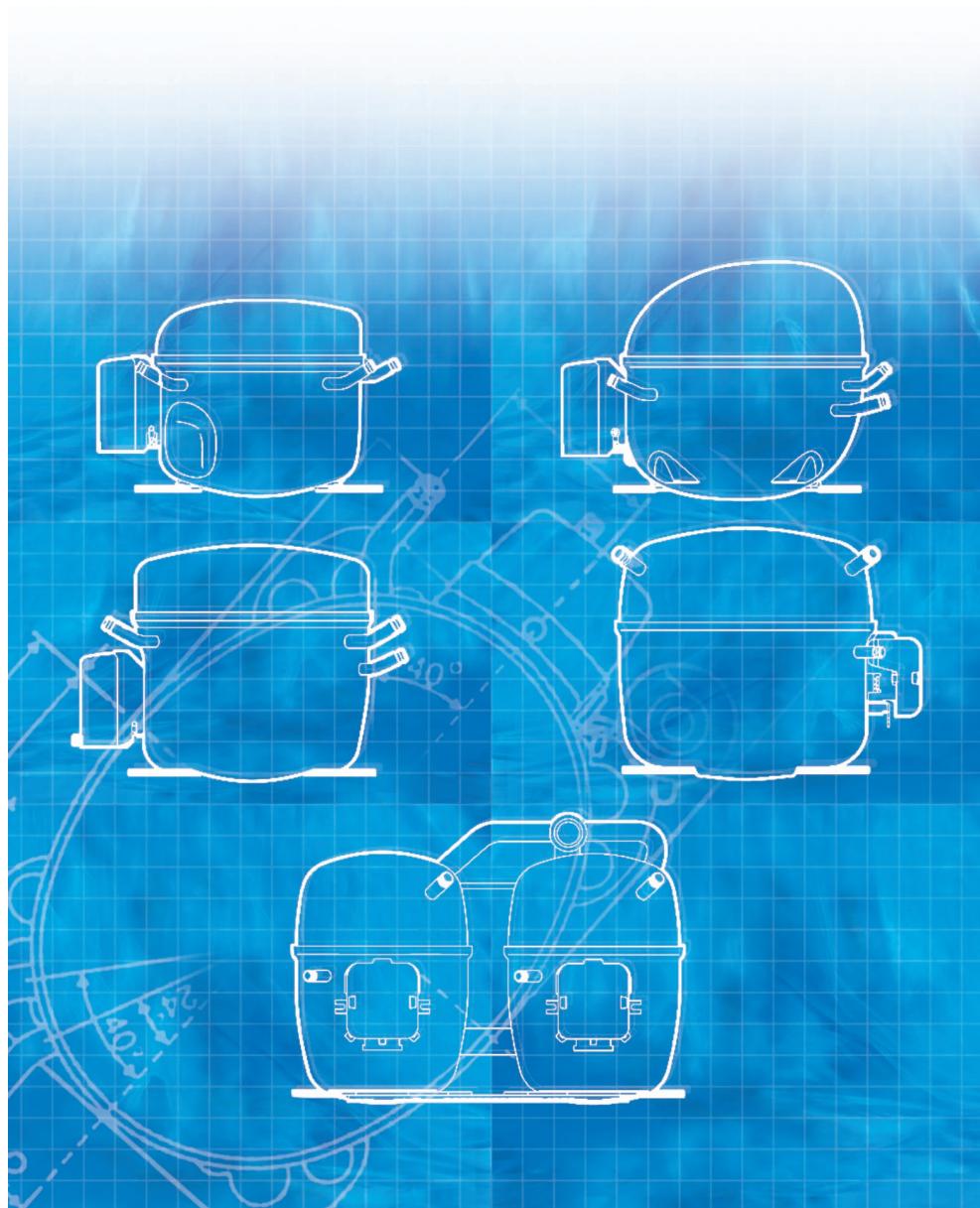


Collection of Datasheets

**Compressors for R404A/R507 & R407C
220-240V 50Hz & 60Hz, 115V 60Hz**

R404A/R507, 220-240V 50Hz

T-Series

TL4CL	(LBP/MBP)	Page 10
TL4DL	(MBP/HBP)	Page 12

N-Series

NL7CLX	(LBP/MBP)	Page 14
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F-Series

FR6CL	(LBP/MBP)	Page 16
FR6DL	(MBP/HBP)	Page 18
FR7.5CL	(LBP/MBP)	Page 20
FR8.5CL	(LBP)	Page 22

S-Series

SC10CL	(LBP/MBP)	Page 24
SC10DL	(MBP/HBP)	Page 26
SC12CL	(LBP/MBP)	Page 28
SC12DL	(MBP/HBP)	Page 30
SC15CL	(LBP/MBP)	Page 32
SC15DL	(MBP/HBP)	Page 34
SC18CL	(LBP/MBP)	Page 36
SC21CL	(LBP)	Page 38

S-Series (Twins)

SC10/10CL	(LBP/MBP)	Page 40
SC10/10DL	(MBP/HBP)	Page 42
SC12/12CL	(LBP/MBP)	Page 44
SC12/12DL	(MBP/HBP)	Page 46
SC15/15CL	(LBP/MBP)	Page 48
SC15/15DL	(MBP/HBP)	Page 50
SC18/18CL	(LBP/MBP)	Page 52
SC21/21CL	(LBP)	Page 54

R404A/R507, 220-240V 50/60Hz

S-Series

SC10CLX	(LBP/MBP)	Page 66
SC10MLX	(MBP)	Page 68
SC12CLX.2	(LBP)	Page 70
SC12MLX	(MBP)	Page 72

R404A/R507, 220-240V 60Hz

S-Series

SC12CLX	(LBP)	Page 56
SC15CLX	(LBP)	Page 58

S-Series (Twins)

SC10/10CLX	(LBP/MBP)	Page 60
SC12/12CLX	(LBP)	Page 62
SC15/15CLX	(LBP)	Page 64

R404A/R507, 115V 60Hz

T-Series

TF4CLX	(LBP/MBP)	Page 74
TFS4.5CLX	(LBP)	Page 76

N-Series

NF5.5CLX	(LBP/MBP)	Page 78
NF7CLX	(LBP/MBP)	Page 80

S-Series

SC10CL	(LBP/MBP)	Page 82
SC12CL	(LBP)	Page 84
SC12CLX.2	(LBP)	Page 86
SC12MLX	(MBP)	Page 88
SC15CLX.2	(LBP)	Page 90
SC15MLX	(MBP)	Page 92

R407C, 220-240V 50Hz

S-Series

SC10DL	(MBP/HBP)	Page 94
SC12DL	(MBP/HBP)	Page 96
SC15DL	(MBP/HBP)	Page 98

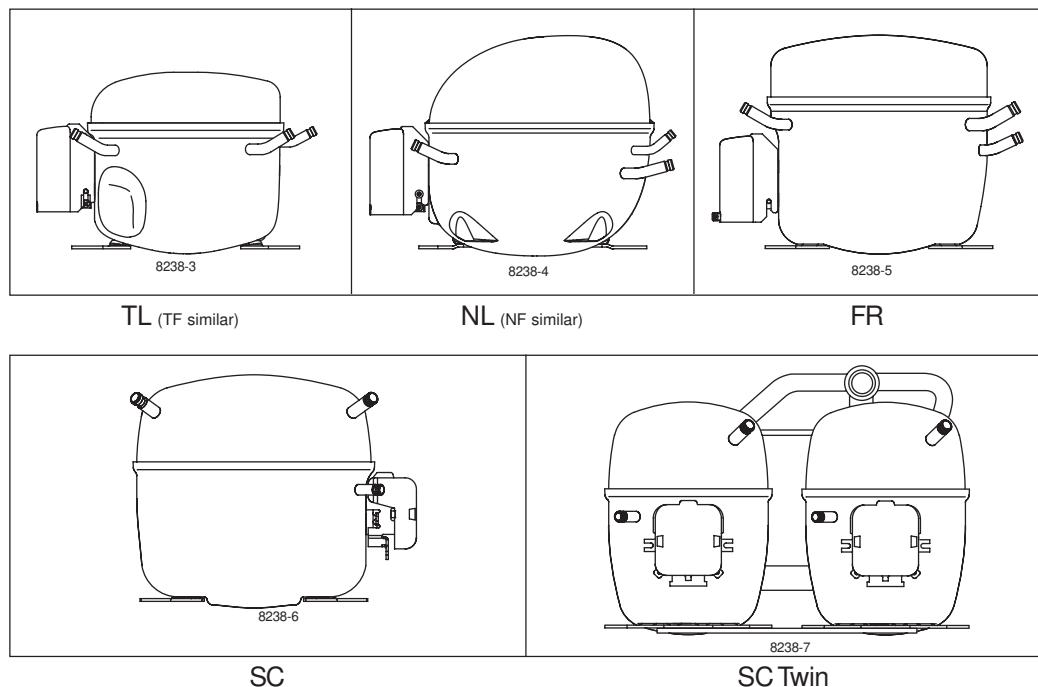
S-Series (Twins)

SC10/10DL	(MBP/HBP)	Page 100
SC12/12DL	(MBP/HBP)	Page 102
SC15/15DL	(MBP/HBP)	Page 104

1. General

This collection of datasheets contains information on Danfoss hermetic refrigeration compressors for 220-240V and 115V especially designed for refrigeration systems using refrigerant R404A (CHF_2CF_3 / CH_3CF_3 / CH_2FCF_3) / R507 (CHF_2CF_3 / CH_3CF_3) and R407C (CH_2F_2 / CHF_2CF_3 / CH_2FCF_3).

The programme consists of the basic types TL, TF, NL, NF, FR, SC and SC Twin.



1.1 Compressor designations

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

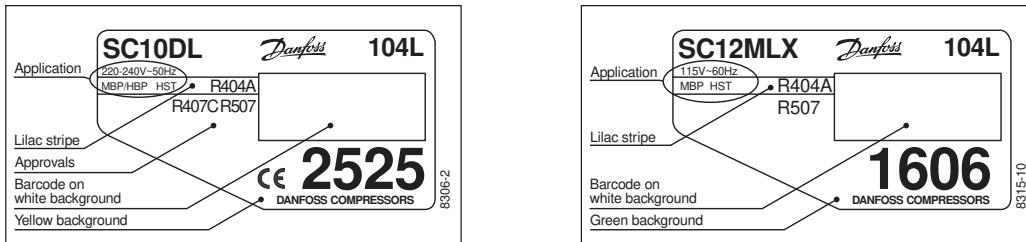
Design	Optimization level	Compressor size	Application range	Start characteristics	Generation
TL, TF					
NL, NF	Blank Standard energy level	Nominal displacement in cm ³	CL R404/R507 LBP (MBP) DL R404/R507 HBP R407C HBP ML R404/R507 MBP	Blank → universal (principal rule)	Blank → First generation .2 → Second generation etc.
FR	S Semi-direct intake			X = HST characteristics (capillary tube)	
SC					

Examples

TF	S	4.5	CL	X	
NL		7	CL	X	
FR		6	DL		
SC		15	CL	X	.2

1.2 Design All Danfoss compressors for R404A/R507 and R407C from the TL, TF, NL, NF, FR, and SC range are standard efficiency types.

1.3 Type label Compressors for 220-240V have a yellow label with the type designation. This label has a lilac stripe and the text "R404A R507" or "R404A R407C R507".
Compressors for 115V have a green label with the type designation. This label has a lilac stripe and the text "R404A R507".



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,
L-4CL-2071
F-202E2207

The first line states the model designation and the code no.
L- = last letter (or last two letters) of the compressor type
4CL = nominal displacement and application
2071 = 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
2 = 2002
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**
- CL** Compressors with denominations ending with **CL** are primarily designed for low evaporating temperatures (**LBP Low Back Pressure**) for use in commercial refrigerators, freezers and similar applications in regions with normal supply voltage.
 - ML** Compressors with denominations ending with **ML** are primarily designed for medium evaporation temperatures (**MBP Medium Back Pressure**) for use in commercial refrigerators, bottle coolers, ice machines and similar applications.
 - DL** Compressors with denominations ending with **DL** are primarily designed for high evaporation temperatures (**HBP High Back Pressure**) for use in commercial refrigerators, liquid coolers, dehumidifiers, refrigerated display counters, vending machines, heat pumps, and similar applications.

The following table 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	HBP	LBP	MBP	HBP	LBP	MBP	HBP
R404A/R507, 220-240V 50Hz	TL4CL	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	TL4DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			
	NL7CLX	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	FR6 - 7.5CL	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	FR8.5CL	198 - 254 /50	F ₂			F ₂					
	FR6DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			
	SC10 - 12 - 15 - 18CL	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	SC21CL	198 - 254 /50	F ₂			F ₂					
	SC10 - 12 - 15DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			
	SC10/10 - 12/12CL	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	SC15/15CL - 18/18CL	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
	SC21/21CL	198 - 254 /50	F ₂			F ₂					
R404A/R507, 220-240V 60Hz	SC10 - 12/12 - 15/15DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			
	SC12 - 15CLX	198 - 254 /60	F ₂			F ₂					
	SC10/10CLX	198 - 254 /60	F ₂	F ₂		F ₂	F ₂		F ₂	F ₂	
R404A/R507, 220-240V 50/60Hz	SC12/12 - 15/15CLX	198 - 254 /60	F ₂			F ₂					
	SC10CLX	198 - 254 /50	F ₂	F ₂		F ₂	F ₂				
		198 - 254 /60	F ₂			F ₂					
	SC12CLX.2	198 - 254 /50	F ₂			F ₂					
		198 - 254 /60	F ₂			F ₂					
R404A/R507, 115V 60Hz	SC10 - 12MLX	187 - 254 /50		F ₂			F ₂			F ₂	
		187 - 254 /60		F ₂			F ₂			F ₂	
	TF4CLX	95 - 135 /60	F ₁	F ₁		F ₁	F ₁		F ₁	F ₁	
	TFS4.5CLX	103 - 135 /60	F ₁			F ₁			F ₁		
	NF5.5CLX	95 - 135 /60	F ₂			F ₂			F ₂		
		103 - 135 /60	F ₂	F ₂		F ₂	F ₂		F ₂	F ₂	
	NF7CLX	95 - 135 /60	F ₂			F ₂			F ₂		
		108 - 135 /60	F ₂	F ₂		F ₂	F ₂		F ₂	F ₂	
	SC10CL	103 - 127 /60	F ₂	F ₂		F ₂	F ₂		F ₂	F ₂	
	SC12CL	103 - 127 /60	F ₂			F ₂			F ₂		
R407C, 220-240V 50Hz	SC15CLX.2	103 - 127 /60	F ₂			F ₂			F ₂		
	SC12MLX	95 - 135 /60		F ₂			F ₂			F ₂	
	SC15MLX	95 - 135 /60		F ₂			F ₂			F ₂	
		103 - 135 /60		F ₂			F ₂			F ₂	
	SC10 - 12 - 15DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			
	SC10/10 - 12/12 - 15/15DL	198 - 254 /50		F ₂	F ₂		F ₂	F ₂			

S = Static cooling normally sufficient

O = Oil cooling

F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temp.)

F₂ = 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 60°C. The winding temperature must not exceed 135°C.

At stable operation conditions the condensing temperature must not exceed 50°C. The winding temperature must not exceed 125°C.

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

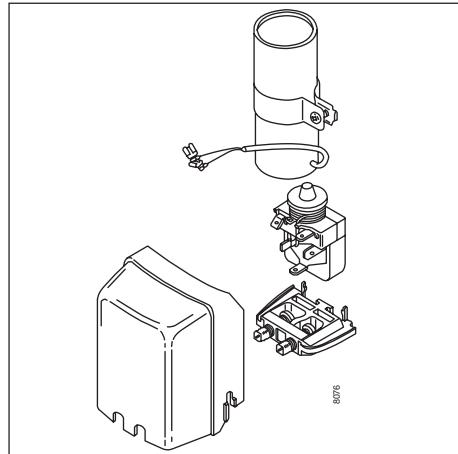
Condensing temperature
Winding temperature

3. Electrical equipment

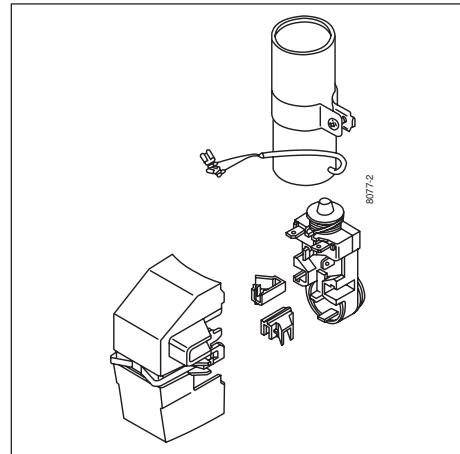
The compressors are equipped with a single-phase AC motor. All compressors for R404A/R507 and R407C are designed only for use with **High Starting Torque (HST)**.
The electrical equipments are classified as "normal tight" (IP20).
The motor protector is built into the motor (winding protector). Exception are compressors with the denominations TF and NF and some SCs.
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 HST (CSIR)



TL, NL, FR



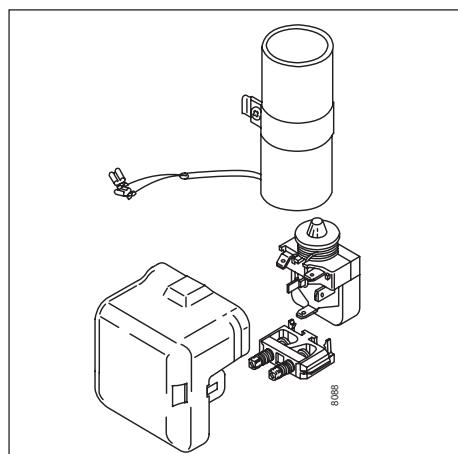
TF, NF

Compressors with the motor type **Capacitor Start Induction Run (CSIR)** have a starting device for **High Starting Torque (HST)**. This starting device consists of a starting relay and a starting capacitor and is used for compressors with the denominations TL, TF, NL, NF, FR and SC. The following designs of starting devices exist:

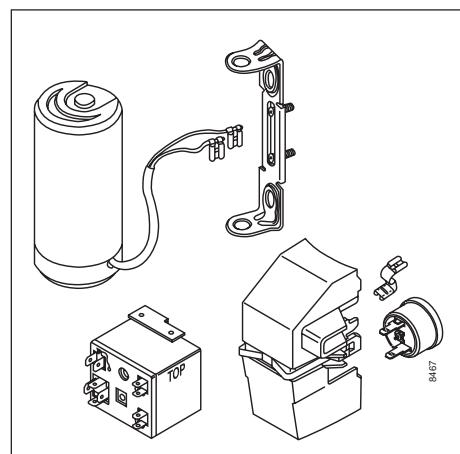
- a) Relay + starting capacitor + cord relief + cover, used for compressors with the denominations TL, NL, FR and SC.
- b) Relay housing including motor protector + starting capacitor + cord relief (2x) + cover, used for compressors with the denomination TF and NF.
- c) Relay + starting capacitor (with bracket) + cover/protector/protector holder (parts of compressor), used for compressors with the denomination SC which have an external protector.

The starting device requires no pressure-equalization before each start and is normally used in refrigerating systems with expansion valve as throttling device or in capillary tube systems where pressure equalizing is not obtained during the standstill periods.

The starting capacitor is designed for short time cut-in. "1.7% ED", which is stamped on the starting capacitor, means for instance max. 10 cutins per hour each with a duration of 6 seconds (normally shorter than 1 sec.).

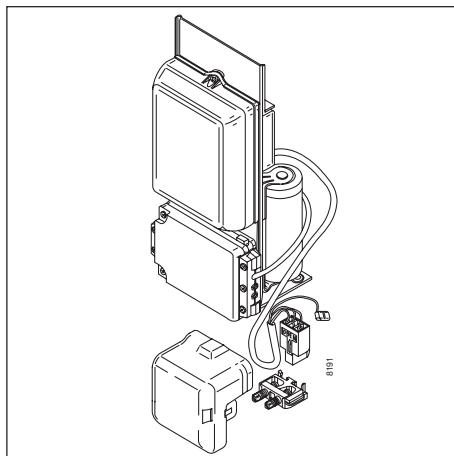


SC

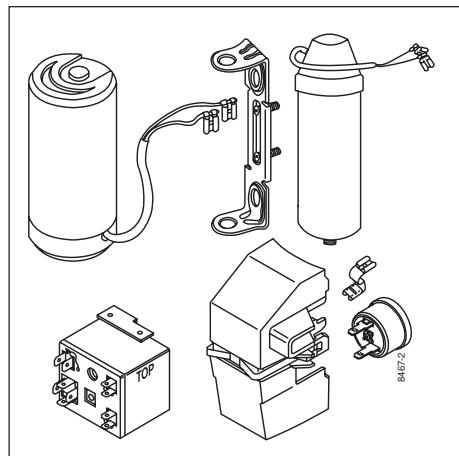


SC (external protector)

3.5 HST (CSR)



SC



SC (external protector)

Compressors with the motor type **Capacitor Start Run (CSR)** have a starting device for **High Starting Torque (HST)**. The following designs of starting devices exist:

- a) Relay + starting capacitor + run capacitor + terminal board + cord relief + cover, used for compressors with the denomination SC.
- b) Relay + starting capacitor (with bracket) run capacitor + cover/protector/protector holder (parts of compressor), used for compressors with the denomination SC which have an external protector.

The starting device is mandatory for some of the biggest SC compressors. The starting capacitor is designed for short time cut-in. "1.7% ED", which is stamped on the starting capacitor, means for instance max. 10 cut-ins per hour each with a duration of 6 seconds.

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

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.

Most compressors which are capable of running at 60Hz have been approved in respect of safety by testing authorities UL and CSA. Actual standards to which the compressors have been approved are specified in the individual datasheets. Approval markings appear on a separate approval mark label.

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

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.

The refrigerant amount may be critical as regards oil foaming and liquid hammer after long standstill periods. Because of this, limitations of refrigerant charges have been introduced. The maximum refrigerant charge is specified in the individual datasheets.

If these limitations cannot be complied with, the risk may be reduced if a crankcase heater is properly used or if a pump down system is established.

