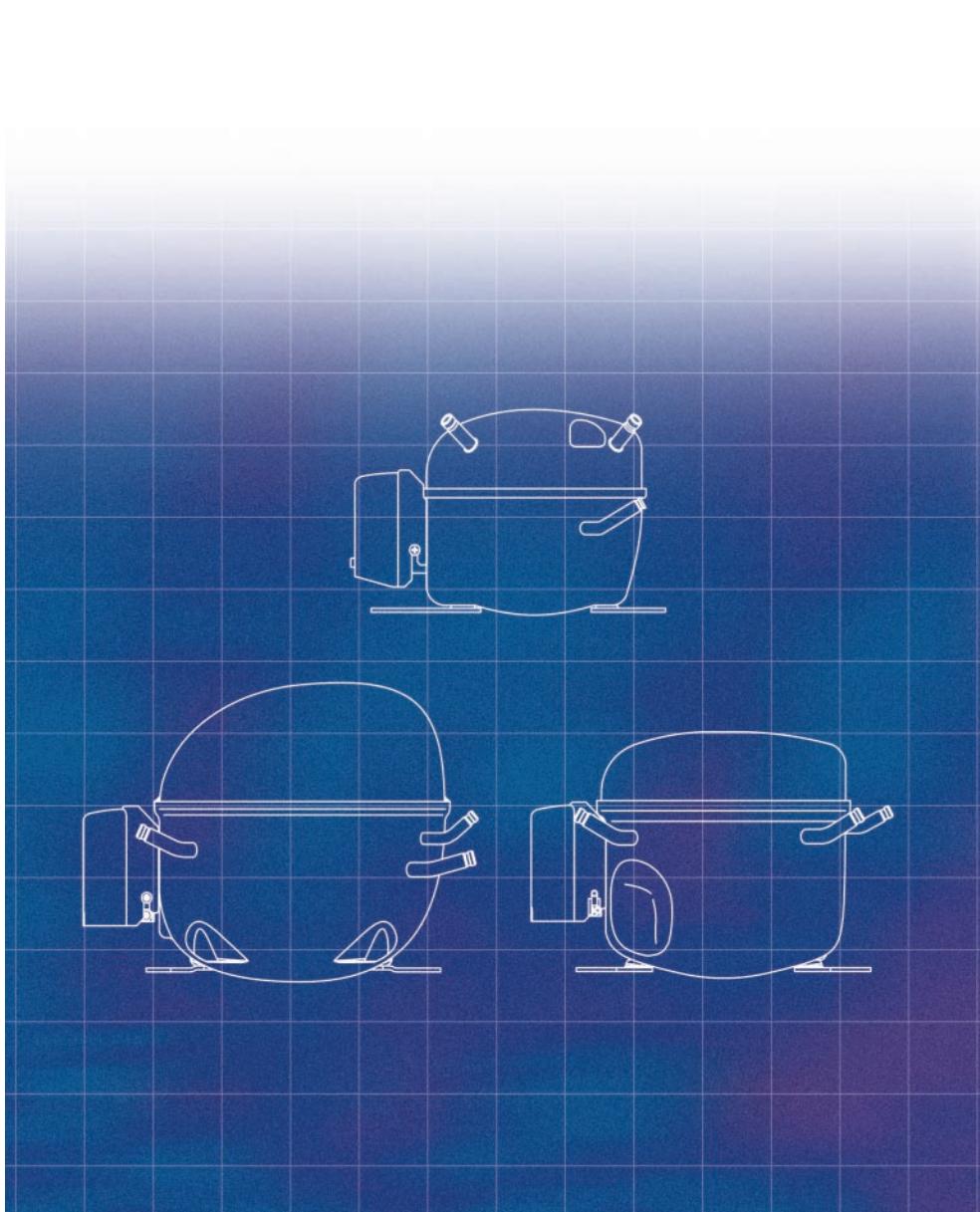


## Collection of Datasheets

**Compressors for R600a  
220-240V 50Hz & 60Hz**

## Standard Compressors

### T-Series

TLS4K	(50Hz)	Page 10
TLS5K	(50Hz)	Page 12
TLS6K	(50Hz)	Page 14
TLS7K	(50Hz)	Page 16
TLS8K	(50Hz)	Page 18
TLS9K	(50Hz)	Page 20

### N-Series

NL10K	(50Hz)	Page 22
NL11K	(50Hz)	Page 24
NL13K	(50Hz)	Page 26

## Energy-optimized Compressors

### P-Series

PLE35K	(50Hz)	Page 28
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### T-Series

TLES4KK.2	(50Hz)	Page 30
TLES5KK.2	(50Hz)	Page 32
TLES6KK.2	(50Hz)	Page 34
TLES7KK.2	(50Hz)	Page 36
TLES8KK.2	(50Hz)	Page 38
TLES9KK.2	(50Hz)	Page 40

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NLE10KK.2	(50Hz)	Page 44
NLE11KK.2	(50Hz)	Page 46
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NLE15KK.2	(50Hz)	Page 50
NLE10KK.3	(50Hz)	Page 52
NLE11KK.3	(50Hz)	Page 54
NLE13KK.3	(50Hz)	Page 56
NLE15KK.3	(50Hz)	Page 58

## Variable Speed Drive Compressors

### T-Series

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TLV6K	(50-60Hz)	Page 62
TLV7K	(50-60Hz)	Page 64
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TLV9K	(50-60Hz)	Page 68

### N-Series

NLV11K	(50-60Hz)	Page 70
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## High Energy-optimized Compressors

### T-Series

TLY3K	(50Hz)	Page 72
TLY4KK.2	(50Hz)	Page 74
TLY5KK.2	(50Hz)	Page 76
TLY6KK.2	(50Hz)	Page 78
TLY7KK.2	(50Hz)	Page 80
TLY8KK.2	(50Hz)	Page 82
TLY9K	(50Hz)	Page 84
TLX4KK	(50Hz)	Page 86
TLX5KK	(50Hz)	Page 88
TLX6KK	(50Hz)	Page 90
TLX7KK	(50Hz)	Page 92
TLX8KK	(50Hz)	Page 94
TLX9KK	(50Hz)	Page 96

### N-Series

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## Energy-optimized Tropical Compressors

### T-Series

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TLES5KTK	(50Hz)	Page 120
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### N-Series

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NLE11KTK	(50/60Hz)	Page 130
NLE15KTK	(50Hz)	Page 132
NLE15KTK.2	(50Hz)	Page 134

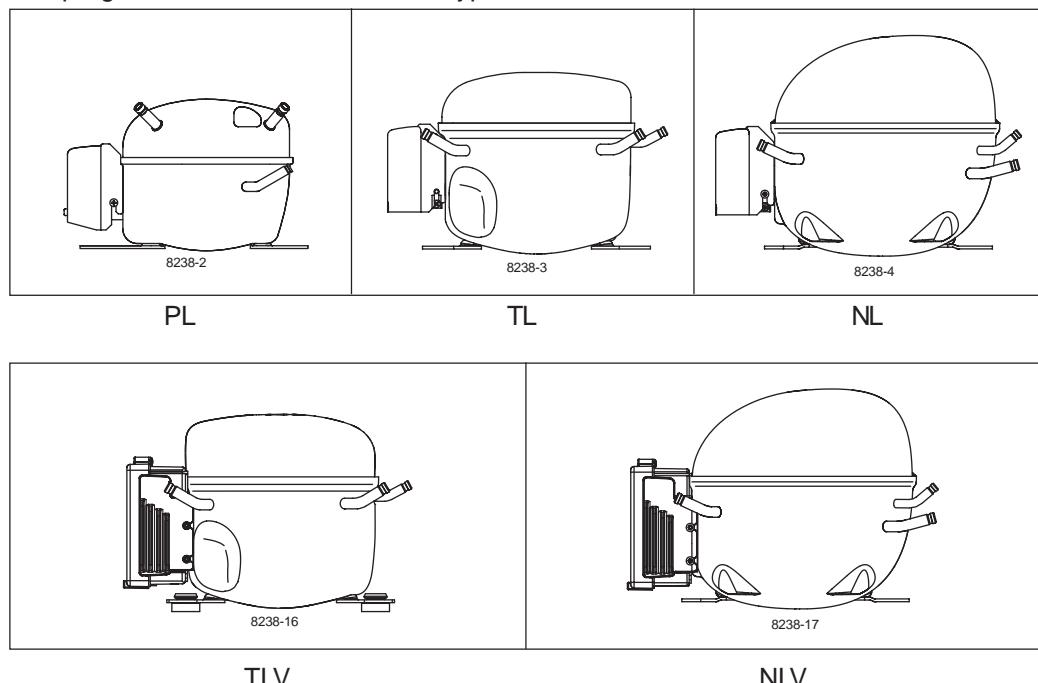
## 1. General

This collection of datasheets contains information on Danfoss hermetic refrigeration compressors for 220-240V especially designed for refrigeration systems using isobutane, refrigerant R600a ( $C_4H_{10}$ ).

R600a is classified as a flammable refrigerant of class A3 according to ANSI/ASHRAE 34. Accordingly, special safety regulations must be complied with. For domestic appliances a special Test Schedule has been integrated in the European Standard EN 60335-2-24 and IEC 60335-2-24. For commercial refrigerators IEC 60335-2-89 will include flammable refrigerants.

Danfoss compressors for R600a must only and exclusively be used in appliances certified for R600a according to these or later regulations. This means that the compressors must not be used in appliances which are not originally designed and certified for R600a.

The programme consists of the basic types PL, TL, TLV, NL and NLV.



### 1.1 Compressor designations

The compressor designations are built up according to the following system:

Design	Optimization level	Compressor size	Application range	Start characteristics	Generation
PL	Blank Standard energy level	Nominal displacement in cm <sup>3</sup>	K R600a LBP	Blank → universal (principal rule)	Blank → First generation
	S Semi-direct intake				
TL	E Energy-optimized (optimized motor)	Exception: For PL compressors the capacity at rating point is stated.	KT R600a LBP/(MBP) tropical	K = LST characteristics (capillary tube)	.2 → Second generation
	Y, X High Energy-optimized (high optimization level)				
NL	V Variable Speed				.3 → Third generation etc.

### Examples

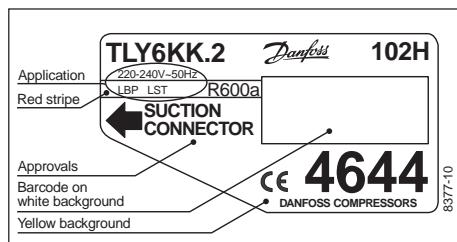
PL	E	35	K		
TL	ES	6	KT	K	
NL	Y	10	K	K	.3
TL	V	7	K		

## 1.2 Design

All compressors featured in this collection are designs with semi-direct intake. Please note that the suction and process connectors on all TLS, TLES, TLY and TLX compressors have been interchanged as compared with the normal TL compressors.  
Using the wrong connector as suction connector will lead to reduced capacity and efficiency.

## 1.3 Type label

All compressors have a yellow label with the type designation. This label has a red stripe and the text "R600a".



The country of origin indicated on the compressor paper label and on the compressor cover varies depending on the manufacturing place. Information can be found on our technical information sheet "Country of Origin".

## 1.4 Data stamping

The compressor type and production date are stamped on the side of the compressor. The information may be as follows,

LY-6K-4644  
F-201E2207

The first line states the model designation and the code no.

LY = last letter (or last two letters) of the compressor type  
 -6K- = nominal displacement and application  
 4644 = 4 last digits in the code no.  
 (- = position mark)

The second line states the date of manufacture and internal Danfoss codes.

F = manufacturing place (F = Germany, AL = Slovenia, AM = Mexico)  
 20 = week 20  
 1 = 2001  
 E = Friday (A = Monday etc.)  
 220 = nominal voltage  
 7 = internal Danfoss code

## 1.5 Compressor dimensions

The build-in conditions (total height, weight, tube dimensions etc.) are specified in the individual datasheets including dimensioned sketches for the compressors.

## 2. Application range

- K** All compressors for R600a have denominations ending with **K** after the number for displacement or capacity. They are designed for low operating temperatures (**LBP Low Back Pressure**) for use in refrigerators, freezers and similar applications.
- KK** Compressors with endings **K** and **KK** are designed for regions with stable supply voltage.
- KTK** Endings **KTK** are designed for less stable supply voltage and tropical conditions. Some of the smaller TLS-K, TLES-K, TLY-K and the PLE-K compressors are also released for medium operating temperatures (**MBP Medium Back Pressure**). **None** of the compressors are released for high evaporation temperatures (**HBP High Back Pressure**).
- The table on page 5 shows the normally recommended applications as regards voltage/frequency, ambient temperature, evaporating temperature and necessary compressor cooling. The recommendations must be regarded as a guideline only as they presuppose a proper dimensioning of the refrigeration system.

Compressor		Mains [V/Hz]	Ambient temperature					
			32°C		38°C		43°C	
			LBP	MBP	LBP	MBP	LBP	MBP
Standard	<b>TLS4 - 5K</b>	198 - 254 /50	S	S	S	S		
	<b>TLS6 - 7 - 8 - 9K</b>	198 - 254 /50	S		S			
	<b>NL10 - 11 - 13K</b>	198 - 254 /50	S		S			
Energy-optimized	<b>PLE35K</b>	198 - 254 /50		S*		S*		
	<b>TLES4 - 5KK.2</b>	198 - 254 /50	S	S	S	S		
	<b>TLES6 - 7 - 8 - 9KK.2</b>	198 - 254 /50	S		S			
	<b>NLE9KK.2</b>	198 - 254 /50	S		S			S
	<b>NLE10 - 11 - 13 - 15KK.2</b>	198 - 254 /50	S		S			
	<b>NLE10 - 11 - 13 - 15KK.3</b>	198 - 254 /50	S		S			S
High Energy-optimized	<b>TLY3K</b>	198 - 254 /50		S*		S*		
	<b>TLY4 - 5 - 6 - 7 - 8KK.2</b>	198 - 254 /50	S*		S*			S*
	<b>TLY9K</b>	198 - 254 /50	S*		S*			
	<b>TLX4 - 5 - 6 - 7 - 8 - 9KK</b>	198 - 254 /50	S*		S*			
	<b>NLY9 - 10 - 11 - 13K</b>	198 - 254 /50	S*		S*			
	<b>NLY15KK</b>	198 - 254 /50	S*		S*			
Energy-optimized Tropical	<b>NLY9 - 10 - 11 - 13 - 15KK.3</b>	198 - 254 /50	S*		S*			S*
	<b>TLES4 - 5KTK</b>	187 - 254 /50	S	S	S	S	S	S
	<b>TLES6 - 7 - 8KTK</b>	187 - 254 /50	S		S			S
	<b>NLE9 - 11KTK</b>	187 - 254 /50	S		S			S
		198 - 254 /60	F <sub>1</sub>		F <sub>1</sub>			F <sub>1</sub>
	<b>NLE15KTK</b>	187 - 254 /50	S		S			F <sub>1</sub>
Variable Speed	<b>NLE15KTK.2</b>	187 - 254 /50	S		S			S
	<b>TLV5 - 6 - 7 - 8 - 9K</b>	198 - 254 /50 - 60	S	S	S	S	S	S
	<b>NLV11K</b>	198 - 254 /50 - 60	S	S	S	S	S	S

S = Static cooling normally sufficient

O = Oil cooling

F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temp.)

F<sub>2</sub> = Fan cooling 3.0 m/s necessary

■ = Outside application range, not recommended

\* = Run capacitor compulsory

\*\* = Not applicable below -25°C evaporating temperature in 43°C ambient temperature above 240V

The application limits regarding evaporating temperatures and motor systems are specified in the individual compressor datasheets.

## 2.1 Design limits

In order to secure a satisfying lifetime of the compressor, and to protect the compressor against overload, some design criteria for the appliances must be fulfilled.

Both the condensing temperature and the compressor temperature should be kept as low as possible. This can be done by using well-dimensioned condenser surfaces and by ensuring good ventilation around the compressor under all operating conditions.

In order to protect the compressor against overload, the compressor has to start and work properly through pressure peaks obtained in the highest ambient temperature and lowest working voltage. At peak load the condensing temperature must not exceed 70°C. The winding temperature must not exceed 135°C.

At stable operation conditions the condensing temperature must not exceed 60°C. The winding temperature must not exceed 125°C (TLX-KK and NLY9-10-11KK.3 compressors should not exceed 105°C at these conditions).

These limitations ensure a protection of valves, gaskets, oil, and motor insulation.

Condensing temperature

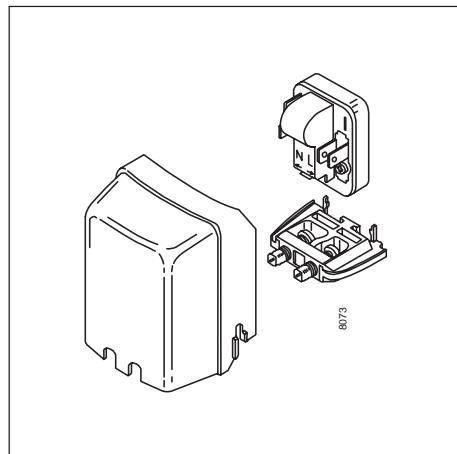
Winding temperature

### 3. Electrical equipment

The compressors are equipped with a single-phase AC motor. All compressors for R600a are designed only for use with **Low Starting Torque (LST)**.  
 The electrical equipments are classified as "normal tight" (IP20)  
 The motor protector is built into the motor (winding protector).  
 Earth connections are located on the bracket around the current lead-in of the compressor.  
*No attempt must be made to start the compressor without a complete starting device.*

The compressors can be supplied with the following motor systems:

#### 3.1 LST (RSIR)

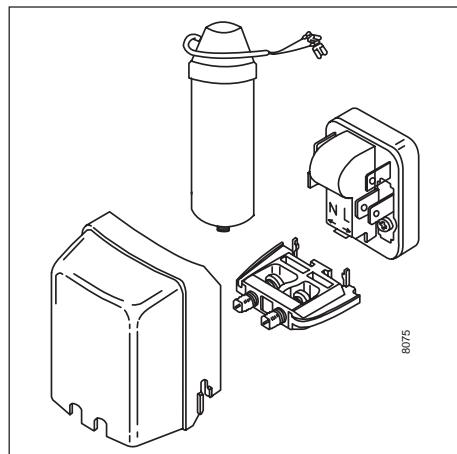


TL, NL, TLES, NLE

Compressors with the motor type **Resistant Start Induction Run (RSIR)** have a starting device for **Low Starting Torque (LST)**. This starting device consists of a PTC, a cord relief, and a cover and is used for compressors with the denominations TL, NL, TLES and NLE. The PTC starting device requires a pressure-equalization before each start. This starting device is normally used in well-designed refrigerating systems with capillary tube as throttling device.

The PTC needs a compressor standstill period of 5 minutes to cool down before each start.

#### 3.2 LST (RSCR)



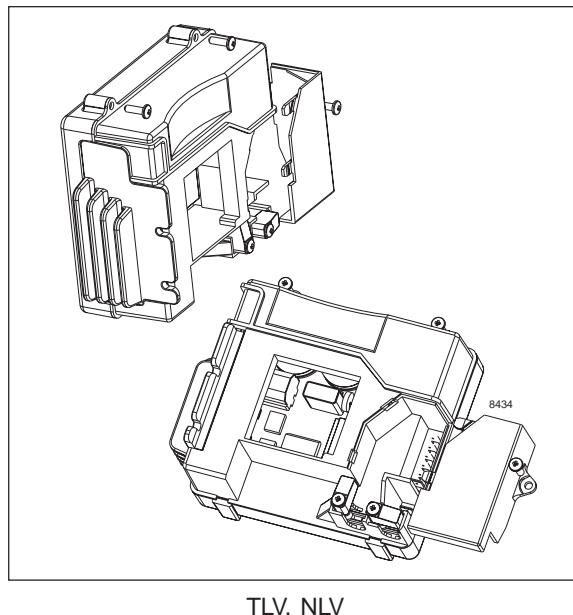
PLE, TLY, TLX, NLY

Compressors with the motor type **Resistant Start Capacitor Run (RSCR)** have a starting device for **Low Starting Torque (LST)**. This starting device consists of a PTC and a run capacitor and is mandatory for compressors with the denominations PLE, TLY, TLX and NLY. The PTC starting device requires a pressure-equalization before each start. This starting device is normally used in well-designed refrigerating systems with capillary tube as throttling device.

The PTC needs a compressor standstill period of 5 minutes to cool down before each start.

For further information on which starting device to use on individual compressors, please refer to the actual datasheets.

### 3.5 Electronic unit (variable speed)



The variable speed compressor motors are electronically controlled. No attempt must be made to start the compressor without a complete electronic unit, as specified in the data sheet for the compressor type in question.

The electronic unit has a built-in overload protection as well as thermal protection. In case of activation of this protection the electronic unit will protect the compressor motor as well as itself. When the protection has been activated, the electronic unit automatically will restart the compressor after a certain time. The electronic unit provides the compressor with **High Starting Torque (HST)** which means that a pressure-equalization of the system before start is not necessary.

The compressors are equipped with permanent magnet rotors (PM motor) and 3 identical stator windings. The electronic unit is mounted directly on the compressor and controls the PM motor.

Connecting the motor to AC mains, by fault, will damage the magnets and lead to drastically reduced efficiency, or even non functioning.

For further information on which starting device to use on individual compressors, please refer to the actual datasheets (some compressors have limitations for either LST or HST).

### 3.6 Connections

The electrical equipments are equipped with connectors depending on the ordered code number,

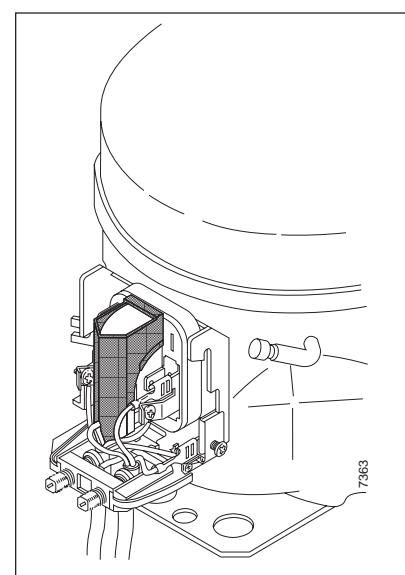
Starting relays:	6.3 mm spade connectors only
PTCs:	6.3 or 4.8 mm spade connectors and screws
Variable speed electronic unit:	6.3 mm spade connectors only

The power supply must be connected as shown in the wiring diagrams for the chosen electrical equipment given in the actual datasheets.

### 3.7 Approvals

The compressors have been approved in respect of safety by testing authorities in the majority of Western European countries. Actual standards to which the compressors have been approved are specified in the individual datasheets. Approval markings appear on the compressor labels.

*To fulfil the requirements of EN 60355-2-34 the protection screen 103N0476 must be applied to the PTC starting device.*



Protection screen

#### 4. Moisture and Impurities

The compressors are dried to a maximum moisture content of 60 to 75 mg depending on the compressor size. The maximum impurity content is 40 to 50 mg depending on the compressor size.

#### 5. Max. refrigerant charge

According to the European Standard EN 60335-2-24 or draft IEC 60335-2-89, which standard has to be complied with, the refrigerant charge must not exceed 150 g.

Commercially available R600a must not be used because the fuel grades of these products are of a variable composition. These products may also contain impurities which could significantly reduce the reliability and performance of the system and lead to premature failure. All Danfoss compressors for R600a are released for a base purity of 97% or better. Impurities limits shall comply with DIN 8960 of 1998 (extended Version of ISO 916). For details see also separate documentation CD.60.E .

All users of refrigerant R600a should refer to the chemical data safety sheets for full information on the safe handling of R600a.

In general the R600a charge is approximately 40 - 50% by weight than that for HFC.

The refrigerant charge must never be too large to be contained on the condenser side of the refrigeration system. Only the refrigerant amount which is necessary for the system to function must be charged.

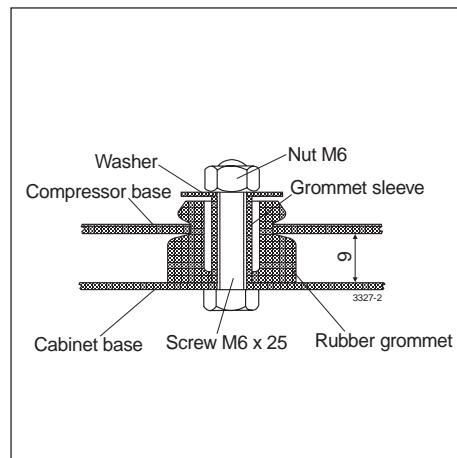
#### 6. Oil charge

The compressors are supplied charged with dried and degassed oil, which is normally sufficient for the lifetime of the compressor. The refrigeration systems and the system components must be dimensioned in such a way that the oil can be lead back continuously to the compressor housing without accumulating in the system, e.g. without oil pockets and with sufficient gas velocity. The compressors use mineral oils and are approved only for these oils and R600a.

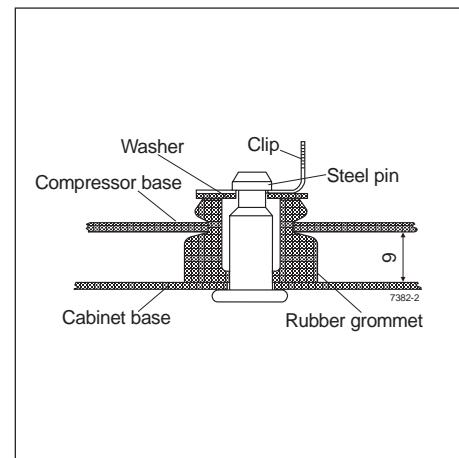
#### 7. Mounting

Soldering problems caused by oil in the connectors can be avoided by placing the compressor on its baseplate some time before soldering it into the system. The compressor must never be placed upside down when mounting the rubber grommets in the baseplate. Instead place the compressor on its side with the connectors upwards.

##### 7.1 Mounting accessories



Bolt joint



Snap-on joint

The mounting accessories for the compressors are available in two versions, with bolt joint or snap-on joint.

The rubber grommets are designed for the 16 mm holes of the baseplate.

Bolt joint for one compressor in a bag 118-1917

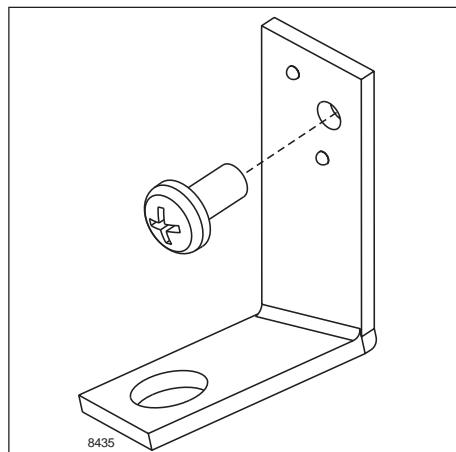
Bolt joint in quantities 118-1918

Snap-on in quantities 118-1919

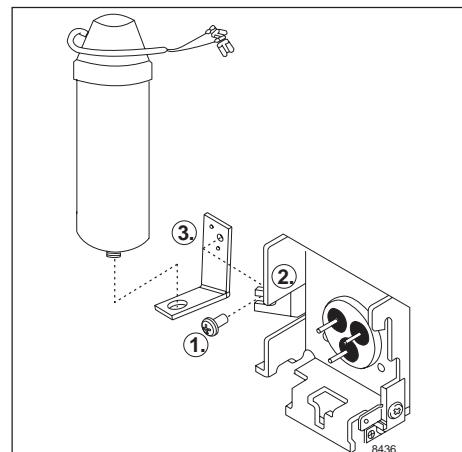
## 8. Run capacitor holder

A run capacitor holder is available for the "Energy-optimized" and "High Energy-optimized" compressor range. This optional part enables to fix the run capacitor for 220 V directly and earth-connected on the compressor shell, concentrating all electrical accessories on the compressor. This will save space in the machine compartment.

Code numbers: run capacitor holder 117-0300  
screw M4 x 8 PZD 2 117-0301



run capacitor holder with screw



assembly sequence

## 9. Condition at delivery

The compressors are delivered without mounted starting devices on pallets with the dimensions 1144 x 800 mm. Quantities per pallets are specified in the individual datasheets. Electrical equipment is packed in separate boxes.

The most important performance controls carried out during manufacturing are,

- A high potential insulation test with 1650V for 1 second
- Pumping capacity
- Tightness of discharge side and discharge valve
- Tightness of compressor housing
- Check of the right oil charge
- Noise test

The compressors are supplied with sealed connectors and the sealing should not be removed before the system assembly takes place (max 15 minutes with open connectors).

## 10. Warnings



R600a is flammable in concentrations of air between approximately 1.5% and 8.5% by volume (LEL lower explosion limit and UEL upper explosion limit). An ignition source at a temperature higher than 460°C is needed for a combustion to occur.

Isobutane is significantly different from R12 and R134a. This means that compressors for R600a cannot be used with R12 or R134a.

No high potential test nor start tests must be carried out while the compressor is under vacuum.

No attempt must be made to start the compressor without a complete starting device.

Allow the compressor to assume a temperature

above 10°C before starting the first time in order to avoid starting problems.

Anti-freeze agents must not be used in the compressors as such agents are damaging to several of the materials used. In particular, the ethyl or methyl alcohol contents of such anti-freeze agents have a destructive effect on the synthetic motor insulation.

# TLS4K

## Standard Compressor

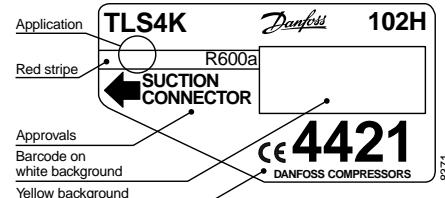
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.A1.02)

#### General

Compressor	<b>TLS4K</b>
Code number	102H4421



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

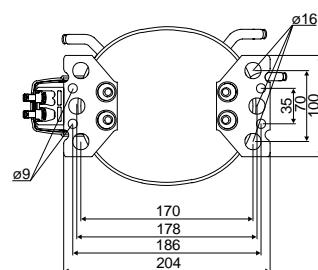
Displacement cm <sup>3</sup>	3.86
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1690
Weight without electrical equipment kg	6.7



Yellow warning label

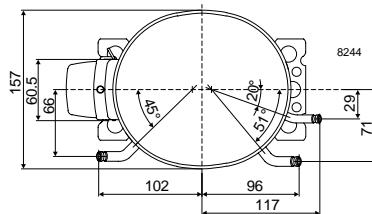
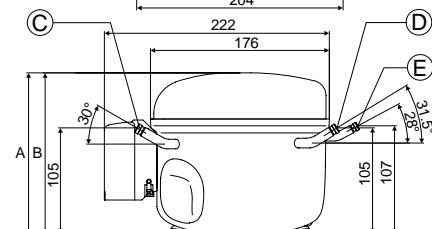
#### Motor

Motor size watt	60
LRA (rated after 4 sec. UL984) LST A	2.3
Cut-in current LST A	6.9
Resistance, main and start winding (25°C) Ω	40.0/15.0
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 163 B 159
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125



**Capacity (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS4K	14	24	35	39	48	63	82	106	135	

**Capacity (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS4K	17	29	42	47	58	77	100	129	165	

**Power consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS4K	44	49	54	56	61	67	74	81	86	

**Current consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	A
TLS4K	0.52	0.53	0.54	0.54	0.55	0.56	0.57	0.58	0.60	

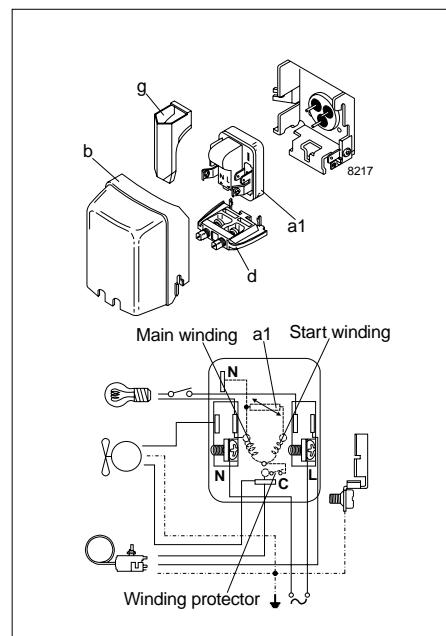
**COP (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLS4K	0.32	0.49	0.64	0.70	0.79	0.94	1.11	1.32	1.57	

**COP (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLS4K	0.41	0.61	0.79	0.85	0.96	1.14	1.35	1.59	1.88	

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.


**Accessories**

Devices	Fig.	TLS4K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLS5K

## Standard Compressor

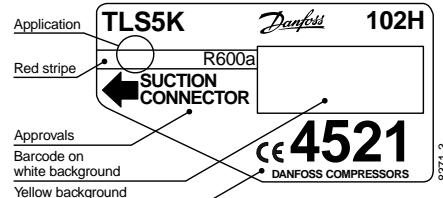
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.B1.02)

#### General

Compressor	<b>TLS5K</b>
Code number	102H4521



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

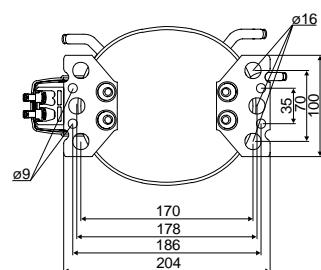
Displacement cm <sup>3</sup>	5.08
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1690
Weight without electrical equipment kg	6.7



Yellow warning label

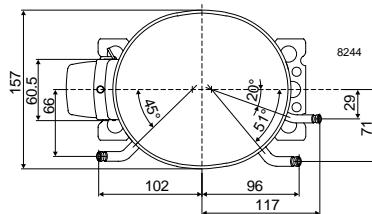
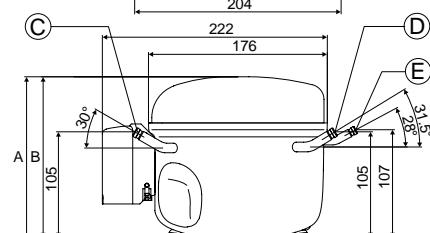
#### Motor

Motor size watt	75
LRA (rated after 4 sec. UL984) LST A	2.8
Cut-in current LST A	7.4
Resistance, main and start winding (25°C) Ω	31.5/15.0
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 163
Suction connector location/I.D. mm	B 159
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet pcs.	E 5.0 +0.12/+0.20



**Capacity (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS5K	25	37	53	59	72	95	121	151	184	

**Capacity (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS5K	30	45	65	72	88	116	147	184	225	

**Power consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLS5K	54	60	68	71	77	86	96	107	118	

**Current consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	A
TLS5K	0.52	0.55	0.57	0.58	0.60	0.63	0.65	0.68	0.70	

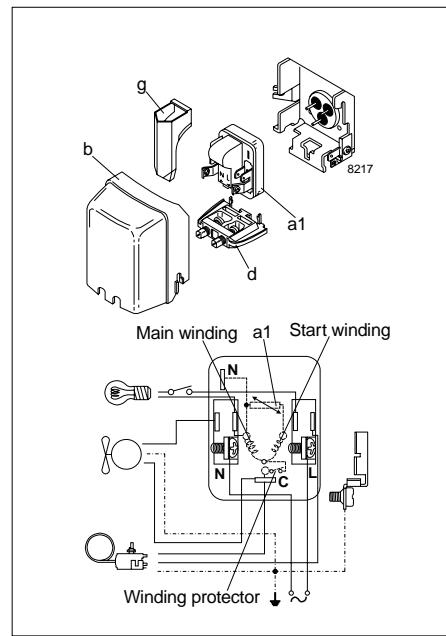
**COP (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLS5K	0.46	0.62	0.78	0.84	0.94	1.10	1.26	1.41	1.56	

**COP (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLS5K	0.56	0.75	0.95	1.02	1.15	1.34	1.53	1.72	1.91	

Test conditions  
 Condensing temperature 55°C EN 12900/CECOMAF ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 32°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.