6. Oil charge

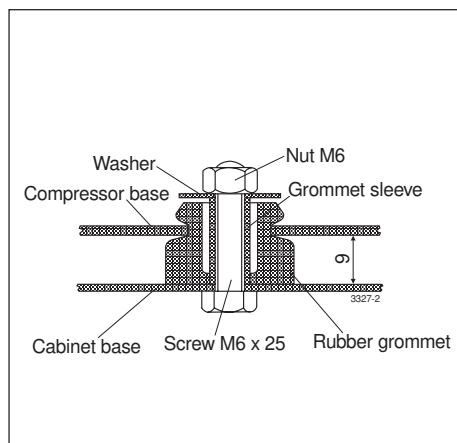
The compressors are supplied charged with dried and degassed oil, which is normally sufficient for the lifetime of the compressor. The refrigeration systems and the system components must be dimensioned in such a way that the oil can be lead back continuously to the compressor housing without accumulating in the system, e.g. without oil pockets and with sufficient gas velocity. The compressors use polyolester oils and are approved only for these oils and R404A/R507 respectively R407C.

The oil charge is specified in the individual datasheets.

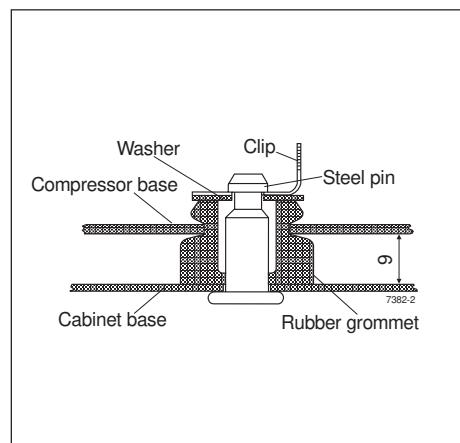
7. Mounting

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 code numbers for the mounting accessories are specified in the individual compressor datasheets.

These rubber grommets are designed for the 16 mm holes of the baseplate:

Bolt joint for one compressor in a bag 118-1917 or 118-1946

Bolt joint in quantities 118-1918 or 118-1945

Snap-on in quantities 118-1919 or 118-1944

Snap-on for one compressor in a bag 118-1947

These rubber grommets are designed for the 19 mm holes of the baseplate:

Bolt joint in quantities 118-1948

8. Condition at delivery	<p>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.</p> <p>The most important performance controls carried out during manufacturing are,</p> <ul style="list-style-type: none">• 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
	<p>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).</p>
9. Twin compressors	<p>The Twin version consists of two SC compressors mounted on a common baseplate. The two compressors are joined by an oil-equalizing tube and also have an intake manifold with screw connector for a service valve or a solder connector (these parts are supplied as accessories).</p> <p>Each Twin compressor has to be ordered with two sets of electrical equipment and mounting accessories. To ensure optimum starting characteristics and the smallest possible mains load we recommend that the compressors be equipped with a time-delay relay for start of the second compressor.</p> <p>Twin compressors can operate with capacity regulation depending on the controls used.</p>
10. Conversion from R502/R22 to R404/R507 or R407C	<p>Normally, the same system components can be used as were used with R502. However, an adjustment of the charge has to be made.</p> <p>A drier with 3Å desiccant of Molecular Sieves or a hard core drier compatible with R404A must always be used.</p> <p>Rules for dryness and cleanliness of system components (DIN 8964) are transferred to R404A systems.</p> <p>The system components must not contain mineral oil or greasy substances.</p> <p>The compressors must be soldered into the system no later than 15 minutes after the connector seals have been removed.</p> <p>The same evacuation procedure as for R502/R22 systems must be used.</p> <p>Max. 1% non-condensable gases.</p> <p>The system must not contain any chlorine.</p> <p>The charging equipment must only be used for R404A/R507 respectively R407C.</p>
11. Warnings	<p>No high potential test nor start tests must be carried out while the compressor is under vacuum.</p> <p>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.</p> <p>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.</p>

TL4CL

LBP/MBP Compressor

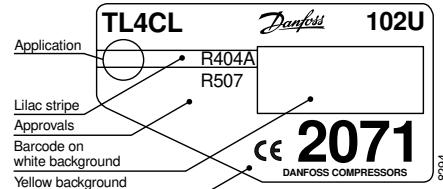
R404A/R507

220-240V 50Hz

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

General

Compressor	TL4CL
Code number	102U2071



8294

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 / 50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

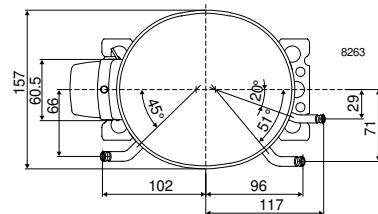
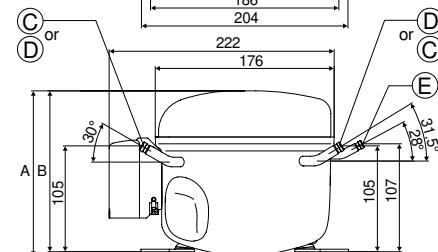
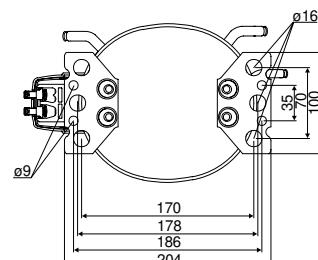
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	3.86
Oil quantity	cm ³	280
Maximum refrigerant charge	g	600
Free gas vol. in compressor	cm ³	1690
Weight without electrical equipment	kg	7.6

Motor

Motor size	watt	140
LRA (rated after 4 sec. UL984) HST	A	5.7
Cut-in current HST	A	5.7
Resistance, main and start winding (25°C)	Ω	14.8/14.5
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)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
TL4CL	52	65	84	110	142	155	182	230	286	352	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
TL4CL	60	76	98	128	166	180	212	268	334	411	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
TL4CL	81	91	105	121	140	147	160	179	198	215	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
TL4CL	0.89	0.79	0.80	0.88	1.01	1.05	1.14	1.25	1.28	1.31	

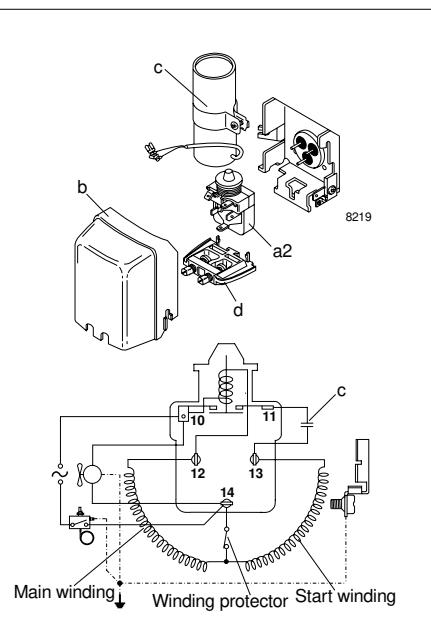
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
TL4CL	0.64	0.72	0.81	0.90	1.02	1.06	1.14	1.28	1.45	1.64	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
TL4CL	0.74	0.83	0.94	1.05	1.18	1.23	1.33	1.50	1.69	1.92	

Test conditions
 Condensing temperature 45°C ASHRAE 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	TL4CL
Starting relay	a2	117U6000
Cover	b	103N2010
Starting capacitor 60 µF	c	117U5014
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

TL4DL

MBP/HBP Compressor

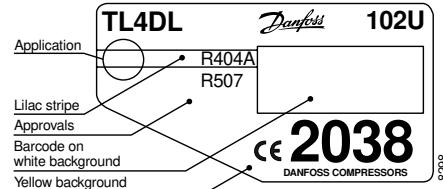
R404A/R507

220-240V 50Hz

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

General

Compressor	TL4DL
Code number	102U2038



Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 10
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂

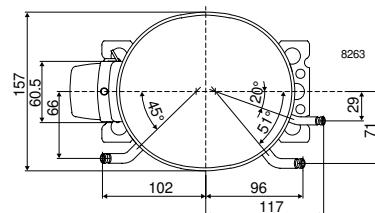
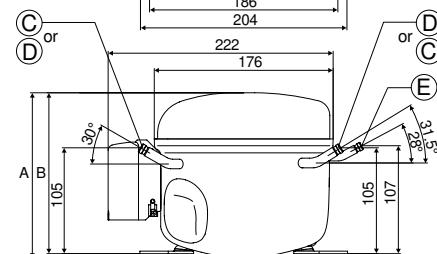
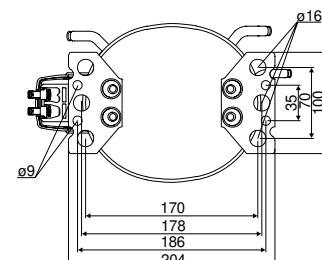
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	3.86
Oil quantity cm ³	280
Maximum refrigerant charge g	600
Free gas vol. in compressor cm ³	1690
Weight without electrical equipment kg	7.5

Motor

Motor size watt	175
LRA (rated after 4 sec. UL984) HST A	7.5
Cut-in current HST A	7.5
Resistance, main and start winding (25°C) Ω	12.0/20.0
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	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	196	229	281	349	432	527	572	631	

Capacity (ASHRAE)									watt
Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	229	267	328	409	506	619	672	742	

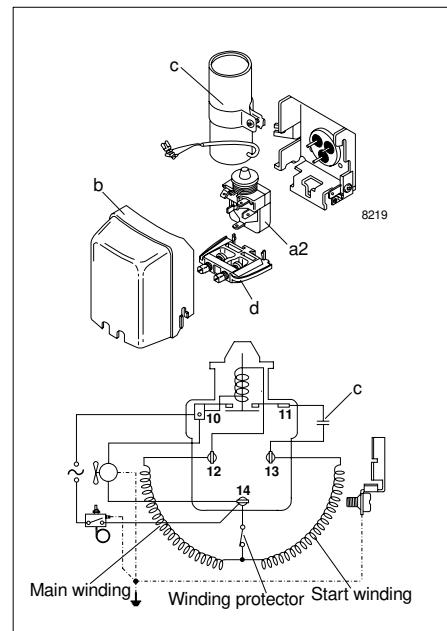
Power consumption									watt
Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	169	186	203	221	239	256	263	272	

Current consumption									A
Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	1.22	1.28	1.34	1.41	1.47	1.54	1.56	1.60	

COP (EN 12900/CECOMAF)									W/W
Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	1.16	1.23	1.38	1.58	1.81	2.06	2.17	2.32	

COP (ASHRAE)									W/W
Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	
TL4DL	1.36	1.44	1.61	1.85	2.12	2.42	2.55	2.73	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	Fig.	TL4DL
Starting relay	a2	117U6001
Cover	b	103N2010
Starting capacitor 60 µF	c	117U5014
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

NL7CLX

LBP/MBP Compressor

R404A/R507

220-240V 50Hz

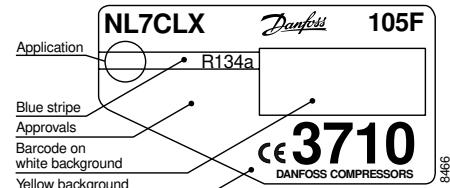
Data Sheet

General

Compressor	NL7CLX
Code number	105F3710

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	F ₁
	38°C	F ₁
	43°C	F ₂



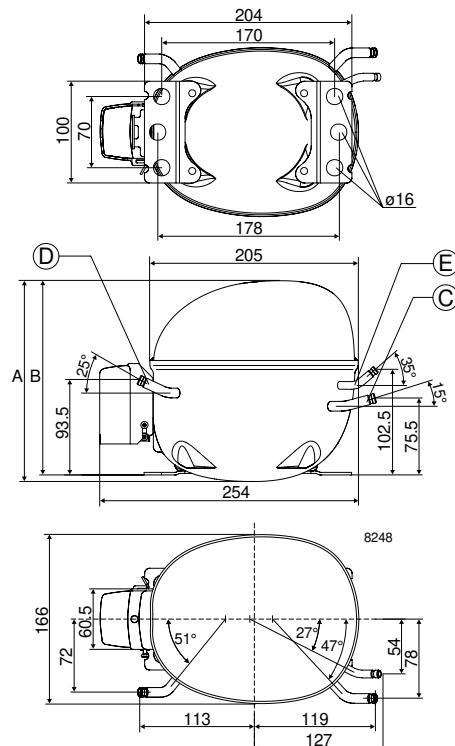
S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	7.27
Oil quantity	cm ³	320
Maximum refrigerant charge	g	400
Free gas vol. in compressor	cm ³	2310
Weight without electrical equipment	kg	10.4

Motor

Motor size	watt	235
LRA (rated after 4 sec. UL984) HST	A	10.4
Cut-in current HST	A	10.4
Resistance, main and start winding (25°C)	Ω	8.2/14.7
Approvals		EN 60335-2-34



Dimensions

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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
NL7CLX					328	360					

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
NL7CLX					380	419					

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
NL7CLX					276	289					

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
NL7CLX					1.64	1.68					

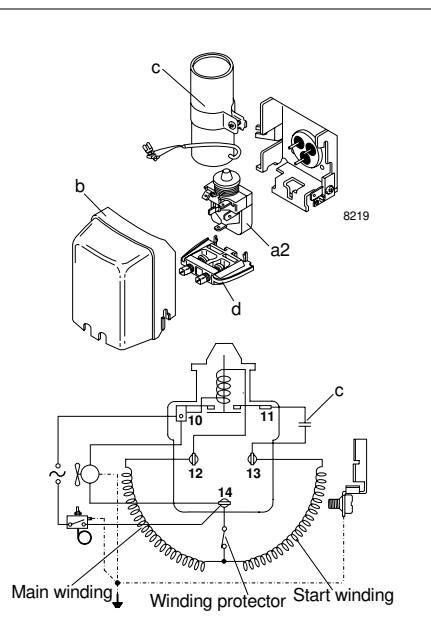
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
NL7CLX					1.18	1.24					

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
NL7CLX					1.37	1.44					

Test conditions
 Condensing temperature 45°C EN 12900/CECOMAF ASHRAE
 Ambient and suction gas temp. 32°C 45°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz,
 preliminary data


Accessories

Devices	Fig.	NL7CLX
Starting relay	a2	117U6002
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

FR6CL

LBP/MBP Compressor

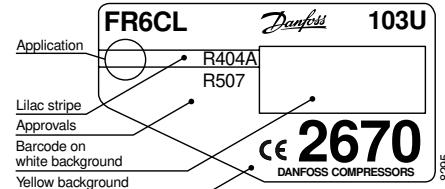
R404A/R507

220-240V 50Hz

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

General

Compressor	FR6CL
Code number	103U2670



8295

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 / 50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

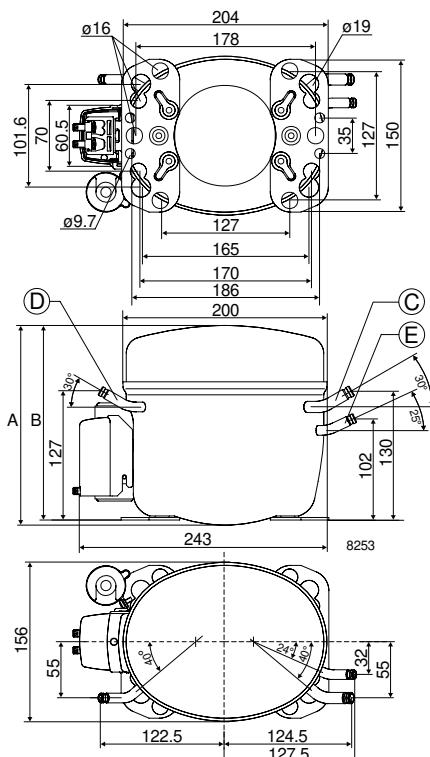
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	6.23
Oil quantity	cm ³	450
Maximum refrigerant charge	g	850
Free gas vol. in compressor	cm ³	1350
Weight without electrical equipment	kg	10.5

Motor

Motor size	watt	215
LRA (rated after 4 sec. UL984) HST	A	8.2
Cut-in current HST	A	8.2
Resistance, main and start winding (25°C)	Ω	8.9/12.0
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A 196
		B 191
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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR6CL	77	108	145	189	243	263	307	383	473	578	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR6CL	90	125	168	220	283	307	358	447	553	676	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR6CL	126	152	180	210	242	253	276	313	353	395	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
FR6CL	1.13	1.18	1.26	1.35	1.46	1.51	1.60	1.75	1.91	2.09	

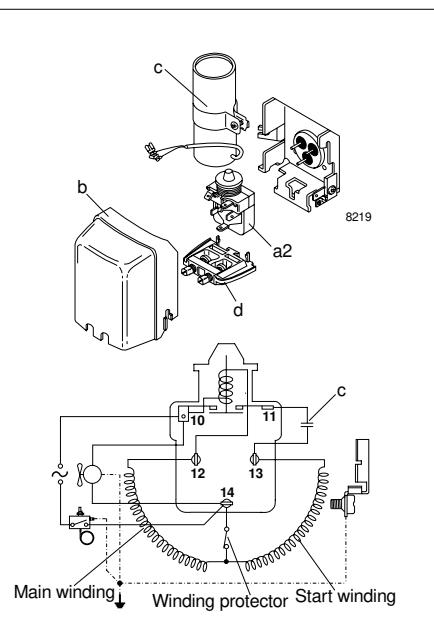
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
FR6CL	0.61	0.71	0.80	0.90	1.00	1.04	1.11	1.22	1.34	1.47	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
FR6CL	0.71	0.82	0.94	1.05	1.17	1.21	1.29	1.43	1.57	1.71	

Test conditions
 Condensing temperature 45°C ASHRAE 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	FR6CL
Starting relay	a2	117U6015
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

FR6DL

MBP/HBP Compressor

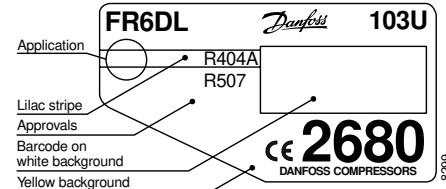
R404A/R507

220-240V 50Hz

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

General

Compressor	FR6DL
Code number	103U2680



Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂

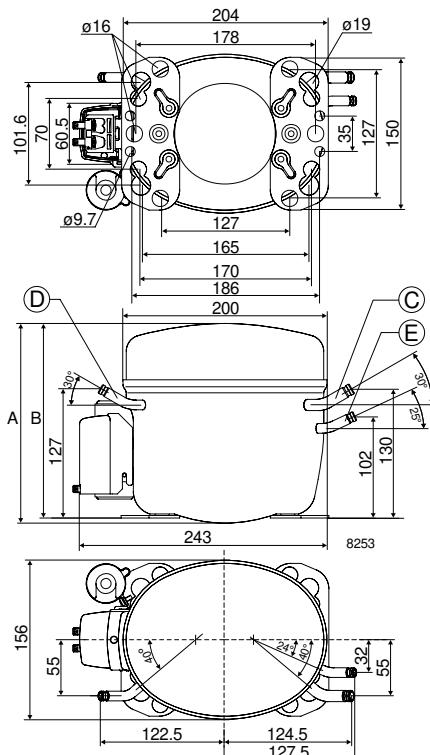
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	6.23
Oil quantity cm ³	450
Maximum refrigerant charge g	850
Free gas vol. in compressor cm ³	1350
Weight without electrical equipment kg	10.5

Motor

Motor size watt	275
LRA (rated after 4 sec. UL984) HST A	10.0
Cut-in current HST A	10.0
Resistance, main and start winding (25°C) Ω	7.3/12.0
Approvals	EN 60335-2-34



Dimensions

Height mm	A 196 B 191
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	-20	-15	-10	-5	0	5	7.2	10	15	watt
FR6DL	317	385	471	576	698	840	907	999	1177	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
FR6DL	370	449	550	673	818	986	1065	1176	1389	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
FR6DL	290	321	354	388	423	456	469	485	509	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
FR6DL	1.91	1.99	2.10	2.23	2.37	2.51	2.56	2.62	2.70	

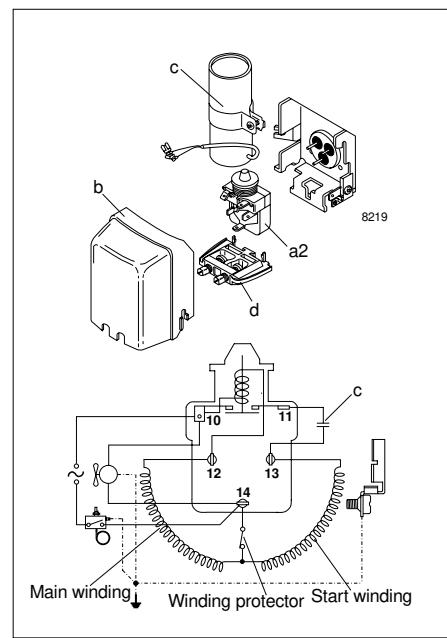
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
FR6DL	1.09	1.20	1.33	1.48	1.65	1.84	1.93	2.06	2.31	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
FR6DL	1.27	1.40	1.56	1.73	1.94	2.16	2.27	2.42	2.73	

Test conditions
 Condensing temperature 45°C ASHRAE
 Ambient and suction gas temp. 32°C 45°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	FR6DL
Starting relay	a2	117U6010
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

FR7.5CL

LBP/MBP Compressor

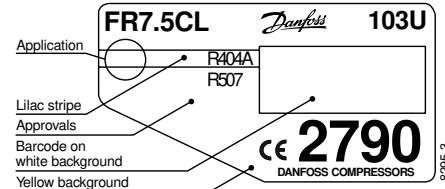
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.53.D1.02)

General

Compressor	FR7.5CL
Code number	103U2790



Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 / 50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

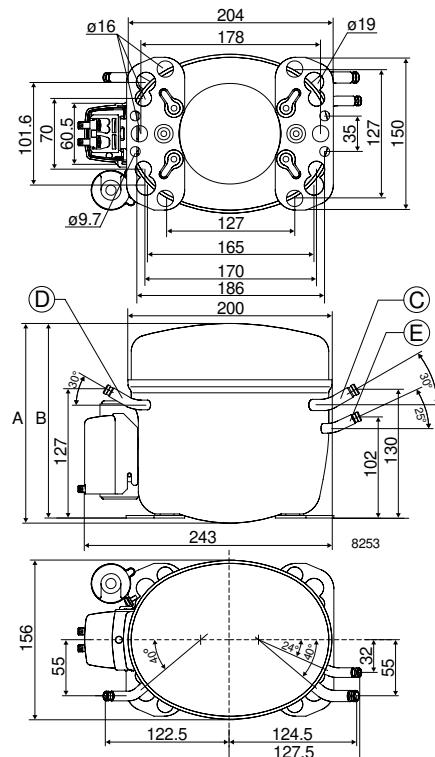
Displacement	cm ³	6.93
Oil quantity	cm ³	450
Maximum refrigerant charge	g	850
Free gas vol. in compressor	cm ³	1350
Weight without electrical equipment	kg	10.6