**Accessories**

Devices	Fig.	TLS5K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLS6K

## Standard Compressor

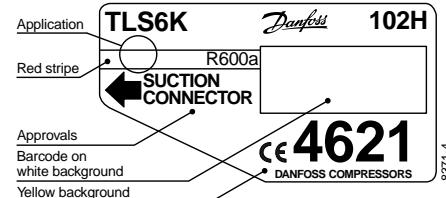
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.C1.02)

#### General

Compressor	<b>TLS6K</b>
Code number	102H4621



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

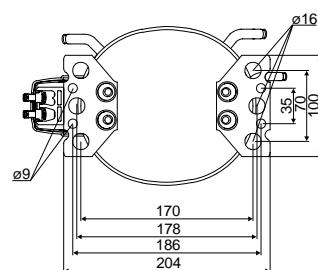
Displacement cm <sup>3</sup>	5.70
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1690
Weight without electrical equipment kg	6.7



Yellow warning label

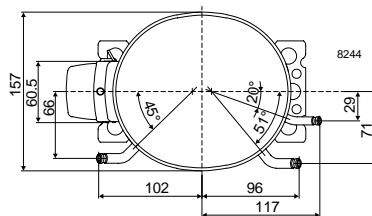
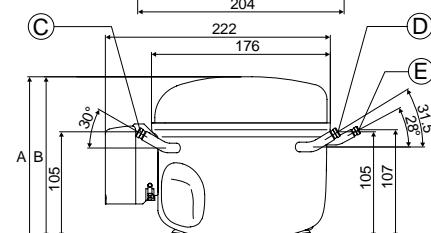
#### Motor

Motor size watt	95
LRA (rated after 4 sec. UL984) LST A	3.5
Cut-in current LST A	8.0
Resistance, main and start winding (25°C) Ω	24.3/15.5
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 163
Suction connector location/I.D. mm	B 159
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet pcs.	E 5.0 +0.12/+0.20



Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	30	44	60	67	80	104
						133

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	36	54	74	81	97	126
						162

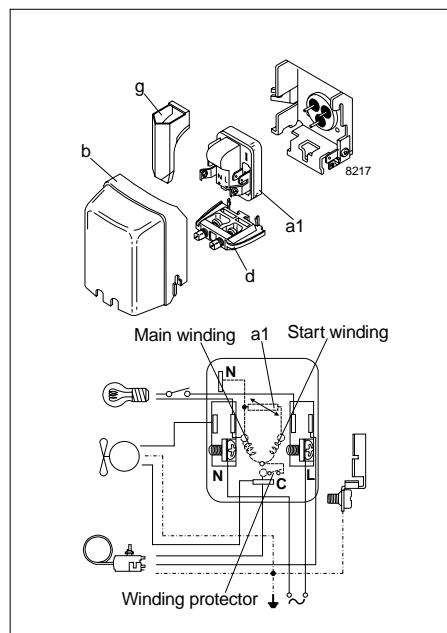
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	57	67	77	80	86	95
						104

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	0.67	0.71	0.75	0.76	0.78	0.80
						0.81

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	0.52	0.66	0.79	0.83	0.93	1.09
						1.28

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS6K	0.64	0.80	0.96	1.02	1.13	1.32
						1.56

Test conditions  
 Condensing temperature 55°C EN 12900/CECOMAF ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 32°C 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.



#### Accessories

Devices	Fig.	TLS6K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLS7K

## Standard Compressor

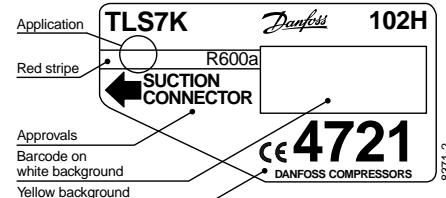
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.D1.02)

#### General

Compressor	<b>TLS7K</b>
Code number	102H4721



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

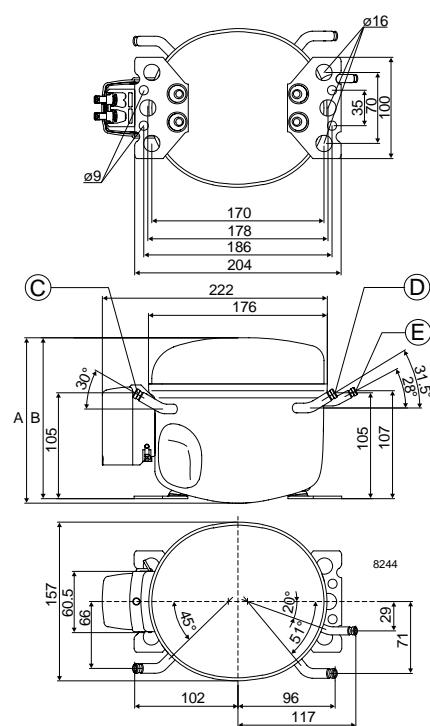
Displacement cm <sup>3</sup>	6.49
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

#### Motor

Motor size alternative motor	watt	125
		135
LRA (rated after 4 sec. UL984) LST alternative motor	A	4.7
		5.2
Cut-in current LST alternative motor	A	8.7
		9.2
Resistance, main and start winding (25°C) alternative motor	Ω	16.0/17.0
		16.0/17.0
Approvals		EN 60335-2-34



#### Dimensions

Height mm	A	173
	B	169
Suction connector location/I.D. mm	C	6.2 ±0.09
Process connector location/I.D. mm	D	6.2 ±0.09
Discharge connector location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet	pcs.	125

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	42	55	74	81	98	128
						164

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	51	67	94	99	119	156
						200

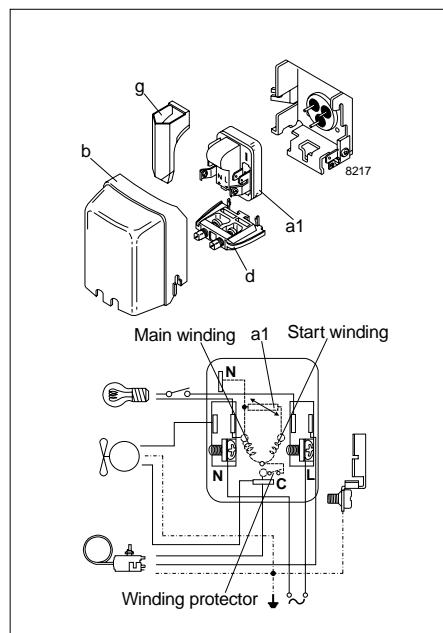
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	65	75	86	90	98	111
						126

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	0.77	0.79	0.81	0.82	0.84	0.87
						0.91

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	0.65	0.74	0.86	0.91	1.00	1.15
						1.30

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLS7K	0.79	0.90	1.05	1.10	1.22	1.40
						1.59

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.



#### Accessories

Devices	Fig.	TLS7K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLS8K

## Standard Compressor

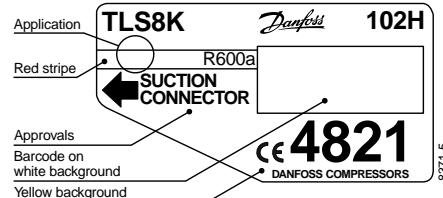
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.E1.02)

#### General

Compressor	<b>TLS8K</b>
Code number	102H4821



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

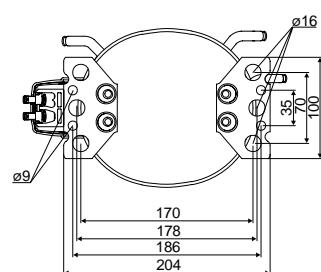
Displacement cm <sup>3</sup>	7.76
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

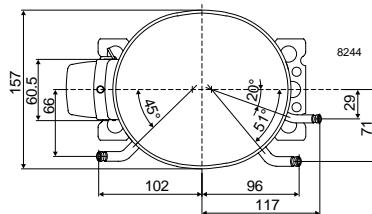
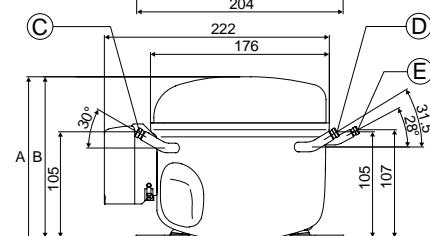
#### Motor

Motor size watt	110
LRA (rated after 4 sec. UL984) LST A	4.3
Cut-in current LST A	8.9
Resistance, main and start winding (25°C) Ω	17.8/14.6
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	49	67	89	99	118	150	188

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	60	82	108	120	143	183	229

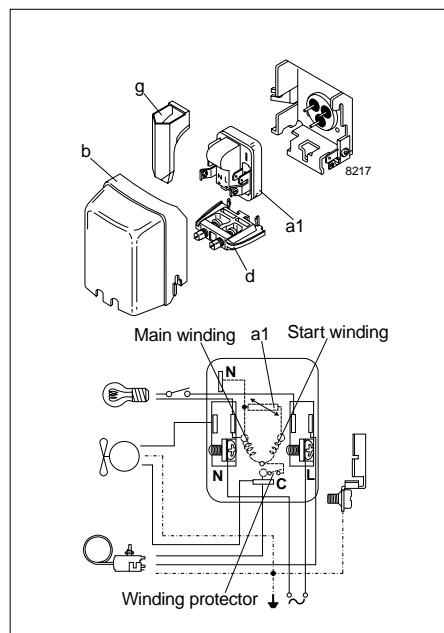
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	73	87	100	105	114	129	143

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	0.73	0.74	0.77	0.78	0.80	0.85	0.91

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	0.67	0.78	0.90	0.94	1.03	1.17	1.31

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS8K	0.82	0.94	1.09	1.14	1.25	1.42	1.60

Test conditions  
 Condensing temperature 55°C EN 12900/CECOMAF ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 32°C 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.



### Accessories

Devices	Fig.	TLS8K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

**TLS9K  
Standard Compressor  
R600a  
220-240V 50Hz**

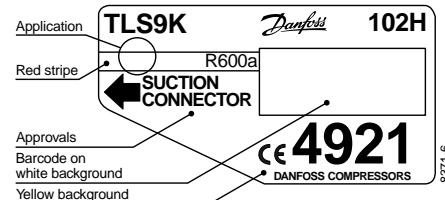
Data Sheet (Replaces CD.52.F1.02)

## General

Compressor	<b>TLS9K</b>
Code number	102H4921

## Application

Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type	RSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

Design

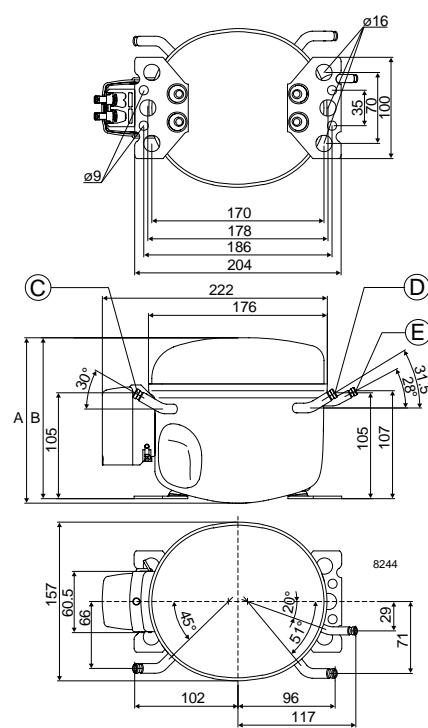
Displacement	cm <sup>3</sup>	8.83
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight without electrical equipment	kg	7.5



**Yellow warning label**

## Motor

Motor size	watt	125
alternative motor		110
LRA (rated after 4 sec. UL984) LST	A	4.7
alternative motor		4.1
Cut-in current LST	A	8.7
alternative motor		8.6
Resistance, main and start winding (25°C)	Ω	16.0/17.0
alternative motor		18.2/15.1
Approvals		EN 60335-2-34



## Dimensions

Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/-0.20
Compressors on a pallet	pcs.		125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	55	77	101	113	135	171	212

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	67	93	123	138	164	208	258

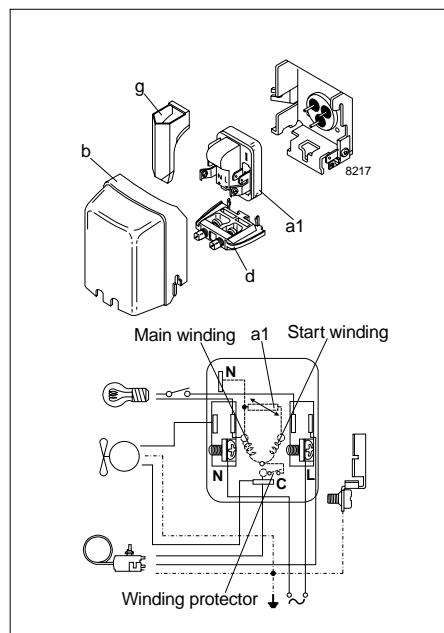
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	82	98	113	118	128	144	160

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	0.75	0.80	0.85	0.87	0.90	0.95	1.00

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	0.67	0.78	0.91	0.96	1.05	1.19	1.33

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLS9K	0.81	0.95	1.11	1.17	1.28	1.44	1.61

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.



#### Accessories

Devices	Fig.	TLS9K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NL10K

## Standard Compressor

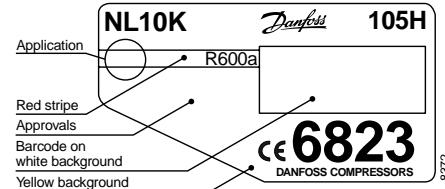
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.A1.02)

#### General

Compressor	<b>NL10K</b>
Code number	105H6823



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

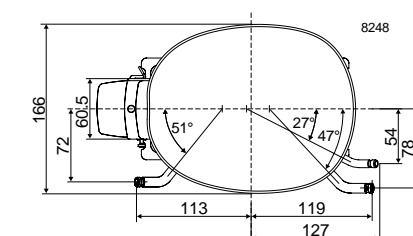
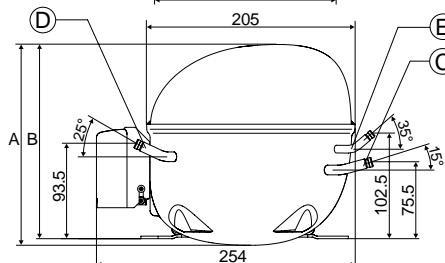
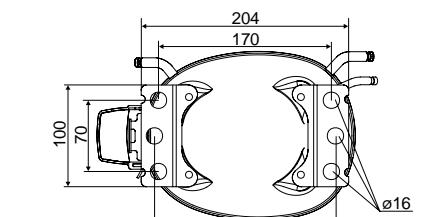
#### Design

Displacement cm <sup>3</sup>	10.09
Oil quantity cm <sup>3</sup>	320
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2230
Weight without electrical equipment kg	7.5



#### Motor

Motor size watt	125
LRA (rated after 4 sec. UL984) LST A	5.0
Cut-in current LST A	9.6
Resistance, main and start winding (25°C) Ω	16.0/13.6
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 190
	B 183
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	80 pcs.

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	66	82	107	117	140	181
						231

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	76	100	130	142	170	221
						281

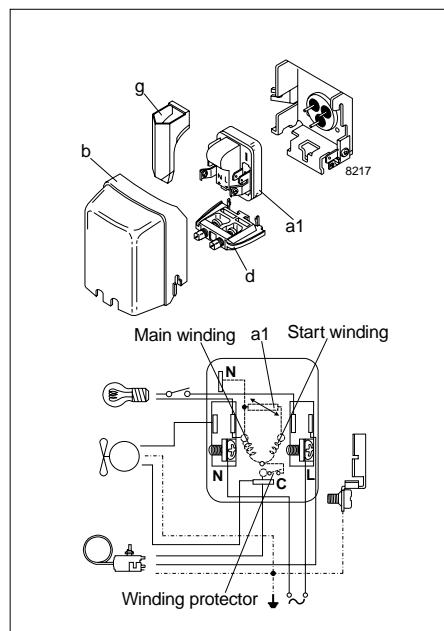
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	89	103	117	122	131	146
						161

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	0.78	0.80	0.83	0.85	0.88	0.93
						0.99

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	0.74	0.80	0.91	0.96	1.07	1.24
						1.43

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL10K	0.90	0.97	1.11	1.17	1.30	1.51
						1.75

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.



### Accessories

Devices	Fig.	NL10K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NL11K

## Standard Compressor

### R600a

### 220-240V 50Hz

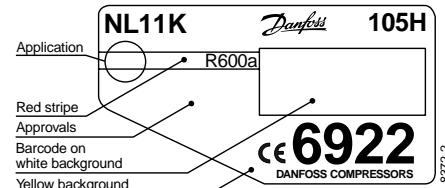
Data Sheet (Replaces CD.53.B1.02)

#### General

Compressor	<b>NL11K</b>
Code number	105H6922

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

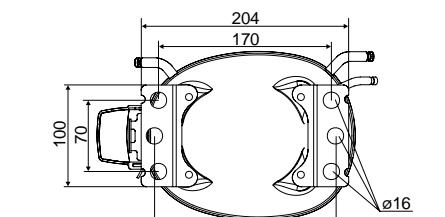
Displacement cm <sup>3</sup>	11.15
Oil quantity cm <sup>3</sup>	320
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2270
Weight without electrical equipment kg	7.5



Yellow warning label

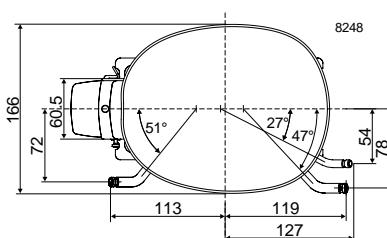
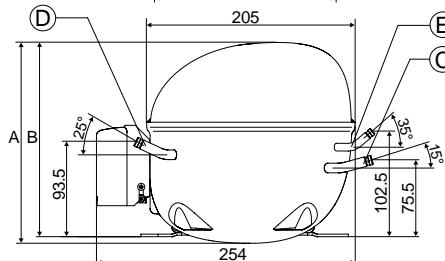
#### Motor

Motor size watt	150
LRA (rated after 4 sec. UL984) LST A	5.9
Cut-in current LST A	10.4
Resistance, main and start winding (25°C) Ω	13.3/14.1
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 190 B 183
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	72	91	119	131	156	203
						258

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	88	110	145	159	190	247
						314

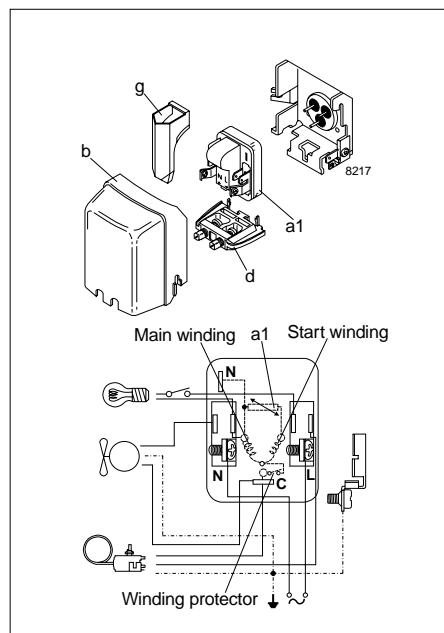
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	97	113	130	135	146	161
						177

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	0.91	0.93	0.97	0.99	1.02	1.08
						1.16

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	0.74	0.80	0.92	0.97	1.07	1.26
						1.46

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL11K	0.90	0.97	1.12	1.18	1.31	1.53
						1.78

Test conditions  
 Condensing temperature 55°C ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 32°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.



### Accessories

Devices	Fig.	NL11K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NL13K

## Standard Compressor

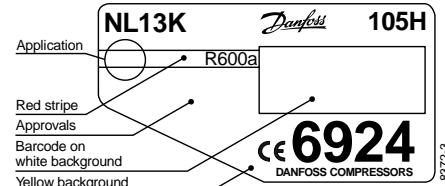
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.C1.02)

#### General

Compressor	<b>NL13K</b>
Code number	105H6924



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

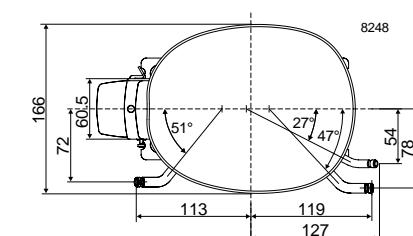
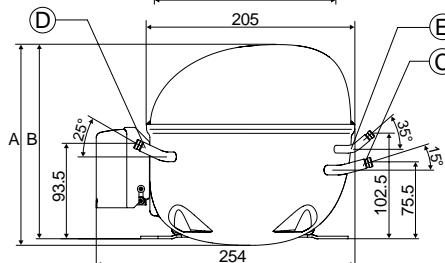
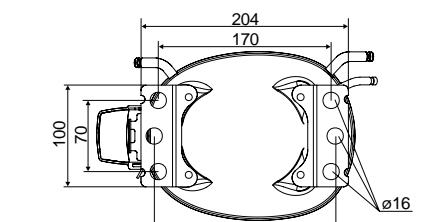
Displacement cm <sup>3</sup>	13.25
Oil quantity cm <sup>3</sup>	320
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2270
Weight without electrical equipment kg	7.5



8372-3

#### Motor

Motor size watt	185
LRA (rated after 4 sec. UL984) LST A	6.8
Cut-in current LST A	11.2
Resistance, main and start winding (25°C) Ω	11.7/13.7
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 190 B 183
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	84	109	144	158	188	241
						303

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	102	133	175	192	229	293
						369

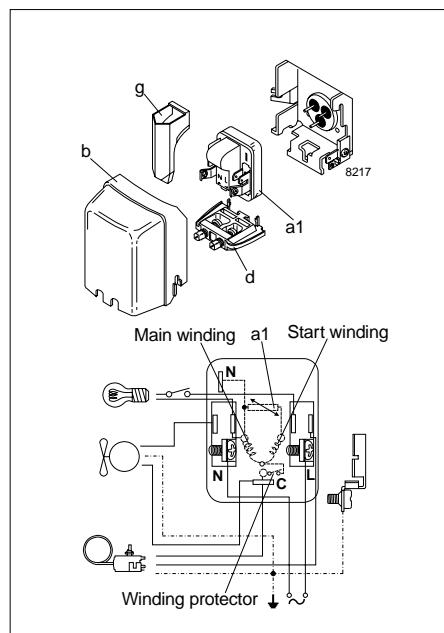
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	121	138	157	164	178	200
						224

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	1.09	1.11	1.15	1.17	1.21	1.29
						1.40

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	0.69	0.79	0.92	0.96	1.06	1.21
						1.35

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NL13K	0.84	0.96	1.12	1.17	1.29	1.47
						1.65

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.



### Accessories

Devices	Fig.	NL13K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Cover	b	103N2010
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# PLE35K

## Energy-optimized Compressor

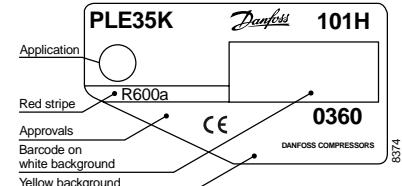
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.51.A1.02)

#### General

Compressor	<b>PLE35K</b>
Code number	101H0360



#### Application

Application	MBP
Evaporating temperature range °C	-25 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



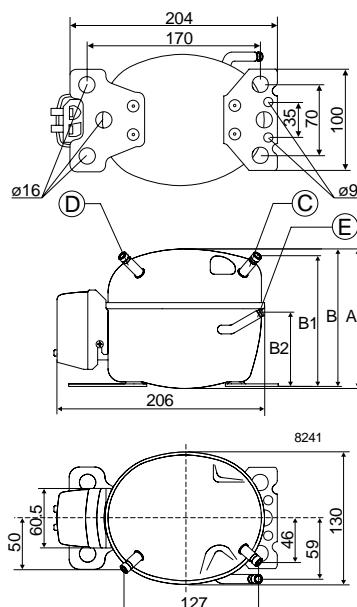
Yellow warning label

#### Design

Displacement cm <sup>3</sup>	3.00
Oil quantity cm <sup>3</sup>	150
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	870
Weight without electrical equipment kg	4.8

#### Motor

Motor size watt	37
LRA (rated after 4 sec. UL984) LST A	1.3
Cut-in current LST A	5.0
Resistance, main and start winding (25°C) Ω	57.0/22.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 137 B 135 B1 128 B2 73
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 150

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	27.2	30.8	38.4	51.7	67.7	86.6	109

Capacity (ASHRAE)							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	33.2	37.5	46.7	63.0	82.5	106	132

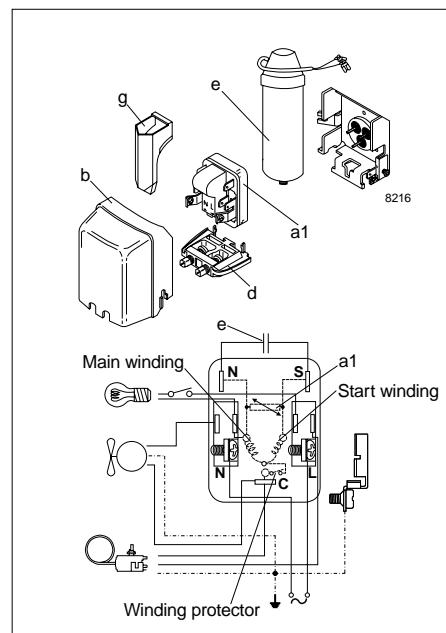
Power consumption							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	40.1	41.4	44.0	48.3	53.1	58.6	64.9

Current consumption							A
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	0.21	0.21	0.23	0.25	0.27	0.29	0.31

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	0.68	0.74	0.87	1.07	1.28	1.48	1.67

COP (ASHRAE)							W/W
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
PLE35K	0.83	0.90	1.06	1.30	1.55	1.80	2.04

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	PLE35K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N0491
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLES4KK.2

## Energy-optimized Compressor

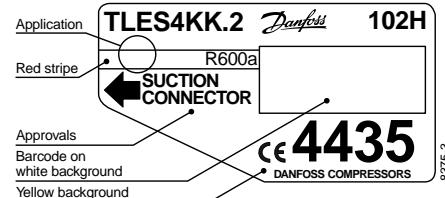
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.G1.02)

#### General

Compressor	<b>TLES4KK.2</b>
Code number	102H4435



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

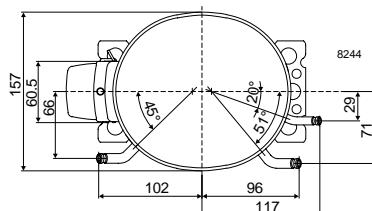
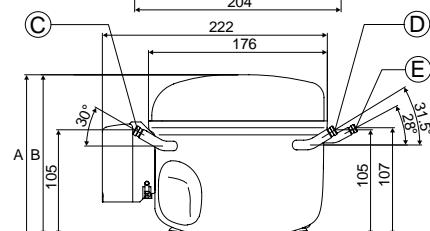
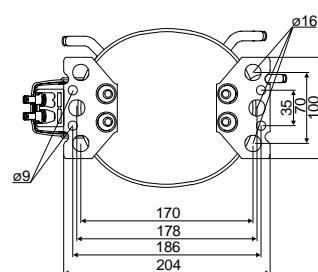
Displacement cm <sup>3</sup>	3.86
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.4



Yellow warning label

#### Motor

Motor size watt	80
LRA (rated after 4 sec. UL984) LST A	2.9
Cut-in current LST A	7.1
Resistance, main and start winding (25°C) Ω	24.5/19.1
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

**Capacity (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES4KK.2	18	28	40	45	55	74	96	123	154	

**Capacity (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES4KK.2	22	34	49	54	67	90	117	150	188	

**Power consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES4KK.2	35	41	45	47	50	55	61	68	76	

**Current consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	A
TLES4KK.2	0.37	0.38	0.39	0.40	0.41	0.42	0.44	0.46	0.48	

**COP (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLES4KK.2	0.51	0.68	0.88	0.95	1.10	1.34	1.57	1.81	2.01	

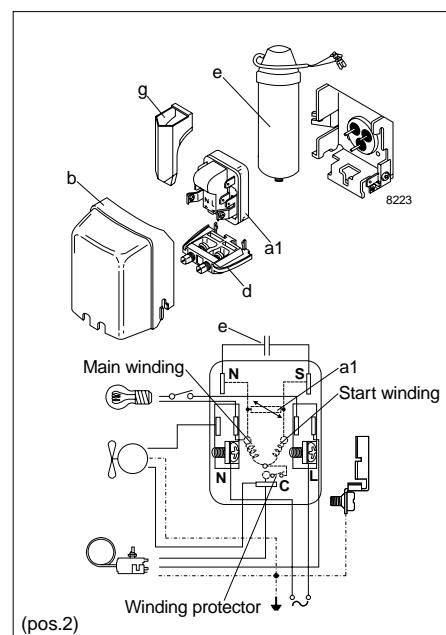
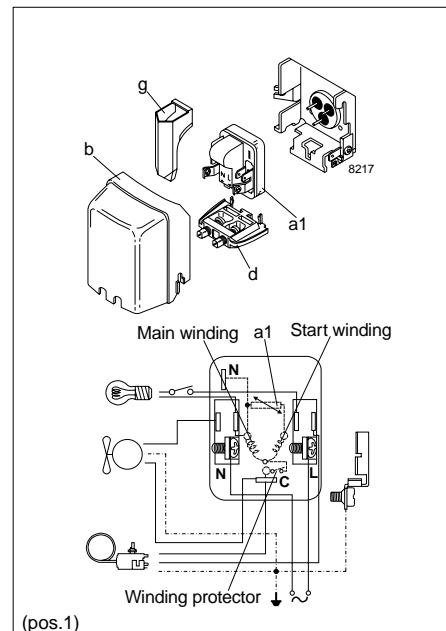
**COP (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLES4KK.2	0.62	0.83	1.07	1.17	1.34	1.63	1.92	2.20	2.46	

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

**Accessories**

Devices	Fig.	TLES4KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# TLES5KK.2

## Energy-optimized Compressor

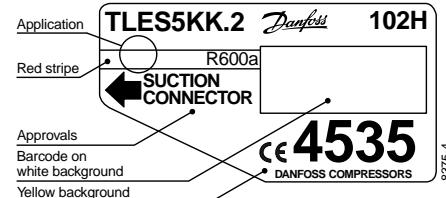
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.H1.02)

#### General

Compressor	<b>TLES5KK.2</b>
Code number	102H4535



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

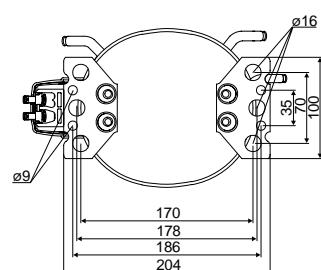
Displacement cm <sup>3</sup>	5.08
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

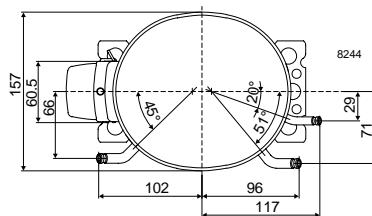
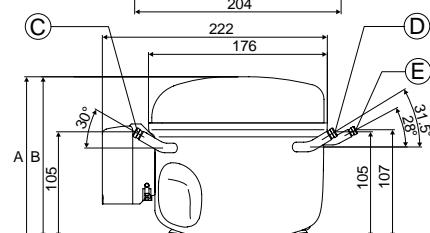
#### Motor

Motor size watt	80
LRA (rated after 4 sec. UL984) LST A	2.9
Cut-in current LST A	7.6
Resistance, main and start winding (25°C) Ω	25.7/15.7
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
Suction connector location/I.D. mm	B 169
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet pcs.	E 5.0 +0.12/+0.20



**Capacity (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES5KK.2	28	41	57	63	76	99	126	159	196	

**Capacity (ASHRAE)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES5KK.2	34	50	69	77	93	121	154	193	239	

**Power consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES5KK.2	44	50	57	59	64	72	80	89	100	

**Current consumption**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	watt
TLES5KK.2	0.40	0.42	0.44	0.44	0.46	0.48	0.51	0.54	0.58	

**COP (EN 12900/CECOMAF)**

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLES5KK.2	0.63	0.82	1.00	1.07	1.19	1.39	1.58	1.77	1.97	

**COP (ASHRAE)**

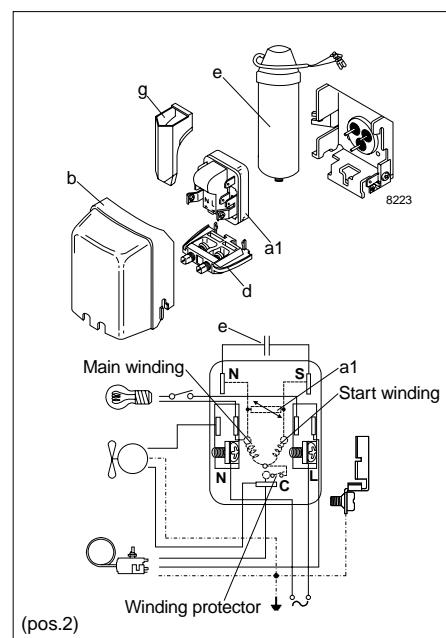
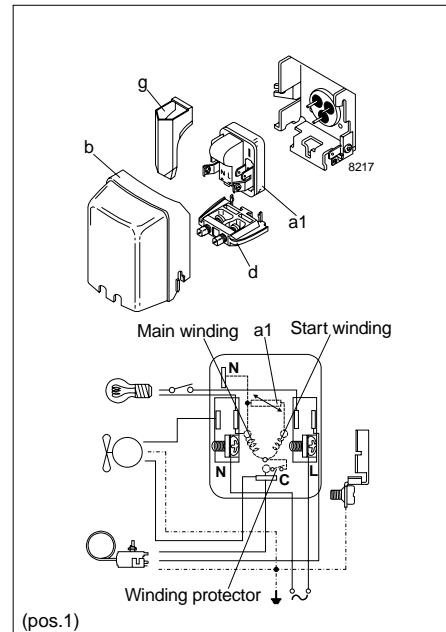
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	W/W
TLES5KK.2	0.77	0.99	1.22	1.30	1.45	1.69	1.93	2.16	2.40	

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 32°C 32°C  
 32°C

**Accessories**

Devices	Fig.	TLES5KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# TLES6KK.2

## Energy-optimized Compressor

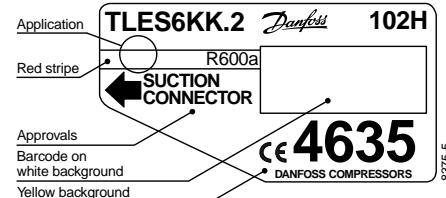
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.I1.02)

#### General

Compressor	<b>TLES6KK.2</b>
Code number	102H4635



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

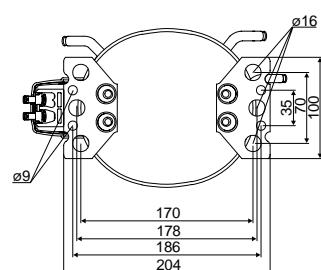
Displacement cm <sup>3</sup>	5.70
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

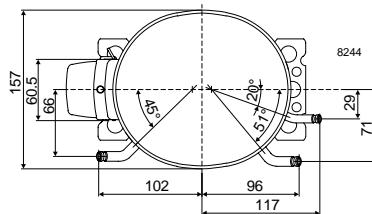
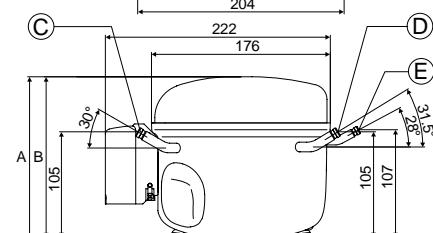
#### Motor

Motor size watt	80
LRA (rated after 4 sec. UL984) LST A	2.9
Cut-in current LST A	7.6
Resistance, main and start winding (25°C) Ω	25.7/15.7
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125



Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	31	47	66	72	87	111	139

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	37	57	80	88	105	135	170

Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	47	56	64	67	73	82	91

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	0.40	0.42	0.45	0.46	0.48	0.51	0.55

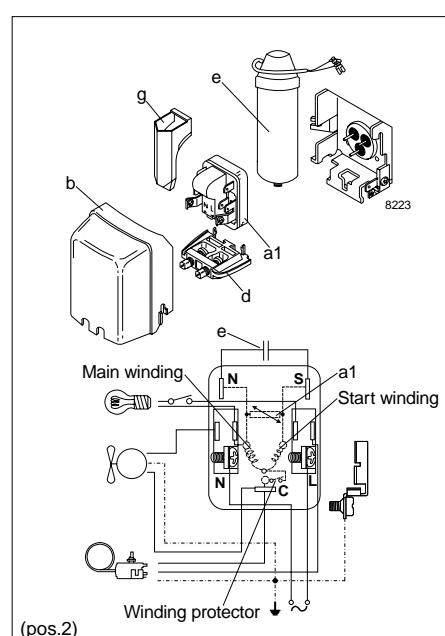
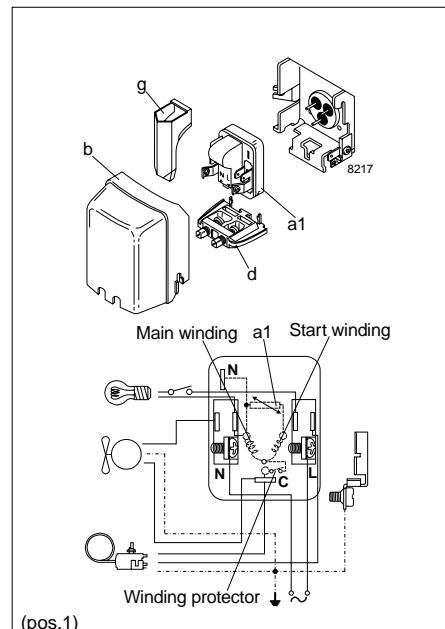
COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	0.65	0.85	1.02	1.08	1.19	1.36	1.53

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KK.2	0.80	1.03	1.24	1.31	1.45	1.65	1.87

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES6KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# TLES7KK.2

## Energy-optimized Compressor

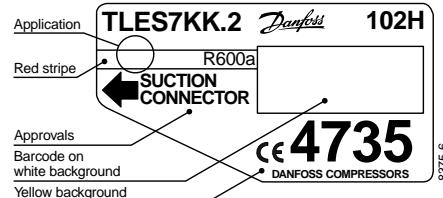
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.J1.02)

#### General

Compressor	<b>TLES7KK.2</b>
Code number	102H4735



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

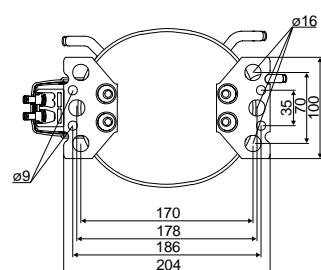
Displacement cm <sup>3</sup>	6.49
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

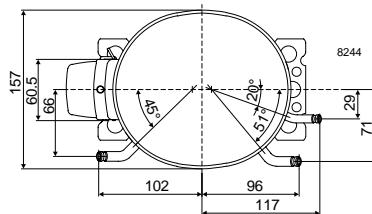
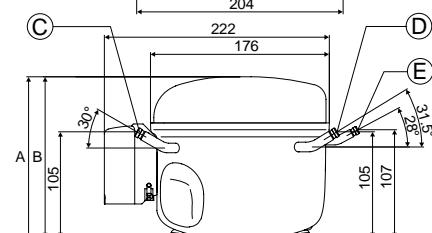
#### Motor

Motor size watt	105
LRA (rated after 4 sec. UL984) LST A	4.0
Cut-in current LST A	8.5
Resistance, main and start winding (25°C) Ω	18.9/15.3
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	40	57	77	85	101	130	163

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	48	69	94	103	123	158	199

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	59	66	76	79	86	97	108

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	0.55	0.57	0.59	0.60	0.62	0.66	0.69

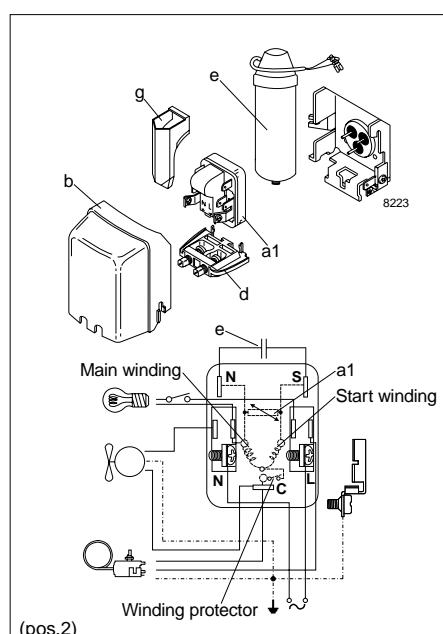
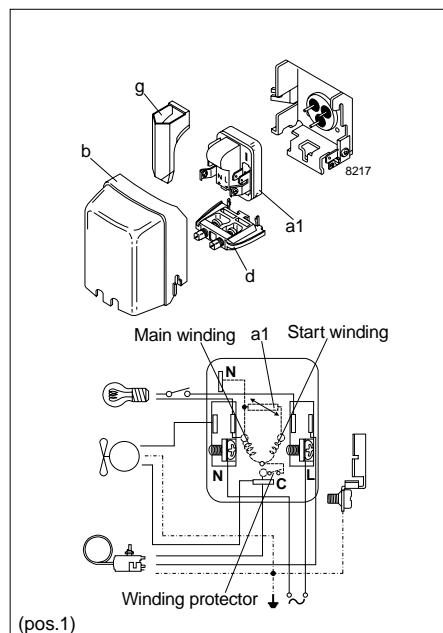
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	0.68	0.85	1.02	1.07	1.18	1.34	1.50

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KK.2	0.83	1.04	1.24	1.31	1.43	1.63	1.83

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES7KK.2
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# TLES8KK.2

## Energy-optimized Compressor

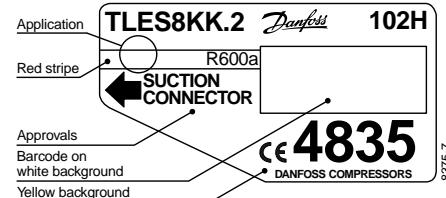
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.K1.02)

#### General

Compressor	<b>TLES8KK.2</b>
Code number	102H4835



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

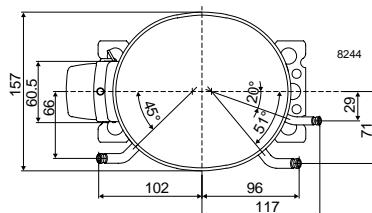
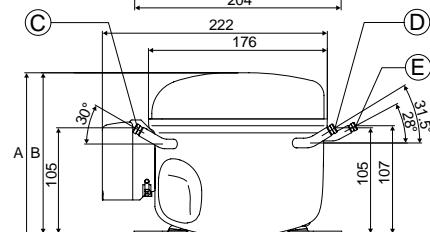
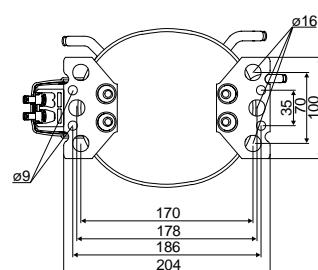
Displacement cm <sup>3</sup>	7.76
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.6



Yellow warning label

#### Motor

Motor size watt	105
LRA (rated after 4 sec. UL984) LST A	4.0
Cut-in current LST A	8.5
Resistance, main and start winding (25°C) Ω	18.9/15.3
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	44	66	89	98	115	146	183

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	53	80	108	119	140	177	223

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	63	75	87	91	99	111	124

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	0.62	0.65	0.70	0.71	0.74	0.80	0.85

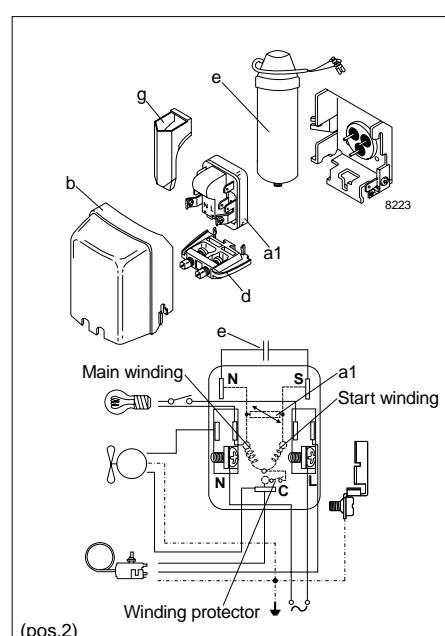
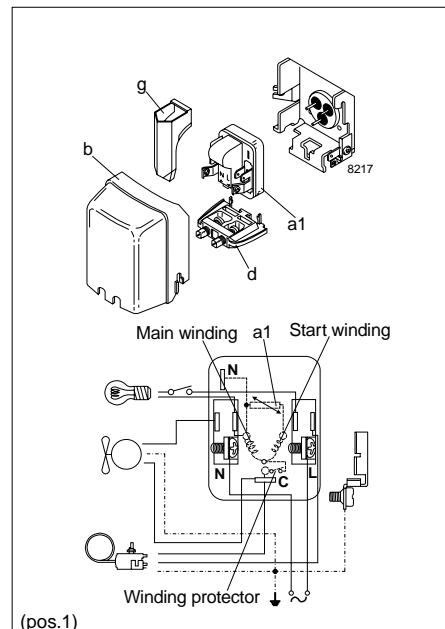
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	0.69	0.87	1.02	1.08	1.16	1.31	1.47

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KK.2	0.84	1.06	1.24	1.31	1.42	1.60	1.79

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES8KK.2
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# TLES9KK.2

## Energy-optimized Compressor

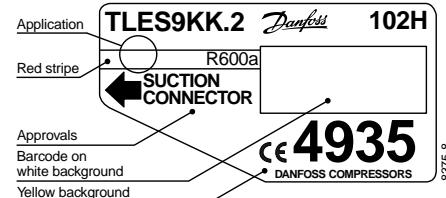
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.L1.02)

#### General

Compressor	<b>TLES9KK.2</b>
Code number	102H4935



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

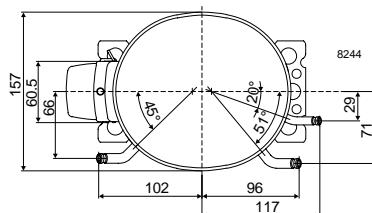
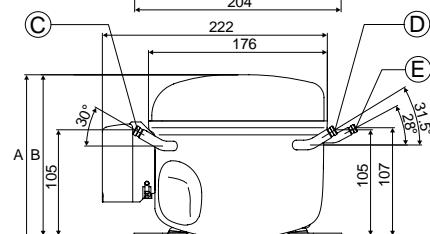
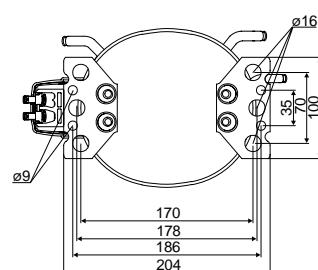
Displacement cm <sup>3</sup>	8.83
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.6



Yellow warning label

#### Motor

Motor size watt	120
LRA (rated after 4 sec. UL984) LST A	4.5
Cut-in current LST A	8.8
Resistance, main and start winding (25°C) Ω	16.5/16.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

Capacity (EN 12900/CECOMAF) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	57	77	101	110	130	164	205

Capacity (ASHRAE) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	70	94	123	134	158	200	249

Power consumption watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	76	86	98	102	111	124	139

Current consumption A							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	0.69	0.73	0.78	0.80	0.83	0.89	0.95

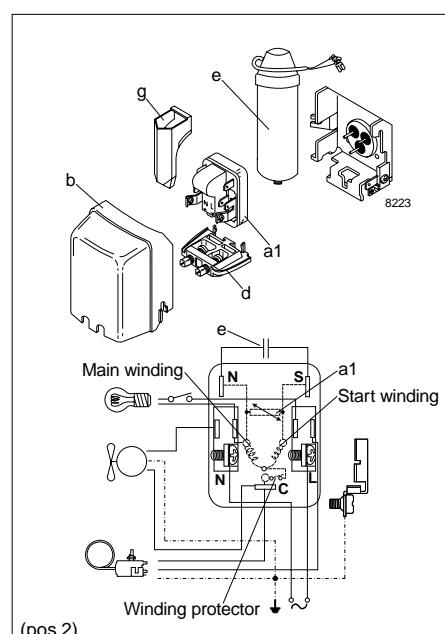
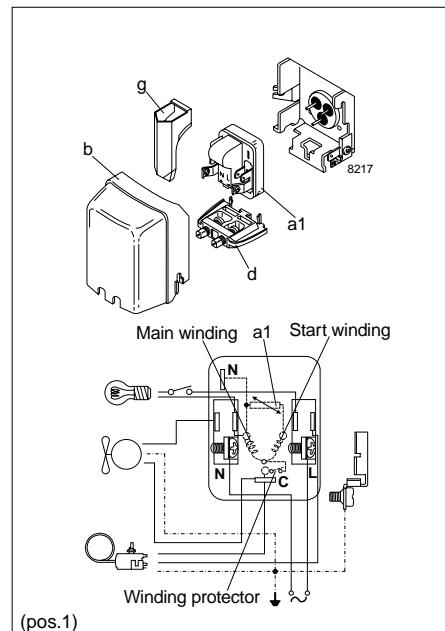
COP (EN 12900/CECOMAF) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	0.76	0.89	1.03	1.09	1.17	1.32	1.48

COP (ASHRAE) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES9KK.2	0.92	1.09	1.25	1.32	1.43	1.61	1.80

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES9KK.2
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# NLE9KK.2

## Energy-optimized Compressor

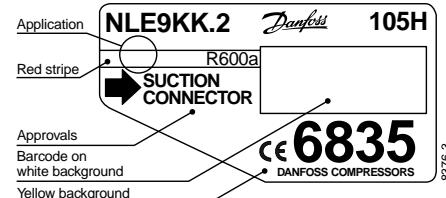
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.D2.02)

#### General

Compressor	<b>NLE9KK.2</b>
Code number	105H6835



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

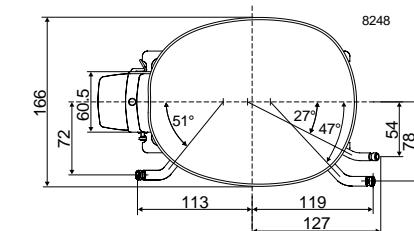
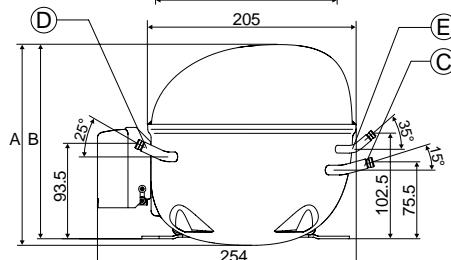
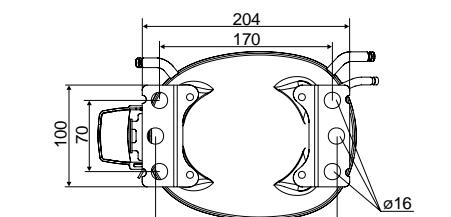
#### Design

Displacement cm <sup>3</sup>	8.35
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	9.6



#### Motor

Motor size watt	106
LRA (rated after 4 sec. UL984) LST A	3.9
Cut-in current LST A	8.4
Resistance, main and start winding (25°C) Ω	21.0/14.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 190
	B 183
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	80

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	56.8	76.0	100	110	130	167
						212

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	69.0	92.4	122	133	158	203
						258

Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	74.6	83.0	93.5	97.4	106	119
- with RC			89.3	94.0		

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	0.61	0.63	0.66	0.67	0.69	0.72
- with RC			0.44	0.45		

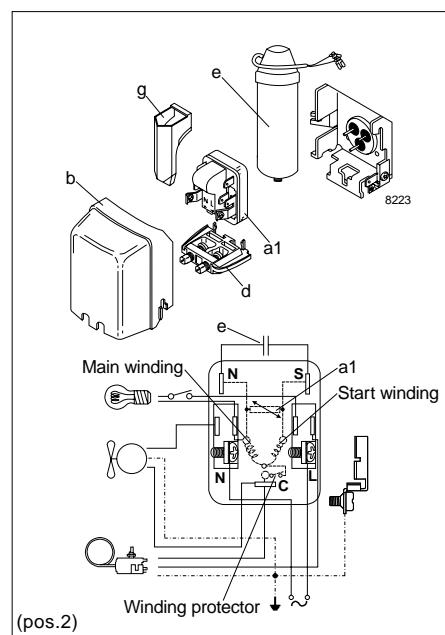
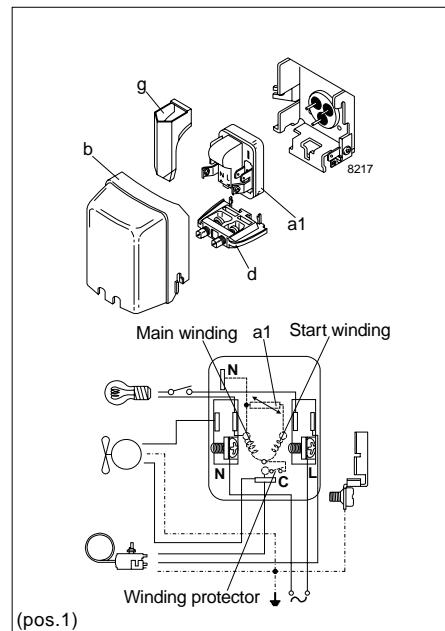
COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	0.76	0.92	1.07	1.12	1.23	1.41
-with RC			1.12	1.17		

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE9KK.2	0.93	1.11	1.30	1.37	1.50	1.71
- with RC			1.36	1.42		

Test conditions  
Condensing temperature 55°C ASHRAE  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.

#### Accessories

Devices	Fig.	NLE9KK.2
PTC starting device 6.3 mm spades	a1	103N0011
4.8 mm spades (pos.1)		103N0018
PTC starting device 6.3 mm spades	a1	103N0016
4.8 mm spades (pos.2)		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# NLE10KK.2

## Energy-optimized Compressor

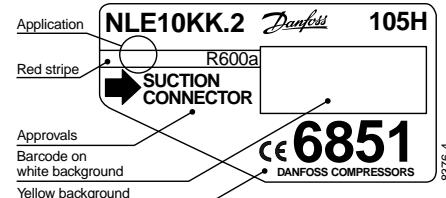
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.E1.02)

#### General

Compressor	<b>NLE10KK.2</b>
Code number	105H6851



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

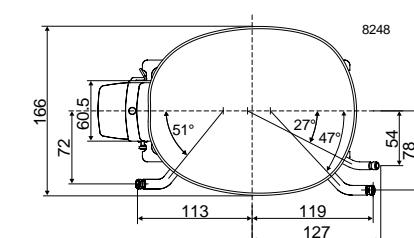
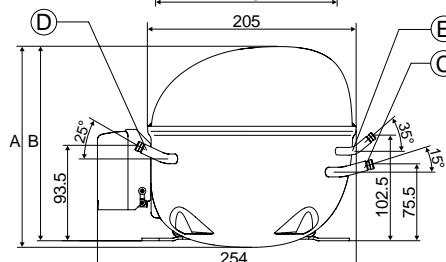
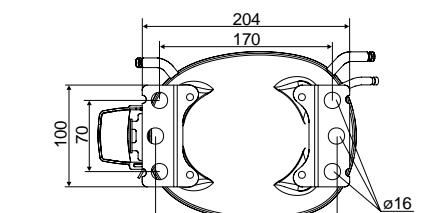
Displacement cm <sup>3</sup>	10.09
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.0



8776-4

#### Motor

Motor size watt	140
LRA (rated after 4 sec. UL984) LST A	5.0
Cut-in current LST A	9.4
Resistance, main and start winding (25°C) Ω	14.9/17.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 197
	B 191
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	67	91	120	131	155	198	249

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	82	111	146	160	189	241	304

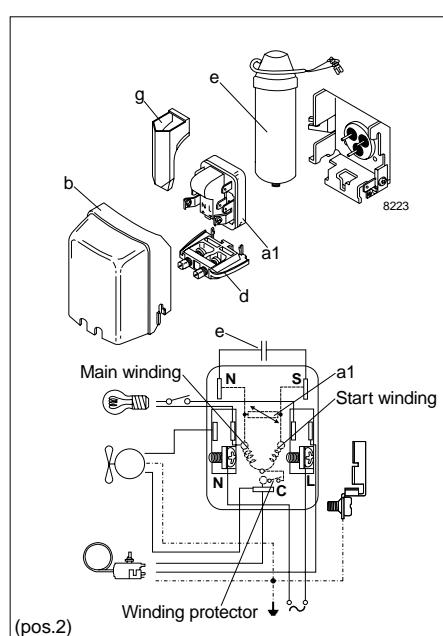
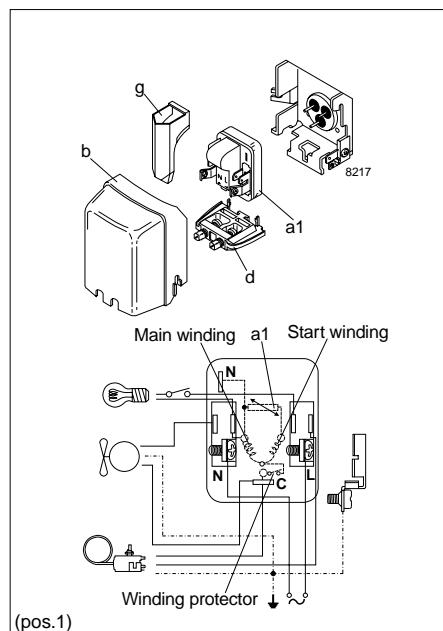
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	82	95	109	114	124	140	157

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	0.66	0.70	0.74	0.75	0.78	0.83	0.88

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	0.82	0.96	1.10	1.15	1.25	1.41	1.59

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE10KK.2	0.99	1.17	1.34	1.40	1.52	1.72	1.94

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.



#### Accessories

Devices	Fig.	NLE10KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 μF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLE11KK.2

## Energy-optimized Compressor

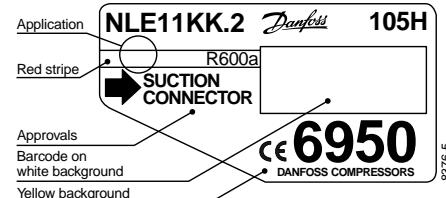
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.F1.02)

#### General

Compressor	<b>NLE11KK.2</b>
Code number	105H6950



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

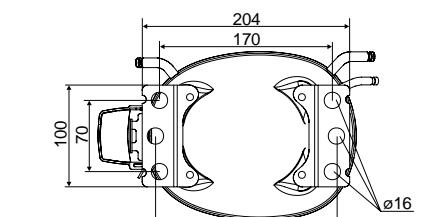
Displacement cm <sup>3</sup>	11.15
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.0



Yellow warning label

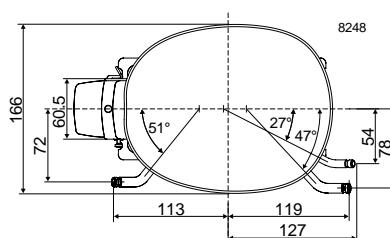
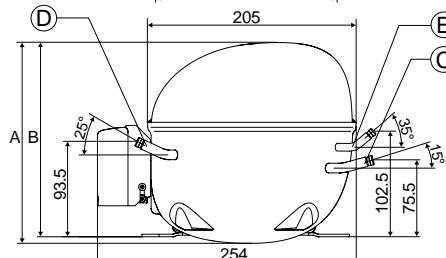
#### Motor

Motor size watt	140
LRA (rated after 4 sec. UL984) LST A	5.0
Cut-in current LST A	9.4
Resistance, main and start winding (25°C) Ω	14.9/17.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 197
	B 191
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	78	103	133	144	169	214	271

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	94	126	162	175	206	261	330

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	86	103	119	124	135	153	173

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	0.70	0.74	0.80	0.81	0.85	0.90	0.96

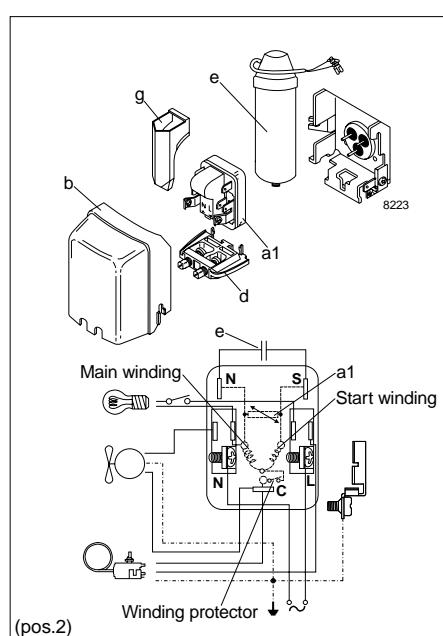
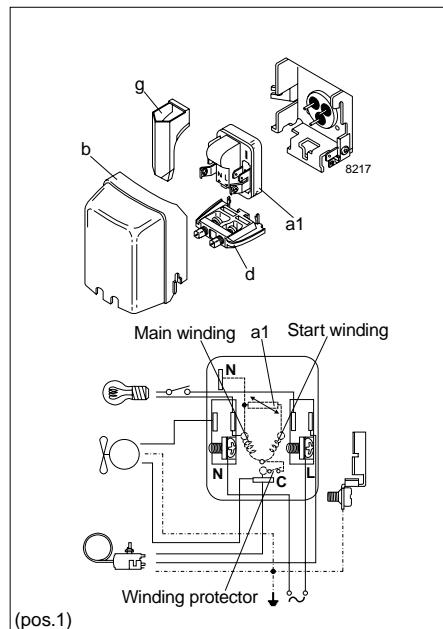
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	0.90	1.01	1.12	1.16	1.25	1.40	1.57

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KK.2	1.10	1.22	1.36	1.41	1.52	1.70	1.91

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE11KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# **NLE13KK.2**

## **Energy-optimized Compressor**

### **R600a**

### **220-240V 50Hz**

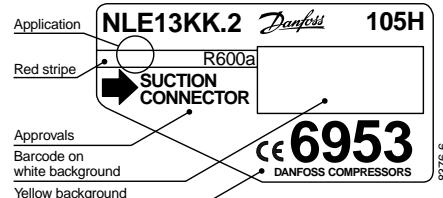
Data Sheet (Replaces CD.53.G1.02)

## General

Compressor	<b>NLE13KK.2</b>
Code number	105H6953

## Application

Application		LBP
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		RSIR/RSCR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

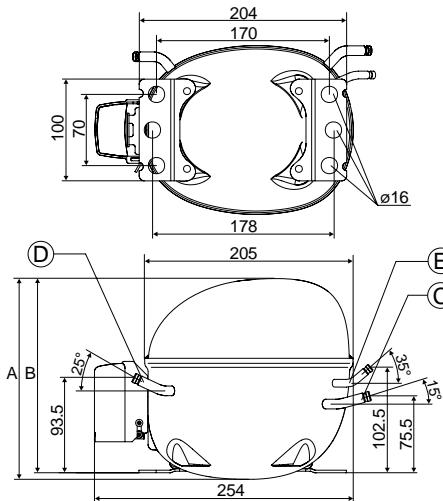
Design

Displacement	cm <sup>3</sup>	13.25
Oil quantity	cm <sup>3</sup>	270
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.0



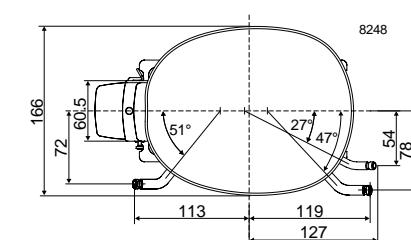
## Motor

Motor size	watt	175
LRA (rated after 4 sec. UL984) LST	A	6.6
Cut-in current LST	A	10.9
Resistance, main and start winding ( $25^{\circ}\text{C}$ )	$\Omega$	10.7/13.0
Approvals	EN 60335-2-34 with Annex AA	



## Dimensions

Height	mm	A	197
		B	191
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet	pcs.		80



Capacity (EN 12900/CECOMAF) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	88	118	154	168	198	250	313

Capacity (ASHRAE) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	107	143	187	204	241	305	381

Power consumption watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	99	122	143	150	164	185	207

Current consumption A							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	0.94	0.99	1.05	1.06	1.10	1.16	1.23

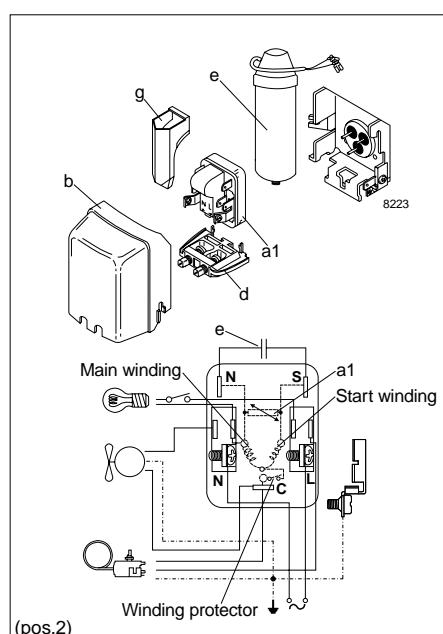
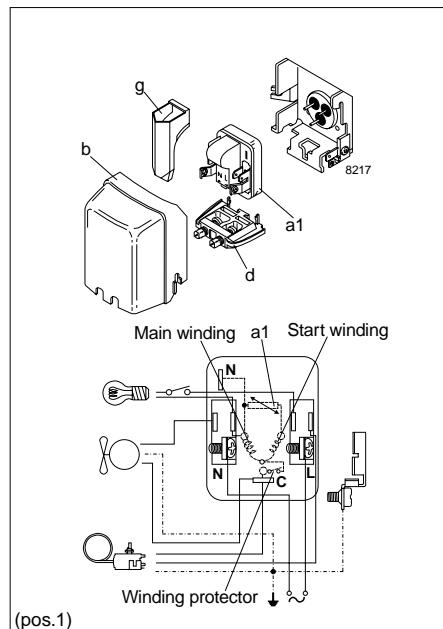
COP (EN 12900/CECOMAF) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	0.89	0.97	1.08	1.12	1.21	1.35	1.51

COP (ASHRAE) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE13KK.2	1.08	1.18	1.31	1.36	1.47	1.65	1.84

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE13KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# NLE15KK.2

## Energy-optimized Compressor

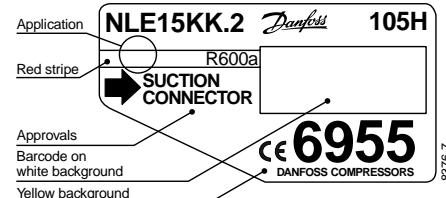
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.H1.02)

#### General

Compressor	<b>NLE15KK.2</b>
Code number	105H6955



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

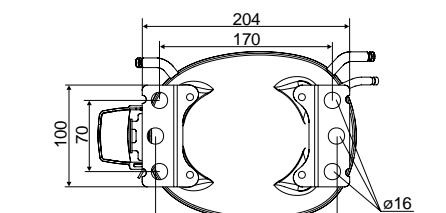
Displacement cm <sup>3</sup>	14.65
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.0



Yellow warning label

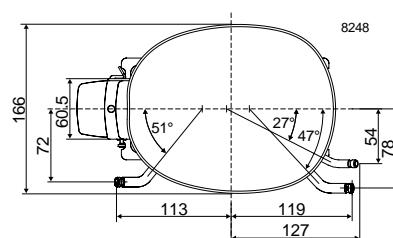
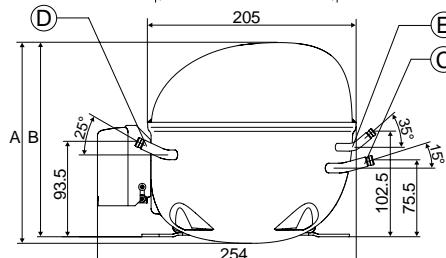
#### Motor

Motor size watt	175
LRA (rated after 4 sec. UL984) LST A	6.6
Cut-in current LST A	10.9
Resistance, main and start winding (25°C) Ω	10.7/13.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 197
	B 191
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	95	130	172	188	223	284	357

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	116	158	209	229	271	346	435

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	111	135	159	167	182	205	229

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	0.96	1.04	1.11	1.12	1.15	1.19	1.20

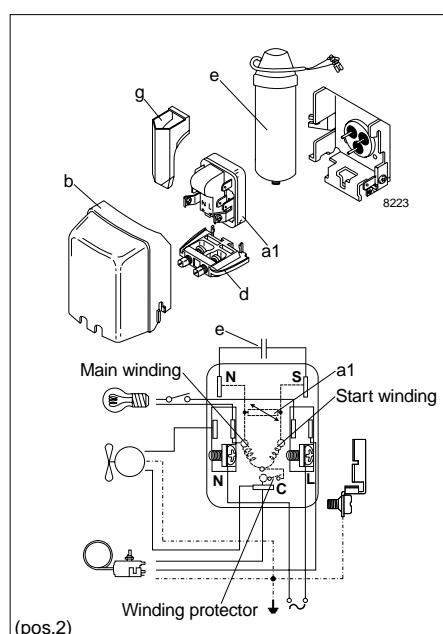
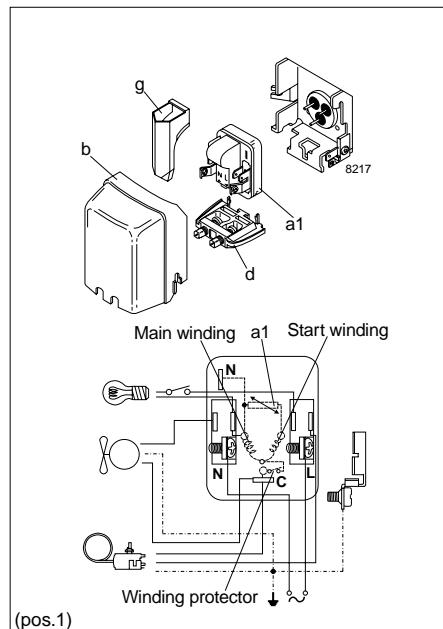
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	0.86	0.96	1.08	1.13	1.23	1.39	1.56

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KK.2	1.05	1.17	1.32	1.37	1.49	1.69	1.90

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE15KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# NLE10KK.3

## Energy-optimized Compressor

### R600a

### 220-240V 50Hz

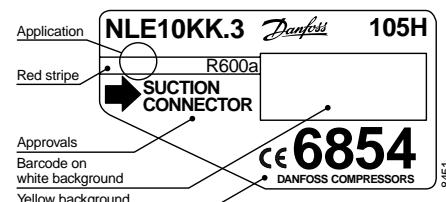
Data Sheet (Replaces CD.53.Z1.02)

#### General

Compressor	<b>NLE10KK.3</b>
Code number	105H6854

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

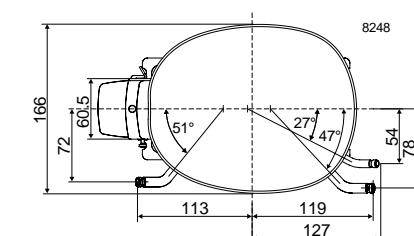
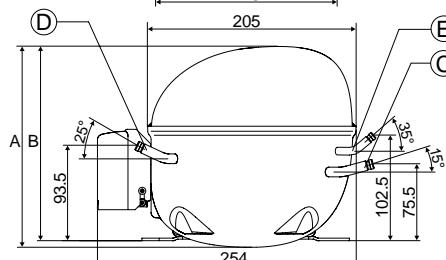
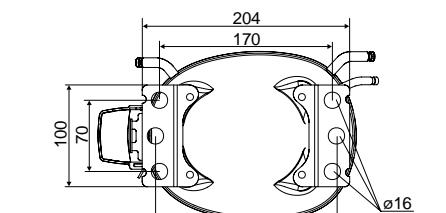
Displacement cm <sup>3</sup>	10.09
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.7



Yellow warning label

#### Motor

Motor size watt	124
LRA (rated after 4 sec. UL984) LST A	4.6
Cut-in current LST A	9.1
Resistance, main and start winding (25°C) Ω	17.0/14.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	80

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	59.0	89.8	124	137	163	207
						258

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	71.8	109	151	166	198	252
						314

Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	74.8	91.2	107	112	122	137
- with RC			103	108		

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	0.56	0.63	0.70	0.73	0.78	0.85
- with RC			0.51	0.53		

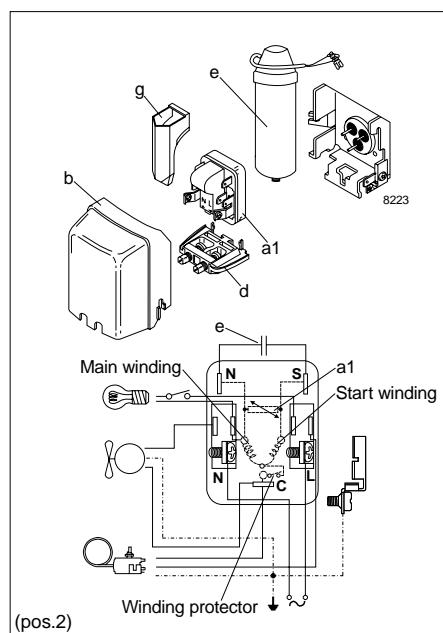
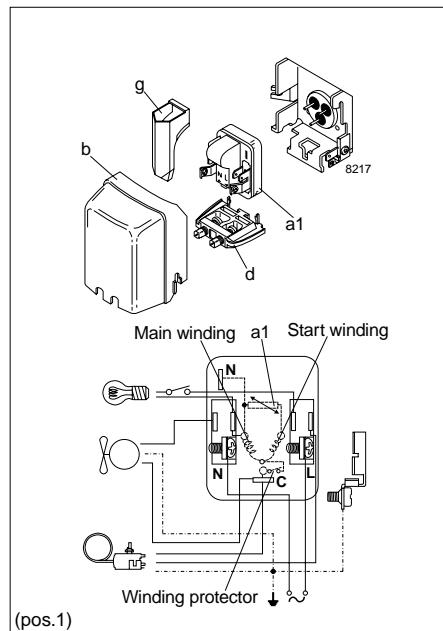
COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	0.79	0.98	1.16	1.22	1.33	1.51
- with RC			1.20	1.26		

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE10KK.3	0.96	1.20	1.41	1.48	1.62	1.84
- with RC			1.46	1.53		

Test conditions	EN 12900/CECOMAF	ASHRAE
Condensing temperature	55°C	55°C
Ambient and suction gas temp.	32°C	32°C
Liquid temperature	55°C	32°C
Static cooling, 220V 50Hz,		
PTC consumption incl.		