Motor

Motor size	watt	235
LRA (rated after 4 sec. UL984) HST	A	9.1
Cut-in current HST	A	9.1
Resistance, main and start winding (25°C)	Ω	8.8/12.0
Approvals	EN 60335-2-34	

Dimensions

Height	mm	A 196
		B 191
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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR7.5CL	86	114	154	202	262	285	333	418	515	630	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR7.5CL	101	132	178	235	305	333	388	488	602	737	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
FR7.5CL	142	168	197	231	267	280	307	349	395	440	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
FR7.5CL	1.39	1.44	1.52	1.62	1.75	1.81	1.91	2.09	2.28	2.51	

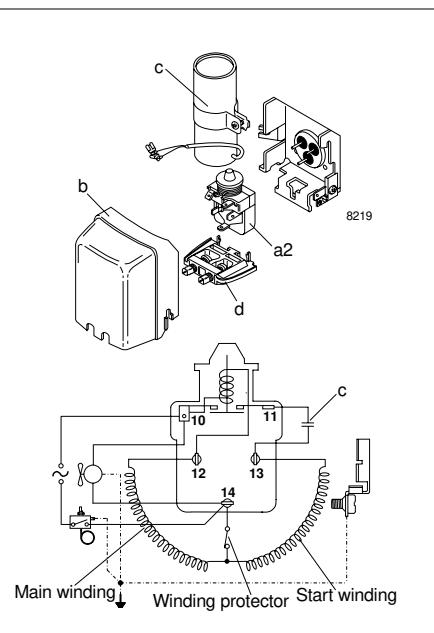
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
FR7.5CL	0.61	0.68	0.78	0.88	0.98	1.02	1.09	1.20	1.30	1.43	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
FR7.5CL	0.71	0.79	0.90	1.02	1.14	1.19	1.27	1.40	1.53	1.67	

Test conditions
 Condensing temperature 45°C ASHRAE 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz,
 preliminary data


Accessories

Devices	Fig.	FR7.5CL
Starting relay	a2	117U6016
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

FR8.5CL

LBP Compressor

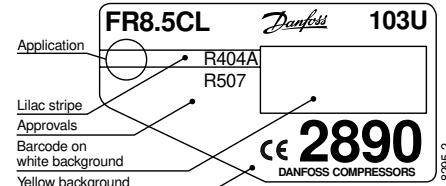
R404A/R507

220-240V 50Hz

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

General

Compressor	FR8.5CL
Code number	103U2890



Application

Application	LBP	
Evaporating temperature range	°C	-45 to -10
Voltage range	V/Hz	198 - 254 / 50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

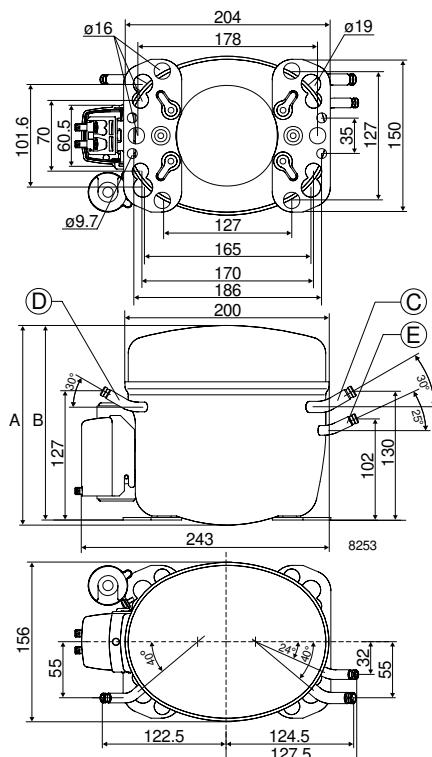
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	7.95
Oil quantity	cm ³	450
Maximum refrigerant charge	g	850
Free gas vol. in compressor	cm ³	1350
Weight without electrical equipment	kg	10.6

Motor

Motor size	watt	275
LRA (rated after 4 sec. UL984) HST	A	10.0
Cut-in current HST	A	10.0
Resistance, main and start winding (25°C)	Ω	7.3/12.0
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A 196
		B 191
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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
FR8.5CL	99	126	168	222	290	317	372	468	577	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
FR8.5CL	115	147	195	259	338	369	434	546	674	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
FR8.5CL	171	198	231	271	315	331	364	417	472	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	A
FR8.5CL	1.61	1.64	1.72	1.83	1.97	2.03	2.15	2.35	2.57	

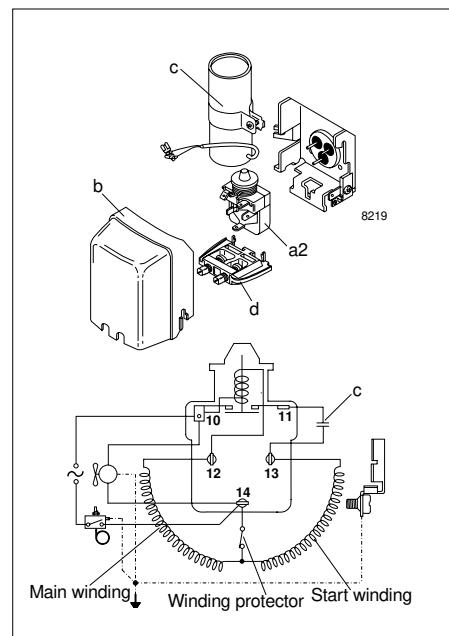
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
FR8.5CL	0.58	0.64	0.72	0.82	0.92	0.96	1.02	1.12	1.22	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
FR8.5CL	0.67	0.74	0.84	0.96	1.07	1.11	1.19	1.31	1.43	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	FR8.5CL
Starting relay	a2	117U6010
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC10CL

LBP/MBP Compressor

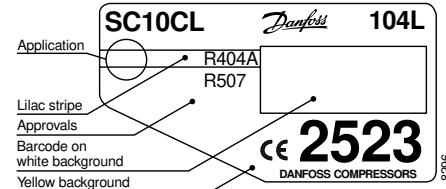
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.A1.02)

General

Compressor	SC10CL
Code number	104L2523



Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to -5
Voltage range	V/Hz	198 - 254 / 50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

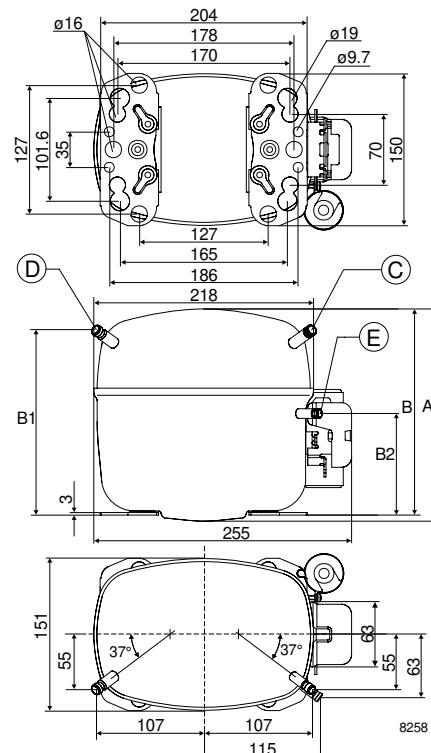
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	10.29
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	13.1

Motor

Motor size	watt	315
LRA (rated after 4 sec. UL984) HST	A	12.6
Cut-in current HST	A	12.6
Resistance, main and start winding (25°C)	Ω	6.7/11.8
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A	209
		B	203
		B1	183
		B2	100
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	-5
SC10CL	168	258	365	405	489	634	800	991

Capacity (ASHRAE)								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10CL	195	300	424	470	569	737	932	1154

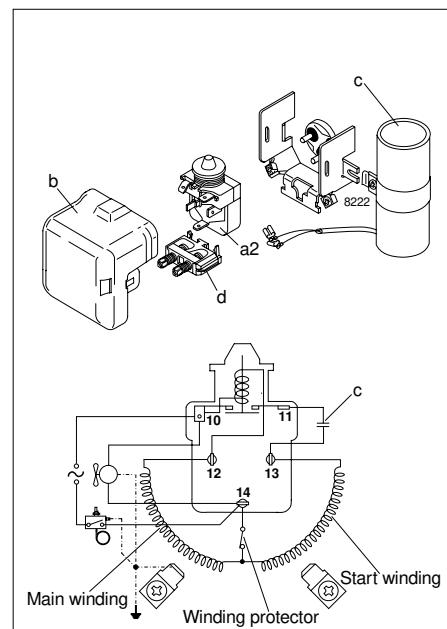
Power consumption								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10CL	243	294	350	370	410	471	530	584

Current consumption									
A	Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10CL	1.91	2.05	2.22	2.27	2.39	2.59	2.81	3.04	

COP (EN 12900/CECOMAF)									
W/W	Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10CL	0.69	0.88	1.04	1.09	1.19	1.35	1.51	1.70	

COP (ASHRAE)									
W/W	Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10CL	0.80	1.02	1.21	1.27	1.39	1.57	1.76	1.98	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	Fig.	SC10CL
Starting relay	a2	117U6003
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC10DL

MBP/HBP Compressor

R404A/R507

220-240V 50Hz

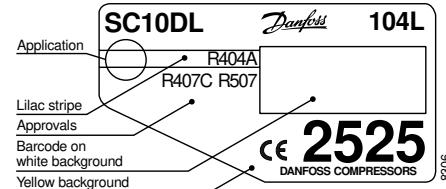
Data Sheet (Replaces CF.54.K2.02)

General

Compressor	SC10DL
Code number	104L2525

Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



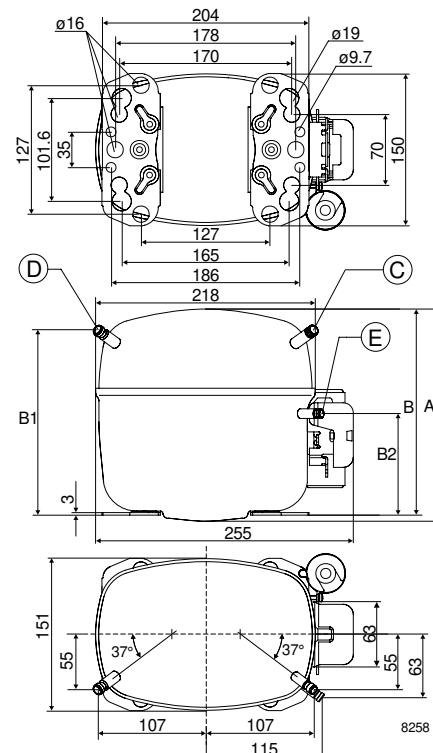
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	10.29
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1410
Weight without electrical equipment kg	13.1

Motor

Motor size watt	385
LRA (rated after 4 sec. UL984) HST A	14.8
Cut-in current HST A	14.8
Resistance, main and start winding (25°C) Ω	5.0/13.7
Approvals	EN 60335-2-34



Dimensions

Height mm	A	209
	B	203
	B1	183
	B2	100
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	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10DL	471	611	775	968	1192	1450	1576	1747	2085	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10DL	547	710	902	1128	1391	1696	1845	2048	2451	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10DL	373	429	479	522	559	590	601	614	631	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
SC10DL	2.55	2.78	2.97	3.15	3.30	3.42	3.47	3.53	3.61	

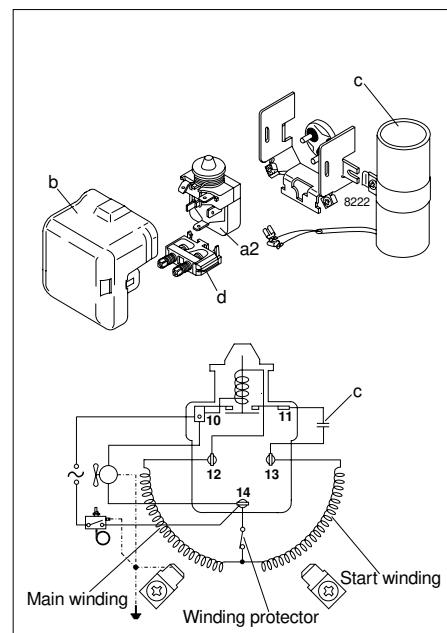
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC10DL	1.26	1.42	1.62	1.85	2.13	2.46	2.62	2.85	3.30	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC10DL	1.47	1.66	1.89	2.16	2.49	2.88	3.07	3.34	3.88	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC10DL
Starting relay	a2	117U6005
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12CL

LBP/MBP Compressor

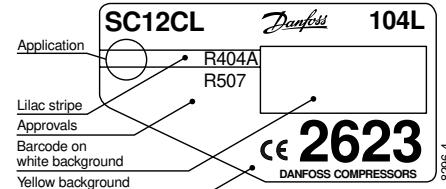
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.B1.02)

General

Compressor	SC12CL
Code number	104L2623



Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

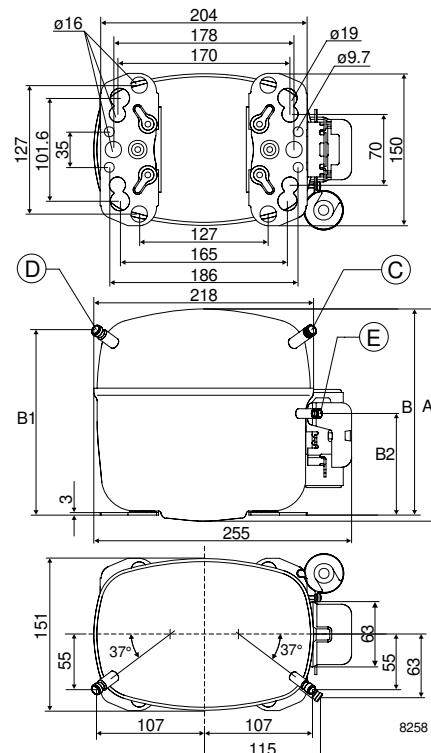
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	12.87
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	12.5

Motor

Motor size	watt	385
LRA (rated after 4 sec. UL984) HST	A	14.8
Cut-in current HST	A	14.8
Resistance, main and start winding (25°C)	Ω	5.0/13.7
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A	209
		B	203
		B1	183
		B2	100
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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC12CL	58	140	237	353	490	541	650	835	1048	1292	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC12CL	67	162	275	410	568	629	754	971	1220	1505	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC12CL	190	253	316	380	445	468	512	581	654	730	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
SC12CL	2.15	2.27	2.43	2.61	2.82	2.90	3.06	3.34	3.64	3.97	

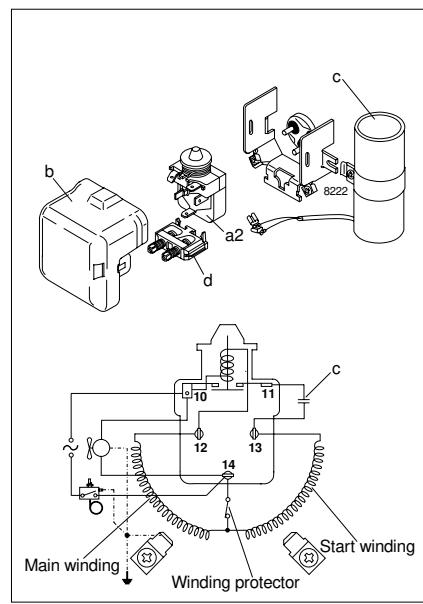
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
SC12CL	0.30	0.55	0.75	0.93	1.10	1.16	1.27	1.44	1.60	1.77	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
SC12CL	0.35	0.64	0.87	1.08	1.28	1.34	1.47	1.67	1.87	2.06	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC12CL
Starting relay	a2	117U6005
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12DL

MBP/HBP Compressor

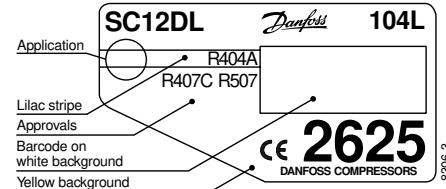
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.L2.02)

General

Compressor	SC12DL
Code number	104L2625



Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂

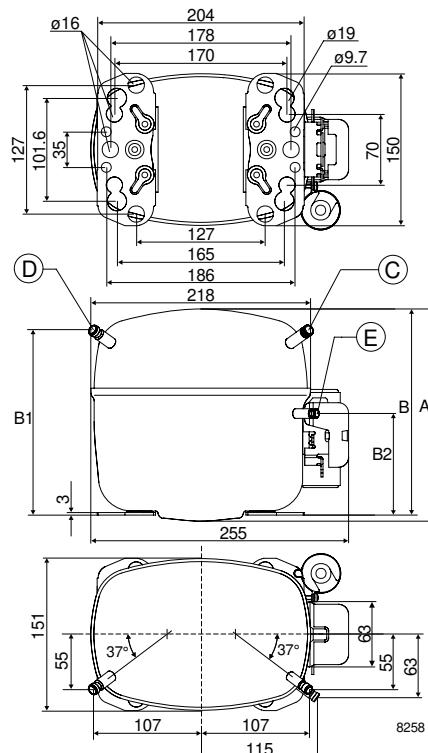
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	12.87
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1460
Weight without electrical equipment kg	13.6

Motor

Motor size watt	495
LRA (rated after 4 sec. UL984) HST A	18.6
Cut-in current HST A	18.6
Resistance, main and start winding (25°C) Ω	3.7/14.1
Approvals	EN 60335-2-34



Dimensions

Height mm	A 219 B 213 B1 193 B2 110
Suction connector location/I.D. mm	C 10.2 ±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	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12DL	609	806	1028	1279	1565	1890	2046	2258	2674	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12DL	707	937	1196	1491	1827	2210	2396	2647	3144	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12DL	489	563	624	675	717	750	763	778	800	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
SC12DL	3.37	3.65	3.89	4.11	4.29	4.44	4.50	4.56	4.66	

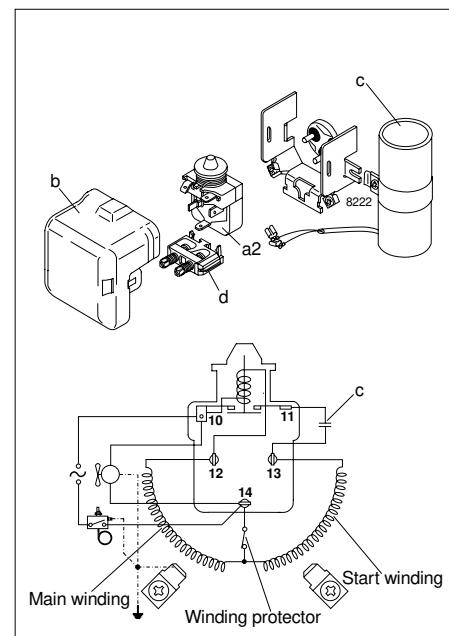
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC12DL	1.24	1.43	1.65	1.90	2.18	2.52	2.68	2.90	3.34	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC12DL	1.45	1.67	1.92	2.21	2.55	2.95	3.14	3.40	3.93	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC12DL
Starting relay	a2	117U6019
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC15CL

LBP/MBP Compressor

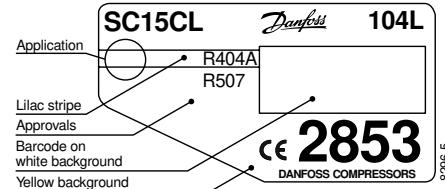
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.C1.02)

General

Compressor	SC15CL
Code number	104L2853



Application

Application	LBP/MBP	
Evaporating temperature range	°C	-40 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

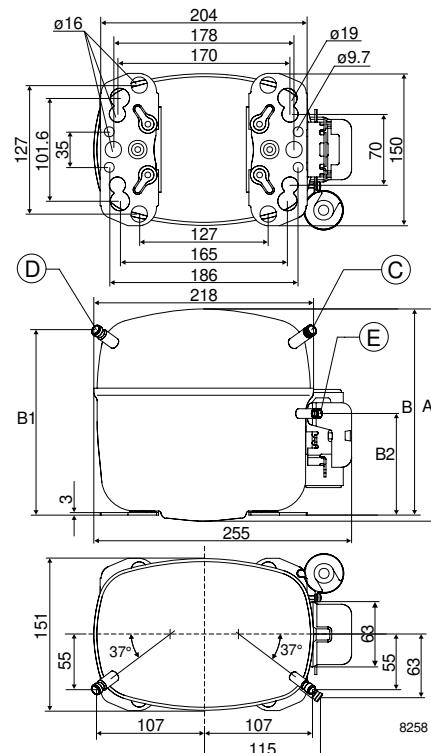
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	15.28
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1510
Weight without electrical equipment	kg	13.8

Motor

Motor size	watt	495
LRA (rated after 4 sec. UL984) HST	A	18.6
Cut-in current HST	A	18.6
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm	C	10.2 ± 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)

	watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	151	299	452	615	673	792	988	1208	1458

Capacity (ASHRAE)

	watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	175	347	525	714	782	920	1149	1407	1699

Power consumption

	watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	298	400	485	560	584	631	706	790	891

Current consumption

	A								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	2.83	3.05	3.28	3.52	3.61	3.77	4.04	4.31	4.60

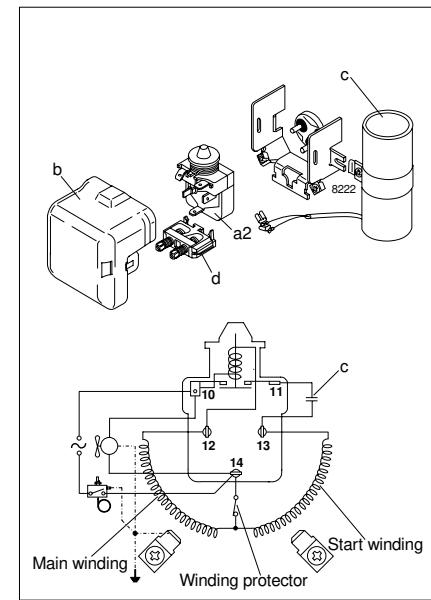
COP (EN 12900/CECOMAF)

	W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	0.51	0.75	0.93	1.10	1.15	1.25	1.40	1.53	1.64

COP (ASHRAE)

	W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15CL	0.59	0.87	1.08	1.27	1.34	1.46	1.63	1.78	1.91

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC15CL
Starting relay	a2	117U6019
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC15DL

MBP/HBP Compressor

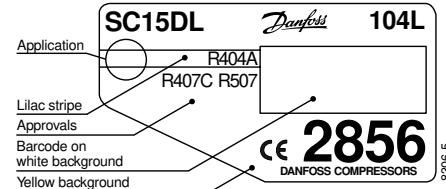
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.M2.02)

General

Compressor	SC15DL
Code number	104L2856



Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	F ₂
38°C	F ₂

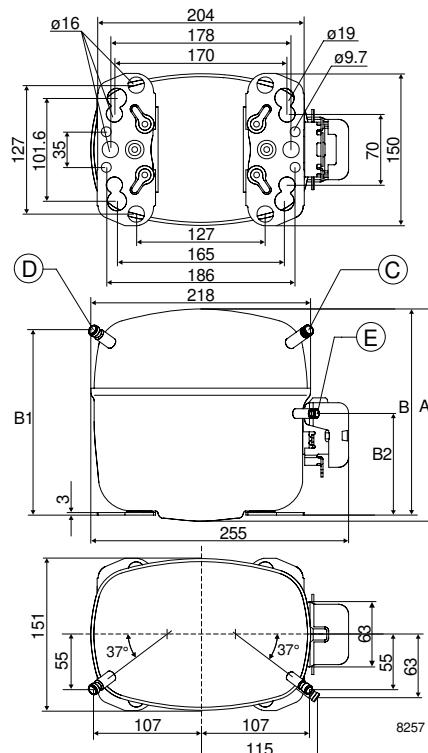
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	15.28
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1460
Weight without electrical equipment kg	13.5

Motor

Motor size watt	550
LRA (rated after 4 sec. UL984) HST A	21.8
Cut-in current HST A	21.8
Resistance, main and start winding (25°C) Ω	3.5/12.2
Approvals	EN 60335-2-34



Dimensions

Height mm	A	219
	B	213
	B1	193
	B2	110
Suction connector location/I.D. mm	C	10.2 ±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	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC15DL	759	964	1207	1493	1825	2210	2397	2652	3156	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC15DL	881	1121	1405	1740	2131	2585	2807	3109	3710	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC15DL	589	659	722	778	825	865	879	896	918	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
SC15DL	3.09	3.46	3.79	4.07	4.31	4.50	4.57	4.64	4.75	

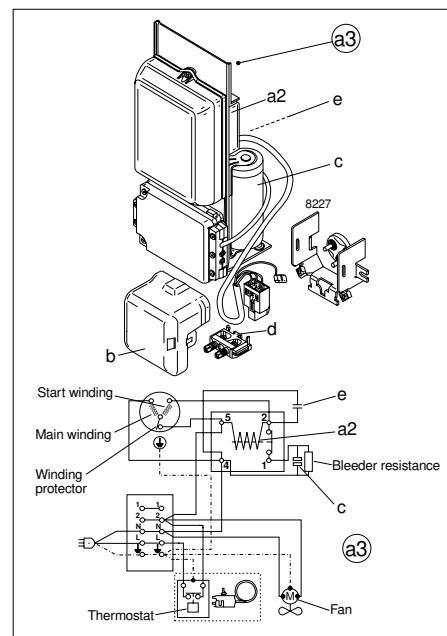
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC15DL	1.29	1.46	1.67	1.92	2.21	2.56	2.73	2.96	3.44	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC15DL	1.50	1.70	1.95	2.24	2.58	2.99	3.19	3.47	4.04	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC15DL
Starting device	a3	117-7028 (470 mm cable length) 117-7029 (550 mm cable length) 117-7032 (650 mm cable length)
Cover	b	103N2009
Starting relay	a2	Components of starting device
Starting capacitor	c	
Run capacitor	e	
Cord relief	d	103N1004
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

SC18CL

LBP/MBP Compressor

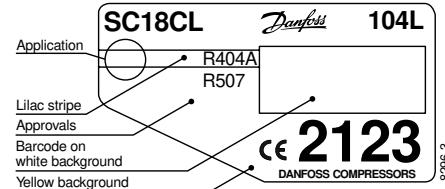
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.D1.02)

General

Compressor	SC18CL
Code number	104L2123



Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

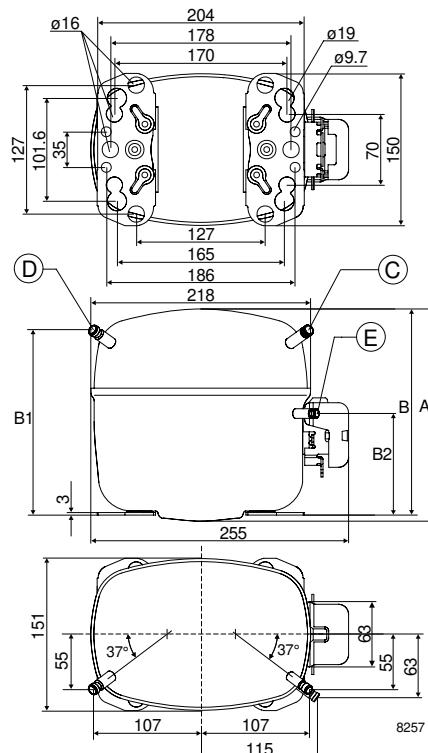
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	17.69
Oil quantity	cm ³	600
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	13.7

Motor

Motor size	watt	495
LRA (rated after 4 sec. UL984) HST	A	20.0
Cut-in current HST	A	20.0
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm	C	10.2 ±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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC18CL	167	271	395	542	715	781	918	1154	1425	1735	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC18CL	193	313	457	628	830	907	1067	1342	1659	2022	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	watt
SC18CL	294	376	455	534	615	643	700	792	894	1008	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	A
SC18CL	2.61	2.80	3.02	3.29	3.60	3.72	3.96	4.36	4.80	5.29	

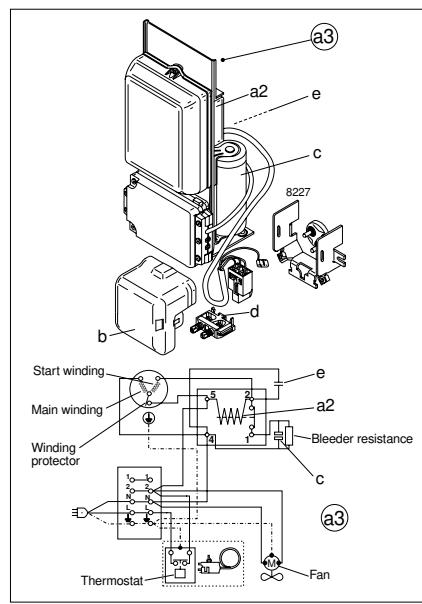
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
SC18CL	0.57	0.72	0.87	1.01	1.16	1.21	1.31	1.46	1.59	1.72	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	W/W
SC18CL	0.66	0.83	1.00	1.18	1.35	1.41	1.52	1.69	1.86	2.01	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC18CL
Starting device	a3	117-7012 (470 mm cable length) 117-7027 (550 mm cable length) 117-7046 (650 mm cable length) 117-7040 (1000 mm cable length)
Cover	b	103N2009
Starting relay	a2	Components of starting device
Starting capacitor 80 µF	c	
Run capacitor	e	
Cord relief	d	103N1004
Mounting accessories		118-1917 118-1918 118-1919
Bolt joint for one compressor		
Bolt joint in quantities		
Snap-on in quantities		

SC21CL

LBP Compressor

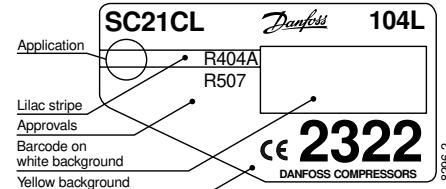
R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.E1.02)

General

Compressor	SC21CL
Code number	104L2322



Application

Application	LBP	
Evaporating temperature range	°C	-45 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type	CSR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

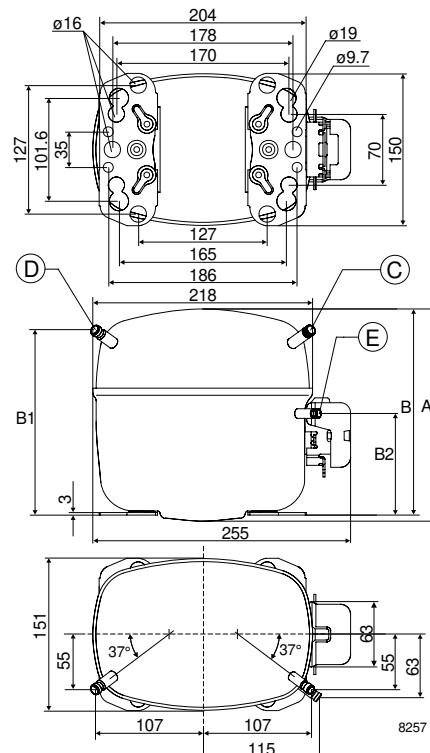
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	20.95
Oil quantity	cm ³	600
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	14.0

Motor

Motor size	watt	590
LRA (rated after 4 sec. UL984) HST	A	23.4
Cut-in current HST	A	23.4
Resistance, main and start winding (25°C)	Ω	3.4/14.4
Approvals	EN 60335-2-34	



Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm	C	10.2 ±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	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC21CL	226	325	455	617	813	887	1042	1306	1606	

Capacity (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC21CL	263	378	529	719	947	1033	1215	1524	1876	

Power consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC21CL	400	462	534	615	702	733	795	891	989	

Current consumption

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	A
SC21CL	2.40	2.63	2.94	3.31	3.71	3.86	4.14	4.58	5.00	

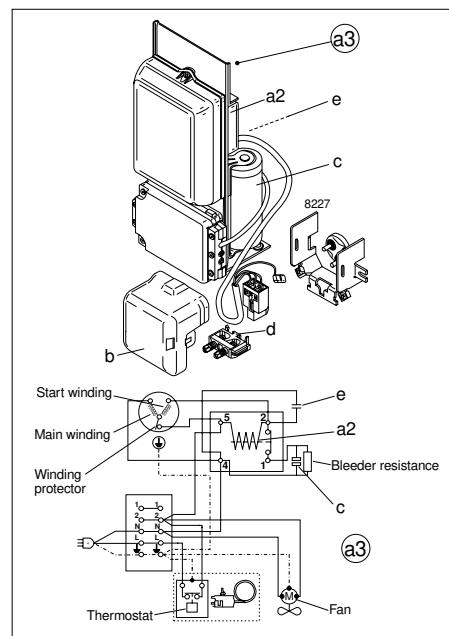
COP (EN 12900/CECOMAF)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
SC21CL	0.57	0.70	0.85	1.00	1.16	1.21	1.31	1.47	1.62	

COP (ASHRAE)

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
SC21CL	0.66	0.82	0.99	1.17	1.35	1.41	1.53	1.71	1.90	

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	Fig.	SC21CL
Starting device	a3	117-7012 (470 mm cable length) 117-7027 (550 mm cable length) 117-7040 (1000 mm cable length)
Cover	b	103N2009
Starting relay	a2	Components of starting device
Starting capacitor 80 µF	c	
Run capacitor	e	
Cord relief	d	103N1004
Mounting accessories Bolt joint for one compressor Bolt joint in quantities Snap-on in quantities		118-1917 118-1918 118-1919

SC10/10CL

LBP/MBP Twin Compressor

R404A/R507

220-240V 50Hz

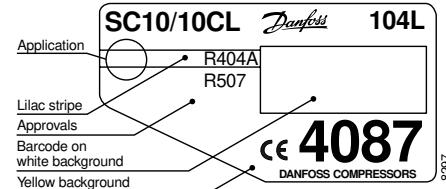
Data Sheet (Replaces CF.54.F1.02)

General

Compressor	SC10/10CL
Code number	104L4087

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	2 x 10.29
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2820
Weight without electrical equipment	kg	26.3

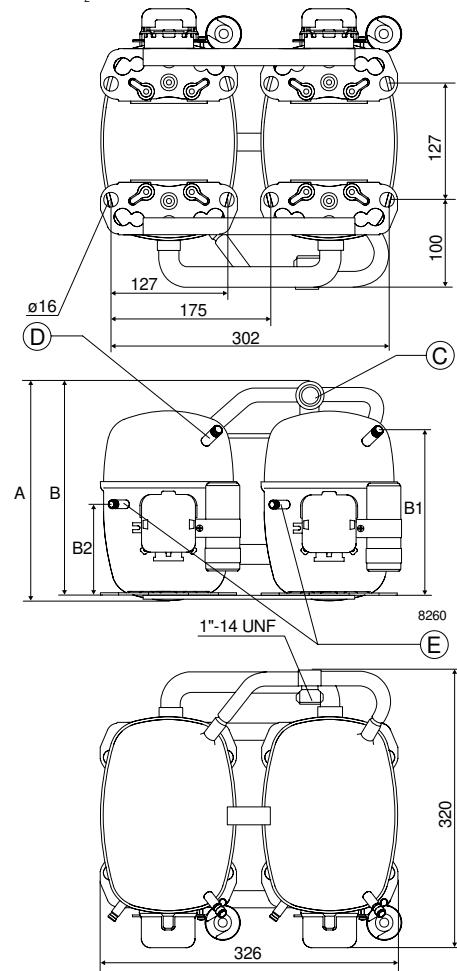
Motor

Motor size	watt	2 x 315
LRA (rated after 4 sec. UL984) HST*	A	12.6
Cut-in current HST*	A	12.6
Resistance, main and start winding (25°C)	Ω	6.7/11.8
Approvals	EN 60335-2-34	

* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	249
		B	244
		B1	183
		B2	100
Suction connector			
Service valve	location/I.D. mm	C	12
Solder connector	location/I.D. mm	C	12
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.		18



Capacity (EN 12900/CECOMAF) watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	336	517	730	810	979	1268	1601	1981

Capacity (ASHRAE) watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	390	600	847	941	1137	1474	1863	2309

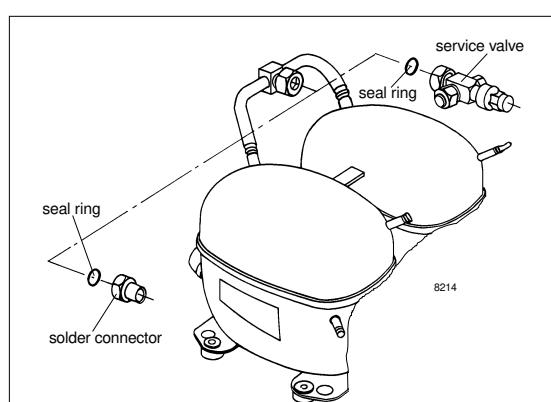
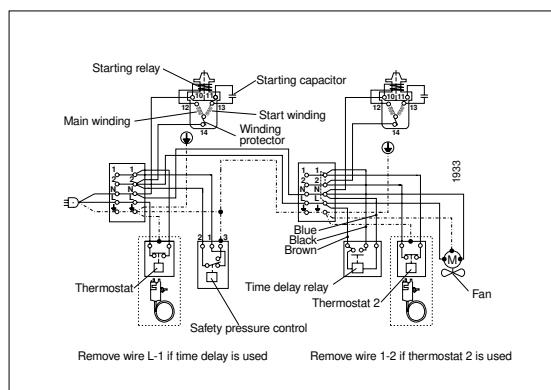
Power consumption watt								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	486	587	701	741	821	942	1060	1168

Current consumption A								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	3.82	4.11	4.43	4.55	4.79	5.18	5.61	6.08

COP (EN 12900/CECOMAF) W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	0.69	0.88	1.04	1.09	1.19	1.35	1.51	1.70

COP (ASHRAE) W/W								
Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CL	0.80	1.02	1.21	1.27	1.39	1.57	1.76	1.98

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	pcs.	SC10/10CL
Starting relay	2	117U6003
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918

SC10/10DL

MBP/HBP Twin Compressor

R404A/R507

220-240V 50Hz

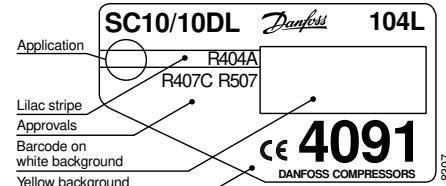
Data Sheet (Replaces CF.54.N2.02)

General

Compressor	SC10/10DL
Code number	104L4091

Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 10.29
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2820
Weight without electrical equipment kg	26.8

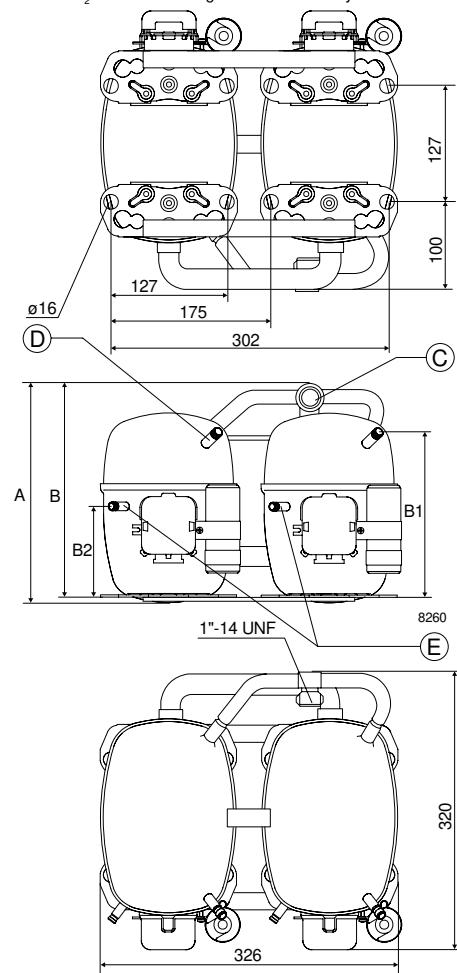
Motor

Motor size watt	2 x 385
LRA (rated after 4 sec. UL984) HST*	A 14.8
Cut-in current HST*	A 14.8
Resistance, main and start winding (25°C) Ω	5.0/13.7
Approvals	EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 249 B 244 B1 183 B2 100
Suction connector	
Service valve location/I.D. mm	C 12
Solder connector location/I.D. mm	C 12
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.	18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10/10DL	943	1222	1550	1935	2383	2900	3152	3494	4169	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10/10DL	1095	1420	1804	2256	2782	3392	3690	4095	4901	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC10/10DL	747	858	957	1044	1118	1180	1203	1228	1262	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
SC10/10DL	5.11	5.55	5.95	6.30	6.60	6.85	6.95	7.06	7.21	

COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC10/10DL	1.26	1.42	1.62	1.85	2.13	2.46	2.62	2.85	3.30	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC10/10DL	1.47	1.66	1.89	2.16	2.49	2.88	3.07	3.34	3.88	

Test conditions

Condensing temperature
Ambient and suction gas temp.
Liquid temperature
Fan cooling F₂, 220V 50Hz

EN 12900/CECOMAF

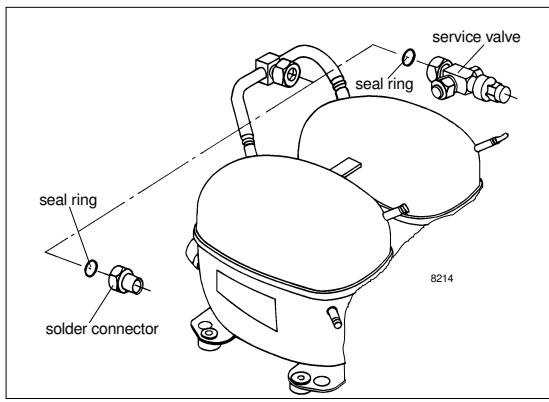
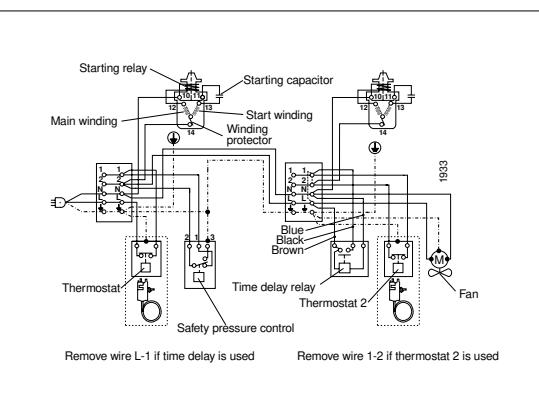
45°C
32°C
45°C

ASHRAE

45°C
32°C
32°C

Accessories

Devices	pcs.	SC10/10DL
Starting relay	2	117U6005
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918



SC12/12CL

LBP/MBP Twin Compressor

R404A/R507

220-240V 50Hz

Data Sheet (Replaces CF.54.G1.02)

General

Compressor	SC12/12CL
Code number	104L4088

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

Design

Displacement	cm ³	2 x 12.87
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2820
Weight without electrical equipment	kg	27.3

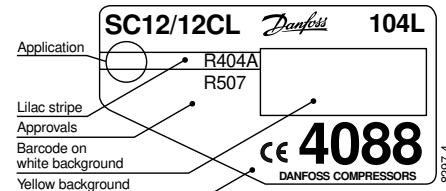
Motor

Motor size	watt	2 x 385
LRA (rated after 4 sec. UL984) HST*	A	14.8
Cut-in current HST*	A	14.8
Resistance, main and start winding (25°C)	Ω	5.0/13.7
Approvals	EN 60335-2-34	

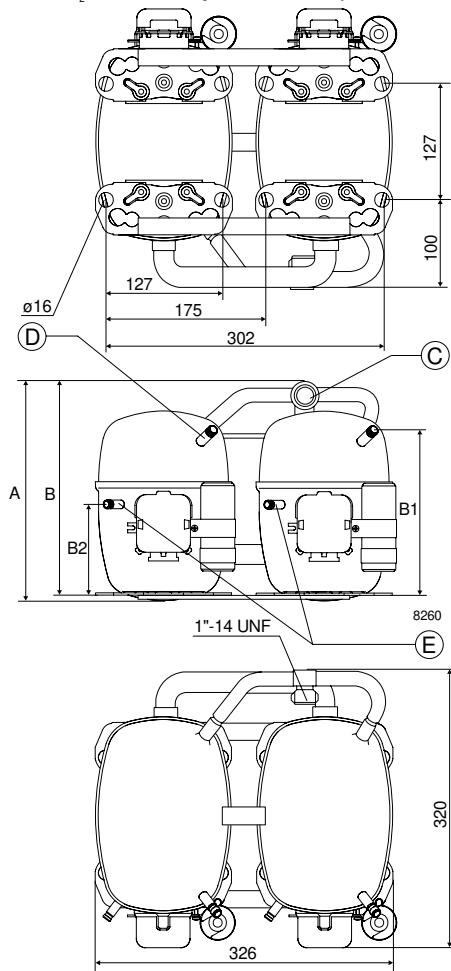
* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	249
		B	244
		B1	183
		B2	100
Suction connector			
Service valve	location/I.D. mm	C	12
Solder connector	location/I.D. mm	C	12
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.		18