#### Accessories

Devices	Fig.	NLE10KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# NLE11KK.3

## Energy-optimized Compressor

### R600a

### 220-240V 50Hz

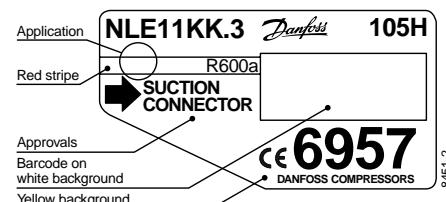
Data Sheet (Replaces CG.53.A1.02)

#### General

Compressor	<b>NLE11KK.3</b>
Code number	105H6957

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

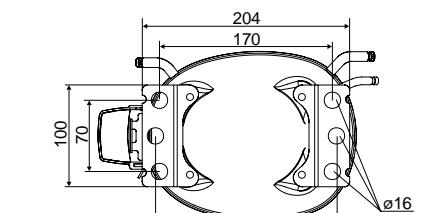
Displacement cm <sup>3</sup>	11.15
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8



Yellow warning label

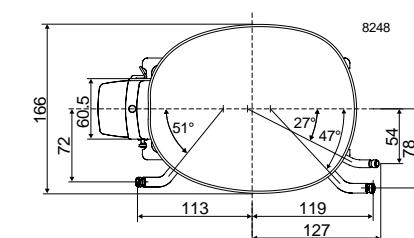
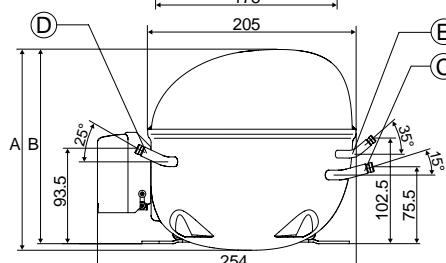
#### Motor

Motor size watt	143
LRA (rated after 4 sec. UL984) LST A	5.2
Cut-in current LST A	9.7
Resistance, main and start winding (25°C) Ω	14.4/13.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	80



Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	71.6	104	142	156	185	236
						295

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	87.1	127	173	190	226	287
						359

Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	85.6	104	120	125	135	149
- with RC			116	121		

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	0.64	0.72	0.79	0.82	0.87	0.94
- with RC			0.59	0.61		

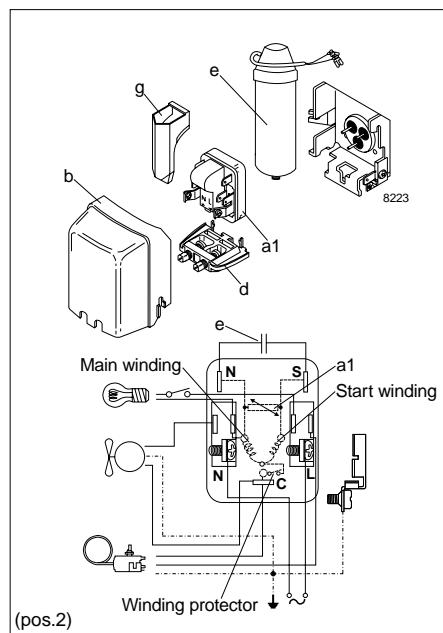
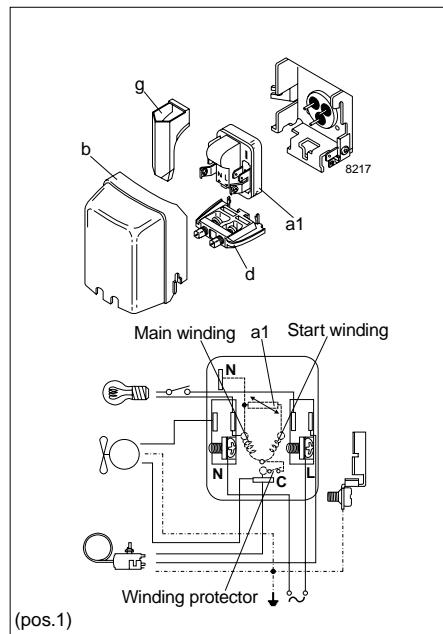
COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	0.84	1.01	1.18	1.25	1.38	1.58
- with RC			1.22	1.29		

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE11KK.3	1.02	1.22	1.44	1.52	1.67	1.93
- with RC			1.49	1.57		

Test conditions  
Condensing temperature 55°C ASHRAE  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.

#### Accessories

Devices	Fig.	NLE11KK.3
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# NLE13KK.3

## Energy-optimized Compressor

### R600a

### 220-240V 50Hz

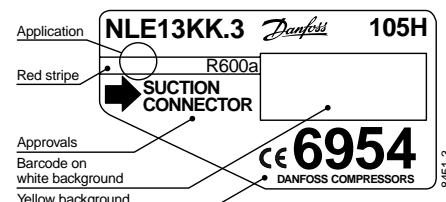
Data Sheet (Replaces CG.53.B1.02)

#### General

Compressor	<b>NLE13KK.3</b>
Code number	105H6954

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

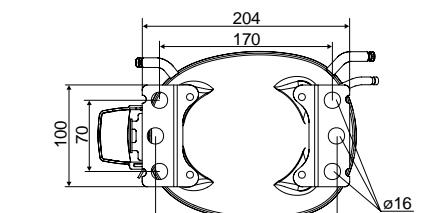
Displacement cm <sup>3</sup>	13.25
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8



Yellow warning label

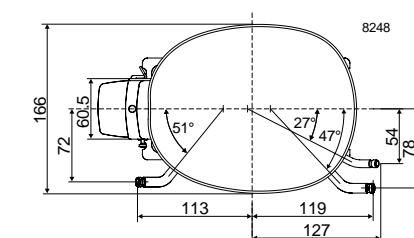
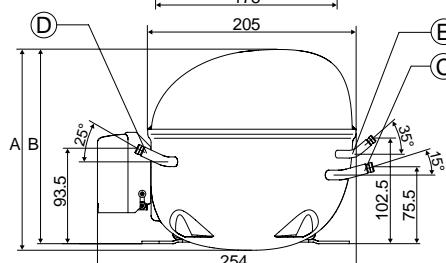
#### Motor

Motor size watt	174
LRA (rated after 4 sec. UL984) LST A	6.5
Cut-in current LST A	11.4
Resistance, main and start winding (25°C) Ω	12.3/10.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	80



Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	88.3	121	163	180	215	276
						347

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	107	147	198	219	262	337
						423

Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	99.1	118	138	145	158	179
- with RC			130	137		
						201

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	0.80	0.88	0.96	0.99	1.06	1.15
- with RC			0.71	0.74		
						1.26

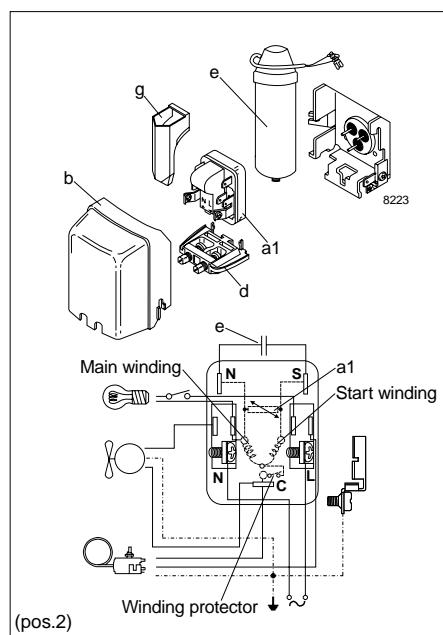
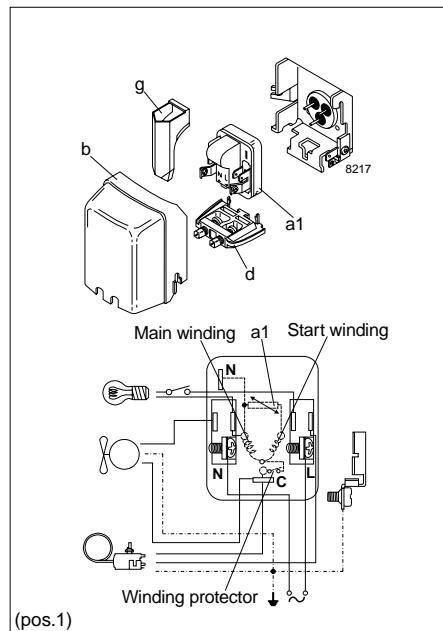
COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	0.89	1.02	1.18	1.24	1.36	1.54
- with RC			1.25	1.31		
						1.72

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE13KK.3	1.08	1.24	1.44	1.51	1.65	1.88
- with RC			1.52	1.60		
						2.10

Test conditions  
 Condensing temperature 55°C EN 12900/CECOMAF ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 32°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE13KK.3
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# NLE15KK.3

## Energy-optimized Compressor

### R600a

### 220-240V 50Hz

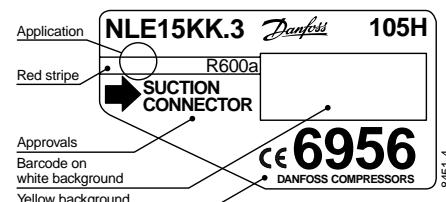
Data Sheet (Replaces CG.53.C1.02)

#### General

Compressor	<b>NLE15KK.3</b>
Code number	105H6956

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

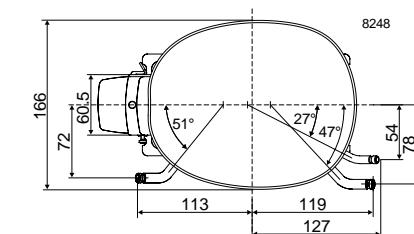
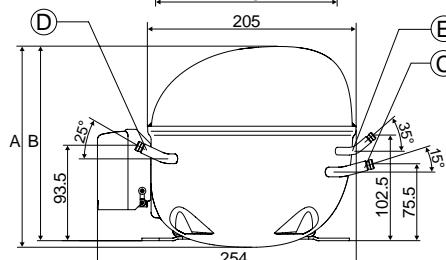
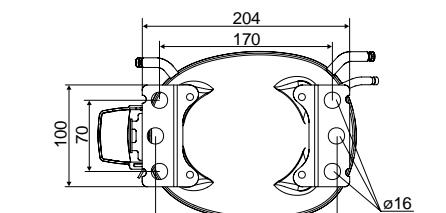
Displacement cm <sup>3</sup>	14.65
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8



Yellow warning label

#### Motor

Motor size watt	195
LRA (rated after 4 sec. UL984) LST A	5.0
Cut-in current LST A	10.0
Resistance, main and start winding (25°C) Ω	10.0/12.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	80

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	104	141	186	204	241	308
						387

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	126	171	226	248	294	374
						471

Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	110	136	160	168	184	208
- with RC			151	159		
						235

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	0.95	1.02	1.10	1.13	1.18	1.26
- with RC			0.82	0.85		
						1.35

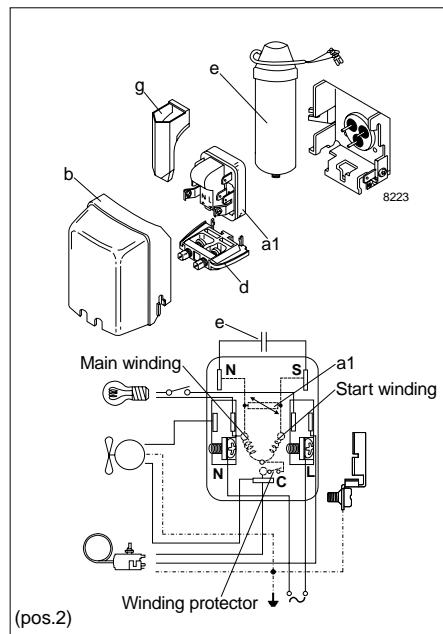
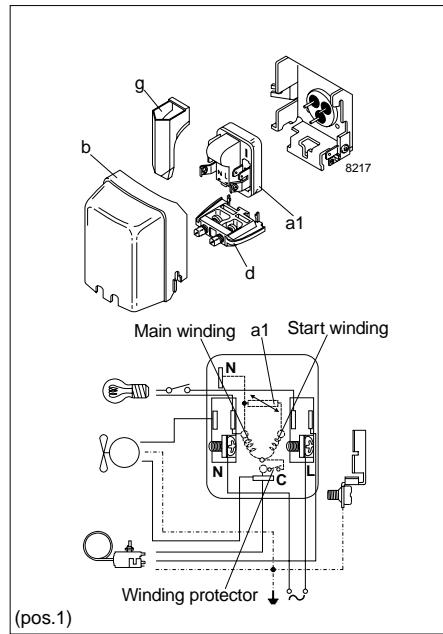
COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	0.94	1.04	1.16	1.21	1.31	1.48
-with RC			1.23	1.28		
						1.65

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLE15KK.3	1.14	1.26	1.41	1.47	1.60	1.80
- with RC			1.49	1.56		
						2.01

Test conditions  
Condensing temperature 55°C ASHRAE  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, 220V 50Hz,  
PTC consumption incl.

#### Accessories

Devices	Fig.	NLE15KK.3
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# **TLV5K**

## **Variable Speed Drive Compressor**

### **R600a**

### **220-240V 50-60Hz**

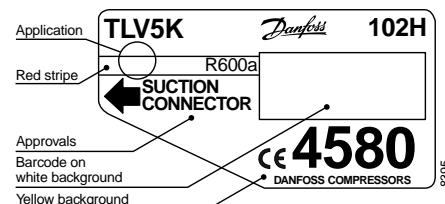
Data Sheet (Replaces CD.52.Y2.02)

## General

Compressor	<b>TLV5K</b>
Code number: Comp. without electronic unit	102H4580
Code number: Electronic unit	105N4001

## Application

Application		LBP/MBP
Evaporating temperature range	°C	-35 to 0
Voltage range	V/Hz	198 - 254 /50 - 60
Starting characteristics		HST
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



**Yellow warning label**

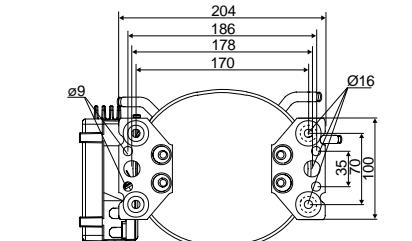
## Features

Speed range	rpm	2000 - 4000
Control modes with integrated speed control AEO*)		<ul style="list-style-type: none"> <li>- mech. thermostat 220V ON/OFF</li> <li>- 5V DC ON/OFF</li> </ul>
External speed control		- 5V DC 200-400Hz
Protections		<ul style="list-style-type: none"> <li>- current</li> <li>- speed</li> <li>- temperature</li> </ul>

\*AEO - Adaptive Energy Optimizer

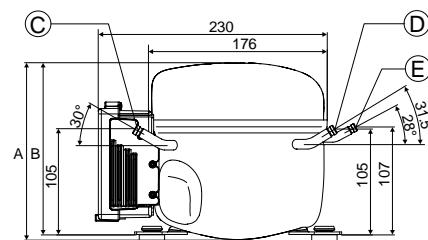
## Design

Displacement	cm <sup>3</sup>	5.08
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight: Compressor/Electronic unit	kg	7.9/0.6



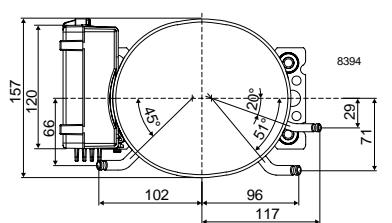
## **Motor**

Motor type	permanent magnet	
LRA (rated after 4 sec. UL984) HST	A	electronic cut-off
Cut-in current HST	A	6
Resistance, all 3 windings (25°C)	Ω	13.0
Approvals	EN 60335-2-34 with Annex AA	



### Dimensions

Dimensions			
Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/-0.20
Compressors on a pallet (without el. unit)	pcs.		125



**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	18.8	28.5	40.0	44.4	53.8	70.2	89.5	112	139
2,500	22.3	34.7	49.2	54.8	66.6	87.0	111	139	172
3,000	26.4	41.0	58.3	64.9	78.9	103	132	165	204
4,000	33.8	51.4	72.8	81.0	98.6	129	166	208	258

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	22.8	34.6	48.7	54.1	65.5	85.4	109	137	169
2,500	27.2	42.2	59.9	66.7	81.0	106	135	170	209
3,000	32.1	49.9	71.0	79.0	96.0	126	160	201	248
4,000	41.1	62.5	88.6	98.6	120	157	202	254	314

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	25.8	30.4	35.3	37.0	40.4	45.7	51.2	56.8	62.5
2,500	33.3	38.3	44.1	46.3	50.8	58.1	65.9	74.1	82.6
3,000	40.1	46.3	53.4	56.0	61.4	70.4	80.1	90.7	102
4,000	51.8	62.6	72.9	76.4	83.3	94.5	107	121	138

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.61	0.71	0.81	0.84	0.91	1.01	1.10	1.19	1.29
2,500	0.65	0.76	0.86	0.89	0.96	1.06	1.17	1.27	1.37
3,000	0.67	0.78	0.88	0.92	0.99	1.10	1.20	1.31	1.42
4,000	0.66	0.76	0.87	0.90	0.97	1.07	1.17	1.27	1.36

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.73	0.94	1.13	1.20	1.33	1.54	1.75	1.98	2.22
2,500	0.67	0.91	1.12	1.18	1.31	1.50	1.69	1.88	2.08
3,000	0.66	0.89	1.09	1.16	1.28	1.47	1.64	1.82	2.00
4,000	0.65	0.82	1.00	1.06	1.18	1.37	1.55	1.72	1.86

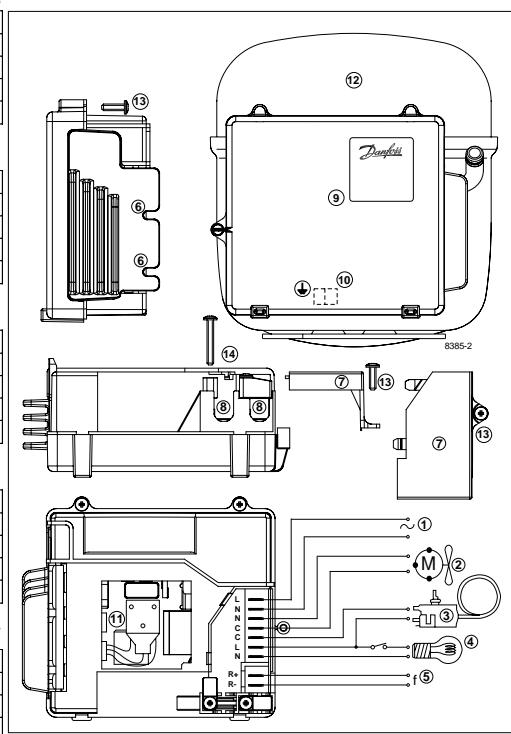
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.89	1.14	1.38	1.46	1.62	1.87	2.13	2.41	2.70
2,500	0.82	1.10	1.36	1.44	1.59	1.82	2.05	2.29	2.53
3,000	0.80	1.08	1.33	1.41	1.56	1.79	2.00	2.22	2.44
4,000	0.79	1.00	1.22	1.29	1.44	1.67	1.89	2.09	2.27

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz

**Accessories**

Devices	TLV5K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

**TLV6K  
Variable Speed Drive Compressor  
R600a  
220-240V 50-60Hz**

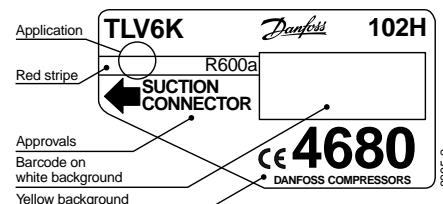
Data Sheet (Replaces CD.52.Z2.02)

## General

Compressor	<b>TLV6K</b>
Code number: Comp. without electronic unit	102H4680
Code number: Electronic unit	105N4001

## Application

Application		LBP/MBP
Evaporating temperature range	°C	-35 to 0
Voltage range	V/Hz	198 - 254 /50 - 60
Starting characteristics		HST
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



**Yellow warning label**

## Features

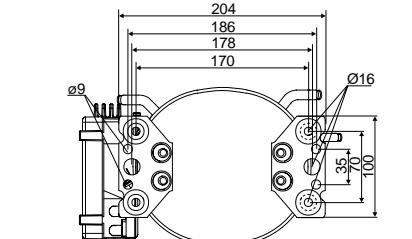
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Speed range	rpm	2000 - 4000
Control modes with integrated speed control AEO*)		- mech. thermostat 220V ON/OFF - 5V DC ON/OFF
External speed control		- 5V DC 200-400Hz
Protections		- current - speed - temperature

\*AEO - Adaptive Energy Optimizer

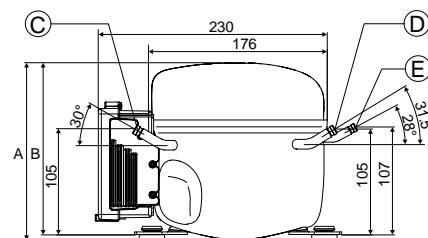
## Design

Displacement	cm <sup>3</sup>	5.70
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight: Compressor/Electronic unit	kg	7.9/0.6



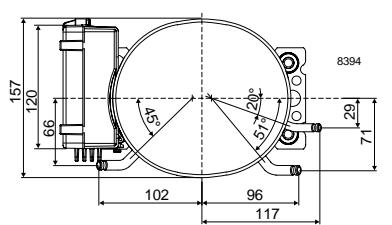
## **Motor**

Motor type		permanent magnet
LRA (rated after 4 sec. UL984) HST	A	electronic cut-off
Cut-in current HST	A	6
Resistance, all 3 windings (25°C)	Ω	13.0
Approvals		EN 60335-2-34 with Annex AA



## Dimensions

Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	$6.2 \pm 0.09$
Process connector	location/I.D. mm	D	$6.2 \pm 0.09$
Discharge connector	location/I.D. mm	E	$5.0 +0.12/+0.20$
Compressors on a pallet (without el. unit)	pcs.		125



**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	23.8	33.8	46.0	50.8	60.9	78.9	100	126	155
2,500	29.1	41.7	56.9	62.7	75.2	97.2	123	154	190
3,000	34.0	49.0	67.0	74.0	88.8	115	146	182	224
4,000	42.5	61.7	84.9	93.9	113	147	187	234	288

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	29.0	41.1	56.0	61.8	74.1	96.0	122	153	189
2,500	35.4	50.7	69.2	76.3	91.5	118	150	188	232
3,000	41.4	59.6	81.6	90.0	108	140	177	222	273
4,000	51.7	75.0	103	114	138	179	227	285	352

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	26.8	31.1	36.2	38.1	41.8	47.9	54.1	60.4	66.5
2,500	34.5	39.0	45.1	47.5	52.5	61.1	70.5	80.7	91.3
3,000	41.1	46.7	54.0	56.9	62.9	73.2	84.7	97.1	110
4,000	55.1	65.7	76.8	80.7	88.4	101	114	127	141

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.59	0.69	0.79	0.82	0.88	0.97	1.06	1.15	1.23
2,500	0.60	0.70	0.80	0.83	0.90	0.99	1.09	1.18	1.28
3,000	0.61	0.71	0.81	0.84	0.91	1.01	1.11	1.21	1.31
4,000	0.63	0.73	0.83	0.86	0.93	1.03	1.13	1.23	1.33

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.89	1.09	1.27	1.33	1.46	1.65	1.85	2.08	2.33
2,500	0.84	1.07	1.26	1.32	1.43	1.59	1.75	1.91	2.08
3,000	0.83	1.05	1.24	1.30	1.41	1.57	1.72	1.87	2.03
4,000	0.77	0.94	1.11	1.16	1.28	1.46	1.64	1.84	2.04

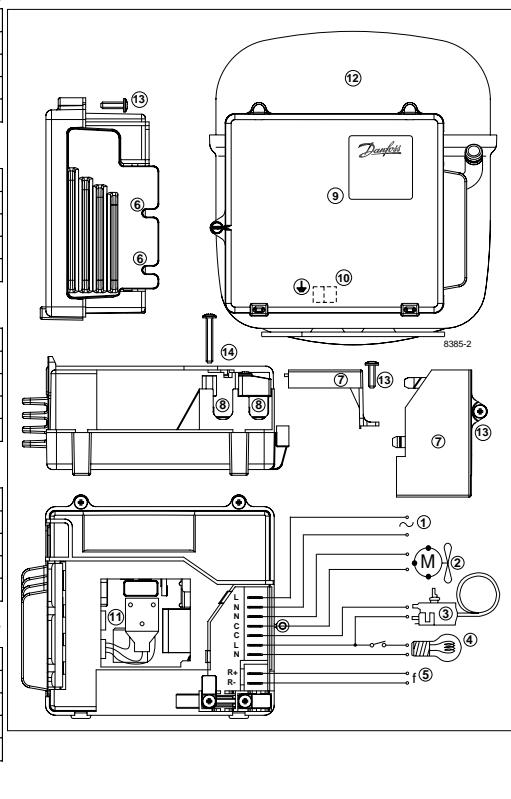
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.08	1.32	1.55	1.62	1.77	2.01	2.26	2.53	2.84
2,500	1.03	1.30	1.53	1.61	1.74	1.94	2.13	2.33	2.54
3,000	1.01	1.28	1.51	1.58	1.72	1.91	2.09	2.28	2.47
4,000	0.94	1.14	1.35	1.42	1.56	1.77	2.00	2.24	2.49

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz

**Accessories**

Devices	TLV6K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

**TLV7K  
Variable Speed Drive Compressor  
R600a  
220-240V 50-60Hz**

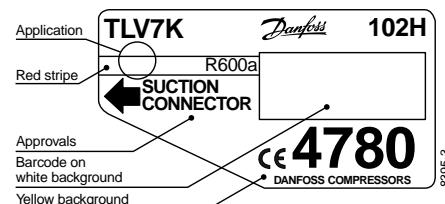
Data Sheet (Replaces CG.52.A2.02)

## General

Compressor	<b>TLV7K</b>
Code number: Comp. without electronic unit	102H4780
Code number: Electronic unit	105N4001

## Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to 0
Voltage range	V/Hz	198 - 254 /50 - 60
Starting characteristics	HST	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label

## Features

Speed range	rpm	2000 - 4000
Control modes with integrated speed control AEO*)		<ul style="list-style-type: none"> <li>- mech. thermostat 220V ON/OFF</li> <li>- 5V DC ON/OFF</li> </ul>
External speed control		- 5V DC 200-400Hz
Protections		<ul style="list-style-type: none"> <li>- current</li> <li>- speed</li> <li>- temperature</li> </ul>

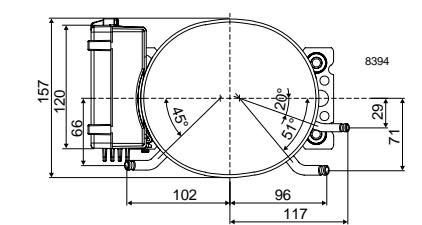
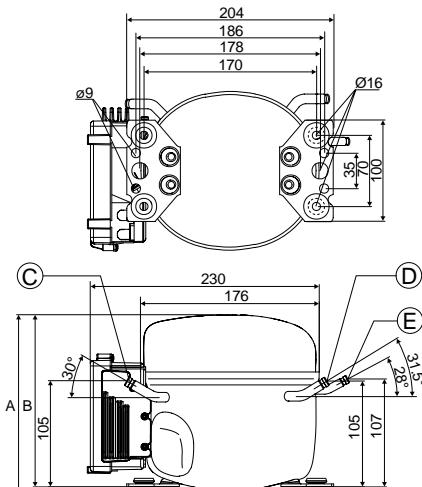
<sup>\*)</sup>AEO - Adaptive Energy Optimizer

Design

Displacement	cm <sup>3</sup>	6.49
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight: Compressor/Electronic unit	kg	7.9/0.6

## **Motor**

Motor type	permanent magnet	
LRA (rated after 4 sec. UL984) HST	A	electronic cut-off
Cut-in current HST	A	6
Resistance, all 3 windings (25°C)	Ω	13.0
Approvals	EN 60335-2-34 with Annex AA	



**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	30.2	41.7	56.0	61.5	73.3	94.2	119	149	183
2,500	36.2	50.7	68.3	75.1	89.5	115	145	180	221
3,000	41.5	58.6	79.3	87.3	104	134	169	211	258
4,000	49.9	71.3	97.5	108	129	168	213	266	328

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	36.7	50.8	68.1	74.8	89.2	115	145	181	223
2,500	44.1	61.7	83.1	91.4	109	140	177	220	270
3,000	50.5	71.3	96.5	106	127	163	206	257	315
4,000	60.7	86.7	119	131	157	204	259	324	400

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	33.9	39.7	46.0	48.2	52.6	59.3	66.1	72.9	79.5
2,500	43.2	50.2	57.8	60.5	65.8	74.1	82.4	90.5	98.1
3,000	51.3	59.5	68.7	72.0	78.6	88.9	99.1	109	118
4,000	63.8	75.0	88.3	93.2	103	119	134	150	164

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.81	0.91	1.01	1.04	1.10	1.20	1.29	1.37	1.46
2,500	0.79	0.91	1.03	1.06	1.12	1.21	1.28	1.34	1.38
3,000	0.77	0.91	1.03	1.07	1.14	1.22	1.30	1.35	1.39
4,000	0.77	0.89	1.01	1.05	1.13	1.26	1.39	1.52	1.66

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.89	1.05	1.22	1.28	1.39	1.59	1.80	2.04	2.30
2,500	0.84	1.01	1.18	1.24	1.36	1.55	1.76	1.99	2.26
3,000	0.81	0.99	1.16	1.21	1.33	1.51	1.71	1.93	2.19
4,000	0.78	0.95	1.10	1.16	1.25	1.41	1.58	1.78	2.01

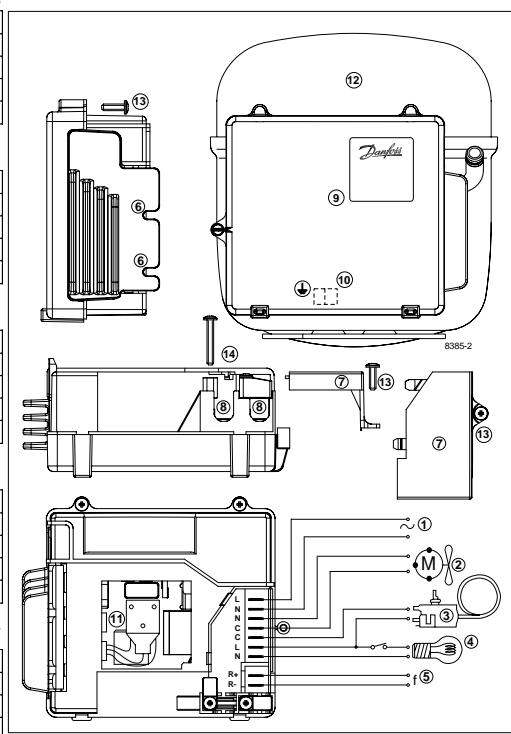
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.08	1.28	1.48	1.55	1.70	1.93	2.19	2.48	2.80
2,500	1.02	1.23	1.44	1.51	1.66	1.89	2.14	2.43	2.75
3,000	0.98	1.20	1.41	1.48	1.61	1.84	2.08	2.35	2.67
4,000	0.95	1.16	1.34	1.41	1.53	1.72	1.93	2.17	2.44