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary



Capacity (EN 12900/CECOMAF)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	115	279	475	706	980	1083	1299	1670	2096	2583

Capacity (ASHRAE)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	134	323	550	819	1137	1257	1509	1941	2440	3011

Power consumption

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	379	506	633	761	891	936	1024	1163	1308	1460

Current consumption

A

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	4.30	4.55	4.85	5.22	5.64	5.80	6.13	6.67	7.27	7.94

COP (EN 12900/CECOMAF)

W/W

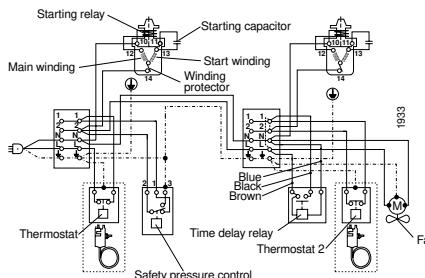
Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	0.30	0.55	0.75	0.93	1.10	1.16	1.27	1.44	1.60	1.77

COP (ASHRAE)

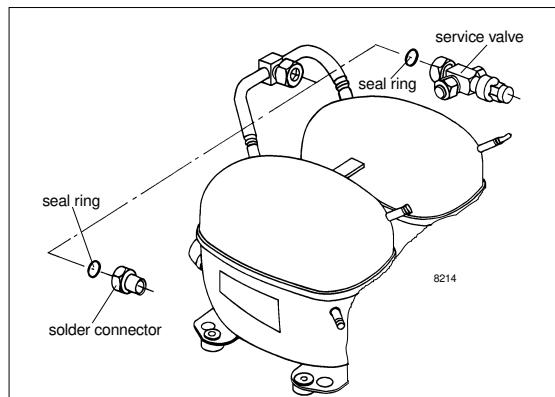
W/W

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC12/12CL	0.35	0.64	0.87	1.08	1.28	1.34	1.47	1.67	1.87	2.06

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC12/12CL
Starting relay	2	117U6005
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918



SC12/12DL

MBP/HBP Twin Compressor

R404A/R507

220-240V 50Hz

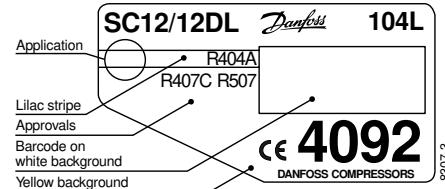
Data Sheet (Replaces CF.54.O2.02)

General

Compressor	SC12/12DL
Code number	104L4092

Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 12.87
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	27.8

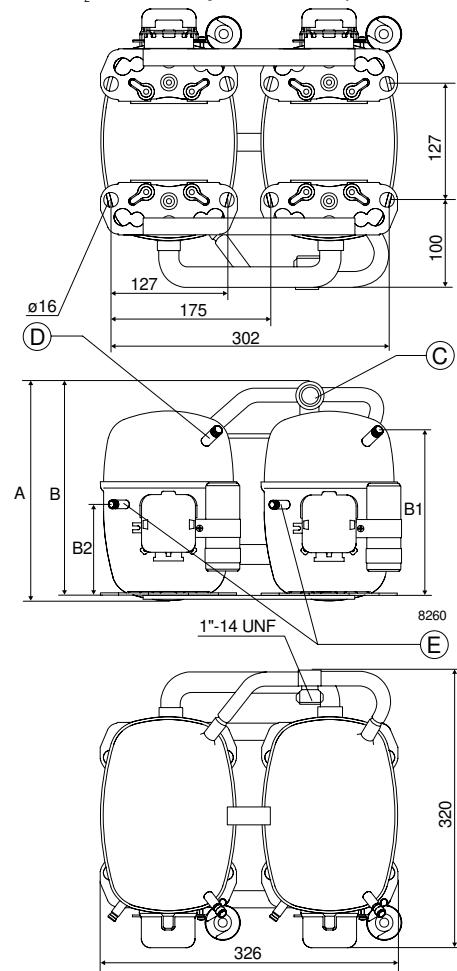
Motor

Motor size watt	2 x 495
LRA (rated after 4 sec. UL984) HST*	A 18.6
Cut-in current HST*	A 18.6
Resistance, main and start winding (25°C) Ω	3.7/14.1
Approvals	EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 249 B 244 B1 183 B2 100
Suction connector	
Service valve location/I.D. mm	C 12
Solder connector location/I.D. mm	C 12
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.	18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12/12DL	1217	1612	2055	2559	3130	3780	4092	4516	5348	

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12/12DL	1414	1874	2393	2982	3654	4421	4791	5294	6287	

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	watt
SC12/12DL	978	1125	1248	1349	1433	1500	1526	1555	1600	

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	A
SC12/12DL	6.74	7.29	7.78	8.21	8.58	8.88	9.00	9.13	9.31	

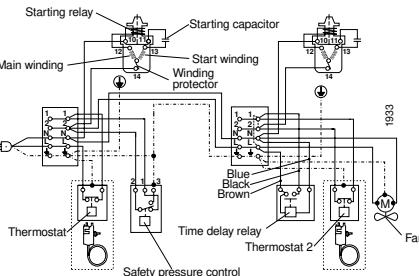
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC12/12DL	1.24	1.43	1.65	1.90	2.18	2.52	2.68	2.90	3.34	

COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15	W/W
SC12/12DL	1.45	1.67	1.92	2.21	2.55	2.95	3.14	3.40	3.93	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz

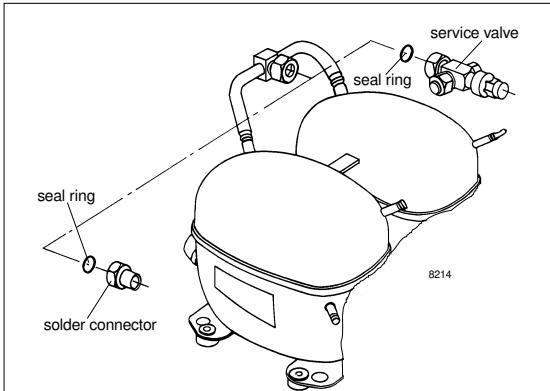


Remove wire L-1 if time delay is used

Remove wire 1-2 if thermostat 2 is used

Accessories

Devices	pcs.	SC12/12DL
Starting relay	2	117U6019
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918



SC15/15CL

LBP/MBP Twin Compressor

R404A/R507

220-240V 50Hz

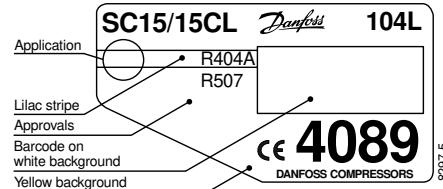
Data Sheet (Replaces CF.54.H1.02)

General

Compressor	SC15/15CL
Code number	104L4089

Application

Application	LBP/MBP
Evaporating temperature range °C	-40 to -5
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 15.28
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	29.1

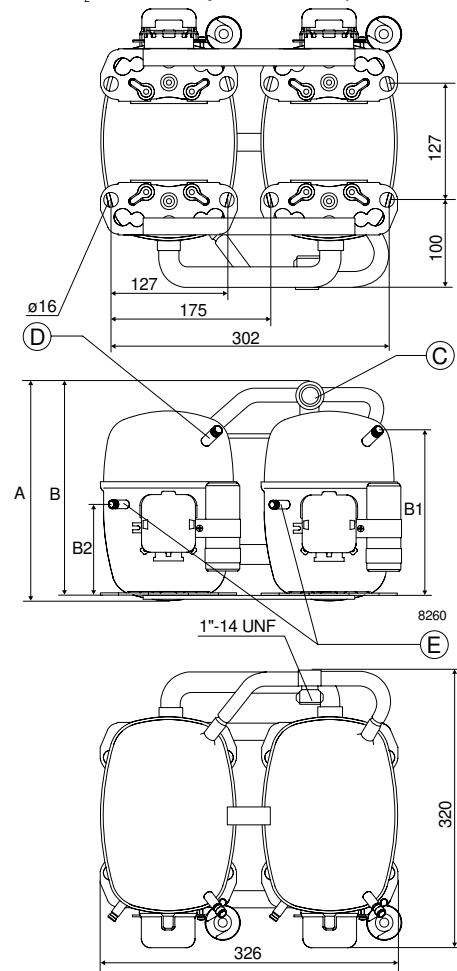
Motor

Motor size watt	2 x 495
LRA (rated after 4 sec. UL984) HST*	A 18.6
Cut-in current HST*	A 18.6
Resistance, main and start winding (25°C) Ω	3.7/14.1
Approvals	EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 259 B 254 B1 193 B2 110
Suction connector	
Service valve location/I.D. mm	C 12
Solder connector location/I.D. mm	C 12
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. 18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	302	599	905	1230	1347	1584	1976	2417	2916

Capacity (ASHRAE)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	350	694	1050	1428	1563	1840	2298	2813	3398

Power consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	597	801	970	1120	1169	1262	1411	1580	1782

Current consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	5.66	6.10	6.56	7.04	7.21	7.55	8.08	8.62	9.19

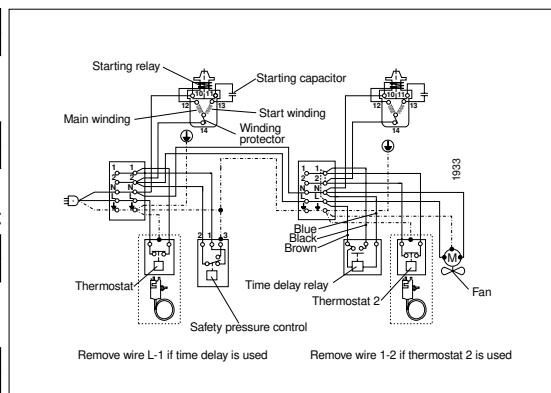
COP (EN 12900/CECOMAF)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	0.51	0.75	0.93	1.10	1.15	1.25	1.40	1.53	1.64

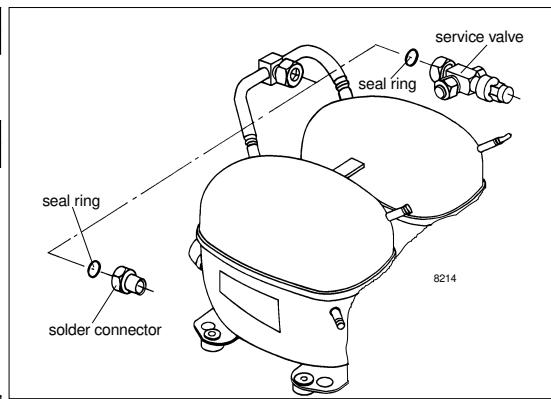
COP (ASHRAE)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC15/15CL	0.59	0.87	1.08	1.27	1.34	1.46	1.63	1.78	1.91

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC15/15CL
Starting relay	2	117U6019
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918



SC15/15DL

MBP/HBP Twin Compressor

R404A/R507

220-240V 50Hz

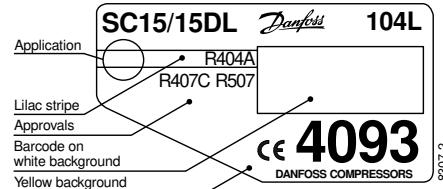
Data Sheet (Replaces CF.54.P2.02)

General

Compressor	SC15/15DL
Code number	104L4093

Application

Application	MBP/HBP
Evaporating temperature range °C	-20 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 15.28
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	28.0

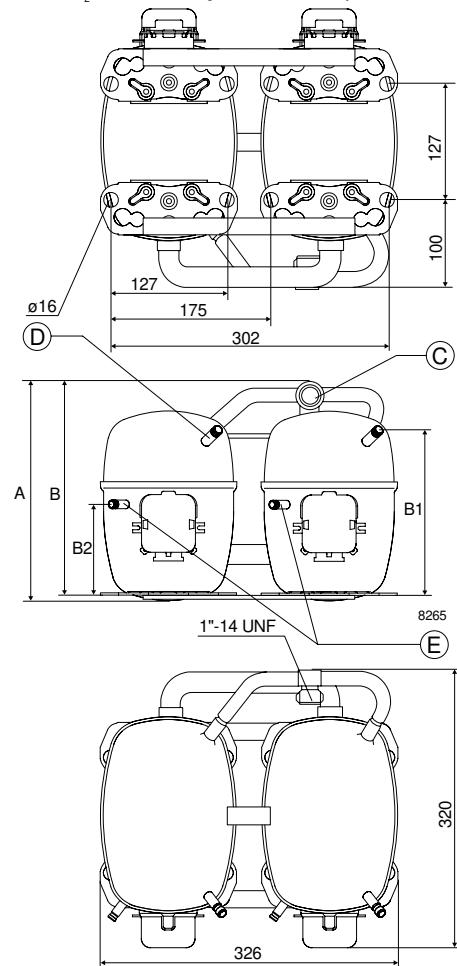
Motor

Motor size watt	2 x 550
LRA (rated after 4 sec. UL984) HST*	A 21.8
Cut-in current HST*	A 21.8
Resistance, main and start winding (25°C) Ω	3.5/12.1
Approvals	EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 259 B 254 B1 193 B2 110
Suction connector	
Service valve location/I.D. mm	C 16
Solder connector location/I.D. mm	C 16
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. 18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1518	1928	2414	2985	3651	4420	4795	5304	6311

Capacity (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1763	2242	2810	3479	4262	5170	5613	6218	7419

Power consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1178	1319	1445	1556	1651	1730	1760	1793	1837

Current consumption

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	6.19	6.93	7.58	8.14	8.61	9.00	9.14	9.29	9.50

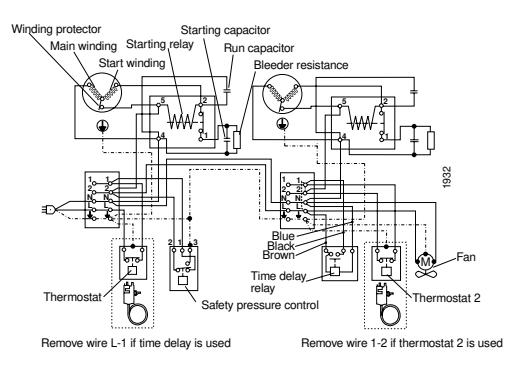
COP (EN 12900/CECOMAF)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1.29	1.46	1.67	1.92	2.21	2.55	2.72	2.96	3.43

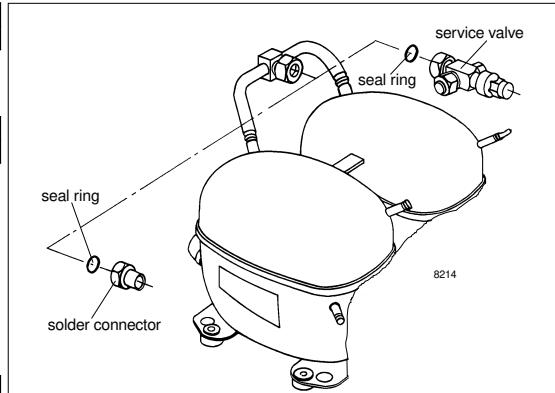
COP (ASHRAE)

Comp.\°C	-20	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1.50	1.70	1.94	2.24	2.58	2.99	3.19	3.47	4.04

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC15/15DL
Starting device	2	117-7028 (470 mm cable length) 117-7029 (550 mm cable length) 117-7032 (650 mm cable length)
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
Service valve	1	118-7351 (16 mm)
Solder connector (alternative)	1	118-7405 (16 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories	2	118-1917 Bolt joint for one compressor Bolt joint in quantities



SC18/18CL

LBP/MBP Twin Compressor

R404A/R507

220-240V 50Hz

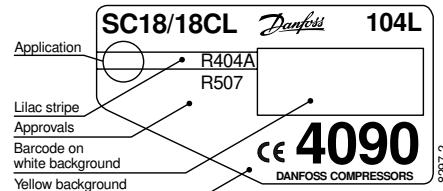
Data Sheet (Replaces CF.54.I1.02)

General

Compressor	SC18/18CL
Code number	104L4090

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-45 to -5
Voltage range	V/Hz	198 - 254 /50
Motor type		CSR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	2 x 17.69
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2920
Weight without electrical equipment	kg	29.1

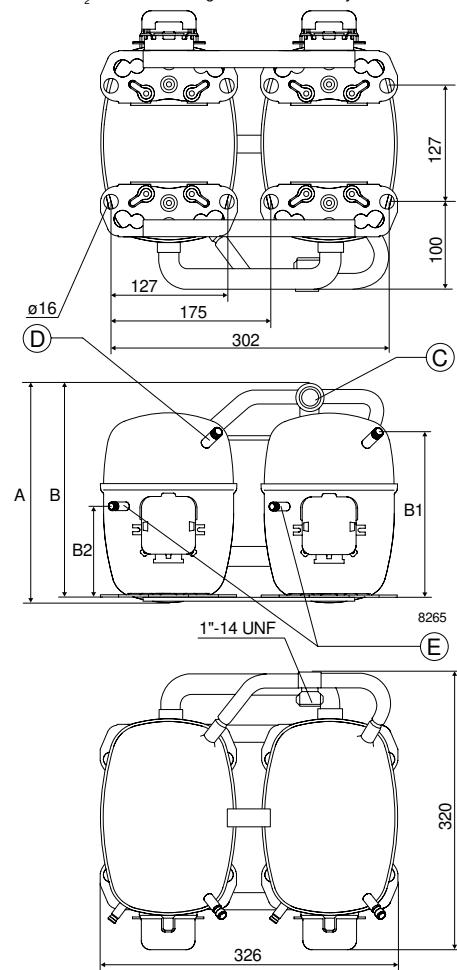
Motor

Motor size	watt	2 x 495
LRA (rated after 4 sec. UL984) HST*	A	20.0
Cut-in current HST*	A	20.0
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals		EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	259
		B	254
		B1	193
		B2	110
Suction connector			
Service valve	location/I.D. mm	C	16
Solder connector	location/I.D. mm	C	16
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.		18



Capacity (EN 12900/CECOMAF)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	333	541	789	1083	1430	1562	1836	2307	2849	3469

Capacity (ASHRAE)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	386	627	915	1256	1660	1813	2133	2683	3317	4043

Power consumption

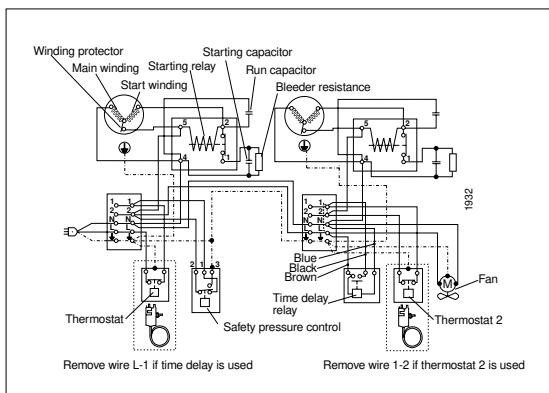
watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	587	752	910	1068	1230	1286	1400	1585	1788	2015

Current consumption

A

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	5.22	5.59	6.04	6.58	7.21	7.44	7.92	8.72	9.61	10.58


COP (EN 12900/CECOMAF)

W/W

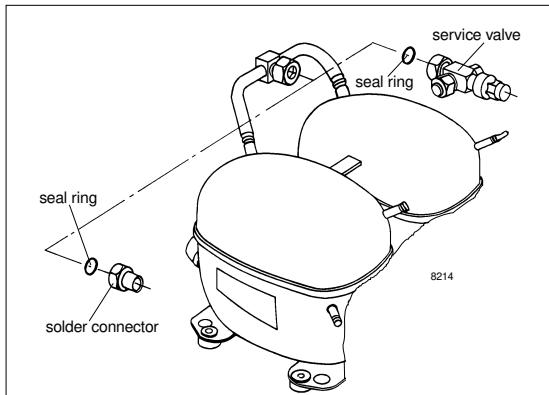
Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	0.57	0.72	0.87	1.01	1.16	1.21	1.31	1.46	1.59	1.72

COP (ASHRAE)

W/W

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5
SC18/18CL	0.66	0.83	1.00	1.18	1.35	1.41	1.52	1.69	1.85	2.01

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC18/18CL
Starting device	2	117-7012 (470 mm cable length) 117-7027 (550 mm cable length)
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7351 (16 mm)
Solder connector (alternative)	1	118-7405 (16 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918

SC21/21CL

LBP Twin Compressor

R404A/R507

220-240V 50Hz

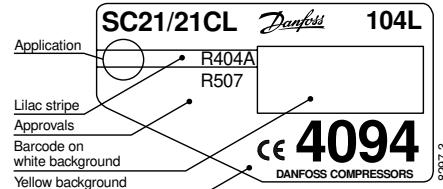
Data Sheet (Replaces CF.54.J1.02)

General

Compressor	SC21/21CL
Code number	104L4094

Application

Application	LBP	
Evaporating temperature range	°C	-45 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type		CSR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	2 x 20.95
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2920
Weight without electrical equipment	kg	29.1

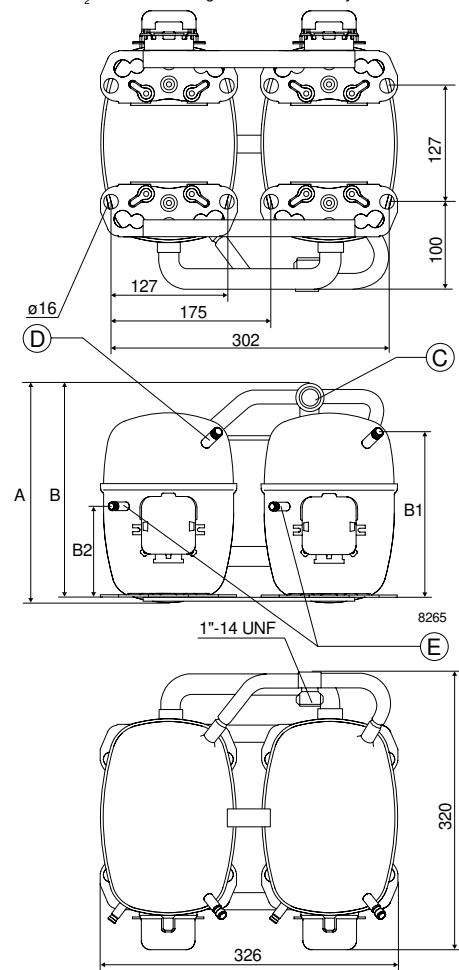
Motor

Motor size	watt	2 x 590
LRA (rated after 4 sec. UL984) HST*	A	23.4
Cut-in current HST*	A	23.4
Resistance, main and start winding (25°C)	Ω	3.4/14.4
Approvals		EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	259
		B	254
		B1	193
		B2	110
Suction connector			
Service valve	location/I.D. mm	C	16
Solder connector	location/I.D. mm	C	16
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.		18



Capacity (EN 12900/CECOMAF)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	452	650	910	1235	1626	1774	2084	2613	3213

Capacity (ASHRAE)

watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	525	755	1059	1437	1893	2068	2430	3049	3753

Power consumption

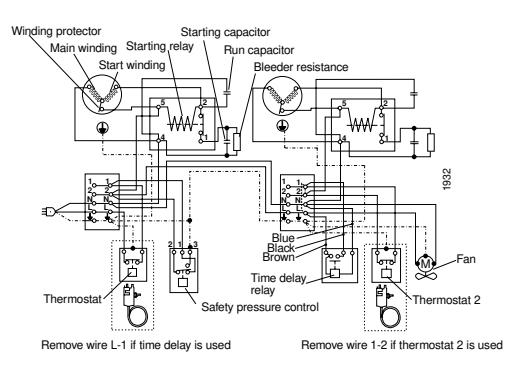
watt

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	799	924	1068	1230	1404	1466	1589	1782	1978

Current consumption

A

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	4.80	5.27	5.88	6.61	7.42	7.71	8.28	9.15	9.99


COP (EN 12900/CECOMAF)

W/W

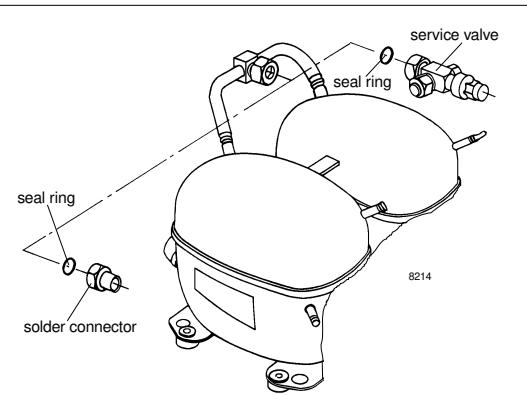
Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	0.57	0.70	0.85	1.00	1.16	1.21	1.31	1.47	1.62

COP (ASHRAE)

W/W

Comp.\°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
SC21/21CL	0.66	0.82	0.99	1.17	1.35	1.41	1.53	1.71	1.90

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC21/21CL
Starting device	2	117-7012 (470 mm cable length) 117-7027 (550 mm cable length)
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7351 (16 mm)
Solder connector (alternative)	1	118-7405 (16 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918

SC12CLX

LBP Compressor

R404A/R507

220-240V 60Hz

Data Sheet (Replaces CF.54.T2.02)

General

Compressor	SC12CLX
Code number	104L2695

Application

Application	LBP	
Evaporating temperature range	°C	-40 to -10
Voltage range	V/Hz	198 - 254 / 60
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

Design

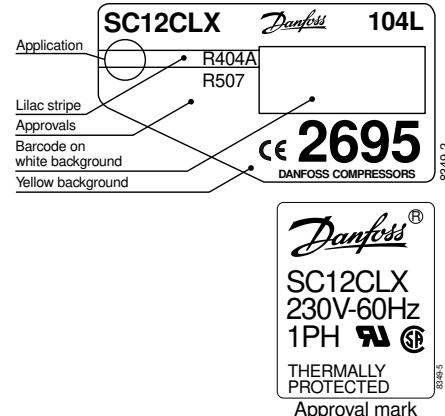
Displacement	cm ³	12.87
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1510
Weight without electrical equipment	kg	13.7

Motor

Motor size	watt	495
LRA (rated after 4 sec. UL984) HST	A	18.6
Cut-in current HST	A	18.6
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals	UL984/CSA-C22.2	

Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
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

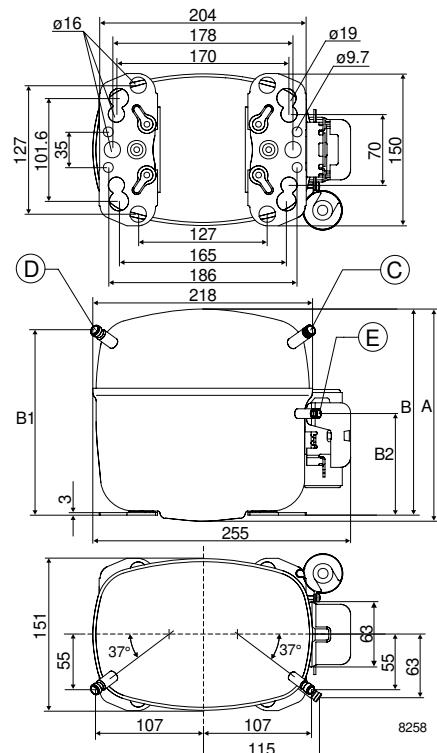


S = Static cooling normally sufficient

O = Oil cooling

F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)

F₂ = Fan cooling 3.0 m/s necessary



Capacity (EN 12900/CECOMAF) watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	146	282	429	590	649	770	972	1200

Capacity (ASHRAE) watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	169	327	497	685	753	894	1130	1397

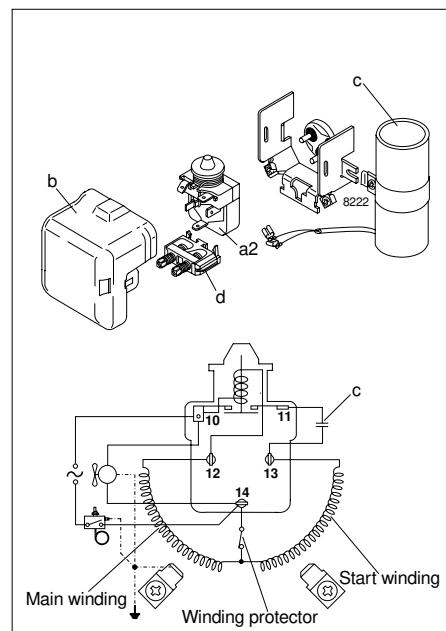
Power consumption watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	277	376	462	540	566	616	696	784

Current consumption A								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	2.58	2.75	2.96	3.23	3.33	3.54	3.91	4.32

COP (EN 12900/CECOMAF) W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	0.53	0.75	0.93	1.09	1.15	1.25	1.40	1.53

COP (ASHRAE) W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12CLX	0.61	0.87	1.08	1.27	1.33	1.45	1.62	1.78

Test conditions
 Condensing temperature 45°C ASHRAE
 Ambient and suction gas temp. 32°C 45°C
 Liquid temperature 32°C 32°C
 Fan cooling F₂, 220V 60Hz



Accessories

Devices	Fig.	SC12CLX
Starting relay	a2	117U6019
Cover	b	103N2008
Starting capacitor 80 µF	c	117U5019
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC15CLX

LBP Compressor

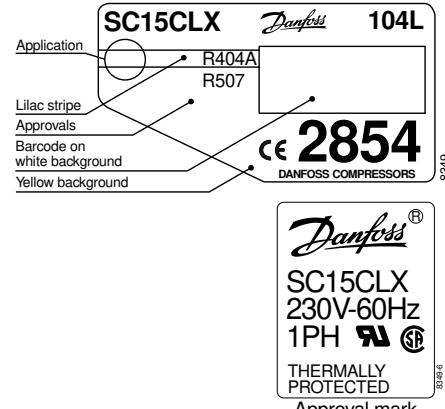
R404A/R507

220-240V 60Hz

Data Sheet (Replaces CF.54.R2.02)

General

Compressor	SC15CLX
Code number	104L2854



Application

Application	LBP
Evaporating temperature range °C	-40 to -10
Voltage range V/Hz	198 - 254 / 60
Motor type	CSR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	F ₂
38°C	F ₂

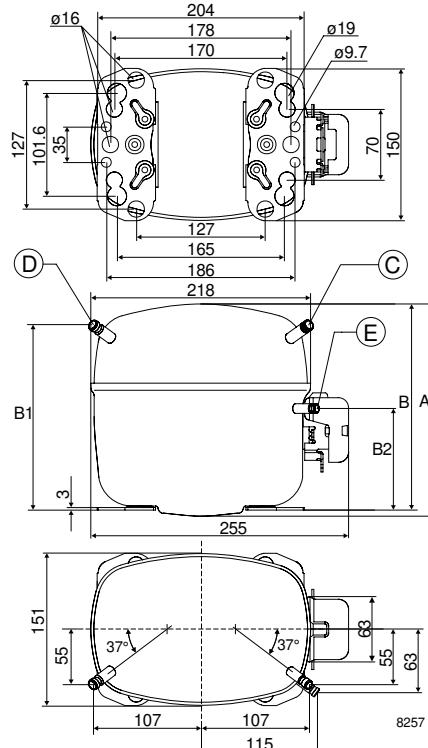
Design

Displacement cm ³	15.28
Oil quantity cm ³	550
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1510
Weight without electrical equipment kg	13.7

- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Motor

Motor size watt	550
LRA (rated after 4 sec. UL984) HST A	21.8
Cut-in current HST A	21.8
Resistance, main and start winding (25°C) Ω	3.5/12.1
Approvals	UL984/CSA-C22.2



Dimensions

Height mm	A	219
	B	213
	B1	193
	B2	110
Suction connector location/I.D. mm	C	10.2 ± 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) watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	179	351	530	720	788	928	1158	1417

Capacity (ASHRAE) watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	208	407	614	836	915	1078	1347	1649

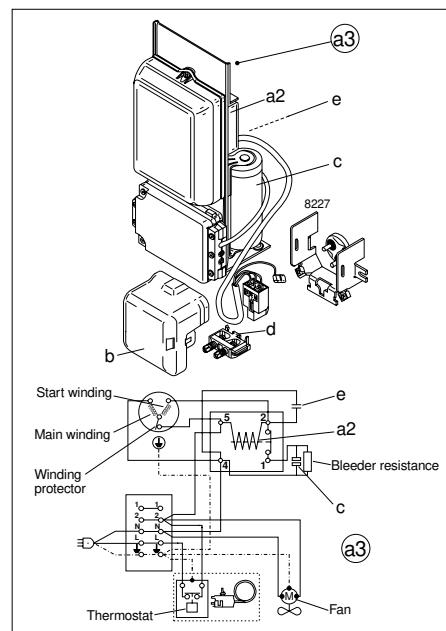
Power consumption watt								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	303	414	515	610	641	699	783	864

Current consumption A								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	1.51	1.99	2.46	2.90	3.05	3.33	3.73	4.11

COP (EN 12900/CECOMAF) W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	0.59	0.85	1.03	1.18	1.23	1.33	1.48	1.64

COP (ASHRAE) W/W								
Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15CLX	0.68	0.98	1.19	1.37	1.43	1.54	1.72	1.91

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 60Hz



Accessories

Devices	Fig.	SC15CLX
Starting device	a3	117-7038 (470 mm cable length) 117-7039 (550 mm cable length) 117-7043 (1000 mm cable length)
Cover	b	103N2008
Starting relay	a2	Components of starting device
Starting capacitor	c	
Run capacitor	e	
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC10/10CLX

LBP/MBP Twin Compressor

R404A/R507

220-240V 60Hz

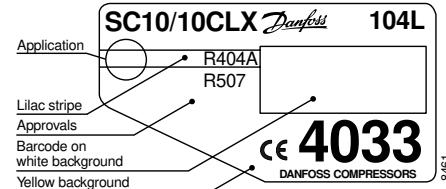
Data Sheet

General

Compressor	SC10/10CLX
Code number	104L4033

Application

Application	LBP/MBP	
Evaporating temperature range	°C	-35 to -5
Voltage range	V/Hz	198 - 254 /60
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



Design

Displacement	cm ³	2 x 10.29
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2820
Weight without electrical equipment	kg	26.8

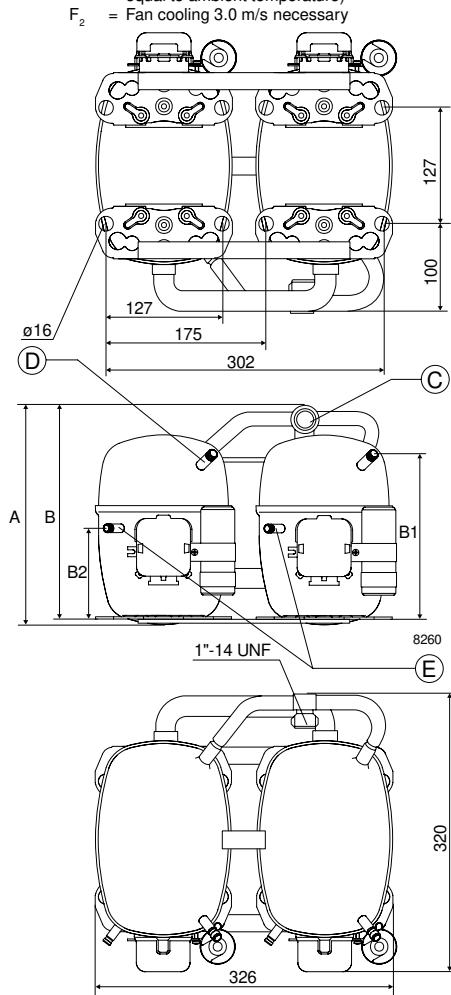
Motor

Motor size	watt	2 x 385
LRA (rated after 4 sec. UL984) HST*	A	14.8
Cut-in current HST*	A	14.8
Resistance, main and start winding (25°C)	Ω	5.0/13.7
Approvals		-

* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	249
		B	244
Suction connector		B1	183
Service valve	location/I.D. mm	C	12
Solder connector	location/I.D. mm	C	12
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.		18



Capacity (EN 12900/CECOMAF)
watt

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	448	670	910	998	1176	1476	1812	2192

Capacity (ASHRAE)
watt

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	520	776	1056	1158	1366	1714	2108	2554

Power consumption
watt

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	608	740	860	900	978	1104	1246	1414

Current consumption
A

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	4.38	4.72	5.10	5.24	9.78	6.04	6.60	7.22

COP (EN 12900/CECOMAF)
W/W

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	0.74	0.90	1.06	1.11	1.20	1.34	1.45	1.55

COP (ASHRAE)
W/W

Comp.\°C	-35	-30	-25	-23.3	-20	-15	-10	-5
SC10/10CLX	0.85	1.05	1.23	1.29	1.40	1.55	1.69	1.81

Test conditions

EN 12900/CECOMAF

ASHRAE

Condensing temperature

45°C

45°C

Ambient and suction gas temp.

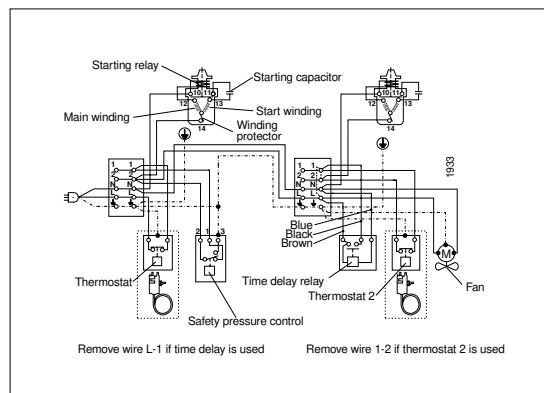
32°C

32°C

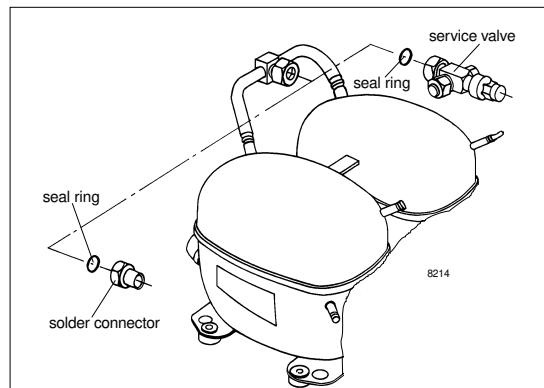
Liquid temperature

45°C

32°C

Fan cooling F₂, 220V 60Hz
Accessories

Devices	pcs.	SC10/10CLX
Starting relay	2	117U6005
Starting capacitor 80 µF	2	117U5019
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve (to be used with time-delay relay)	2	020-1014
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories Bolt joint for one compressor Bolt joint in quantities	2	118-1917 118-1918



SC12/12CLX

LBP Twin Compressor

R404A/R507

220-240V 60Hz

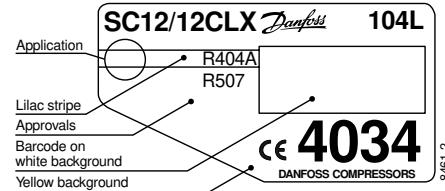
Data Sheet

General

Compressor	SC12/12CLX
Code number	104L4034

Application

Application	LBP	
Evaporating temperature range	°C	-40 to -10
Voltage range	V/Hz	198 - 254 /60
Motor type		CSIR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	2 x 12.87
Oil quantity	cm ³	1220
Maximum refrigerant charge	g	2200
Free gas vol. in compressor	cm ³	2820
Weight without electrical equipment	kg	28.0

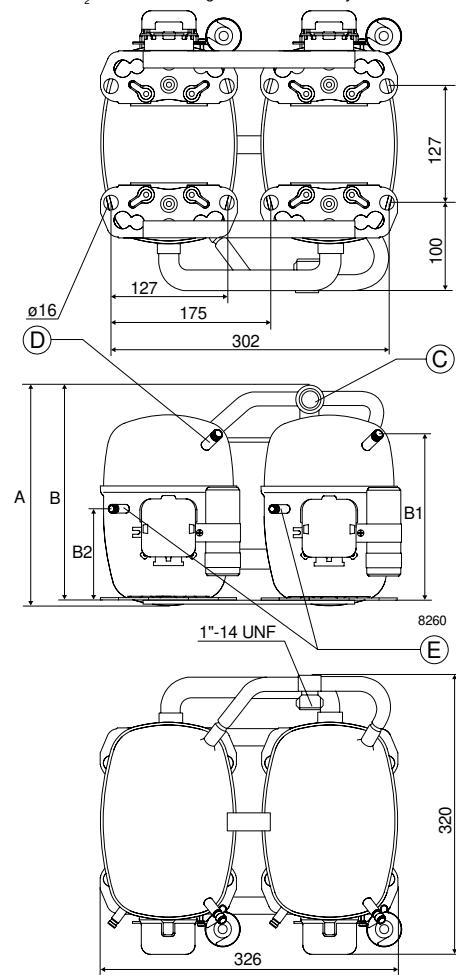
Motor

Motor size	watt	2 x 495
LRA (rated after 4 sec. UL984) HST*	A	18.6
Cut-in current HST*	A	18.6
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals		-

* Operational current for the second compressor time-delayed.