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz

**Accessories**

Devices	TLV7K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

# **TLV8K**

## **Variable Speed Drive Compressor**

### **R600a**

### **220-240V 50-60Hz**

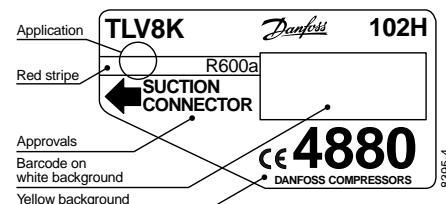
Data Sheet (Replaces CG.52.B2.02)

## General

<b>Compressor</b>	<b>TLV8K</b>
Code number: Comp. without electronic unit	102H4880
Code number: Electronic unit	105N4001

## Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to 0
Voltage range	V/Hz	198 - 254 /50 - 60
Starting characteristics	HST	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- $F_1$  = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- $F_2$  = Fan cooling 3.0 m/s necessary



#### **Yellow warning label**

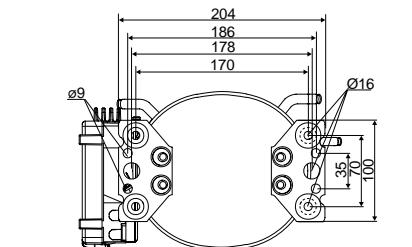
## Features

Speed range	rpm	2000 - 4000
Control modes with integrated speed control AEO*)		<ul style="list-style-type: none"> <li>- mech. thermostat 220V ON/OFF</li> <li>- 5V DC ON/OFF</li> </ul>
External speed control		- 5V DC 200-400Hz
Protections		<ul style="list-style-type: none"> <li>- current</li> <li>- speed</li> <li>- temperature</li> </ul>

\*AEO - Adaptive Energy Optimizer

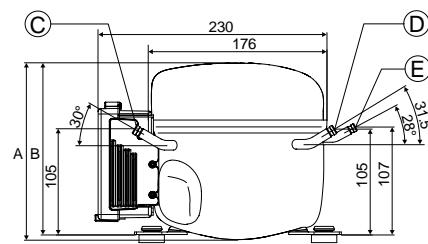
## Design

Displacement	cm <sup>3</sup>	7.76
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight: Compressor/Electronic unit	kg	7.9/0.6



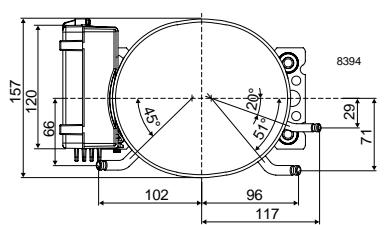
## **Motor**

Motor type	permanent magnet	
LRA (rated after 4 sec. UL984) HST	A	electronic cut-off
Cut-in current HST	A	6
Resistance, all 3 windings (25°C)	Ω	10.2
Approvals	EN 60335-2-34 with Annex AA	



## Dimensions

Dimensions			
Height		mm	A 173
			B 169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet (without el. unit)	pcs.		125



**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	34.6	47.6	64.0	70.4	84.1	109	138	173	213
2,500	41.2	58.4	79.2	87.2	104	134	169	211	259
3,000	47.4	67.8	92.4	102	122	157	198	246	302
4,000	58.1	82.7	113	125	150	194	246	308	379

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	42.0	58.0	77.9	85.6	102	132	168	210	260
2,500	50.2	71.0	96.3	106	127	163	206	257	315
3,000	57.6	82.5	112	124	148	191	241	300	368
4,000	70.7	101	137	152	182	236	300	375	462

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	36.8	44.3	52.4	55.2	60.9	69.8	78.9	88.2	97.7
2,500	46.4	55.5	65.3	68.7	75.6	86.3	97.1	108	119
3,000	55.2	66.2	78.0	82.2	90.5	103	117	130	143
4,000	69.2	85.1	102	107	119	137	156	177	199

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.96	1.11	1.26	1.32	1.42	1.57	1.73	1.89	2.06
2,500	0.97	1.13	1.28	1.34	1.44	1.61	1.77	1.94	2.12
3,000	0.98	1.13	1.30	1.35	1.46	1.63	1.80	1.98	2.16
4,000	0.97	1.14	1.31	1.37	1.48	1.65	1.83	2.01	2.18

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	0.94	1.08	1.22	1.27	1.38	1.56	1.75	1.96	2.18
2,500	0.89	1.05	1.21	1.27	1.38	1.55	1.74	1.95	2.18
3,000	0.86	1.02	1.18	1.24	1.35	1.52	1.70	1.90	2.11
4,000	0.84	0.97	1.11	1.16	1.26	1.41	1.57	1.74	1.91

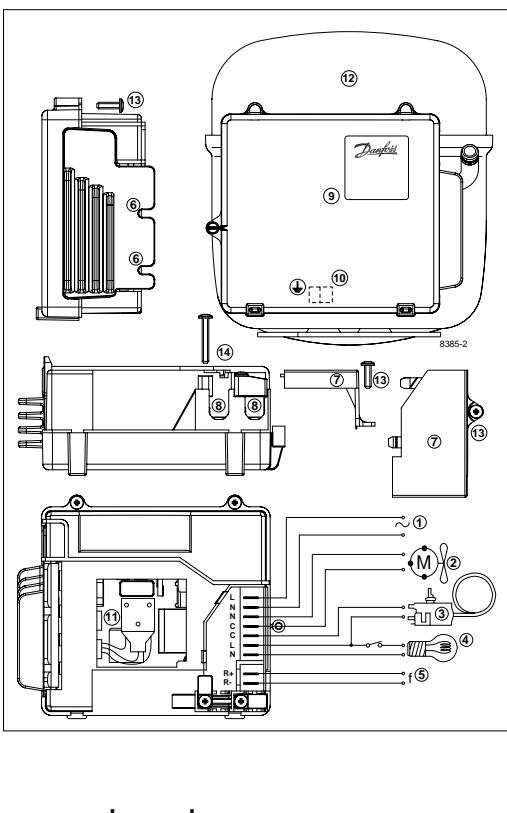
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.14	1.31	1.49	1.55	1.68	1.89	2.13	2.38	2.66
2,500	1.08	1.28	1.48	1.54	1.68	1.89	2.12	2.38	2.66
3,000	1.04	1.25	1.44	1.51	1.64	1.84	2.07	2.31	2.58
4,000	1.02	1.18	1.35	1.41	1.53	1.72	1.92	2.12	2.33

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz

**Accessories**

Devices	TLV8K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

# TLV9K

## Variable Speed Drive Compressor

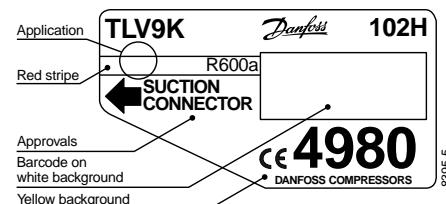
### R600a

### 220-240V 50-60Hz

Data Sheet (Replaces CG.52.C2.02)

#### General

Compressor	<b>TLV9K</b>
Code number: Comp. without electronic unit	102H4980
Code number: Electronic unit	105N4001



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	198 - 254 /50 - 60
Starting characteristics	HST
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	32°C S 38°C S 43°C S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



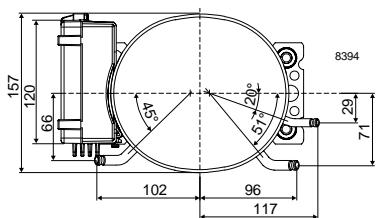
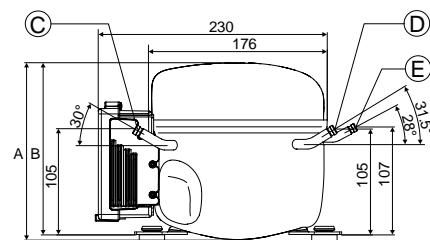
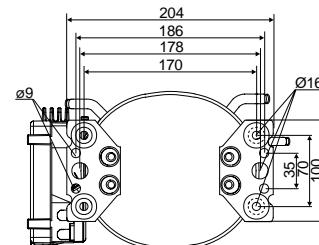
#### Features

Speed range rpm	2000 - 4000
Control modes with integrated speed control AEO*)	- mech. thermostat 220V ON/OFF - 5V DC ON/OFF
External speed control	- 5V DC 200-400Hz
Protections	- current - speed - temperature

\*)AEO - Adaptive Energy Optimizer

#### Design

Displacement cm <sup>3</sup>	8.83
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight: Compressor/Electronic unit kg	7.9/0.6



#### Motor

Motor type	permanent magnet
LRA (rated after 4 sec. UL984) HST	A electronic cut-off
Cut-in current HST	A 6
Resistance, all 3 windings (25°C)	Ω 10.2
Approvals	EN 60335-2-34 with Annex AA

#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet (without el. unit) pcs.	125

**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	40.6	55.6	74.1	81.4	96.9	124	157	196	241
2,500	48.0	67.2	91.0	100	120	155	197	246	303
3,000	54.6	76.9	104	114	137	175	221	275	338
4,000	66.2	93.6	126	138	164	209	263	325	397

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	49.4	67.6	90.2	99.0	118	151	192	239	294
2,500	58.4	81.7	111	122	146	189	240	300	369
3,000	66.4	93.6	127	139	166	214	270	336	412
4,000	80.5	114	153	168	200	255	320	396	484

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	40.7	50.9	60.8	64.1	70.5	80.2	90.2	101	112
2,500	51.4	62.8	75.2	79.6	88.3	102	115	129	142
3,000	60.0	73.3	87.6	92.7	103	119	136	153	170
4,000	81.1	99.5	118	125	138	159	181	207	235

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.09	1.27	1.46	1.53	1.65	1.85	2.05	2.25	2.46
2,500	1.09	1.29	1.50	1.57	1.70	1.90	2.10	2.29	2.48
3,000	1.10	1.30	1.51	1.58	1.71	1.91	2.12	2.32	2.52
4,000	1.12	1.30	1.49	1.55	1.68	1.89	2.10	2.33	2.56

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.00	1.09	1.22	1.27	1.37	1.55	1.74	1.95	2.16
2,500	0.93	1.07	1.21	1.26	1.36	1.52	1.70	1.91	2.13
3,000	0.91	1.05	1.19	1.23	1.33	1.47	1.63	1.80	1.98
4,000	0.82	0.94	1.07	1.11	1.19	1.32	1.45	1.57	1.69

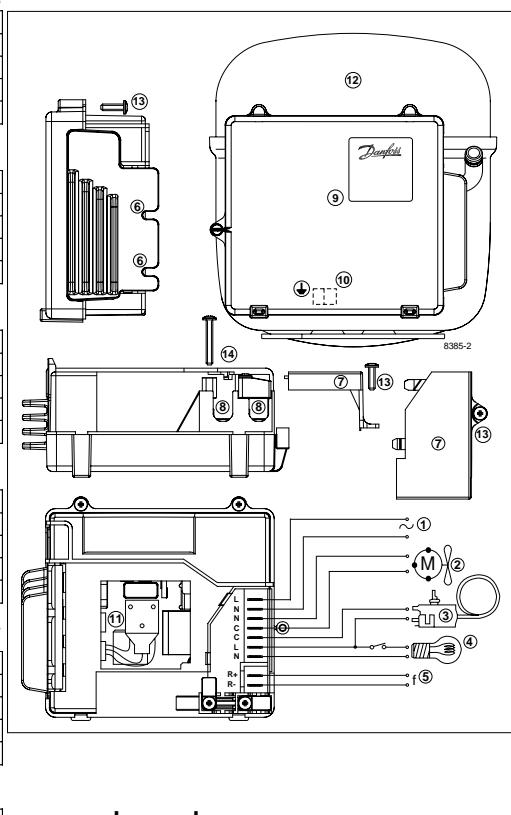
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
2,000	1.21	1.33	1.48	1.54	1.67	1.89	2.12	2.37	2.64
2,500	1.14	1.30	1.47	1.53	1.65	1.85	2.08	2.32	2.60
3,000	1.11	1.28	1.44	1.50	1.62	1.80	1.99	2.19	2.42
4,000	0.99	1.14	1.30	1.35	1.45	1.61	1.76	1.91	2.06

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz

**Accessories**

Devices	TLV9K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

# NLV11K

## Variable Speed Drive Compressor

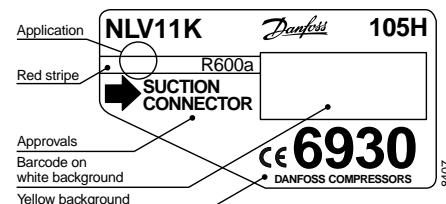
### R600a

### 220-240V 50-60Hz

Data Sheet (Replaces CD.53.X2.02)

#### General

Compressor	<b>NLV11K</b>
Code number: Comp. without electronic unit	105H6930
Code number: Comp. without electronic unit	105H6931
Code number: Electronic unit	105N4201 / 105N4001 - LBP only



8407

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



8472

#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 5
Voltage range V/Hz	198 - 254 /50 - 60
Starting characteristics	HST
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

#### Features

Speed range rpm	2000 - 4000
Control modes with integrated speed control AEO*)	- mech. thermostat 220V ON/OFF - 5V DC ON/OFF
External speed control	- 5V DC 200-400Hz
Protections	- current - speed - temperature

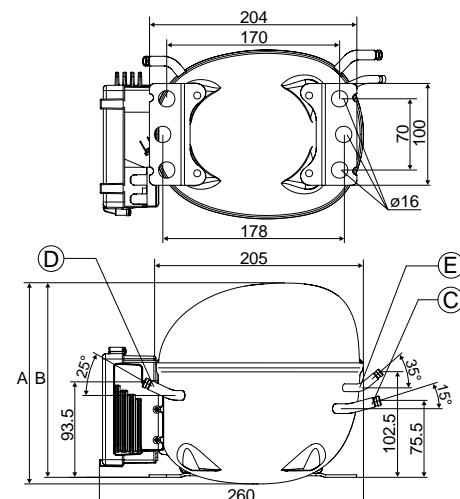
\*)AEO - Adaptive Energy Optimizer

#### Design

Displacement cm <sup>3</sup>	11.15
Oil quantity cm <sup>3</sup>	320
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2360
Weight: Compressor/Electronic unit kg	10.8/0.6

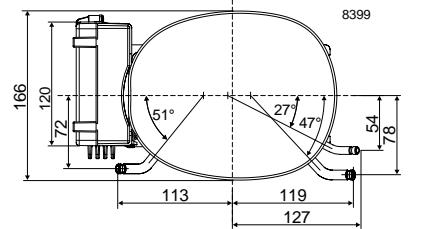
#### Motor

Motor type	permanent magnet
LRA (rated after 4 sec. UL984) LST/HST A	electronic cut-off
Cut-in current LST/HST A	6
Resistance, all 3 windings (25°C) Ω	14.1
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

		<b>105G6930</b>	<b>105G6931</b>
Height mm	A	203	
	B	197	
Suction connector location/I.D. mm	C	8.2 ±0.09	6.2 ±0.09
Process connector location/I.D. mm	D	6.2 ±0.09	6.2 ±0.09
Discharge connector location/I.D. mm	E	6.2 ±0.09	5.0+0.12/-0.20
Compressors on a pallet (without el. unit) pcs.		80	



**Capacity (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	57.1	77.0	102	112	133	171	216	270	334	408
2,500	65.2	94.2	128	141	168	214	269	333	407	493
3,000	72.8	109	150	165	197	251	314	387	471	568
4,000	79.9	126	176	195	233	298	373	459	559	674

**Capacity (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	69.5	93.7	124	136	162	208	263	329	407	497
2,500	79.3	115	156	171	204	261	328	406	497	602
3,000	88.5	133	183	201	240	306	383	472	574	693
4,000	97.2	153	214	237	284	363	454	560	682	822

**Power consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	53.6	62.6	72.9	76.6	84.2	96.3	109	122	134	146
2,500	64.5	79.6	94.5	99.5	109	123	137	151	164	177
3,000	75.0	94.4	112	118	129	146	161	176	191	206
4,000	87.3	111	133	140	154	173	192	212	233	255

**Current consumption**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	0.94	1.08	1.23	1.28	1.38	1.52	1.67	1.81	1.95	2.10
2,500	0.90	1.06	1.22	1.27	1.37	1.52	1.66	1.80	1.94	2.07
3,000	0.88	1.05	1.20	1.26	1.36	1.50	1.64	1.77	1.89	2.01
4,000	0.61	0.80	0.96	1.02	1.11	1.24	1.36	1.45	1.52	1.58

**COP (EN 12900/CECOMAF)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	1.07	1.23	1.40	1.46	1.58	1.77	1.98	2.22	2.49	2.79
2,500	1.01	1.18	1.35	1.41	1.54	1.74	1.96	2.20	2.48	2.78
3,000	0.97	1.16	1.33	1.40	1.52	1.73	1.95	2.20	2.47	2.76
4,000	0.91	1.13	1.32	1.39	1.52	1.72	1.94	2.17	2.40	2.64

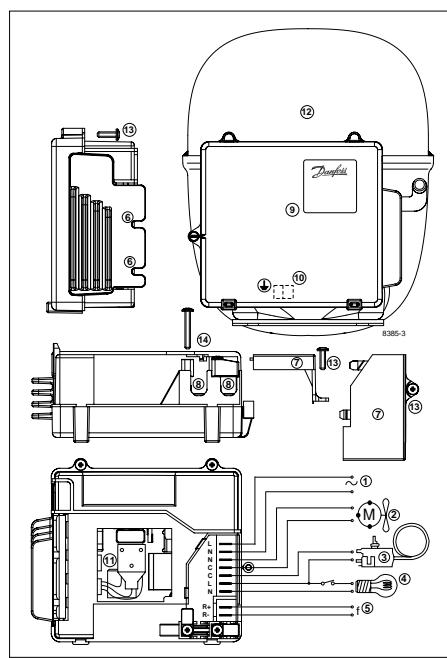
**COP (ASHRAE)**

rpm \ °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5
2,000	1.30	1.50	1.70	1.78	1.92	2.16	2.42	2.71	3.04	3.41
2,500	1.23	1.44	1.65	1.72	1.87	2.11	2.38	2.69	3.02	3.40
3,000	1.18	1.41	1.62	1.70	1.85	2.10	2.38	2.68	3.01	3.37
4,000	1.11	1.37	1.61	1.69	1.85	2.10	2.36	2.64	2.93	3.22

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Electronic unit type 105N4001, Static cooling, 220V 50Hz, preliminary data.  
Performance data established on 8.2 mm suction line.  
Restrictions due to 6.2 mm suction line can affect system performance.

**Accessories**

Devices	NLV11K
Mounting accessories	
Bolt joint for one compressor	118-1917
Bolt joint in quantities	118-1918
Snap-on in quantities	118-1919


**Legend**
**Number Description**

- 1: Power supply
- 2: Fan connection
- 3: Thermostat connection
- 4: Light connection
- 5: Signal input
- 6: Mounting recesses
- 7: Cover
- 8: Cord relief
- 9: Electronic unit
- 10: Earth connection
- 11: Connector
- 12: Compressor
- 13: Screw 3.5 x 12 mm (3 pcs.)
- 14: Screw 3.5 x 25 mm (2 pcs.)

(for further descriptions on connecting the electronic unit and the compressor, refer to instruction CI.42.D. "Electronic Unit Type 105N4001 - 198-254V for the TLV Compressor").

# TLY3K

## High Energy-optimized Compressor

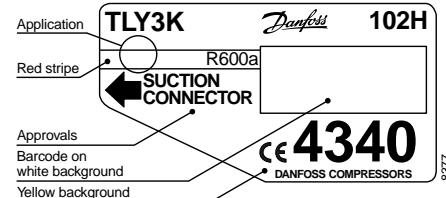
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.M1.02)

#### General

Compressor	<b>TLY3K</b>
Code number	102H4340



#### Application

Application	MBP
Evaporating temperature range °C	-25 to 0
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	S
32°C	S
38°C	S

\* run capacitor 4 µF compulsory

#### Design

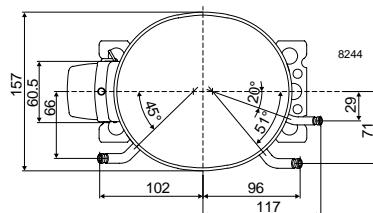
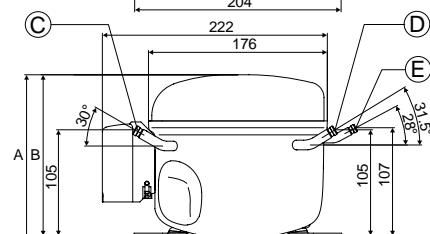
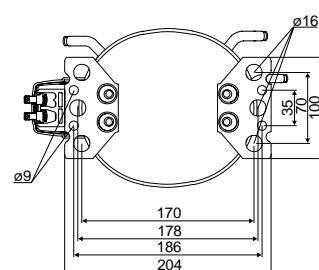
Displacement cm³	3.13
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1690
Weight without electrical equipment kg	6.5



Yellow warning label

#### Motor

Motor size watt	35
LRA (rated after 4 sec. UL984) LST A	1.0
Cut-in current LST A	5.8
Resistance, main and start winding (25°C) Ω	62.0/14.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 163 B 159
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	28.9	32.6	40.7	55.1	71.9	91.0	112

Capacity (ASHRAE)							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	35.2	39.7	49.6	67.1	87.5	111	137

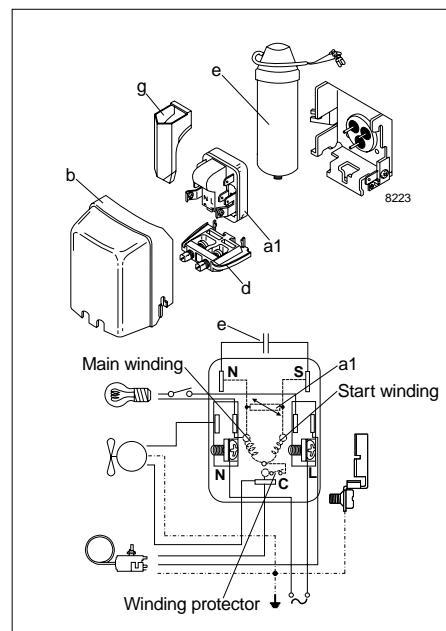
Power consumption							watt
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	35.9	37.5	40.5	45.2	49.8	53.9	57.3

Current consumption							A
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	0.21	0.22	0.22	0.24	0.26	0.27	0.28

COP (CECOMAF)							W/W
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	0.80	0.87	1.01	1.22	1.44	1.69	1.96

COP (ASHRAE)							W/W
Comp.\°C	-25	-23.3	-20	-15	-10	-5	0
TLY3K	0.98	1.06	1.22	1.48	1.76	2.06	2.39

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY3K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY4KK.2

## High Energy-optimized Compressor

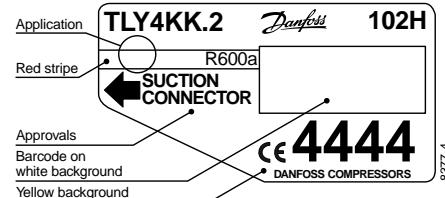
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.N1.02)

#### General

Compressor	<b>TLY4KK.2</b>
Code number	102H4444



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

#### Design

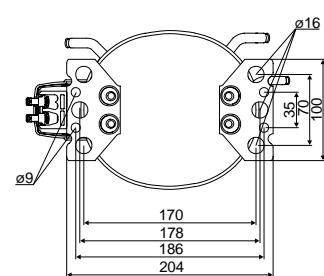
Displacement cm³	3.86
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1690
Weight without electrical equipment kg	6.5



Yellow warning label

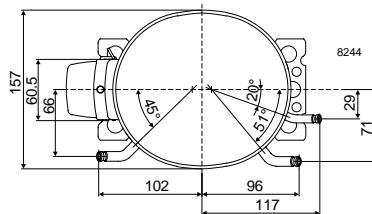
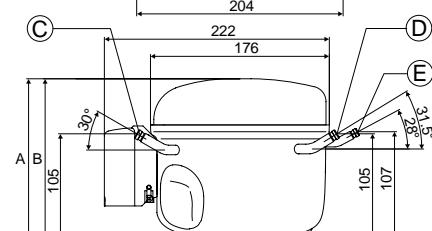
#### Motor

Motor size watt	40
LRA (rated after 4 sec. UL984) LST A	1.4
Cut-in current LST A	5.9
Resistance, main and start winding (25°C) Ω	49.0/15.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 163 B 159
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	18	28	40	45	55	74	96

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	22	34	49	54	67	90	117

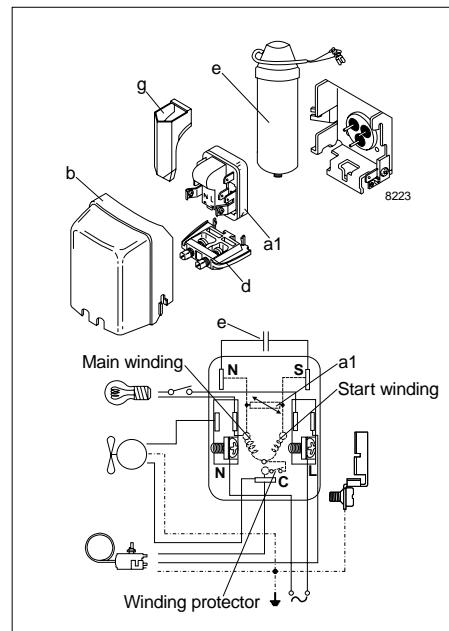
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	34	39	43	45	48	53	58

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	0.20	0.21	0.23	0.23	0.24	0.26	0.29

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	0.54	0.71	0.92	1.00	1.15	1.40	1.65

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY4KK.2	0.65	0.87	1.12	1.22	1.40	1.70	2.00

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY4KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY5KK.2

## High Energy-optimized Compressor

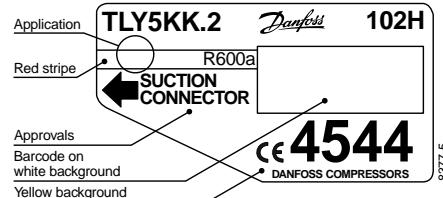
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.O1.02)

#### General

Compressor	<b>TLY5KK.2</b>
Code number	102H4544



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

#### Design

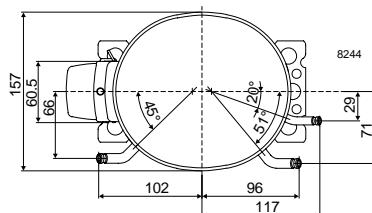
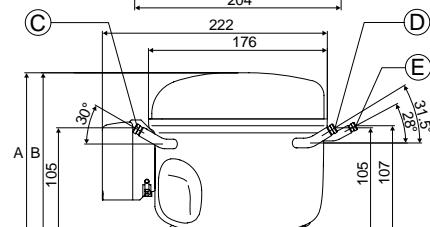
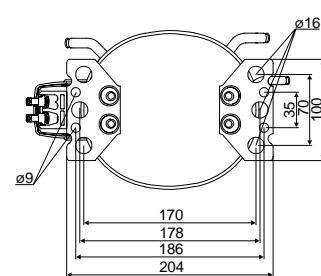
Displacement cm³	5.08
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1790
Weight without electrical equipment kg	7.5



Yellow warning label

#### Motor

Motor size watt	55
LRA (rated after 4 sec. UL984) LST A	1.9
Cut-in current LST A	5.0
Resistance, main and start winding (25°C) Ω	35.0/29.1
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	28	41	57	63	76	99	126

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	34	50	69	77	93	121	154

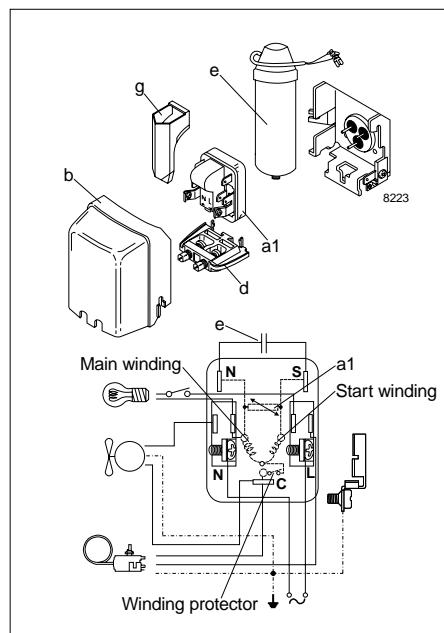
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	43	49	55	57	62	69	77

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	0.23	0.26	0.28	0.29	0.30	0.33	0.36

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	0.66	0.85	1.04	1.10	1.24	1.44	1.64

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY5KK.2	0.80	1.03	1.27	1.34	1.51	1.75	2.00

Test conditions  
 Condensing temperature 55°C ASHRAE  
 Ambient and suction gas temp. 32°C 55°C  
 Liquid temperature 55°C 32°C  
 Static cooling, with RC 4 µF, 220V 50Hz,  
 PTC consumption incl.



## Accessories

Devices	Fig.	TLY5KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY6KK.2

## High Energy-optimized Compressor

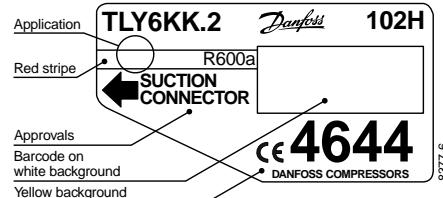
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.P1.02)

#### General

Compressor	<b>TLY6KK.2</b>
Code number	102H4644



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



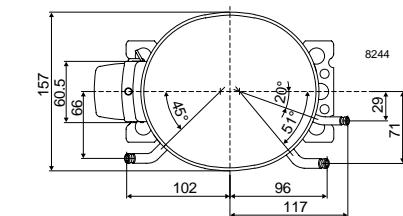
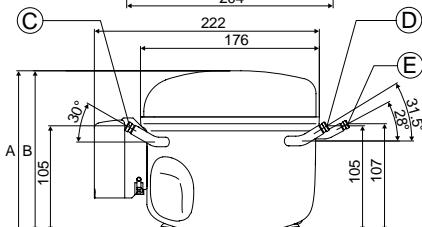
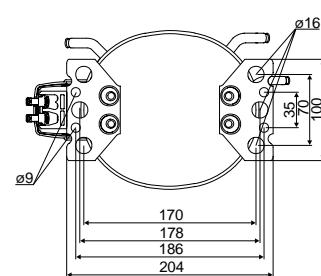
Yellow warning label

#### Design

Displacement cm <sup>3</sup>	5.70
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5

#### Motor

Motor size watt	55
LRA (rated after 4 sec. UL984) LST A	1.9
Cut-in current LST A	4.4
Resistance, main and start winding (25°C) Ω	34.0/41.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	31	47	66	72	87	111	139

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	37	57	80	88	105	135	170

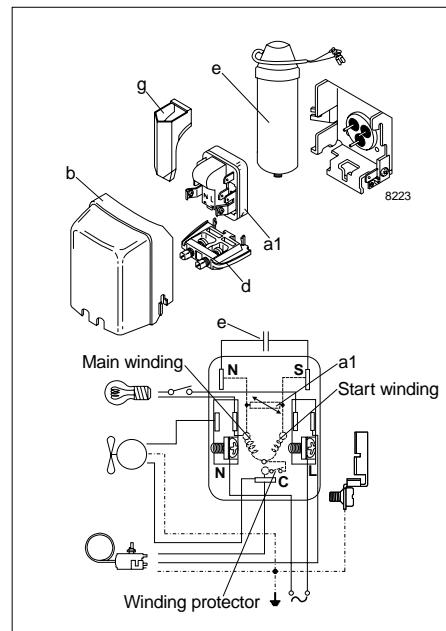
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	45	54	62	65	70	78	87

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	0.23	0.26	0.30	0.31	0.33	0.37	0.41

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	0.68	0.88	1.06	1.13	1.24	1.41	1.60

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY6KK.2	0.83	1.07	1.29	1.37	1.50	1.72	1.94

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY6KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY7KK.2

## High Energy-optimized Compressor

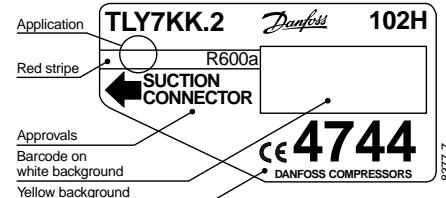
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.Q1.02)

#### General

Compressor	<b>TLY7KK.2</b>
Code number	102H4744



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



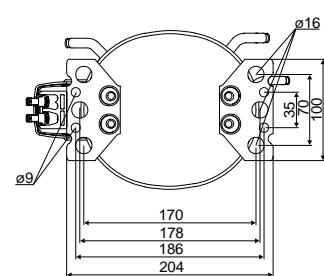
Yellow warning label

#### Design

Displacement cm <sup>3</sup>	6.49
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5

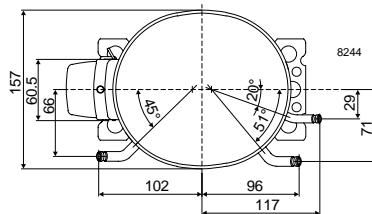
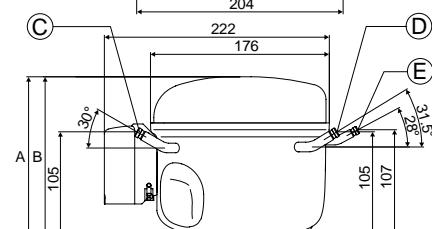
#### Motor

Motor size watt	80
LRA (rated after 4 sec. UL984) LST A	2.3
Cut-in current LST A	5.7
Resistance, main and start winding (25°C) Ω	27.1/27.2
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	40	57	77	85	101	130	163

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	48	69	94	103	123	158	199

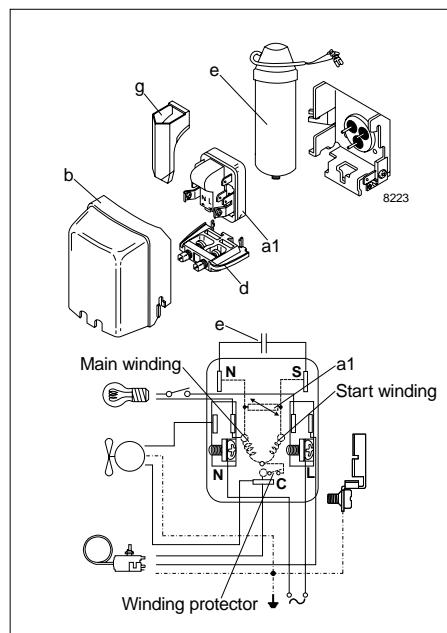
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	53	61	70	73	80	91	102

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	0.26	0.29	0.33	0.34	0.37	0.42	0.47

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	0.75	0.93	1.10	1.16	1.26	1.42	1.59

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY7KK.2	0.91	1.13	1.34	1.41	1.54	1.73	1.94

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY7KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY8KK.2

## High Energy-optimized Compressor

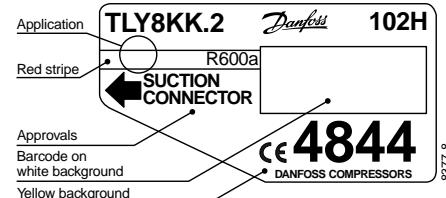
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.R1.02)

#### General

Compressor	TLY8KK.2
Code number	102H4844



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



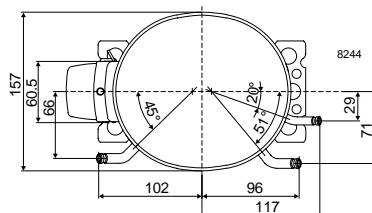
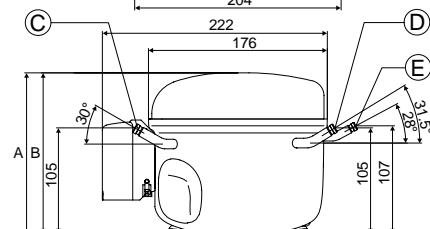
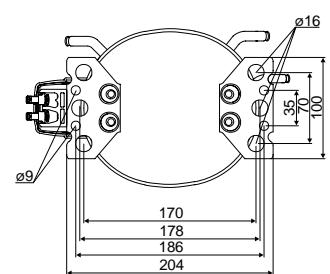
Yellow warning label

#### Design

Displacement cm <sup>3</sup>	7.76
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.6

#### Motor

Motor size watt	100
LRA (rated after 4 sec. UL984) LST A	3.0
Cut-in current LST A	6.4
Resistance, main and start winding (25°C) Ω	21.6/26.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	44	66	89	98	115	146	183

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	53	80	108	119	140	177	223

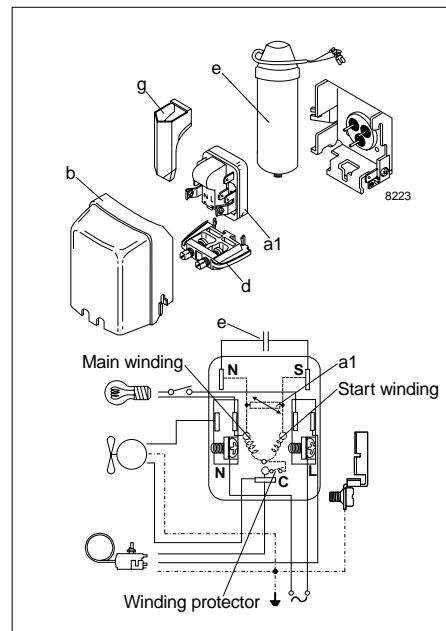
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	58	69	79	83	90	101	114

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	0.31	0.36	0.40	0.42	0.46	0.51	0.57

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	0.76	0.96	1.12	1.17	1.28	1.44	1.61

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLY8KK.2	0.92	1.16	1.36	1.43	1.55	1.75	1.96

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY8KK.2
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLY9K

## High Energy-optimized Compressor

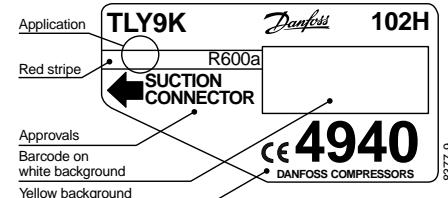
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.S1.02)

#### General

Compressor	<b>TLY9K</b>
Code number	102H4940



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	S
32°C	S
38°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

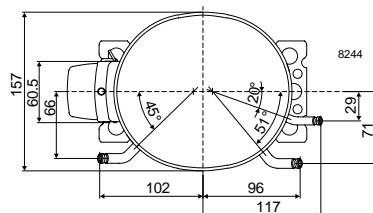
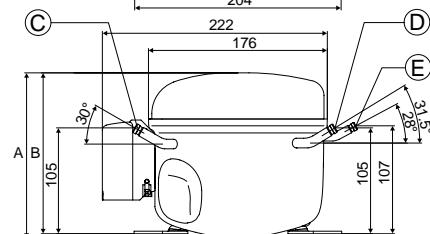
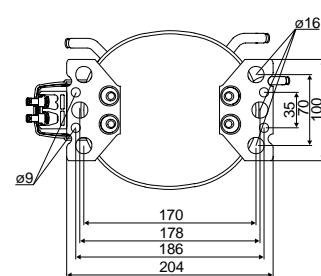
Displacement cm <sup>3</sup>	8.83
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.6



Yellow warning label

#### Motor

Motor size watt	120
LRA (rated after 4 sec. UL984) LST A	4.3
Cut-in current LST A	8.4
Resistance, main and start winding (25°C) Ω	16.5/16.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173
Suction connector location/I.D. mm	B 169
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet	E 5.0 +0.12/+0.20
	pcs. 125

Capacity (EN 12900/CECOMAF) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	57	77	101	110	130	164
	205					

Capacity (ASHRAE) watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	70	94	123	134	158	200
	249					

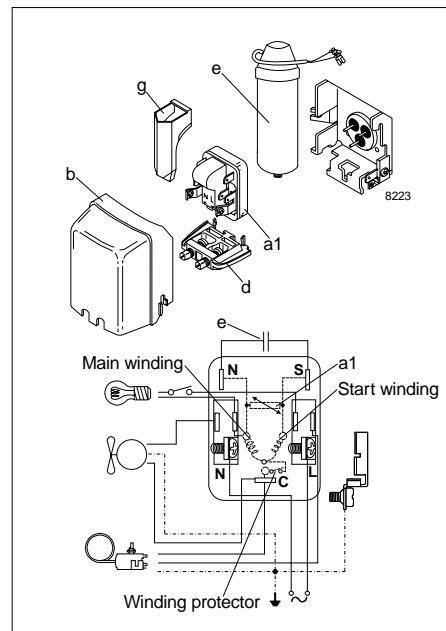
Power consumption watt						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	75	85	97	101	110	123
	137					

Current consumption A						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	0.47	0.51	0.56	0.58	0.62	0.68
	0.75					

COP (EN 12900/CECOMAF) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	0.76	0.90	1.04	1.09	1.18	1.33
	1.49					

COP (ASHRAE) W/W						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
TLY9K	0.93	1.10	1.27	1.33	1.44	1.62
	1.82					

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLY9K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLX4KK

## High Energy-optimized Compressor

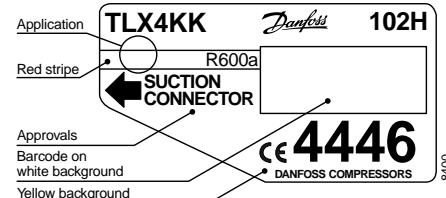
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CG.52.D1.02)

#### General

Compressor	<b>TLX4KK</b>
Code number	102H4446



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory

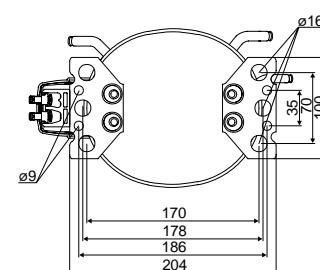
#### Design

Displacement cm³	3.86
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1790
Weight without electrical equipment kg	8.2



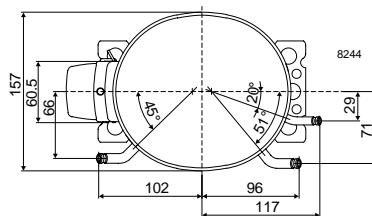
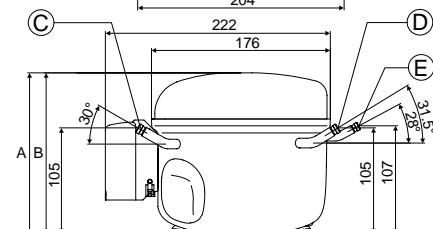
#### Motor

Motor size watt	35
LRA (rated after 4 sec. UL984) LST A	1.2
Cut-in current LST A	5.1
Resistance, main and start winding (25°C) Ω	61.0/19.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	18.3	28.7	41.0	45.7	55.5	72.6	92.7

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	22.2	35.0	49.9	55.6	67.6	88.4	113

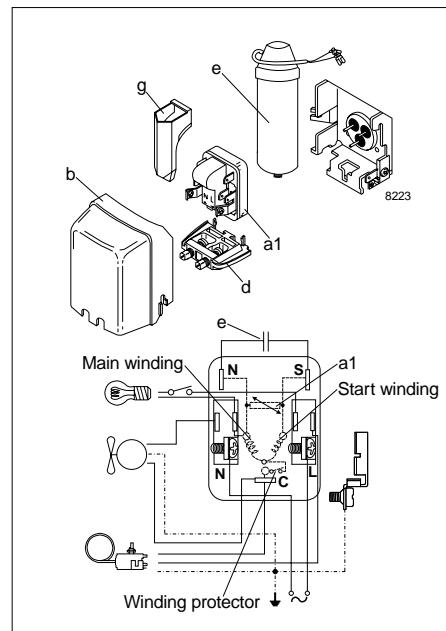
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	28.3	33.8	39.0	40.8	44.2	49.4	54.7

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	0.22	0.24	0.25	0.25	0.26	0.28	0.30

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	0.64	0.85	1.05	1.12	1.26	1.47	1.69

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX4KK	0.78	1.03	1.28	1.36	1.53	1.79	2.06

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLX4KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLX5KK

## High Energy-optimized Compressor

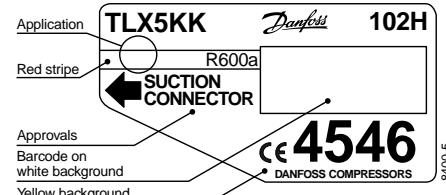
### R600a

### 220-240V 50Hz

#### Data Sheet

##### General

Compressor	TLX5KK
Code number	102H4546



##### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	S
32°C	S
38°C	S

\* run capacitor 2 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



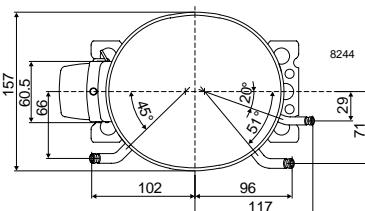
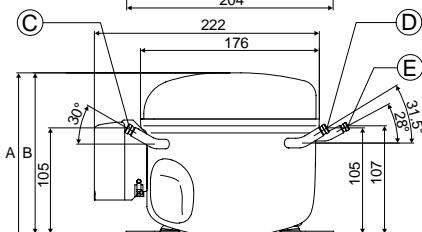
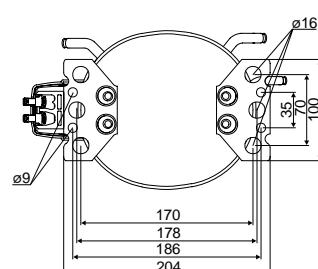
Yellow warning label

##### Design

Displacement cm <sup>3</sup>	5.08
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.3

##### Motor

Motor size watt	
LRA (rated after 4 sec. UL984) LST A	
Cut-in current LST A	
Resistance, main and start winding (25°C) Ω	36.0/36.0
Approvals	EN 60335-2-34 with Annex AA



##### Dimensions

Height mm	A 163
	B 159
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	watt
TLX5KK			58	69			

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	watt
TLX5KK			70	78			

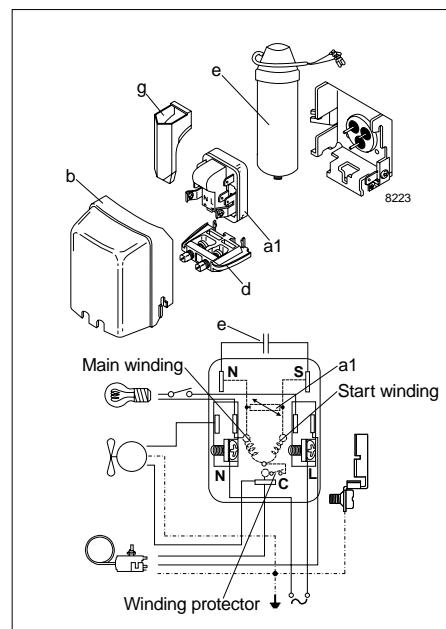
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	watt
TLX5KK			52.5	54.5			

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	A
TLX5KK			0.28	0.29			

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	W/W
TLX5KK			1.10	1.17			

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	W/W
TLX5KK			1.33	1.43			

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 2 µF, 220V 50Hz,  
PTC consumption incl.  
preliminary data



## Accessories

Devices	Fig.	TLX5KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 2 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-xxxx 117-xxxx
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLX6KK

## High Energy-optimized Compressor

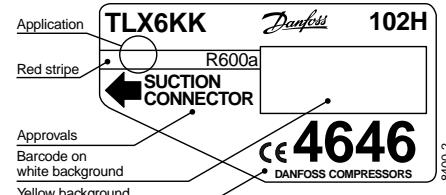
### R600a

### 220-240V 50Hz

#### Data Sheet

##### General

Compressor	<b>TLX6KK</b>
Code number	102H4646



##### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

\* run capacitor 4 µF compulsory

##### Design

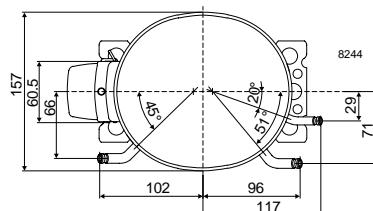
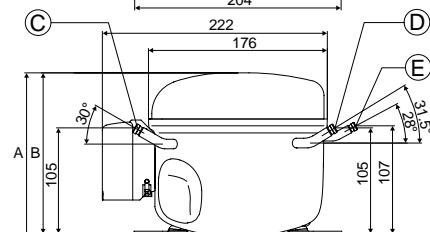
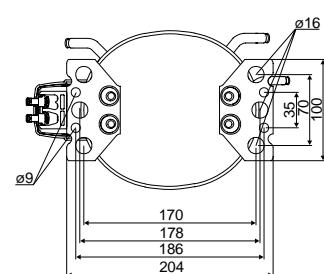
Displacement cm³	5.70
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1790
Weight without electrical equipment kg	8.2



Yellow warning label

##### Motor

Motor size watt	62
LRA (rated after 4 sec. UL984) LST A	2.0
Cut-in current LST A	5.5
Resistance, main and start winding (25°C) Ω	37.0/21.0
Approvals	EN 60335-2-34 with Annex AA



##### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	35.6	50.4	68.0	74.7	88.7	113	142

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	43.3	61.3	82.7	90.9	108	138	172

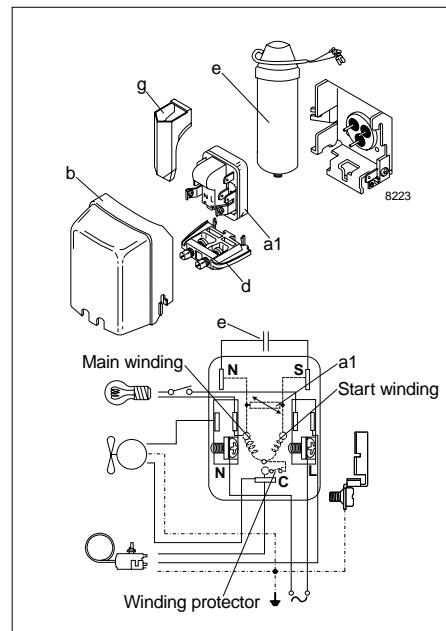
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	45.6	52.7	59.8	62.2	67.1	74.9	83.5

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	0.24	0.27	0.29	0.30	0.33	0.36	0.40

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	0.78	0.96	1.14	1.20	1.32	1.51	1.70

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX6KK	0.95	1.16	1.38	1.46	1.61	1.84	2.06

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLX6KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLX7KK

## High Energy-optimized Compressor

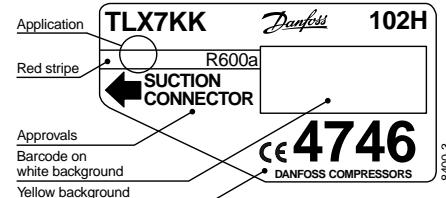
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CG.52.E1.02)

#### General

Compressor	TLX7KK
Code number	102H4746



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory

#### Design

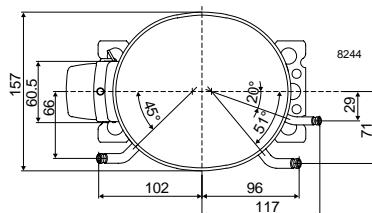
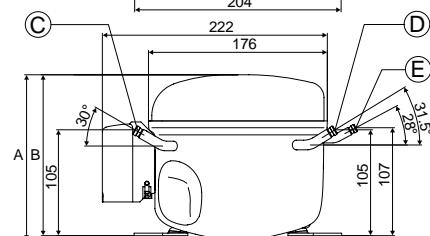
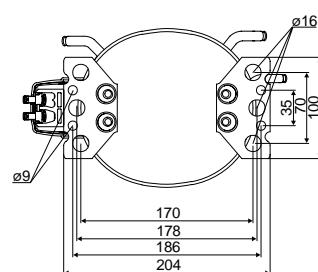
Displacement cm³	6.49
Oil quantity cm³	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	1790
Weight without electrical equipment kg	8.3



Yellow warning label

#### Motor

Motor size watt	65
LRA (rated after 4 sec. UL984) LST A	2.3
Cut-in current LST A	6.6
Resistance, main and start winding (25°C) Ω	30.0/15.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 125

Capacity (EN 12900/CECOMAF) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	41.5	57.6	77.0	84.4	100	128	160

Capacity (ASHRAE) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	50.4	70.1	93.7	103	122	156	195

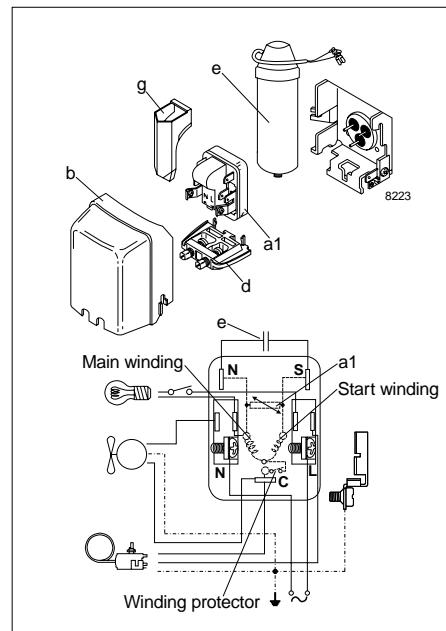
Power consumption watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	49.7	58.7	67.0	69.8	75.2	83.8	93.5

Current consumption A							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	0.25	0.28	0.31	0.33	0.35	0.40	0.45

COP (EN 12900/CECOMAF) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	0.83	0.98	1.15	1.21	1.33	1.52	1.71

COP (ASHRAE) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX7KK	1.02	1.19	1.40	1.47	1.62	1.86	2.09

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLX7KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

**TLX8KK**  
**High Energy-optimized Compressor**  
**R600a**  
**220-240V 50Hz**

## Data Sheet

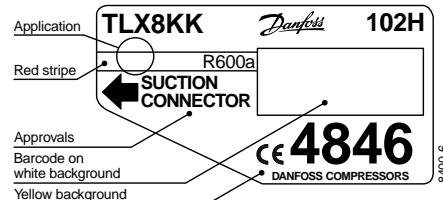
## General

Compressor	<b>TLX8KK</b>
Code number	102H4846

## Application

Application		LBP
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		RSCR*
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S

\* run capacitor 4  $\mu\text{F}$  compulsory



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label

Design

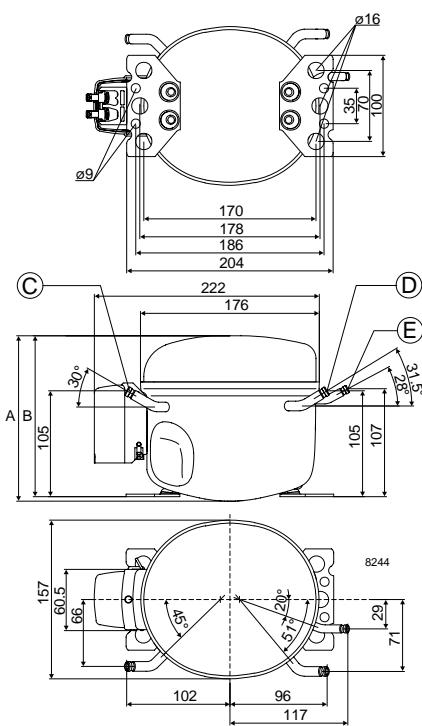
Displacement	cm <sup>3</sup>	7.76
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight without electrical equipment	kg	8.3

## Motor

Motor size	watt	117
LRA (rated after 4 sec. UL984) LST	A	3.6
Cut-in current LST	A	8.4
Resistance, main and start winding (25°C)	Ω	19.0/13.0
Approvals		EN 60335-2-34 with Annex AA

## Dimensions

Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet	pcs.		125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK	44	66	89	98	115	146	183

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK	53	80	108	119	140	177	223

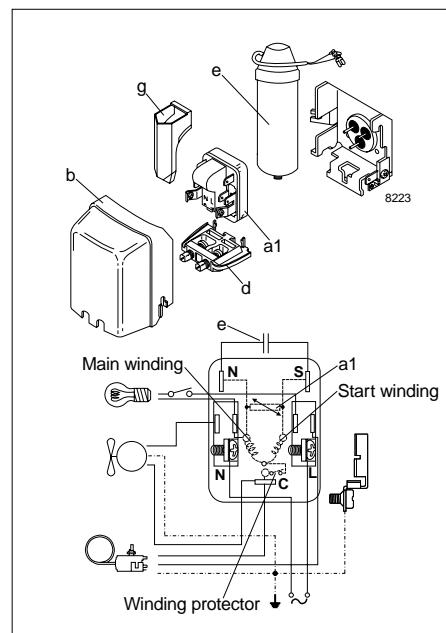
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK			78	82			

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK			0.40	0.42			

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK			1.14	1.19			

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX8KK			1.38	1.45			

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.  
preliminary data



## Accessories

Devices	Fig.	TLX8KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# TLX9KK

## High Energy-optimized Compressor

### R600a

### 220-240V 50Hz

#### Data Sheet

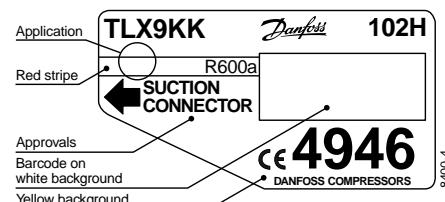
##### General

Compressor	TLX9KK
Code number	102H4946

##### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

##### Design

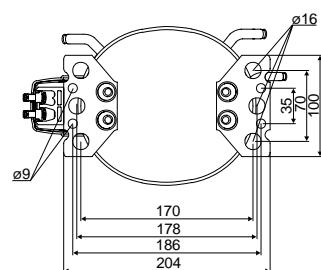
Displacement cm <sup>3</sup>	8.83
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	8.3



Yellow warning label

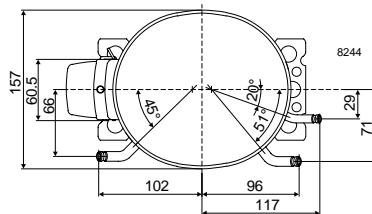
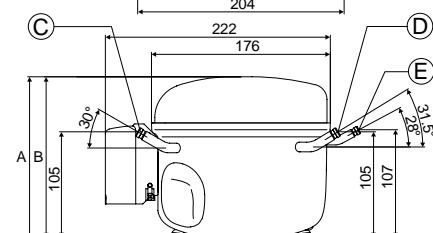
##### Motor

Motor size watt	117
LRA (rated after 4 sec. UL984) LST A	3.6
Cut-in current LST A	8.4
Resistance, main and start winding (25°C) Ω	19.0/13.0
Approvals	EN 60335-2-34 with Annex AA



##### Dimensions

Height mm	A 173 B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125



Capacity (EN 12900/CECOMAF) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	56.9	77.8	103	113	133	169	212

Capacity (ASHRAE) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	69.2	94.6	125	137	162	206	258

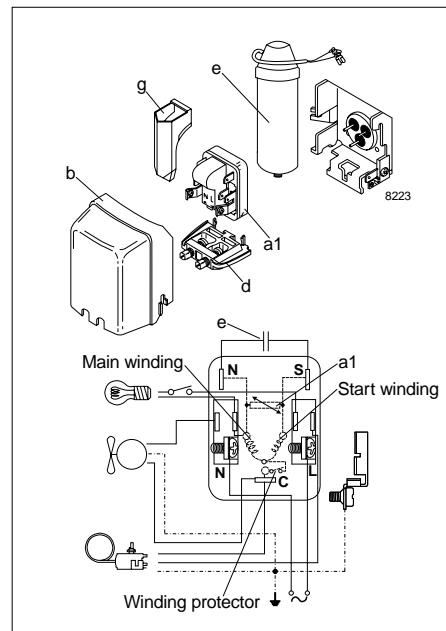
Power consumption watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	68.2	79.8	90.3	94.0	102	116	135

Current consumption A							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	0.33	0.37	0.42	0.44	0.48	0.55	0.63

COP (EN 12900/CECOMAF) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	0.83	0.97	1.14	1.20	1.31	1.46	1.58

COP (ASHRAE) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLX9KK	1.01	1.19	1.39	1.46	1.59	1.78	1.92

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	TLX9KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY9K

## High Energy-optimized Compressor

### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.I1.02)

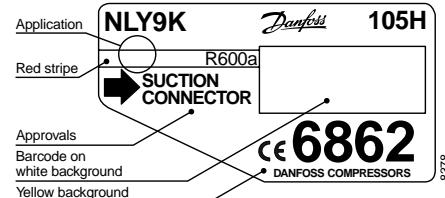
#### General

Compressor	<b>NLY9K</b>
Code number	105H6862

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

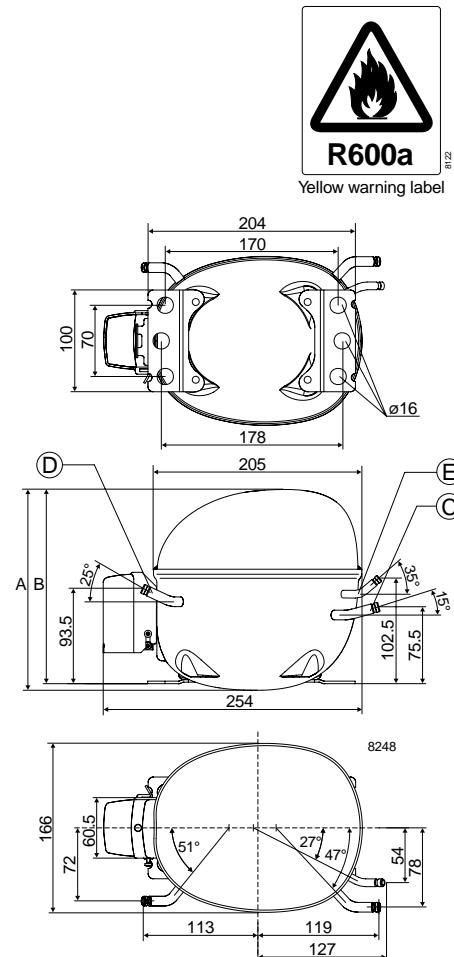
Displacement cm <sup>3</sup>	8.35
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.7

#### Motor

Motor size watt	135
LRA (rated after 4 sec. UL984) LST A	4.3
Cut-in current LST A	8.3
Resistance, main and start winding (25°C) Ω	16.0/15.1
Approvals	EN 60335-2-34 with Annex AA

#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	57	76	100	110	130	167	212

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	69	92	122	133	158	203	258

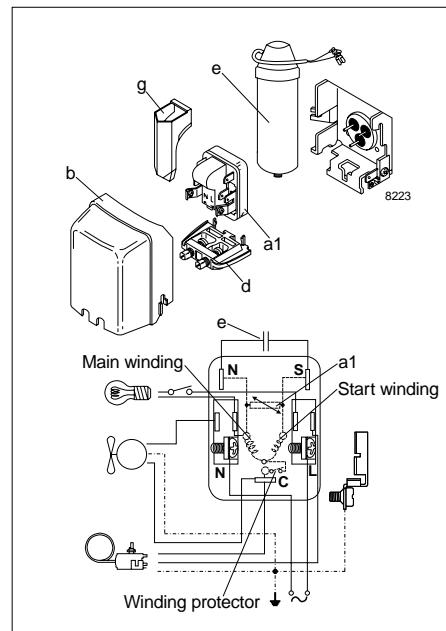
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	66	74	83	87	94	105	117

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	0.31	0.36	0.41	0.43	0.46	0.52	0.57

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	0.86	1.03	1.20	1.26	1.39	1.58	1.81

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9K	1.04	1.25	1.46	1.54	1.69	1.93	2.20

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY9K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY10K

## High Energy-optimized Compressor

### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.J1.02)

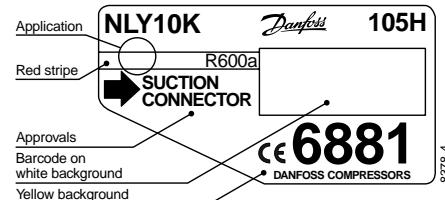
#### General

Compressor	<b>NLY10K</b>
Code number	105H6881

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

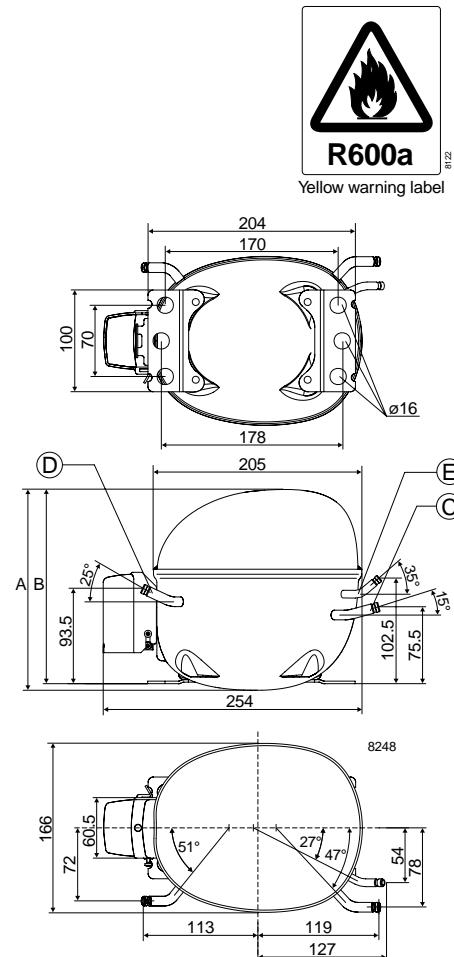
Displacement cm <sup>3</sup>	10.09
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.7

#### Motor

Motor size watt	135
LRA (rated after 4 sec. UL984) LST A	4.3
Cut-in current LST A	8.3
Resistance, main and start winding (25°C) Ω	16.0/15.1
Approvals	EN 60335-2-34 with Annex AA

#### Dimensions

Height mm	A 203 B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	67	91	120	131	155	198	249

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	82	111	146	160	189	241	304

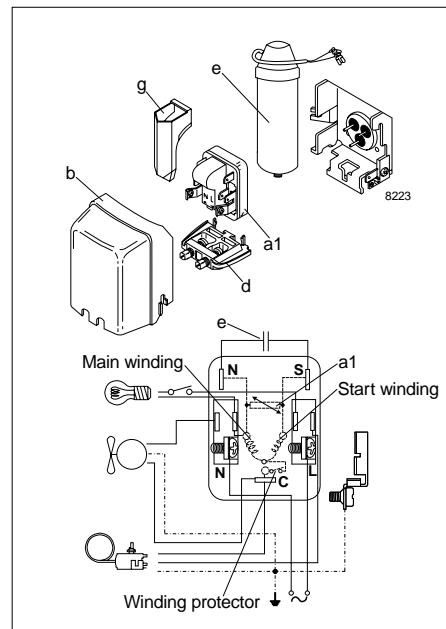
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	76	87	100	105	114	129	144

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	0.36	0.42	0.48	0.50	0.55	0.62	0.69

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	0.89	1.04	1.20	1.25	1.36	1.54	1.74

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10K	1.08	1.27	1.46	1.53	1.66	1.88	2.11

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY10K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY11K

## High Energy-optimized Compressor

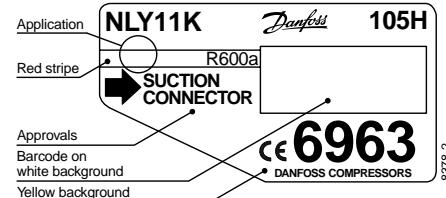
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.K1.02)

#### General

Compressor	<b>NLY11K</b>
Code number	105H6963



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	S
38°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

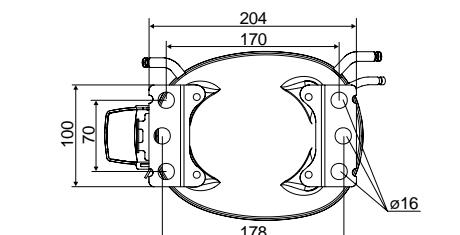
Displacement cm <sup>3</sup>	11.15
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8



Yellow warning label

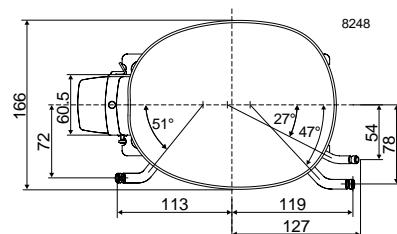
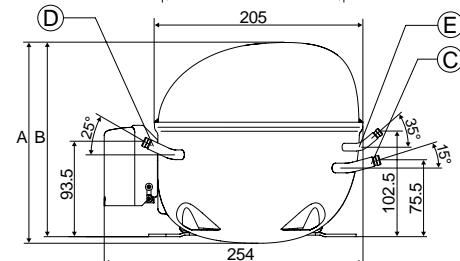
#### Motor

Motor size watt	150
LRA (rated after 4 sec. UL984) LST A	4.9
Cut-in current LST A	9.2
Resistance, main and start winding (25°C) Ω	14.3/12.9
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
	B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



<b>Capacity (EN 12900/CECOMAF)</b>						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY11K	78	103	133	144	169	214
						271

<b>Capacity (ASHRAE)</b>						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY11K	94	126	162	175	206	261
						330

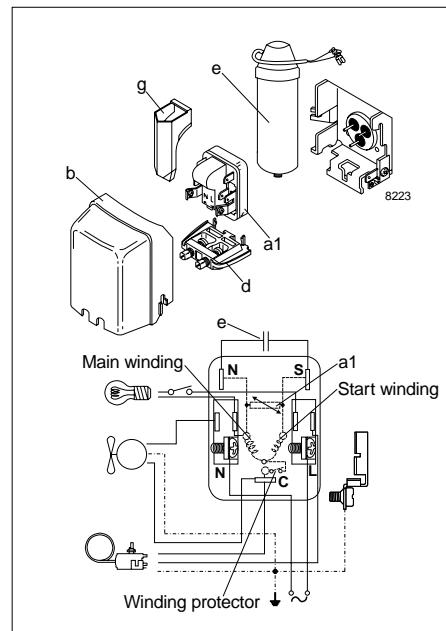
<b>Power consumption</b>						
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY11K	80	96	111	116	126	143
						161

<b>Current consumption</b>						
A	Comp.\°C	-35	-30	-25	-23.3	-20
NLY11K	0.46	0.51	0.57	0.59	0.64	0.72
						0.80

<b>COP (EN 12900/CECOMAF)</b>						
W/W	Comp.\°C	-35	-30	-25	-23.3	-20
NLY11K	0.97	1.08	1.20	1.24	1.34	1.50
						1.68

<b>COP (ASHRAE)</b>						
W/W	Comp.\°C	-35	-30	-25	-23.3	-20
NLY11K	1.17	1.31	1.46	1.51	1.63	1.83
						2.05

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



### Accessories

Devices	Fig.	NLY11K
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY13K

## High Energy-optimized Compressor

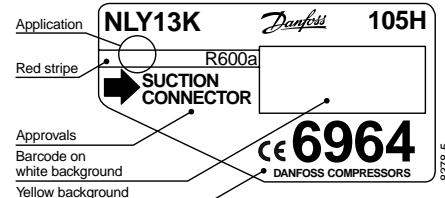
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.L1.02)