Dimensions

Height	mm	A	259
		B	254
Suction connector		B1	193
Service valve	location/I.D. mm	C	12
Solder connector	location/I.D. mm	C	12
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.		18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	292	564	858	1180	1298	1540	1944	2400

Capacity (ASHRAE)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	338	654	994	1370	1506	1788	2260	2794

Power consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	554	752	924	1080	1132	1232	1392	1568

Current consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	5.16	5.50	5.92	6.46	6.66	7.08	7.82	8.64

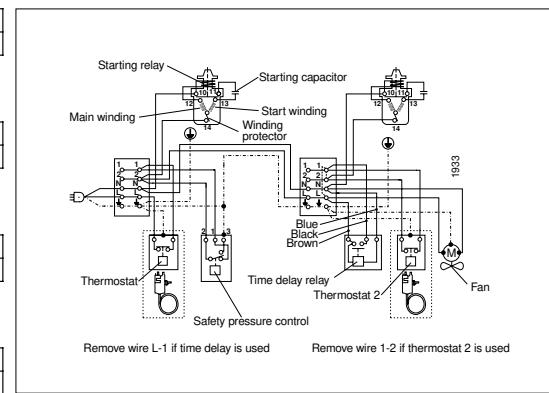
COP (EN 12900/CECOMAF)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	0.53	0.75	0.93	1.09	1.15	1.25	1.40	1.53

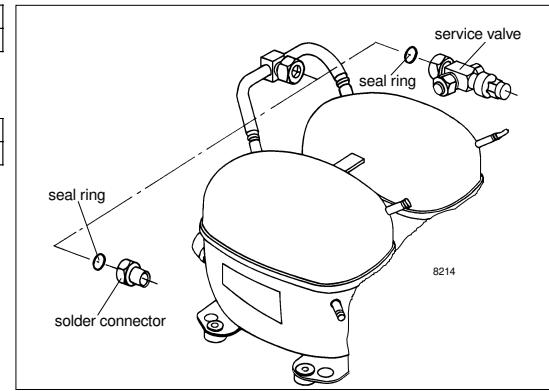
COP (ASHRAE)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC12/12CLX	0.61	0.87	1.08	1.27	1.33	1.45	1.62	1.78

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature 45°C 32°C
 Fan cooling F₂, 220V 60Hz


Accessories

Devices	pcs.	SC12/12CLX
Starting relay	2	117U6019
Starting capacitor 80 µF	2	117U5019
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918



SC15/15CLX

LBP Twin Compressor

R404A/R507

220-240V 60Hz

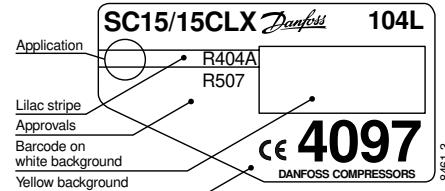
Data Sheet

General

Compressor	SC15/15CLX
Code number	104L4097

Application

Application	LBP
Evaporating temperature range °C	-40 to -10
Voltage range V/Hz	198 - 254 /60
Motor type	CSR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 15.28
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	28.0

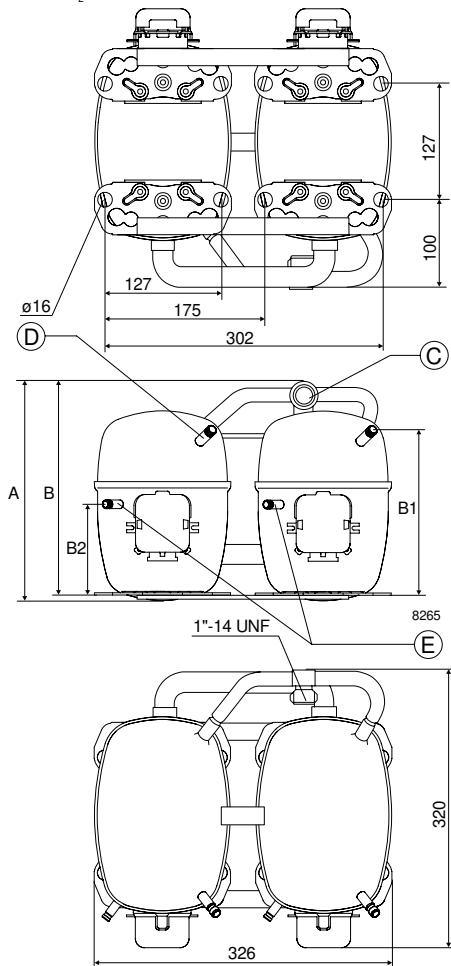
Motor

Motor size watt	2 x 550
LRA (rated after 4 sec. UL984) HST* A	21.8
Cut-in current HST* A	21.8
Resistance, main and start winding (25°C) Ω	3.5/12.1
Approvals	-

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A	259
	B	254
	B1	193
	B2	110
Suction connector		
Service valve location/I.D. mm	C	12
Solder connector location/I.D. mm	C	12
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.	18



Capacity (EN 12900/CECOMAF)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	358	702	1060	1440	1576	1856	2316	2834

watt

Capacity (ASHRAE)

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	416	814	1228	1672	1830	2156	2694	3298

watt

Power consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	606	828	1030	1220	1282	1398	1566	1728

watt

Current consumption

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	3.02	3.98	4.92	5.80	6.10	6.66	7.46	8.22

A

COP (EN 12900/CECOMAF)

W/W

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	0.59	0.85	1.03	1.18	1.23	1.33	1.48	1.64

COP (ASHRAE)

W/W

Comp.\°C	-40	-35	-30	-25	-23.3	-20	-15	-10
SC15/15CLX	0.68	0.98	1.19	1.37	1.43	1.54	1.72	1.91

Test conditions

EN 12900/CECOMAF

ASHRAE

Condensing temperature

45°C

45°C

Ambient and suction gas temp.

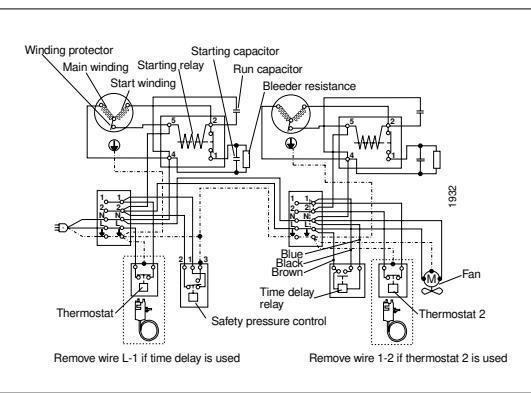
32°C

32°C

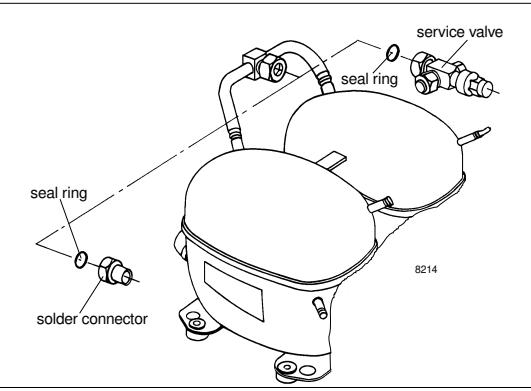
Liquid temperature

45°C

32°C

Fan cooling F₂, 220V 60Hz
Accessories

Devices	pcs.	SC15/15CLX
Starting device	2	117-7028 (470 mm cable length) 117-7029 (550 mm cable length) 117-7032 (650 mm cable length)
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve (to be used with time-delay relay)	2	020-1014
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories Bolt joint for one compressor Bolt joint in quantities	2	118-1917 118-1918



SC10CLX

LBP/MBP Compressor

R404A/R507

220-240V 50/60Hz

Data Sheet (Replaces CF.54.S2.02)

General

Compressor	SC10CLX
Code number	104L2533
Code number	104L2536

Application

Application	LBP/MBP	
Evaporating temperature range	°C	50Hz: -35 to 5 60Hz: -35 to -5
Voltage range	V/Hz	LBP/MBP: 198 - 254 /50 LBP: 198 - 254 /60
Motor type		CSIR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

Design

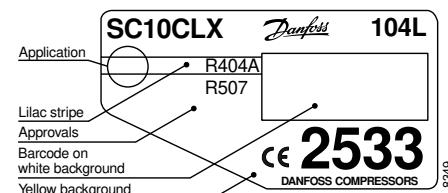
Displacement	cm ³	10.29
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	13.1

Motor

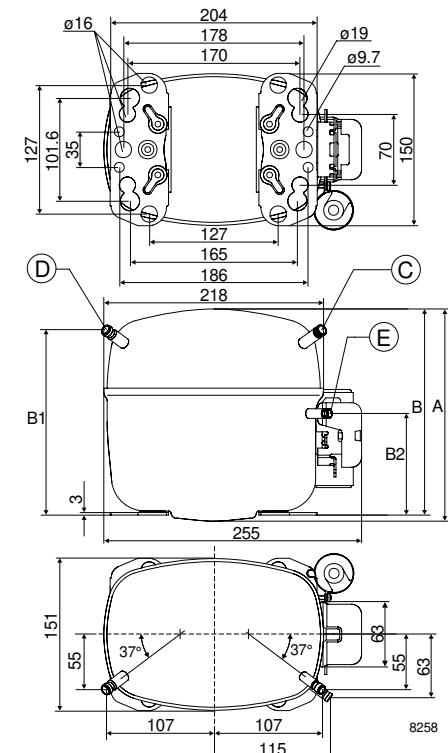
Motor size	watt	385
LRA (rated after 4 sec. UL984) HST	A	14.8
Cut-in current HST	A	14.8
Resistance, main and start winding (25°C)	Ω	5.0/13.7
Approvals		UL984/CSA-C22.2

Dimensions

	104L2533	104L2536
Height	mm	A 209 B 203 B1 183 B2 100
Suction connector	location/I.D. mm	C 8.2 ±0.09 8.2 ±0.09
Process connector	location/I.D. mm	D 6.2 ±0.09 6.5 ±0.09
Discharge connector	location/I.D. mm	E 6.2 ±0.09 6.5 ±0.09
Compressors on a pallet	pcs.	80



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary



Capacity (EN 12900/CECOMAF)

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	watt
SC10CLX, 50Hz	166	255	360	400	483	625	789	977	1190	1430	
SC10CLX, 60Hz	224	335	455	499	588	738	906	1096			

Capacity (ASHRAE)

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	watt
SC10CLX, 50Hz	192	296	418	464	561	727	919	1139	1389	1673	
SC10CLX, 60Hz	260	388	528	579	683	857	1054	1277			

Power consumption

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	watt
SC10CLX, 50Hz	258	302	352	369	404	457	508	556	597	631	
SC10CLX, 60Hz	304	370	430	450	489	552	623	707			

Current consumption

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	A
SC10CLX, 50Hz	2.00	2.15	2.32	2.38	2.51	2.72	2.94	3.19	3.45	3.73	
SC10CLX, 60Hz	2.19	2.36	2.55	2.62	2.77	3.02	3.30	3.61			

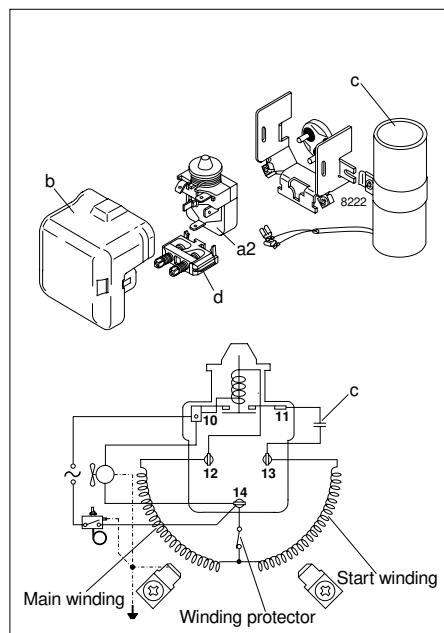
COP (EN 12900/CECOMAF)

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	W/W
SC10CLX, 50Hz	0.64	0.84	1.02	1.08	1.20	1.37	1.55	1.76	1.99	2.27	
SC10CLX, 60Hz	0.74	0.90	1.06	1.11	1.20	1.34	1.45	1.55			

COP (ASHRAE)

Evap. temp in °C	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	W/W
SC10CLX, 50Hz	0.75	0.98	1.19	1.26	1.39	1.59	1.81	2.05	2.33	2.65	
SC10CLX, 60Hz	0.85	1.05	1.23	1.29	1.40	1.55	1.69	1.81			

Test conditions
 Condensing temperature 45°C
 Ambient and suction gas temp. 32°C
 Liquid temperature 45°C
 50Hz: Fan cooling F₂, 220V
 60Hz: Fan cooling F₂, 220V


Accessories

Devices	Fig.	SC10CLX
Starting Relay	a2	117U6005
Cover	b	103N2008
Starting capacitor 80 µF	c	117U5019
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC10MLX

MBP Compressor

R404A/R507

220-240V 50Hz & 208-230V 60Hz

Data Sheet

General

Compressor	SC10MLX
Code number	104L2506

Application

Application	MBP
Evaporating temperature range °C (°F)	-23.3 to 7.2 (-10 to 45)
Voltage range V/Hz	187 - 254 /50 187 - 254 /60
Motor type	CSIR
Max. ambient temperature °C (°F)	43 (110)
Comp. cooling at ambient temp.	
32°C (90°F)	F ₂
38°C (100°F)	F ₂
43°C (110°F)	F ₂

Design

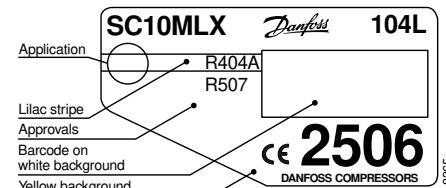
Displacement cm ³	10.29
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1410
Weight without electrical equipment kg	13.1

Motor

Motor size watt	470
LRA (rated after 4 sec. UL984) HST A	18.4
Cut-in current HST A	18.4
Resistance, main and start winding (25°C) Ω	4.3/15.3
Approvals	EN 60335-2-34, UL984/CSA-C22.2

Dimensions

Height mm	A	209
	B	203
	B1	183
	B2	100
Suction connector location/I.D. mm	C	8.2 ±0.09
Process connector location/I.D. mm	D	6.5 ±0.09
Discharge connector location/I.D. mm	E	6.5 ±0.09
Compressors on a pallet pcs.		80

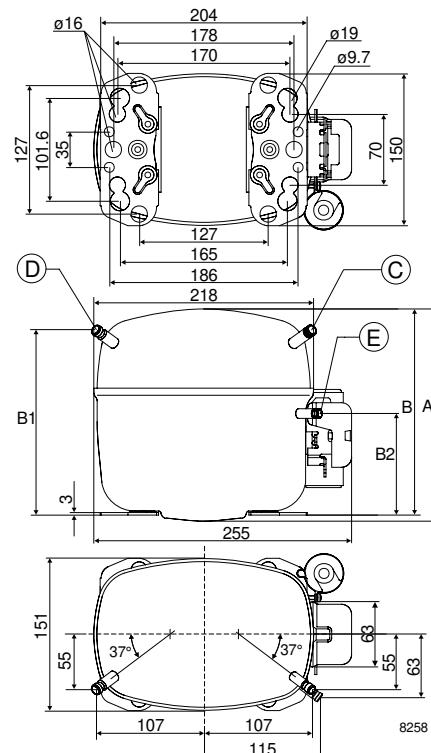


S = Static cooling normally sufficient

O = Oil cooling

F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)

F₂ = Fan cooling 3.0 m/s necessary



Conditions: ASHRAE MBP 60Hz

Evap. temp in°F	-10	0	10	14	20	30	40	45
Evap. temp in°C	-23.3	-17.8	-12.2	-10.0	-6.7	-1.1	4.4	7.2
Capacity in Btu/h	1538	2118	2796	3099	3590	4517	5597	6200
Power cons. in W	462	542	619	650	697	778	867	916
Current cons. in A	2.88	3.15	3.45	3.58	3.79	4.18	4.60	4.83
EER in Btu/Wh	3.33	3.91	4.52	4.77	5.15	5.80	6.45	6.77

Conditions: ASHRAE MBP 50Hz

Evap. temp in°F	-10	0	10	14	20	30	40	45
Evap. temp in°C	-23.3	-17.8	-12.2	-10.0	-6.7	-1.1	4.4	7.2
Capacity in Btu/h	1362	1830	2386	2636	3043	3817	4721	5227
Power cons. in W	428	483	536	557	587	638	687	712
Current cons. in A	3.35	3.52	3.70	3.78	3.90	4.12	4.36	4.49
EER in Btu/Wh	3.18	3.79	4.45	4.73	5.18	5.99	6.87	7.34

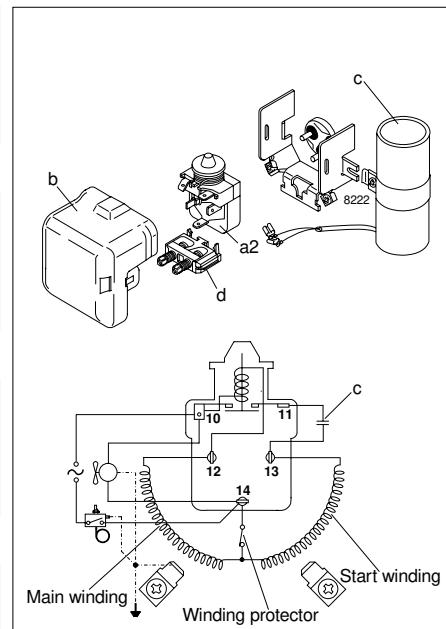
Conditions: EN 12900/CECOMAF (no subcooling) 60Hz

Evap. temp in°C	-23.3	-20	-15	-10	-6.7	-5	0	5
Evap. temp in°F	-10	-4	5	14	20	23	32	41
Capacity in W	547	646	816	1015	1164	1246	1510	1812
Power cons. in W	470	504	557	612	651	672	740	817
Current cons. in A	2.87	2.99	3.20	3.44	3.62	3.72	4.02	4.36
COP in W/W	1.16	1.28	1.47	1.66	1.79	1.85	2.04	2.22

Conditions: EN 12900/CECOMAF (no subcooling) 50Hz

Evap. temp in°C	-23.3	-20	-15	-10	-6.7	-5	0	5
Evap. temp in°F	-10	-4	5	14	20	23	32	41
Capacity in W	465	546	687	855	981	1051	1278	1537
Power cons. in W	416	442	481	518	543	556	594	633
Current cons. in A	3.31	3.39	3.51	3.65	3.75	3.80	3.96	4.14
COP in W/W	1.12	1.23	1.43	1.65	1.81	1.89	2.15	2.43

Test conditions EN 12900/CECOMAF ASHRAE
Condensing temperature 45°C 54.4°C
Return gas temperature 32°C 35.0°C
Liquid temperature 45°C 46.1°C
50Hz: Fan cooling F₂, 220V
60Hz: Fan cooling F₂, 230V


Accessories

Devices	Fig.	SC10MLX
Starting Relay	a2	117U6011
Cover	b	103N2008
Starting capacitor 80 µF	c	117U5019
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12CLX.2

LBP Compressor

R404A/R507

220-240V 50/60Hz

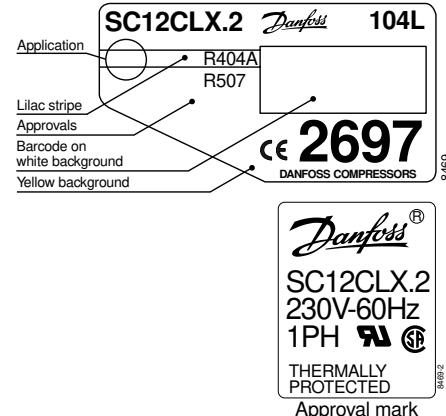
Data Sheet

General

Compressor	SC12CLX.2
Code number	104L2697

Application

Application	LBP	
Evaporating temperature range	°C	-40 to -10
Voltage range	V/Hz	198 - 254 / 50 198 - 254 / 60
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



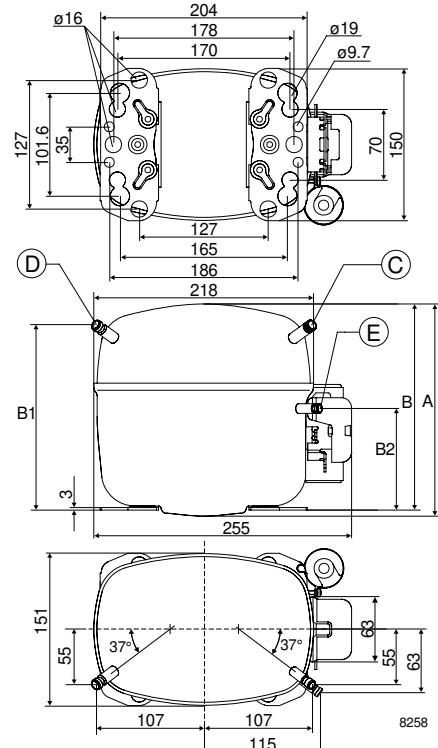
Design

Displacement	cm ³	12.87
Oil quantity	cm ³	550
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1510
Weight without electrical equipment	kg	13.7

- S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Motor

Motor size	watt	495
LRA (rated after 4 sec. UL984) HST	A	18.6
Cut-in current HST	A	18.6
Resistance, main and start winding (25°C)	Ω	3.7/14.1
Approvals	UL984/CSA-C22.2	



Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
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)

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC12CLX.2, 50Hz				540					
SC12CLX.2, 60Hz	240	380		645				1146	

Capacity (ASHRAE)

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC12CLX.2, 50Hz				626					
SC12CLX.2, 60Hz	169	327		748				1397	

Power consumption

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	watt
SC12CLX.2, 50Hz				487					
SC12CLX.2, 60Hz	344	425		570				772	

Current consumption

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	A
SC12CLX.2, 50Hz				3.32					
SC12CLX.2, 60Hz	2.40	2.70		3.27				4.16	

COP (EN 12900/CECOMAF)

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
SC12CLX.2, 50Hz				1.11					
SC12CLX.2, 60Hz	0.70	0.89		1.13				1.48	

COP (ASHRAE)

Evap. temp in °C	-40	-35	-30	-25	-23.3	-20	-15	-10	W/W
SC12CLX.2, 50Hz				1.28					
SC12CLX.2, 60Hz	0.80	1.03		1.31				1.73	

Test conditions EN 12900/CECOMAF ASHRAE

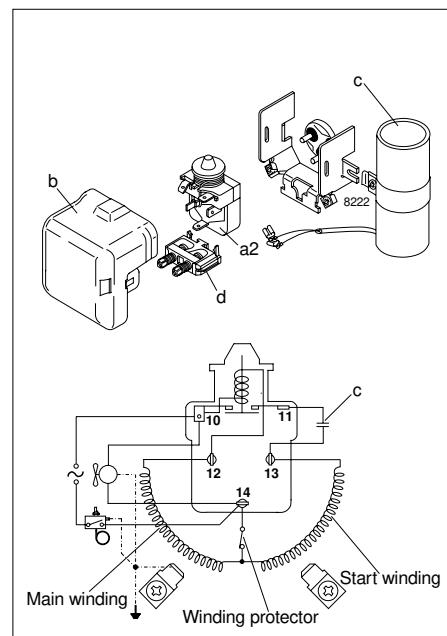
Condensing temperature 45°C 45°C
Ambient and suction gas temp. 32°C 32°C

Liquid temperature 45°C 32°C

50Hz: Fan cooling F₂, 220V

60Hz: Fan cooling F₂, 220V

preliminary data


Accessories

Devices	Fig.	SC12CLX.2
Starting Relay	a2	117U6019
Cover	b	103N2008
Starting capacitor 80 µF	c	117U5019
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12MLX

MBP Compressor

R404A/R507

220-240V 50Hz & 208-230V 60Hz

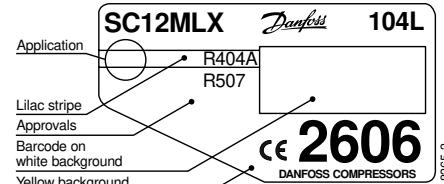
Data Sheet

General

Compressor	SC12MLX
Code number	104L2606

Application

Application	MBP
Evaporating temperature range °C (°F)	-23.3 to 7.2 (-10 to 45)
Voltage range V/Hz	187 - 254 /50 187 - 254 /60
Motor type	CSIR
Max. ambient temperature °C (°F)	43 (110)
Comp. cooling at ambient temp.	
32°C (90°F)	F ₂
38°C (100°F)	F ₂
43°C (110°F)	F ₂