#### General

Compressor	<b>NLY13K</b>
Code number	105H6964



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	S
32°C	S
38°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

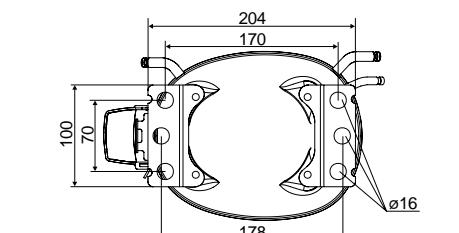
Displacement cm <sup>3</sup>	13.25
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8



Yellow warning label

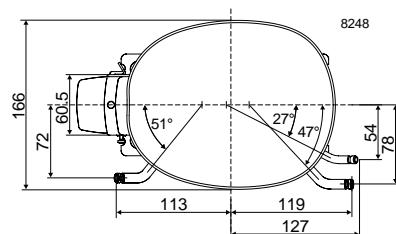
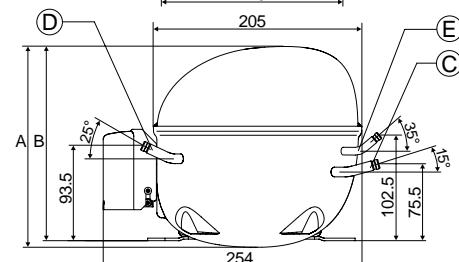
#### Motor

Motor size watt	190
LRA (rated after 4 sec. UL984) LST A	6.1
Cut-in current LST A	11.3
Resistance, main and start winding (25°C) Ω	11.0/9.0
Approvals	EN 60335-2-34 with Annex AA



#### Dimensions

Height mm	A 203
Suction connector location/I.D. mm	B 197
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet pcs.	E 5.0 +0.12/+0.20



<b>Capacity (EN 12900/CECOMAF)</b>						
	<b>watt</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	88	118	154	168	198	250
						-10

<b>Capacity (ASHRAE)</b>						
	<b>watt</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	107	143	187	204	241	305
						-10

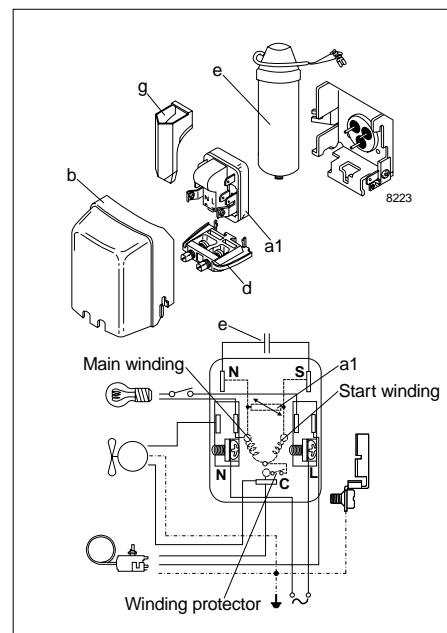
<b>Power consumption</b>						
	<b>watt</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	91	111	131	137	150	169
						-10

<b>Current consumption</b>						
	<b>A</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	0.57	0.63	0.70	0.73	0.79	0.88
						-10

<b>COP (EN 12900/CECOMAF)</b>						
	<b>W/W</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	0.97	1.06	1.18	1.22	1.32	1.48
						-10

<b>COP (ASHRAE)</b>						
	<b>W/W</b>					
Comp.\°C	-35	-30	-25	-23.3	-20	-15
NLY13K	1.18	1.29	1.43	1.49	1.61	1.80
						-10

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

<b>Devices</b>	<b>Fig.</b>	<b>NLY13K</b>
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY15KK

## High Energy-optimized Compressor

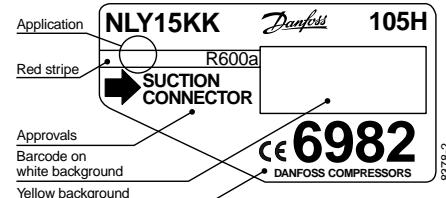
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.M1.02)

#### General

Compressor	<b>NLY15KK</b>
Code number	105H6982



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C S 38°C S

\* run capacitor 4 µF compulsory

#### Design

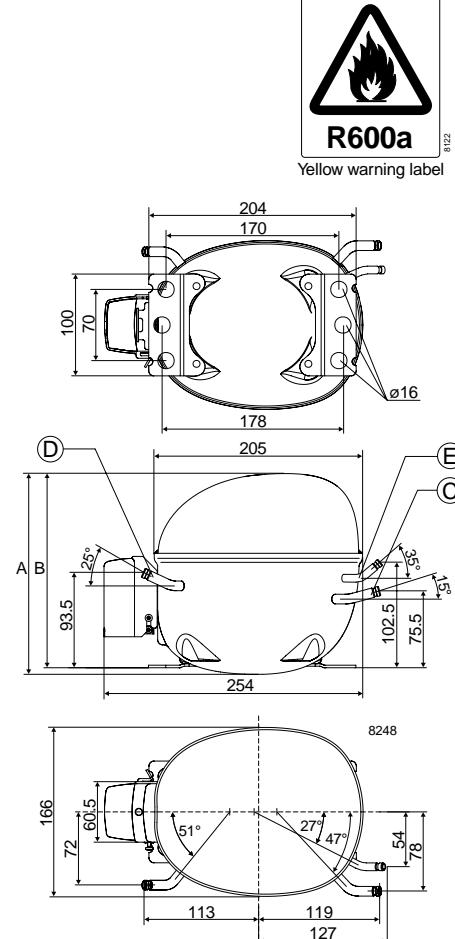
Displacement cm³	14.65
Oil quantity cm³	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm³	2310
Weight without electrical equipment kg	10.8

#### Motor

Motor size watt	260
LRA (rated after 4 sec. UL984) LST A	6.9
Cut-in current LST A	12.4
Resistance, main and start winding (25°C) Ω	9.7/7.8
Approvals	EN 60335-2-34 with Annex AA

#### Dimensions

Height mm	A 203 B 197
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs. 80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	95	130	172	188	223	284	357

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	116	158	209	229	271	346	435

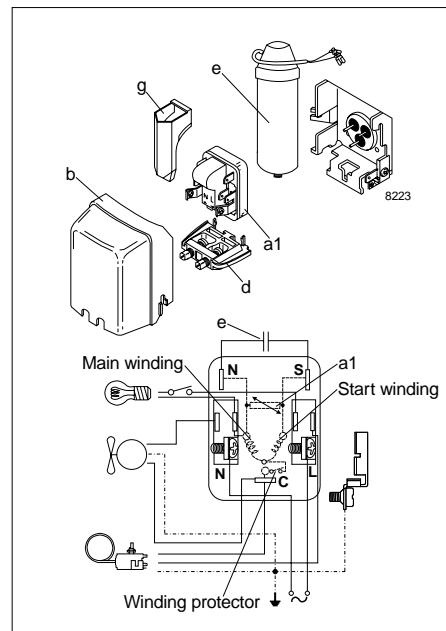
Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	101	124	145	153	166	187	209

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	0.66	0.73	0.81	0.84	0.91	1.01	1.14

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	0.94	1.04	1.19	1.24	1.34	1.52	1.71

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK	1.14	1.27	1.45	1.51	1.63	1.84	2.07

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY15KK
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY9KK.3

## High Energy-optimized Compressor

### R600a

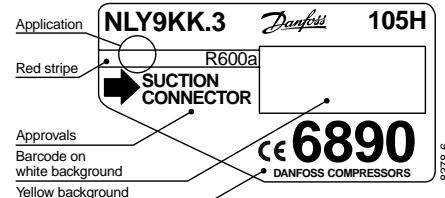
### 220-240V 50Hz

Data Sheet (Replaces CD.53.N2.02)

#### General

Compressor	<b>NLY9KK.3</b>
Code number	105H6890
Code number	105H6892*)

\*) Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.



#### Application

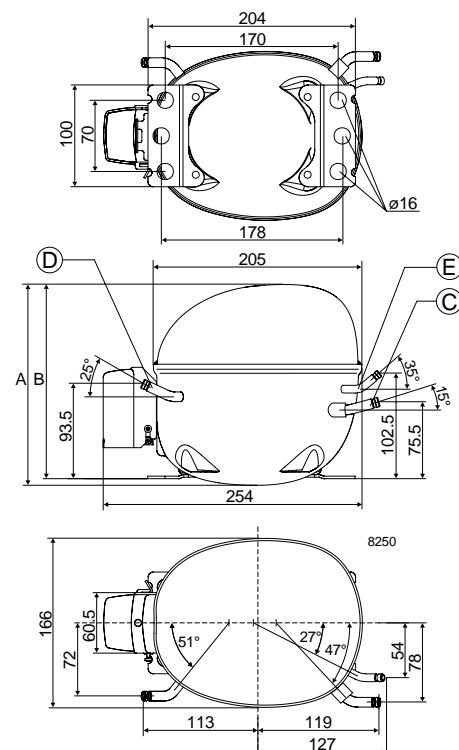
Application	<b>LBP</b>	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		RSCR*
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label



#### Design

Displacement	cm <sup>3</sup>	8.35
Oil quantity	cm <sup>3</sup>	270
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.7

#### Motor

Motor size	watt	135
LRA (rated after 4 sec. UL984) LST	A	4.3
Cut-in current LST	A	8.3
Resistance, main and start winding (25°C)	Ω	16.0/15.1
Approvals	EN 60335-2-34 with Annex AA	

#### Dimensions

		<b>105H6890</b>	<b>105H6892</b>
Height	mm	A 203	
		B 197	
Suction connector	location/I.D. mm	C 8.2 ±0.09	6.2 ±0.09
Process connector	location/I.D. mm	D 6.2 ±0.09	6.2 ±0.09
Discharge connector	location/I.D. mm	E 6.2 ±0.09	5.0 +0.12/+0.20
Compressors on a pallet	pcs.	80	

Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	47.6	75.4	106	117	140	180	225

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	57.9	91.7	129	143	171	219	274

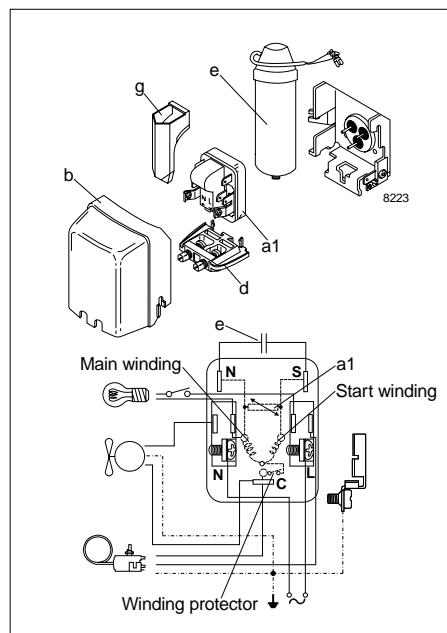
Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	59.6	73.2	85.5	89.4	96.9	108	119

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	0.31	0.36	0.42	0.44	0.48	0.53	0.59

COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	0.80	1.03	1.24	1.31	1.45	1.67	1.89

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY9KK.3	0.97	1.25	1.51	1.59	1.76	2.03	2.31

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY9KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY10KK.3

## High Energy-optimized Compressor

### R600a

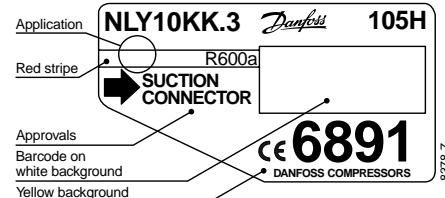
### 220-240V 50Hz

Data Sheet (Replaces CD.53.O2.02)

#### General

Compressor	NLY10KK.3
Code number	105H6891
Code number	105H6893*)

\*) Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.



#### Application

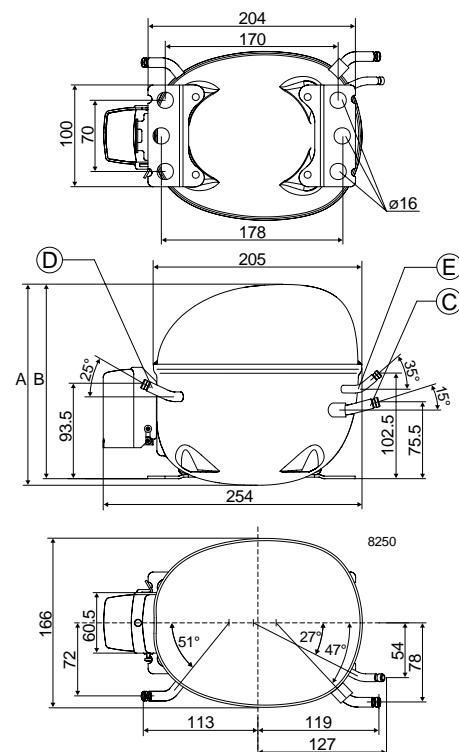
Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		RSCR*
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S

\* run capacitor 4 µF compulsory

S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label 8/72



#### Design

Displacement	cm <sup>3</sup>	10.09
Oil quantity	cm <sup>3</sup>	270
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.7

#### Motor

Motor size	watt	135
LRA (rated after 4 sec. UL984) LST	A	4.3
Cut-in current LST	A	8.3
Resistance, main and start winding (25°C)	Ω	16.0/15.1
Approvals	EN 60335-2-34 with Annex AA	

#### Dimensions

105H6891	105H6893
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Height	mm	A	203
		B	197
Suction connector	location/I.D. mm	C	8.2 ±0.09
			6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
			6.2 ±0.09
Discharge connector	location/I.D. mm	E	6.2 ±0.09
			5.0 +0.12/+0.20
Compressors on a pallet	pcs.		80

Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	61.4	93.4	129	142	169	215	268

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	74.7	114	157	173	206	262	327

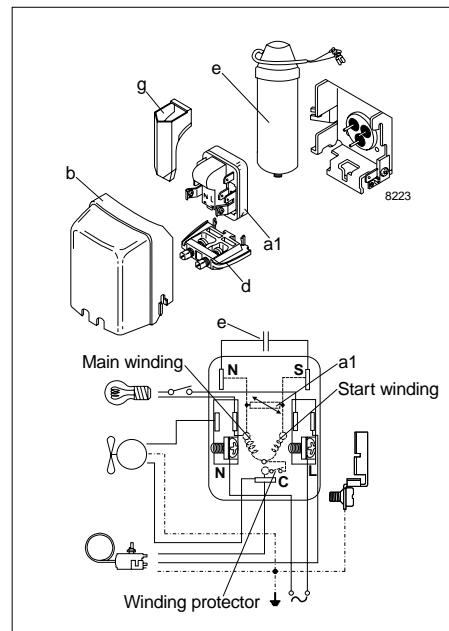
Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	71.7	87.4	102	107	117	132	146

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	0.36	0.43	0.50	0.53	0.58	0.65	0.72

COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	0.86	1.07	1.26	1.32	1.44	1.64	1.84

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY10KK.3	1.04	1.30	1.53	1.61	1.76	1.99	2.24

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY10KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY11KK.3

## High Energy-optimized Compressor

### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.P2.02)

#### General

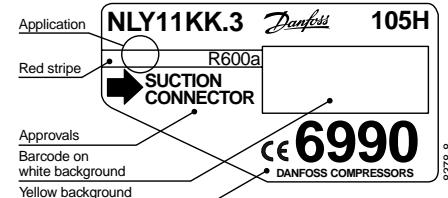
Compressor	NLY11KK.3
Code number	105H6990
Code number	105H6993*)

\*) Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.

#### Application

Application	LBP
Evaporating temperature range	°C -35 to -10
Voltage range	V/Hz 198 - 254 /50
Motor type	RSCR*
Max. ambient temperature	°C 38
Comp. cooling at ambient temp.	32°C S 38°C S 43°C S

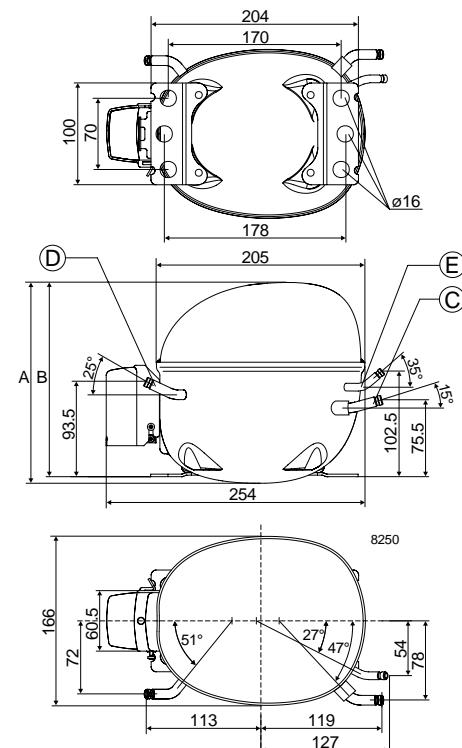
\* run capacitor 4 µF compulsory



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label



#### Design

Displacement	cm <sup>3</sup>	11.15
Oil quantity	cm <sup>3</sup>	270
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.8

#### Motor

Motor size	watt	135
LRA (rated after 4 sec. UL984) LST	A	4.3
Cut-in current LST	A	8.3
Resistance, main and start winding (25°C)	Ω	16.0/15.1
Approvals	EN 60335-2-34 with Annex AA	

#### Dimensions

105H6990	105H6993
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Height	mm	A	203
		B	197
Suction connector	location/I.D. mm	C	8.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	6.2 ±0.09
Compressors on a pallet	pcs.		80

Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	73.1	107	145	159	189	241	301

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	88.9	130	176	194	230	293	366

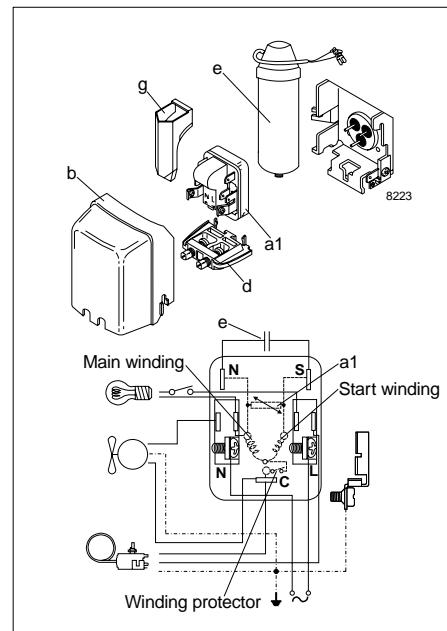
Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	74.9	94.3	112	117	127	142	158

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	0.42	0.50	0.57	0.60	0.65	0.72	0.80

COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	0.98	1.13	1.30	1.36	1.49	1.69	1.91

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY11KK.3	1.19	1.38	1.58	1.66	1.81	2.06	2.33

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



#### Accessories

Devices	Fig.	NLY11KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY13KK.3

## High Energy-optimized Compressor

### R600a

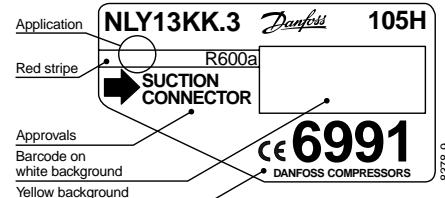
### 220-240V 50Hz

Data Sheet (Replaces CD.53.Q2.02)

#### General

Compressor	NLY13KK.3
Code number	105H6991
Code number	105H6994*)

\*) Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.



#### Application

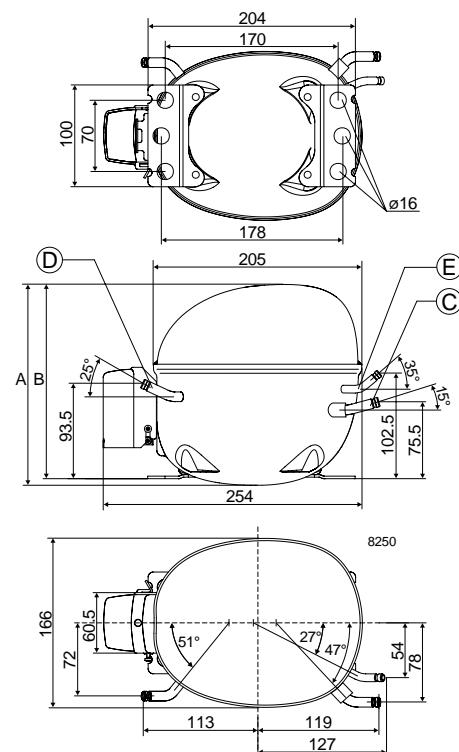
Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	198 - 254 /50
Motor type	RSCR*
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

\* run capacitor 4 µF compulsory

S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label



#### Design

Displacement cm <sup>3</sup>	13.25
Oil quantity cm <sup>3</sup>	270
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2310
Weight without electrical equipment kg	10.8

#### Motor

Motor size watt	190
LRA (rated after 4 sec. UL984) LST A	6.1
Cut-in current LST A	11.3
Resistance, main and start winding (25°C) Ω	11.0/9.0
Approvals	EN 60335-2-34 with Annex AA

#### Dimensions

105H6991	105H6994
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Height mm	A	203
	B	197
Suction connector location/I.D. mm	C	8.2 ±0.09
Process connector location/I.D. mm	D	6.2 ±0.09
Discharge connector location/I.D. mm	E	6.2 ±0.09
Compressors on a pallet pcs.		80

Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	94.8	128	172	189	226	289	362

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	115	156	209	230	275	352	441

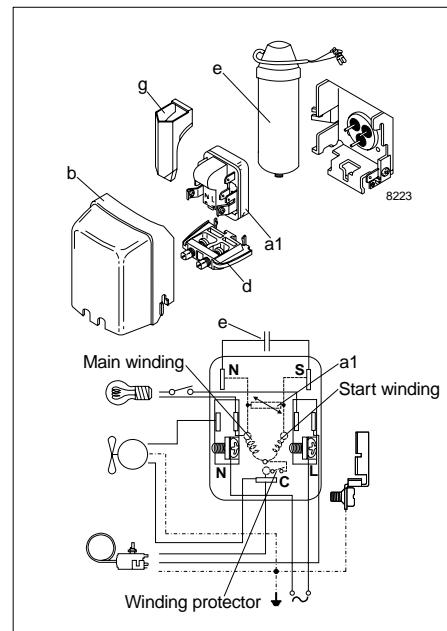
Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	98.1	117	136	143	156	177	199

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	0.58	0.66	0.74	0.77	0.84	0.93	1.04

COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	0.97	1.09	1.26	1.32	1.44	1.63	1.82

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY13KK.3	1.18	1.33	1.53	1.61	1.76	1.99	2.22

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.



## Accessories

Devices	Fig.	NLY13KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

# NLY15KK.3

## High Energy-optimized Compressor

### R600a

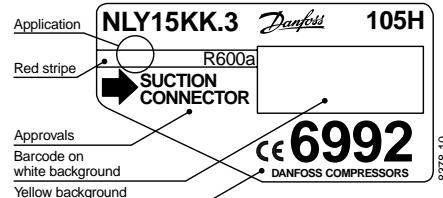
### 220-240V 50Hz

Data Sheet (Replaces CD.53.R2.02)

#### General

Compressor	NLY15KK.3
Code number	105H6992
Code number	105H6995*)

\*) Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.



#### Application

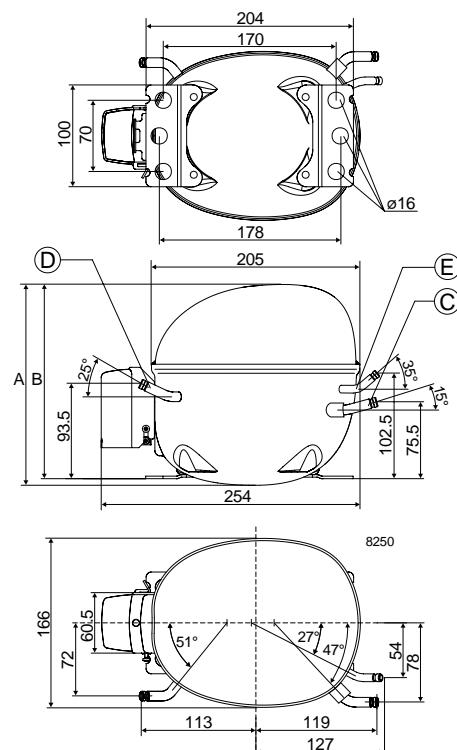
Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		RSCR*
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



Yellow warning label



#### Design

Displacement	cm <sup>3</sup>	14.65
Oil quantity	cm <sup>3</sup>	270
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.8

#### Motor

Motor size	watt	260
LRA (rated after 4 sec. UL984) LST	A	6.9
Cut-in current LST	A	12.4
Resistance, main and start winding (25°C)	Ω	9.7/7.8
Approvals		EN 60335-2-34 with Annex AA

#### Dimensions

		105H6992	105H6995
Height	mm	A 203	
		B 197	
Suction connector	location/I.D. mm	C 8.2 ±0.09	6.2 ±0.09
Process connector	location/I.D. mm	D 6.2 ±0.09	6.2 ±0.09
Discharge connector	location/I.D. mm	E 6.2 ±0.09	5.0 +0.12/+0.20
Compressors on a pallet	pcs.		80

Capacity (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	107	145	192	210	249	317	399

Capacity (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	130	177	234	256	303	386	486

Power consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	109	132	153	161	175	197	220

Current consumption							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	0.67	0.76	0.85	0.88	0.95	1.05	1.15

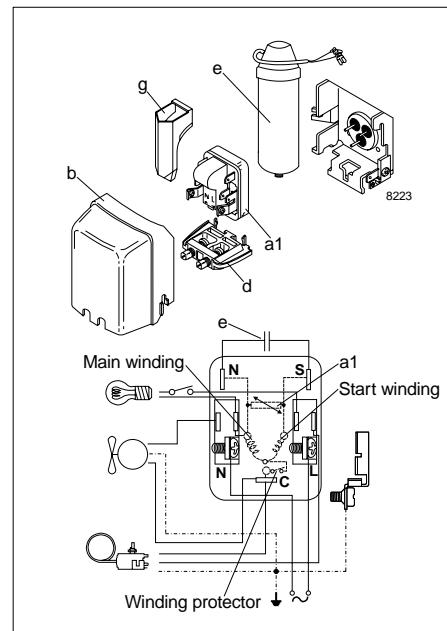
COP (EN 12900/CECOMAF)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	0.98	1.10	1.25	1.31	1.42	1.61	1.81

COP (ASHRAE)							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLY15KK.3	1.19	1.34	1.52	1.59	1.73	1.97	2.21

Test conditions EN 12900/CECOMAF ASHRAE  
Condensing temperature 55°C 55°C  
Ambient and suction gas temp. 32°C 32°C  
Liquid temperature 55°C 32°C  
Static cooling, with RC 4 µF, 220V 50Hz,  
PTC consumption incl.

#### Accessories

Devices	Fig.	NLY15KK.3
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (compulsory) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# TLES4KTK

## Energy-optimized Tropical Compressor

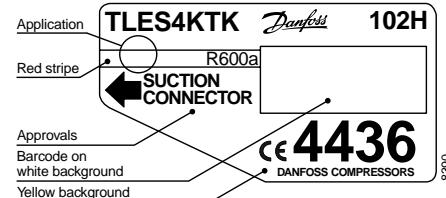
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.T1.02)

#### General

Compressor	<b>TLES4KTK</b>
Code number	102H4436



#### Application

Application	LBP/MBP
Evaporating temperature range °C	-35 to 0
Voltage range V/Hz	187 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

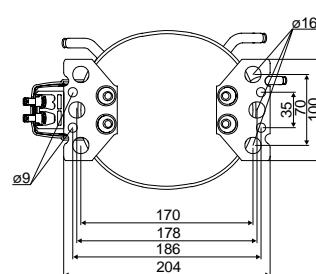
Displacement cm <sup>3</sup>	3.86
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.4



Yellow warning label

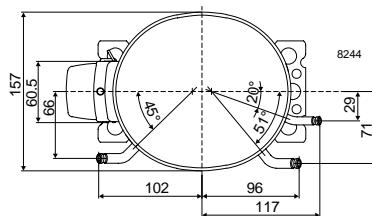
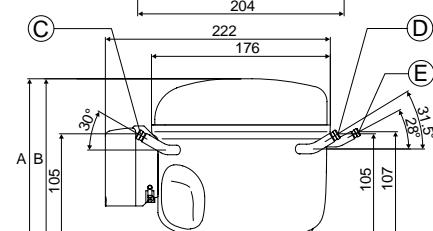
#### Motor

Motor size watt	80
LRA (rated after 4 sec. UL984) LST A	2.9
Cut-in current LST A	7.1
Resistance, main and start winding (25°C) Ω	24.5/19.1
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 173
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125



**Capacity (EN 12900/CECOMAF)**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	18.1	27.7	39.9	45.0	55.2	73.8	96.2	123	154

**Capacity (ASHRAE)**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	22.0	33.7	48.6	54.0	67.2	89.9	117	150	188

**Power consumption**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	38.1	43.4	48.3	50.0	53.2	58.5	64.4	71.4	80.0

**Current consumption**

	A								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	0.43	0.44	0.45	0.46	0.46	0.48	0.50	0.52	0.54

**COP (EN 12900/CECOMAF)**

	W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	0.47	0.64	0.83	0.90	1.04	1.26	1.49	1.72	1.92

**COP (ASHRAE)**

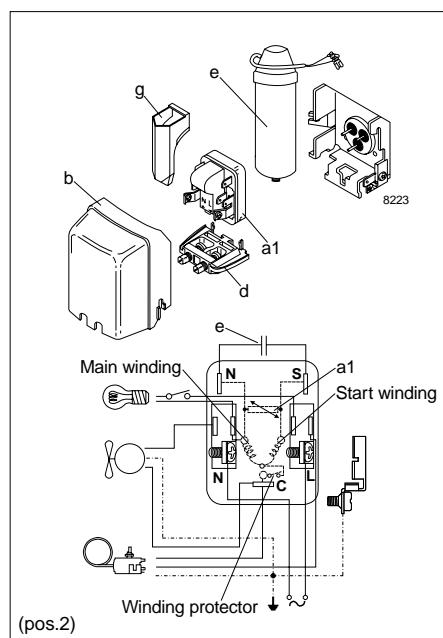
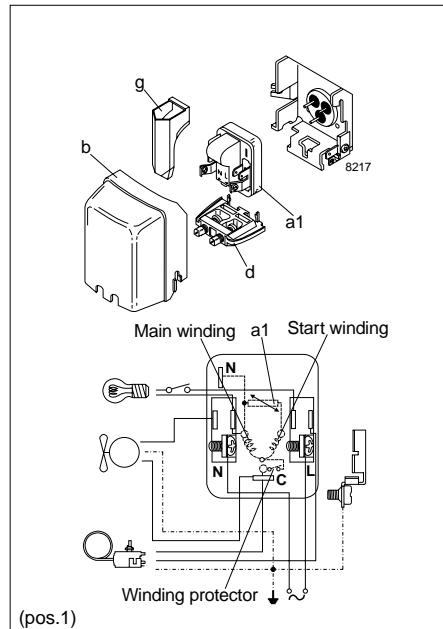
	W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES4KTK	0.58	0.78	1.01	1.09	1.26	1.54	1.82	2.09	2.35

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

EN 12900/CECOMAF ASHRAE

**Accessories**

Devices	Fig.	TLES4KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# **TLES5KTK**

## **Energy-optimized Tropical Compressor**

### **R600a**

### **220-240V 50Hz**

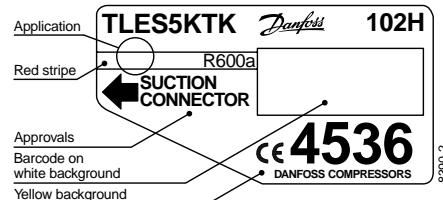
Data Sheet (Replaces CD.52.U1.02)

## General

Compressor	<b>TLES5TK</b>
Code number	102H4536

## Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to 0
Voltage range	V/Hz	187 - 254 /50
Motor type	RSIR/RSCR	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- $F_1$  = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- $F_2$  = Fan cooling 3.0 m/s necessary



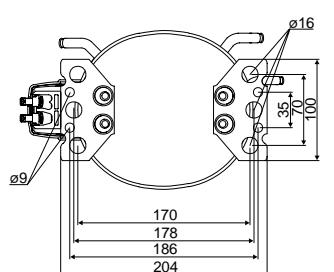
Yellow warning label

Design

Displacement	cm <sup>3</sup>	5.08
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight without electrical equipment	kg	7.5

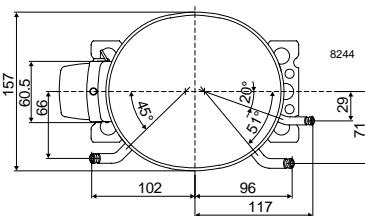
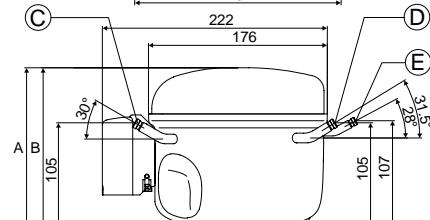
## Motor

Motor size	watt	80
LRA (rated after 4 sec. UL984) LST	A	2.9
Cut-in current LST	A	7.6
Resistance, main and start winding (25°C)	Ω	25.7/15.7
Approvals		EN 60335-2-34



### Dimensions

Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	$6.2 \pm 0.09$
Process connector	location/I.D. mm	D	$6.2 \pm 0.09$
Discharge connector	location/I.D. mm	E	$5.0 +0.12/-0.20$
Compressors on a pallet	pcs.		125



**Capacity (EN 12900/CECOMAF)**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	28.1	41.1	57.0	63.1	76.2	99.2	126	159	196

**Capacity (ASHRAE)**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	34.2	50.1	69.4	76.8	92.7	121	154	193	239

**Power consumption**

	watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	48.2	54.3	61.0	63.4	68.3	76.3	85.1	94.8	106

**Current consumption**

	A								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	0.46	0.47	0.50	0.50	0.52	0.55	0.58	0.61	0.65

**COP (EN 12900/CECOMAF)**

	W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	0.58	0.76	0.93	1.00	1.12	1.30	1.49	1.67	1.86

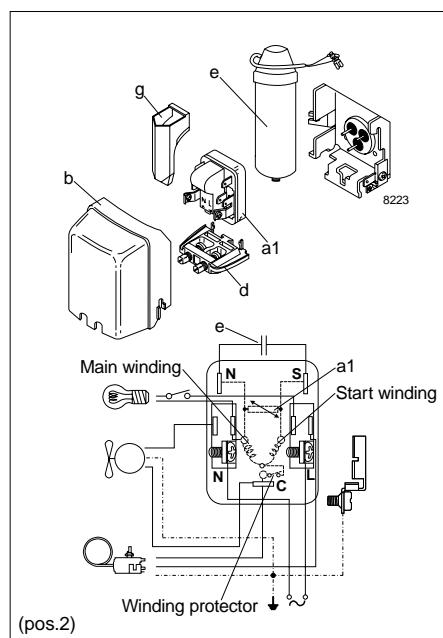
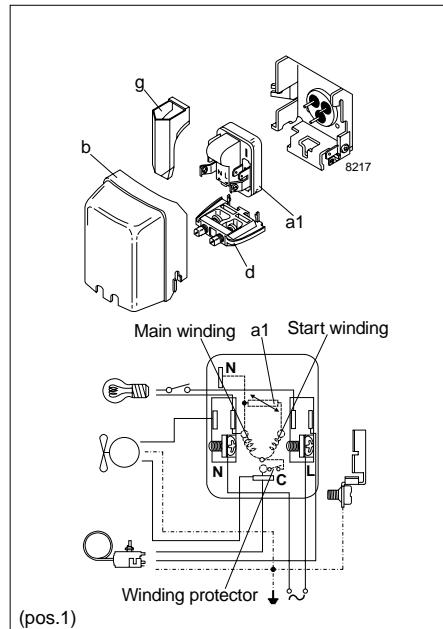
**COP (ASHRAE)**

	W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5	0
TLES5KTK	0.71	0.92	1.14	1.21	1.36	1.58	1.81	2.04	2.27

Test conditions  
 Condensing temperature EN 12900/CECOMAF  
 55°C ASHRAE  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

**Accessories**

Devices	Fig.	TLES5KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# TLES6KTK

## Energy-optimized Tropical Compressor

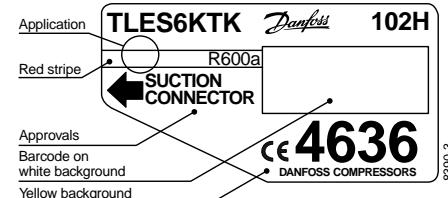
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.V1.02)

#### General

Compressor	<b>TLES6KTK</b>
Code number	102H4636



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	187 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

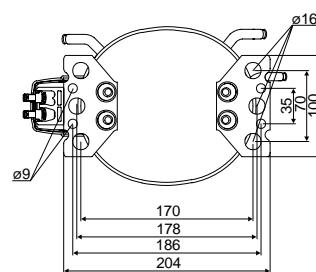
Displacement cm <sup>3</sup>	5.70
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.5



Yellow warning label

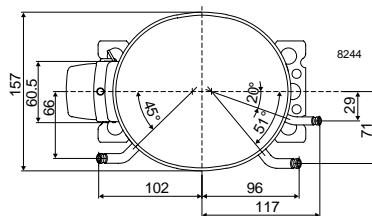
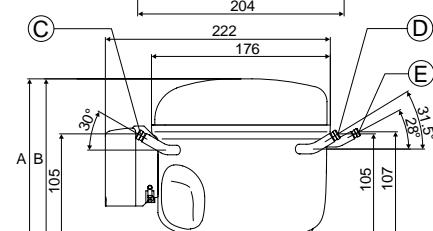
#### Motor

Motor size watt	105
LRA (rated after 4 sec. UL984) LST A	4.0
Cut-in current LST A	8.5
Resistance, main and start winding (25°C) Ω	18.9/15.3
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	31.0	47.5	66.0	72.8	87.1	112	140

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	37.7	57.8	80.3	88.6	106	136	171

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	51.3	60.5	69.4	72.5	78.4	87.6	97.2

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	0.45	0.48	0.51	0.52	0.54	0.57	0.61

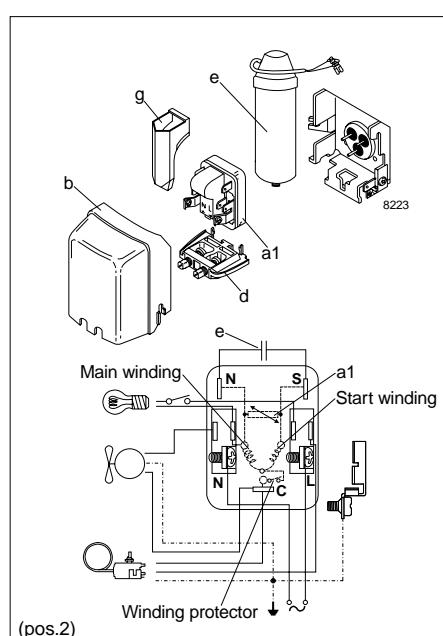
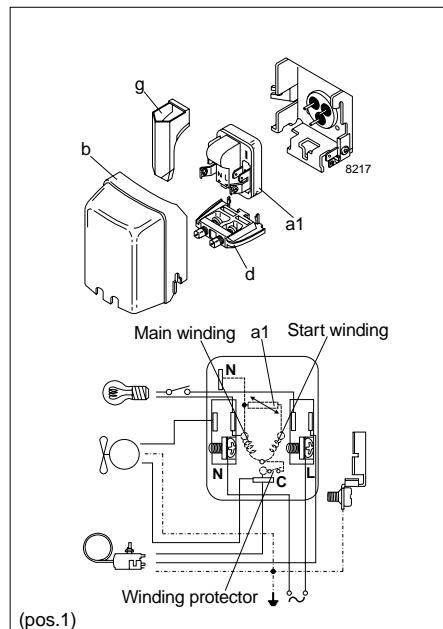
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	0.60	0.78	0.95	1.00	1.11	1.27	1.44

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES6KTK	0.73	0.95	1.16	1.22	1.35	1.55	1.76

Test conditions  
 Condensing temperature 55°C ASHRAE 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES6KTK
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional)		
6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# **TLES7KTK**

## **Energy-optimized Tropical Compressor**

### **R600a**

### **220-240V 50Hz**

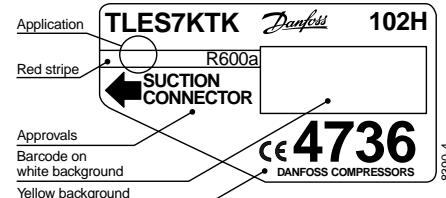
Data Sheet (Replaces CD.52.W1.02)

## General

Compressor	TLES7KTK
Code number	102H4736

## Application

Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	187 - 254 /50
Motor type	RSIR/RSCR	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



- S = Static cooling normally sufficient
- O = Oil cooling
- $F_1$  = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- $F_2$  = Fan cooling 3.0 m/s necessary



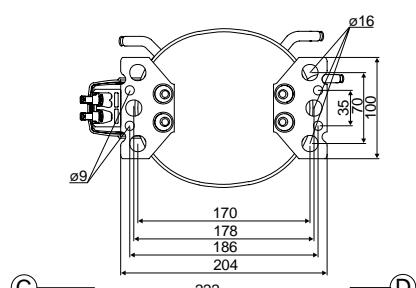
#### **Yellow warning label**

## Design

Displacement	cm <sup>3</sup>	6.49
Oil quantity	cm <sup>3</sup>	180
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	1790
Weight without electrical equipment	kg	7.5

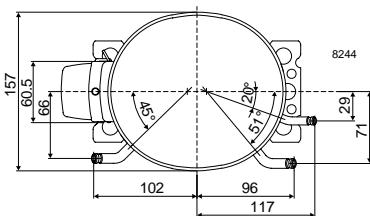
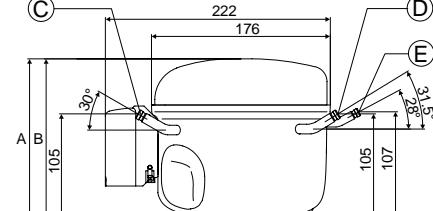
## Motor

Motor size	watt	120
LRA (rated after 4 sec. UL984) LST	A	4.3
Cut-in current LST	A	8.4
Resistance, main and start winding ( $25^{\circ}\text{C}$ )	$\Omega$	16.5/16.9
Approvals		EN 60335-2-34



## Dimensions

Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet	pcs.		125



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	39.8	56.8	77.0	84.7	101	130	163

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	48.4	69.1	93.7	103	123	158	199

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	63.3	71.5	81.0	84.5	91.7	103	115

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	0.62	0.65	0.67	0.68	0.70	0.74	0.78

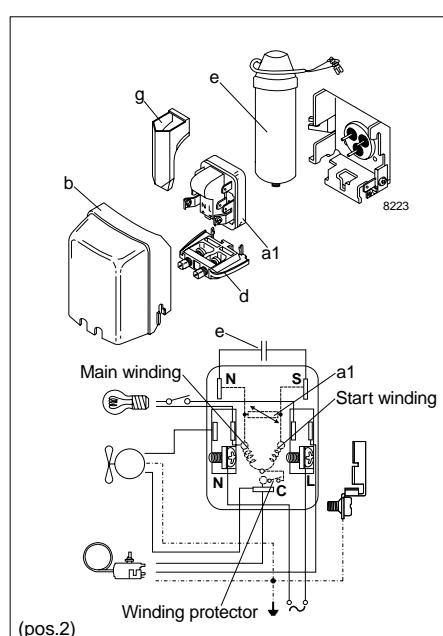
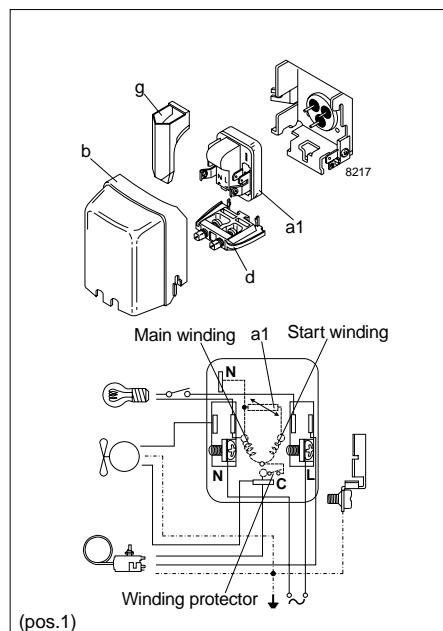
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	0.63	0.79	0.95	1.00	1.10	1.26	1.41

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES7KTK	0.76	0.97	1.16	1.22	1.34	1.53	1.72

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES7KTK
PTC starting device 6.3 mm spades	a1	103N0011
4.8 mm spades	(pos.1)	103N0018
PTC starting device 6.3 mm spades	a1	103N0016
4.8 mm spades	(pos.2)	103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



# TLES8KTK

## Energy-optimized Tropical Compressor

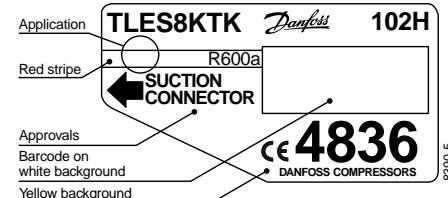
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.52.X1.02)

#### General

Compressor	TLES8KTK
Code number	102H4836



#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	187 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	S

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

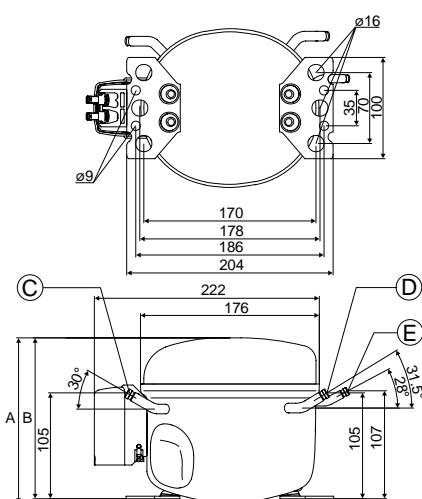
Displacement cm <sup>3</sup>	7.76
Oil quantity cm <sup>3</sup>	180
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	1790
Weight without electrical equipment kg	7.6



Yellow warning label

#### Motor

Motor size watt	120
LRA (rated after 4 sec. UL984) LST A	4.3
Cut-in current LST A	8.4
Resistance, main and start winding (25°C) Ω	16.5/16.9
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 173
	B 169
Suction connector location/I.D. mm	C 6.2 ±0.09
Process connector location/I.D. mm	D 6.2 ±0.09
Discharge connector location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet pcs.	125

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	48	66	89	98	116	149	188

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	58	81	108	119	142	181	229

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	74	83	94	98	106	120	134

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	0.73	0.76	0.78	0.80	0.82	0.86	0.90

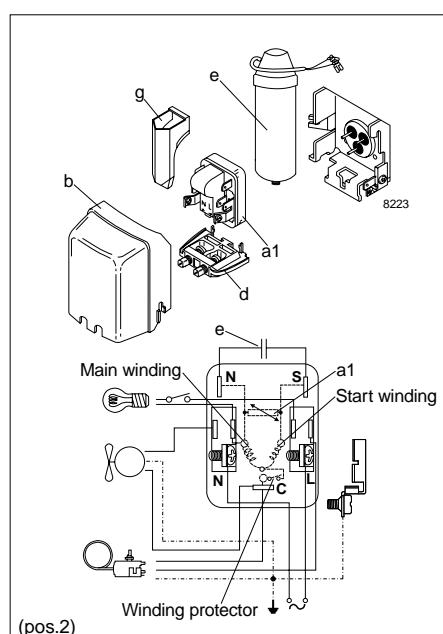
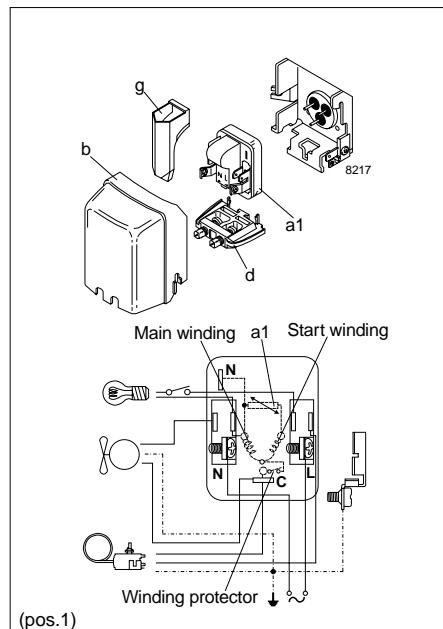
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	0.65	0.80	0.95	1.00	1.10	1.25	1.40

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
TLES8KTK	0.79	0.97	1.15	1.21	1.33	1.52	1.70

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	TLES8KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



**NLE9KTK**  
**Energy-optimized Tropical Compressor**  
**R600a**  
**220-240V 50Hz**

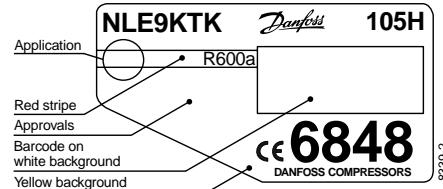
Data Sheet (Replaces CD.53.S1.02)

## General

Compressor	<b>NLE9KTK</b>
Code number	105H6848

## Application

Application	LBP		
Evaporating temperature range	°C	-35 to -10	
Voltage range	V/Hz	187 - 254 /50 198 - 254 /60	
Motor type	RSIR/RSCR		
Max. ambient temperature	°C	43	
Comp. cooling at ambient temp.	32°C	S	
	38°C	S	
	43°C	50Hz: S	60Hz: F <sub>1</sub>



- S = Static cooling normally sufficient
- O = Oil cooling
- $F_1$  = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- $F_2$  = Fan cooling 3.0 m/s necessary



Design

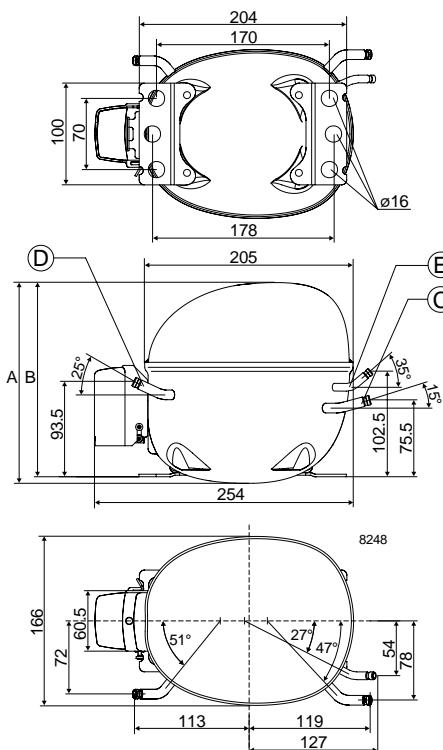
Displacement	cm <sup>3</sup>	8.35
Oil quantity	cm <sup>3</sup>	320
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2360
Weight without electrical equipment	kg	10.0

## **Motor**

Motor size	watt	140
LRA (rated after 4 sec. UL984) LST	A	5.0
Cut-in current LST	A	9.4
Resistance, main and start winding ( $25^{\circ}\text{C}$ )	$\Omega$	14.9/17.9
Approvals	EN 60335-2-34	

## Dimensions

Height	mm	A	197
		B	191
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0 +0.12/+0.20
Compressors on a pallet	pcs.		80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	54	74	98	108	128	166	211

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	66	90	119	131	156	202	257

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	76	84	95	99	107	121	134

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	0.67	0.71	0.75	0.76	0.78	0.82	0.86

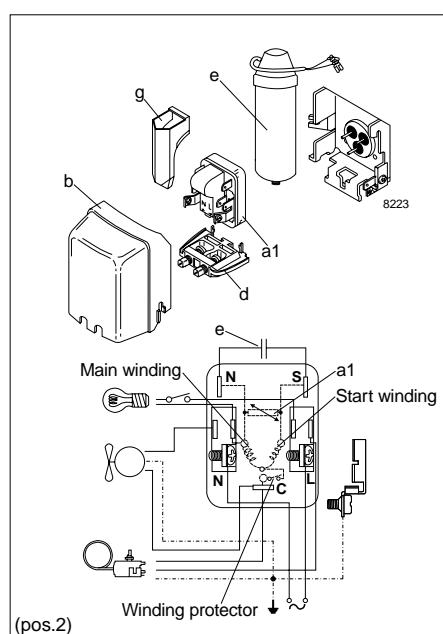
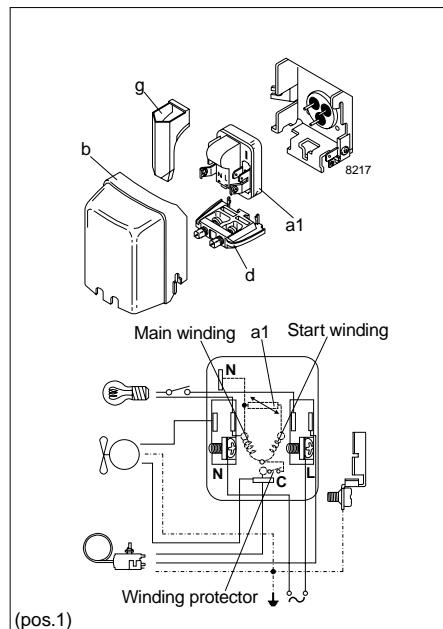
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	0.72	0.88	1.03	1.09	1.20	1.37	1.57

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE9KTK	0.87	1.06	1.26	1.32	1.45	1.67	1.92

Test conditions  
 Condensing temperature 55°C  
 Ambient and suction gas temp. 32°C  
 Liquid temperature 55°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE9KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# NLE11KTK

## Energy-optimized Tropical Compressor

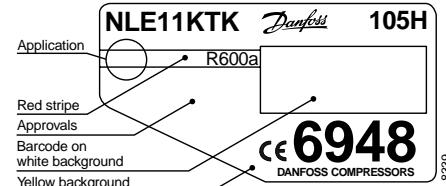
### R600a

### 220-240V 50Hz

Data Sheet (Replaces CD.53.T1.02)

#### General

Compressor	<b>NLE11KTK</b>
Code number	105H6948



8339

#### Application

Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	187 - 254 /50 198 - 254 /60
Motor type	RSIR/RSCR	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C 38°C 43°C	S S 50Hz: S    60Hz: F <sub>1</sub> *

\* run capacitor 4 µF compulsory

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



8172

#### Design

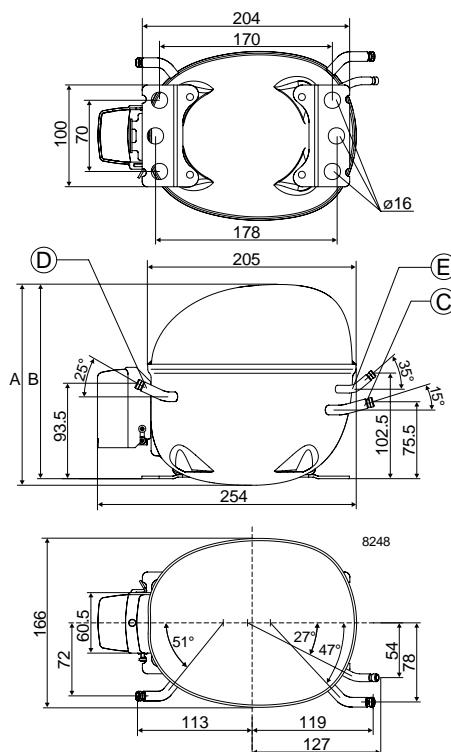
Displacement	cm <sup>3</sup>	11.15
Oil quantity	cm <sup>3</sup>	320
Maximum refrigerant charge	g	150
Free gas vol. in compressor	cm <sup>3</sup>	2360
Weight without electrical equipment	kg	10.0

#### Motor

Motor size	watt	165
LRA (rated after 4 sec. UL984) LST	A	6.4
Cut-in current LST	A	10.7
Resistance, main and start winding (25°C)	Ω	12.9/18.0
Approvals	EN 60335-2-34	

#### Dimensions

Height	mm	A 197 B 191
Suction connector	location/I.D. mm	C 6.2 ±0.09
Process connector	location/I.D. mm	D 6.2 ±0.09
Discharge connector	location/I.D. mm	E 5.0 +0.12/+0.20
Compressors on a pallet	pcs.	80



Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	73	98	127	137	162	206	261

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	89	119	154	167	197	251	318

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	90	107	123	129	140	158	177

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	0.86	0.90	0.95	0.96	1.00	1.04	1.10

COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	0.81	0.92	1.03	1.07	1.16	1.31	1.47

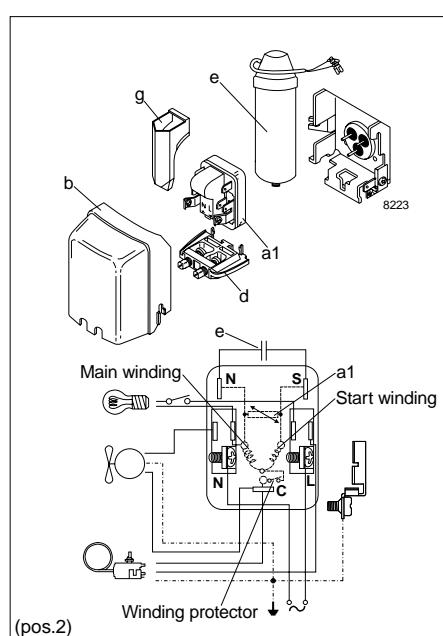
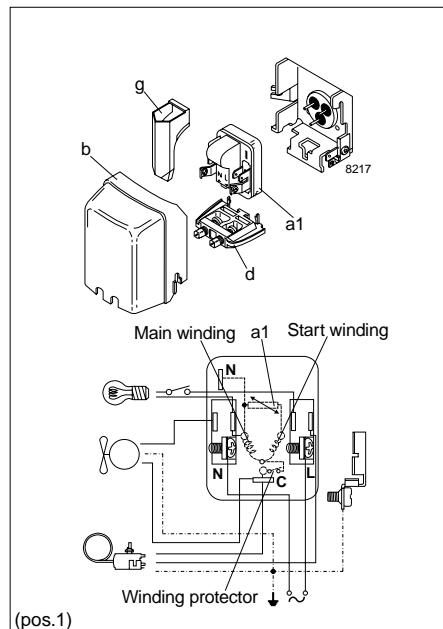
COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE11KTK	0.98	1.12	1.25	1.31	1.41	1.59	1.80

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE11KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016* 103N0021*
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF 6.3 mm spades 4.8 mm spades	e	117-7117* 117-7119*
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

\* run capacitor 4 µF compulsory in 43°C ambient temperature at 60Hz



# NLE15KTK

## Energy-optimized Tropical Compressor

### R600a

### 220-240V 50Hz

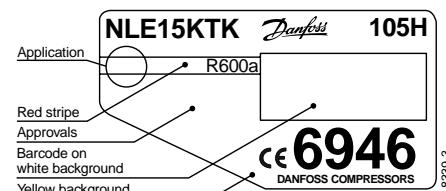
Data Sheet (Replaces CD.53.U1.02)

#### General

Compressor	<b>NLE15KTK</b>
Code number	105H6946

#### Application

Application	LBP
Evaporating temperature range °C	-35 to -10
Voltage range V/Hz	187 - 254 /50
Motor type	RSIR/RSCR
Max. ambient temperature °C	43
Comp. cooling at ambient temp.	
32°C	S
38°C	S
43°C	F <sub>1</sub>



S = Static cooling normally sufficient  
 O = Oil cooling  
 F<sub>1</sub> = Fan cooling 1.5 m/s  
 (compressor compartment temperature equal to ambient temperature)  
 F<sub>2</sub> = Fan cooling 3.0 m/s necessary

#### Design

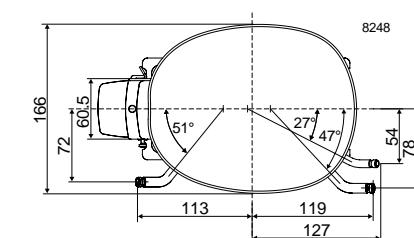
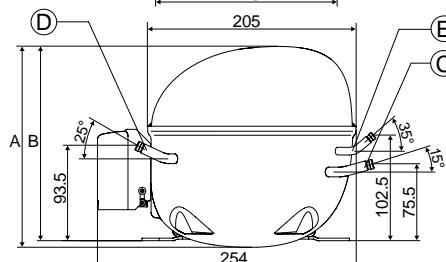
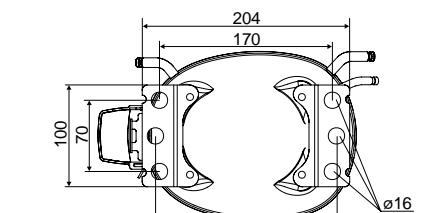
Displacement cm <sup>3</sup>	14.65
Oil quantity cm <sup>3</sup>	320
Maximum refrigerant charge g	150
Free gas vol. in compressor cm <sup>3</sup>	2360
Weight without electrical equipment kg	10.0



Yellow warning label

#### Motor

Motor size watt	215
LRA (rated after 4 sec. UL984) LST A	8.4
Cut-in current LST A	12.8
Resistance, main and start winding (25°C) Ω	8.9/12.0
Approvals	EN 60335-2-34



#### Dimensions

Height mm	A 197
Suction connector location/I.D. mm	B 191
Process connector location/I.D. mm	C 6.2 ±0.09
Discharge connector location/I.D. mm	D 6.2 ±0.09
Compressors on a pallet pcs.	E 5.0 +0.12/+0.20

Capacity (EN 12900/CECOMAF)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	93	128	169	185	219	280	351

Capacity (ASHRAE)							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	114	155	206	225	267	340	428

Power consumption							watt
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	123	147	169	177	191	213	236

Current consumption							A
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	1.22	1.27	1.33	1.35	1.38	1.44	1.50

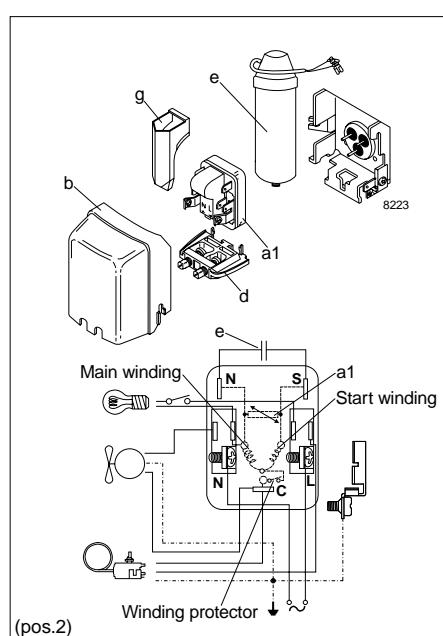
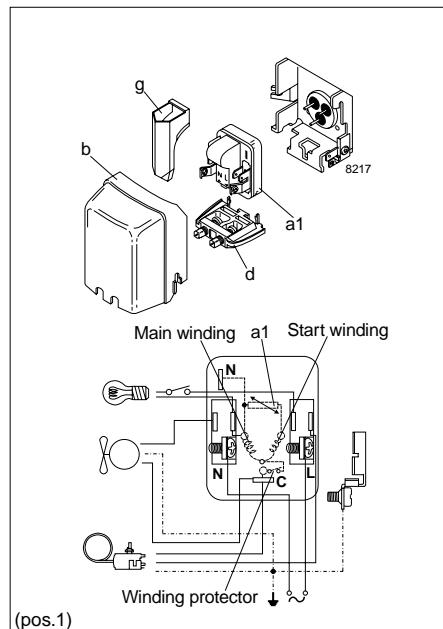
COP (EN 12900/CECOMAF)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	0.76	0.87	1.00	1.04	1.15	1.31	1.49

COP (ASHRAE)							W/W
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK	0.93	1.06	1.22	1.27	1.40	1.60	1.81

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Fan cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE15KTK
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.1)	103N0011 103N0018
PTC starting device 6.3 mm spades 4.8 mm spades	a1 (pos.2)	103N0016 103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades 4.8 mm spades	e	117-7117 117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919



# **NLE15KTK.2**

## **Energy-optimized Tropical Compressor**

### **R600a**

### **220-240V 50Hz**

Data Sheet (Replaces CD.53.Y2.02)

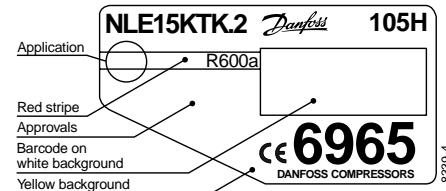
## General

Compressor	<b>NLE15KTK.2</b>
Code number	105H6965
Code number	105H6966*)

**\*)** Performance data established on 8.2 mm suction line. Restrictions due to 6.2 mm suction line can affect system performance.

## Application

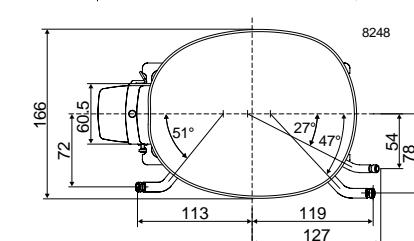
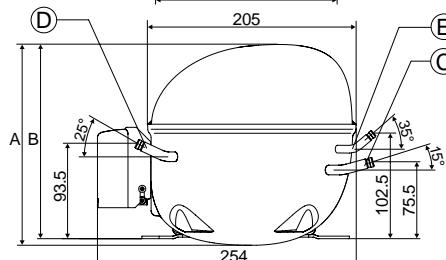
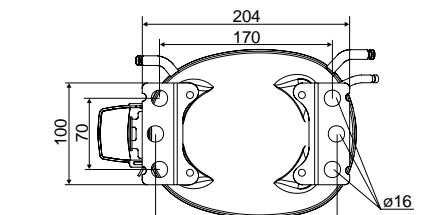
Application	LBP	
Evaporating temperature range	°C	-35 to -10
Voltage range	V/Hz	187 - 254 /50
Motor type	RSIR/RSCR	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	S
	38°C	S
	43°C	S



S = Static cooling normally sufficient  
 O = Oil cooling  
 $F_1$  = Fan cooling 1.5 m/s  
     (compressor compartment temperature  
     equal to ambient temperature)  
 $F_2$  = Fan cooling 3.0 m/s necessary



Yellow warning label



### Dimensions

Dimensions		103H10903	103H10906
Height	mm	A	203
		B	197
Suction connector	location/I.D. mm	C	$8.2 \pm 0.09$
Process connector	location/I.D. mm	D	$6.2 \pm 0.09$
Discharge connector	location/I.D. mm	E	$6.2 \pm 0.09$
Compressors on a pallet	pcs.		80

Capacity (EN 12900/CECOMAF) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	106	144	190	208	246	314	395

Capacity (ASHRAE) watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	129	175	231	253	300	382	481

Power consumption watt							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	114	138	160	167	182	205	230

Current consumption A							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	1.03	1.12	1.23	1.26	1.33	1.44	1.55

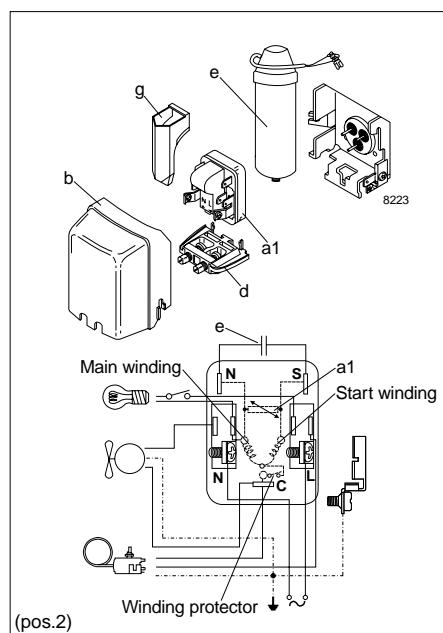
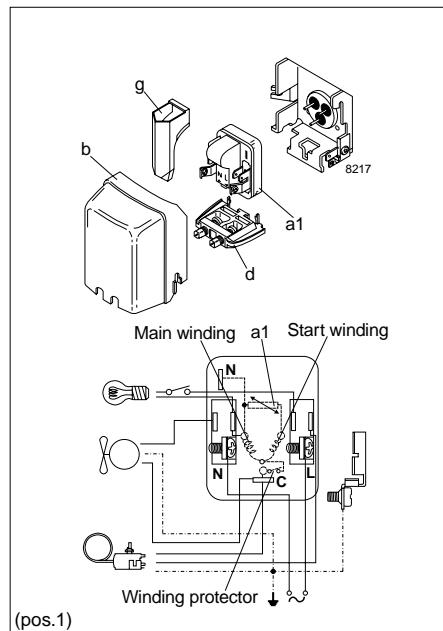
COP (EN 12900/CECOMAF) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	0.93	1.04	1.19	1.24	1.35	1.53	1.72

COP (ASHRAE) W/W							
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10
NLE15KTK.2	1.13	1.27	1.44	1.51	1.65	1.87	2.09

Test conditions  
 Condensing temperature EN 12900/CECOMAF ASHRAE  
 55°C 55°C  
 Ambient and suction gas temp. 32°C 32°C  
 Liquid temperature 55°C 32°C  
 Static cooling, 220V 50Hz,  
 PTC consumption incl.

#### Accessories

Devices	Fig.	NLE15KTK.2
PTC starting device 6.3 mm spades	a1 (pos.1)	103N0011
4.8 mm spades		103N0018
PTC starting device 6.3 mm spades	a1 (pos.2)	103N0016
4.8 mm spades		103N0021
Cover	b	103N2010
Cord relief	d	103N1010
Run capacitor 4 µF (optional) 6.3 mm spades	e	117-7117
4.8 mm spades		117-7119
Protection screen for PTC	g	103N0476
Mounting accessories Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919











## The Danfoss product programme for the refrigeration industry contains:

### Compressors for Refrigeration and Air Conditioning

A wide range of hermetic reciprocating compressors and scroll compressors as well as aircooled condensing units. The product range is applied in air conditioning units, water chillers and commercial refrigeration systems.



### Compressors for Refrigerators and Freezers

Hermetic compressors and fan-cooled condensing units for household refrigeration units such as refrigerators and freezers, and for commercial installations such as sales counters and bottle coolers. Compressors for heating pump systems. 12 and 24 V compressors for refrigerators and freezers in commercial vehicles, buses, and boats.



### Appliance Controls

For the regulation of refrigeration appliances and freezers Danfoss supply a CFC-free product range of electromechanical thermostats for refrigerators and electromechanical thermostats for refrigerators and freezers produced according to customer specification; Hermetic valves for refrigerator/freezer combinations and for energy saving applications; Service thermostats – for all refrigerating and freezing appliances.



### Refrigeration and Air Conditioning Controls

With our full product range we cover all the requirements for mechanical and electronically controlled refrigeration systems. The functions cover: control, safety, system protection and monitoring. Our products are applied for all commercial- and industrial refrigeration applications as well as for air conditioning.



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