Design

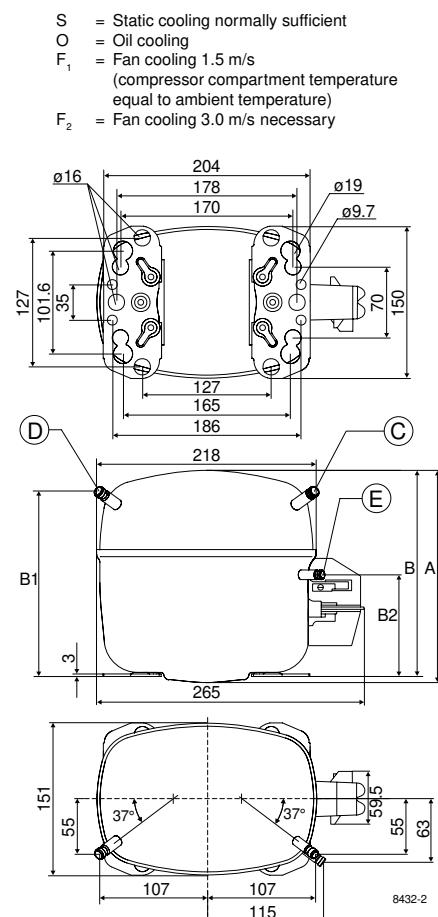
Displacement cm ³	12.87
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1410
Weight without electrical equipment kg	13.9

Motor

Motor size watt	590
LRA (rated after 4 sec. UL984) HST A	23.4
Cut-in current HST A	23.4
Resistance, main and start winding (25°C) Ω	3.4/14.4
Approvals	EN 60335-2-34, UL984/CSA-C22.2

Dimensions

Height mm	A	219
	B	213
	B1	193
	B2	110
Suction connector location/I.D. mm	C	8.2 ±0.09
Process connector location/I.D. mm	D	6.5 ±0.09
Discharge connector location/I.D. mm	E	6.5 ±0.09
Compressors on a pallet pcs.		80



Conditions: ASHRAE MBP 60Hz

Evap. temp in°F	-10	0	10	14	20	30	40	45
Evap. temp in°C	-23.3	-17.8	-12.2	-10.0	-6.7	-1.1	4.4	7.2
Capacity in Btu/h	1885	2554	3335	3684	4250	5320	6564	7259
Power cons. in W	551	646	738	775	831	928	1035	1092
Current cons. in A	3.39	3.70	4.06	4.21	4.46	4.92	5.42	5.69
EER in Btu/Wh	3.42	3.95	4.52	4.75	5.12	5.73	6.34	6.64

Conditions: ASHRAE MBP 50Hz

Evap. temp in°F	-10	0	10	14	20	30	40	45
Evap. temp in°C	-23.3	-17.8	-12.2	-10.0	-6.7	-1.1	4.4	7.2
Capacity in Btu/h	1694	2252	2915	3213	3700	4622	5701	6304
Power cons. in W	507	575	641	667	705	768	829	860
Current cons. in A	3.72	3.92	4.15	4.25	4.40	4.67	4.96	5.11
EER in Btu/Wh	3.34	3.91	4.55	4.82	5.25	6.02	6.87	7.33

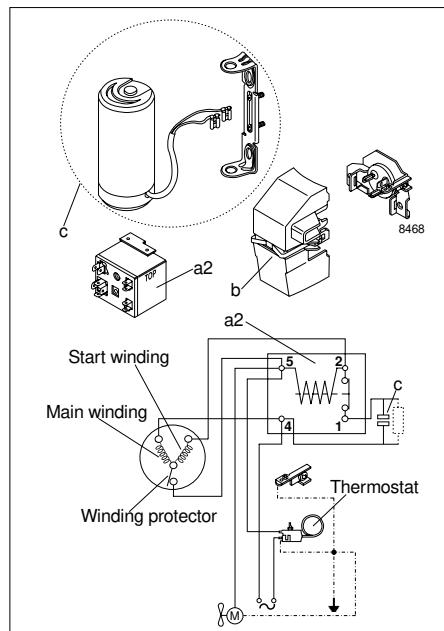
Conditions: EN 12900/CECOMAF (no subcooling) 60Hz

Evap. temp in°C	-23.3	-20	-15	-10	-6.7	-5	0	5
Evap. temp in°F	-10	-4	5	14	20	23	32	41
Capacity in W	659	773	970	1199	1370	1465	1770	2118
Power cons. in W	561	601	664	729	776	801	882	975
Current cons. in A	3.38	3.52	3.76	4.05	4.26	4.37	4.73	5.14
COP in W/W	1.18	1.29	1.46	1.64	1.77	1.83	2.01	2.17

Conditions: EN 12900/CECOMAF (no subcooling) 50Hz

Evap. temp in°C	-23.3	-20	-15	-10	-6.7	-5	0	5
Evap. temp in°F	-10	-4	5	14	20	23	32	41
Capacity in W	572	669	838	1038	1188	1272	1542	1852
Power cons. in W	493	525	572	620	651	667	714	762
Current cons. in A	3.67	3.76	3.91	4.08	4.20	4.27	4.47	4.69
COP in W/W	1.16	1.27	1.46	1.68	1.83	1.91	2.16	2.43

Test conditions EN 12900/CECOMAF ASHRAE
Condensing temperature 45°C 54.4°C
Return gas temperature 32°C 35.0°C
Liquid temperature 45°C 46.1°C
50Hz: Fan cooling F₂, 220V
60Hz: Fan cooling F₂, 230V


Accessories

Devices	Fig.	SC12MLX
Starting Relay	a2	117-7426
Starting Relay (alternative)	a2	117-7422
Cover	b	1117U1021
Starting capacitor 80 µF	c	117U5019
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

TF4CLX

LBP/MBP Compressor

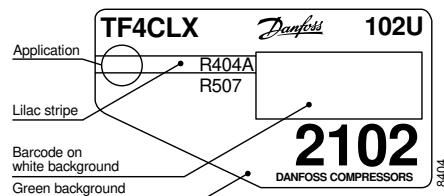
R404A/R507

115-127V 60Hz

Data Sheet (Replaces CF.52.E1.22)

General

Compressor		TF4CLX
Connector-material	Sealing	Code number
Copper-plated steel	Aluminium caps	
Copper-plated steel	Rubber plugs	102U2102
Copper	Rubber plugs	



Application

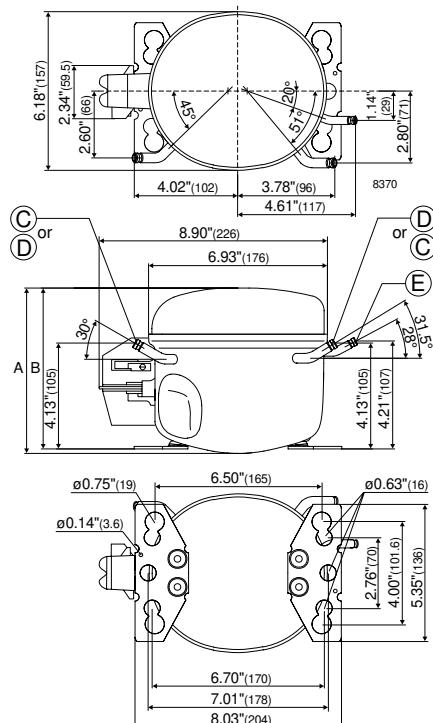
Application	LBP/MBP
Evaporating temperature range	°F (°C)
Voltage range	V/Hz
Motor type	CSIR
Max. ambient temperature	°F (°C)
Comp. cooling at max. ambient temperature	110°F (43°C)
	F ₁

- S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary



Design

Displacement	cu.in. (cm ³)	0.23 (3.86)
Oil quantity	fl.oz. (cm ³)	9.5 (280)
Maximum refrigerant charge	oz. (g)	17.5 (500)
Free gas vol. in compressor housing	fl.oz. (cm ³)	57.3 (1690)
Weight without electrical equipment	lbs. (kg)	17.9 (8.1)



Motor

Motor size	watt	225
LRA (rated after 4 sec. UL984) HST	A	20.0
Cut-in current HST	A	20.0
Resistance, main and start winding (77°F) Ω		2.6/3.8
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A 6.81 (173)
		B 6.65 (169)
Suction connector location/I.D. in. (mm)	C	0.252-0.259 (6.5±0.09)
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E	0.189-0.193 (4.9±0.10-0)
Compressors on a pallet	pcs.	125

Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	124	223	354	512	641	702	928	1197	1512	1880	2306	2544
ASHRAE LBP*	195	290	421	582	714	776	1008	1282	1603	1973	2398	2632
ASHRAE MBP	106	190	302	437	547	599	791	1018	1285	1595	1953	2151
CECOMAF	44	71	104	145	178	194	252	321	401	493	599	657

Power consumption (ASHRAE, EN12900/CECOMAF) watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	97	117	139	160	176	184	209	239	273	313	360	387
ASHRAE LBP*	106	121	138	155	169	175	198	226	259	299	347	374
ASHRAE MBP	97	117	139	160	176	184	209	239	273	313	360	387
CECOMAF	103	120	138	156	169	176	199	227	260	300	348	375

Current consumption (ASHRAE, EN12900/CECOMAF) A

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	2.01	2.07	2.16	2.29	2.41	2.46	2.66	2.90	3.17	3.47	3.81	3.99
ASHRAE LBP*	2.05	2.08	2.16	2.27	2.36	2.41	2.59	2.80	3.05	3.33	3.64	3.82
ASHRAE MBP	2.01	2.07	2.16	2.29	2.41	2.46	2.66	2.90	3.17	3.47	3.81	3.99
CECOMAF	2.03	2.08	2.15	2.27	2.36	2.41	2.59	2.81	3.06	3.35	3.67	3.84

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

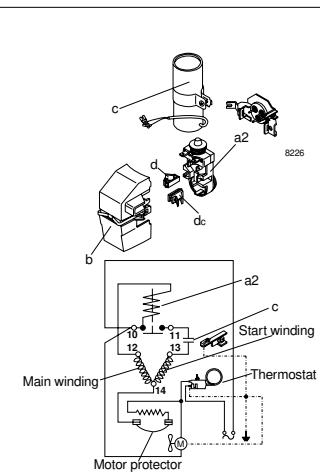
Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	1.27	1.90	2.55	3.19	3.63	3.82	4.44	5.02	5.54	6.01	6.41	6.58
ASHRAE LBP*	1.83	2.39	3.06	3.75	4.23	4.43	5.09	5.68	6.19	6.60	6.91	7.04
ASHRAE MBP	1.09	1.62	2.18	2.72	3.10	3.26	3.78	4.27	4.71	5.10	5.42	5.56
CECOMAF	0.43	0.59	0.76	0.93	1.05	1.10	1.26	1.41	1.54	1.64	1.72	1.75

Test conditions

Max. cond. temp. °F (°C) stable 120 (49)

Max. cond. temp. °F (°C) peak 135 (58)

preliminary data


Accessories

Devices	Fig.	TF4CLX
Starting relay (Klixon incl.)	a2	117U4148
Klixon		MRP36EN-6
Starting capacitor 280 µF	c	117U5025
Cover	b	117U1021
Cord relief	d	117U0349
Cord relief for capacitor	dc	117U0349
Mounting accessories	Ø in. (mm)	
Bolt joint in quantities	5/8 (16)	118-1945
Bolt joint in quantities	3/4 (19)	118-1948
Snap-on in quantities	5/8 (16)	118-1944

TFS4.5CLX

LBP Compressor

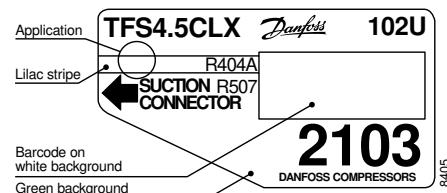
R404A/R507

115-127V 60Hz

Data Sheet (Replaces CF.52.D1.22)

General

Compressor	TFS4.5CLX	
Connector-material	Sealing	Code number
Copper-plated steel	Aluminium caps	
Copper-plated steel	Rubber plugs	102U2103
Copper	Rubber plugs	



Application

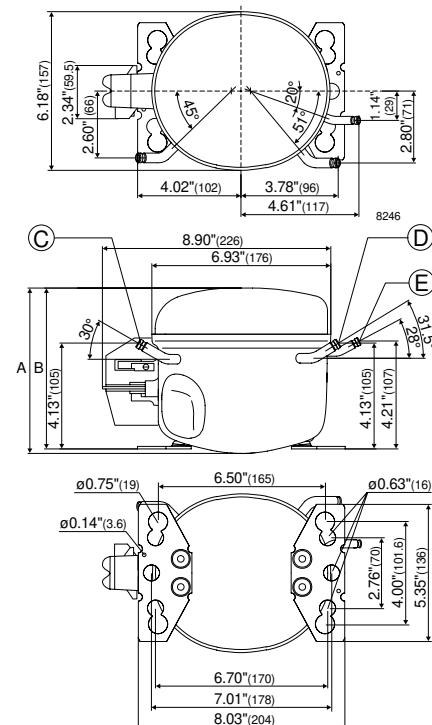
Application	LBP
Evaporating temperature range	°F (°C)
Voltage range	V/Hz
Motor type	CSIR
Max. ambient temperature	°F (°C)
Comp. cooling at max. ambient temperature	110°F (43°C)
	F ₁

- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary



Design

Displacement	cu.in. (cm ³)	0.29 (4.63)
Oil quantity	fl.oz. (cm ³)	9.5 (280)
Maximum refrigerant charge	oz. (g)	14.0 (400)
Free gas vol. in compressor housing	fl.oz. (cm ³)	57.3 (1690)
Weight without electrical equipment	lbs. (kg)	17.9 (8.1)



Motor

Motor size	watt	225
LRA (rated after 4 sec.UL984) HST	A	20.0
Cut-in current HST	A	20.0
Resistance, main and start winding (77°F) Ω		2.6/3.8
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A	6.81 (173)
		B	6.65 (169)
Suction connector location/I.D. in. (mm)	C	0.252-0.259 (6.5±0.09)	
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)	
Discharge connector location/I.D. in. (mm)	E	0.189-0.193 (4.9±0.10/-0)	
Compressors on a pallet	pcs.		125

Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	210	332	494	690	851	926	1207	1539	1930
ASHRAE LBP*	289	407	569	769	933	1010	1298	1637	2034
CECOMAF	67	100	141	192	233	252	325	410	509

Power consumption (ASHRAE, EN12900/CECOMAF)
watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	100	130	161	194	217	228	266	310	360
ASHRAE LBP*	113	135	160	186	206	215	250	291	340
CECOMAF	109	134	160	187	207	217	251	292	342

Current consumption (ASHRAE, EN12900/CECOMAF)
A

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	2.18	2.26	2.40	2.60	2.76	2.84	3.14	3.48	3.88
ASHRAE LBP*	2.23	2.29	2.39	2.55	2.70	2.76	3.03	3.34	3.70
CECOMAF	2.21	2.28	2.39	2.55	2.70	2.77	3.04	3.35	3.72

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	2.10	2.56	3.06	3.56	3.91	4.06	4.53	4.97	5.36
ASHRAE LBP*	2.55	3.01	3.56	4.14	4.53	4.69	5.20	5.63	5.98
CECOMAF	0.62	0.75	0.89	1.03	1.13	1.17	1.29	1.40	1.49

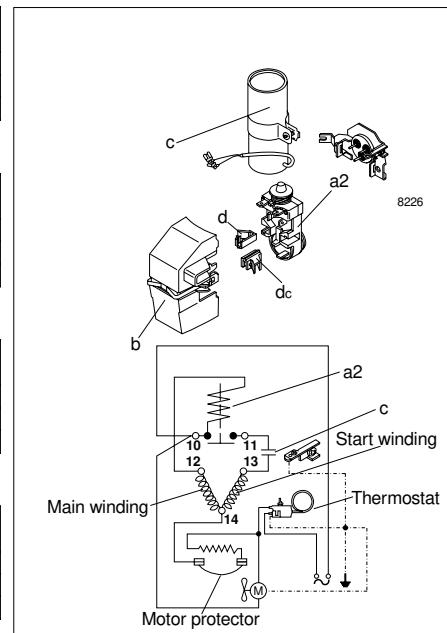
Test conditions	ASHRAE LBP	ASHRAE LBP*	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	45°C (113°F)
Cooling	Fan F1	Fan F1	Fan F1
V/Hz	115/60	115/60	115/60

Design limits:

Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)

Accessories

Devices	Fig.	TFS4.5CLX
Starting relay (Klixon incl.)	a2	117U4148
Klixon		MRP36EN-6
Starting capacitor 280 µF	c	117U5025
Cover	b	117U1021
Cord relief	d	117U0349
Cord relief for capacitor	dc	117U0349
Mounting accessories	Ø in. (mm)	
Bolt joint in quantities	5/8 (16)	118-1945
Bolt joint in quantities	3/4 (19)	118-1948
Snap-on in quantities	5/8 (16)	118-1944



NF5.5CLX

LBP/MBP Compressor

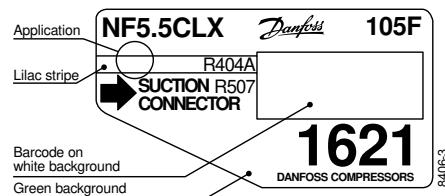
R404A/R507

115V 60Hz

Data Sheet

General

Compressor	NF5.5CLX	
Connector-material	Sealing	Code number
Copper-plated steel	Aluminium caps	105F1621
Copper-plated steel	Rubber plugs	105F1622
Copper	Rubber plugs	



Application

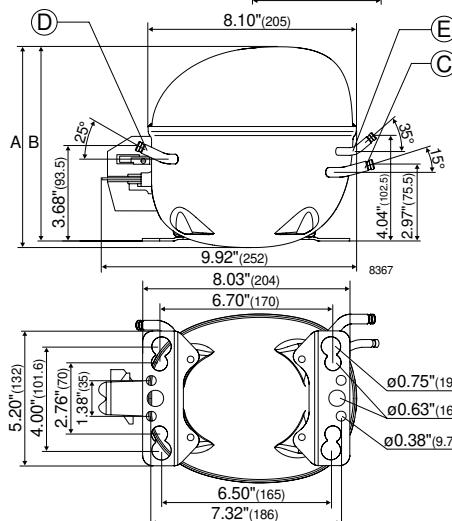
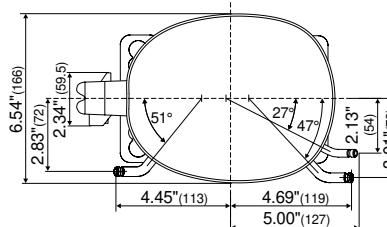
Application	LBP/MBP	
Evaporating temperature range °F (°C)	-49 to 45 (-45 to 7.2)	
Voltage range V/Hz	LBP: 95 - 135 /60	MBP: 103 - 135 /60
Motor type	CSIR	
Max. ambient temperature °F (°C)	110 (43)	
Comp. cooling at max. ambient temperature 110°F (43°C)		F ₂

S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary



Design

Displacement cu.in. (cm ³)	0.37 (6.13)	
Oil quantity fl.oz. (cm ³)	10.8 (320)	
Maximum refrigerant charge oz. (g)	14.0 (400)	
Free gas vol. in compressor housing fl.oz. (cm ³)	76.9 (2280)	
Weight without electrical equipment lbs. (kg)	22.2 (10.0)	



Dimensions

Height in. (mm)	A	8.00 (203)
	B	7.76 (197)
Suction connector location/I.D. in. (mm)	C	0.320-0.327 (8.2±0.09)
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs.	80

Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	304	463	675	933	1145	1245	1620	2066	2593	3211	3931	4333
ASHRAE LBP*	399	566	789	1057	1276	1378	1759	2206	2728	3331	4025	4408
ASHRAE MBP	260	396	577	797	977	1062	1380	1758	2204	2724	3328	3663
EN 12900	97	140	196	264	319	345	441	554	685	836	1010	1106

Power consumption (ASHRAE, EN 12900/CECOMAF) watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	142	179	218	257	285	297	338	382	428	477	530	559
ASHRAE LBP*	155	185	219	253	277	288	324	362	404	449	498	524
ASHRAE MBP	142	179	218	257	285	297	338	382	428	477	530	559
EN 12900	153	185	219	254	279	290	327	366	408	454	504	530

Current consumption (ASHRAE, EN 12900/CECOMAF) A

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	3.32	3.42	3.57	3.75	3.90	3.96	4.21	4.49	4.81	5.16	5.54	5.74
ASHRAE LBP*	3.35	3.43	3.54	3.69	3.82	3.88	4.09	4.34	4.63	4.94	5.29	5.48
ASHRAE MBP	3.32	3.42	3.57	3.75	3.90	3.96	4.21	4.49	4.81	5.16	5.54	5.74
EN 12900	3.35	3.43	3.55	3.70	3.83	3.89	4.11	4.37	4.65	4.98	5.33	5.52

ER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

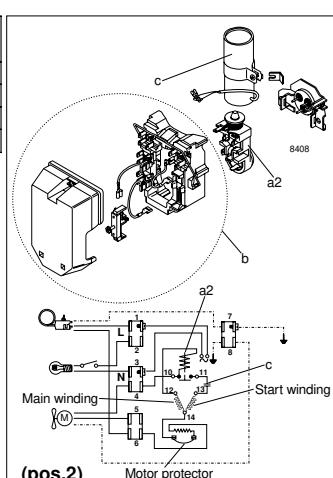
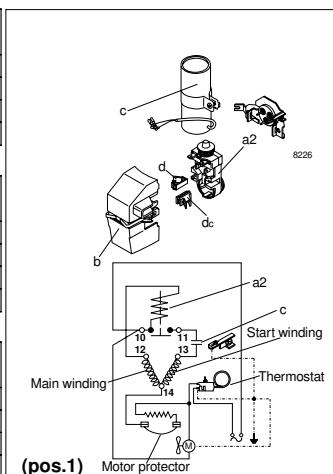
Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	2.13	2.59	3.10	3.63	4.02	4.19	4.79	5.41	6.06	6.73	7.41	7.75
ASHRAE LBP*	2.58	3.05	3.60	4.18	4.60	4.79	5.43	6.09	6.76	7.43	8.08	8.40
ASHRAE MBP	1.28	2.22	2.65	3.10	3.43	3.57	4.08	4.61	5.15	5.71	6.27	6.55
EN 12900	0.64	0.76	0.89	1.04	1.14	1.19	1.35	1.51	1.68	1.84	2.01	2.08

Test conditions

	ASHRAE LBP	ASHRAE LBP*	ASHRAE MBP	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	130°F (54.4°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	115°F (46°C)	45°C (113°F)
Cooling	Fan F ₂	Fan F ₂	Fan F ₂	Fan F ₂
V/Hz	115/60	115/60	115/60	115/60

Accessories

Devices	Fig.	NF5.5CLX
Starting relay (Klixon incl.)	a2	117U4061
Klixon		MRP30AEN-6
Starting capacitor 280 µF	c	117U5025
Cover (standard)	b	117U1021
Cord relief	d	117U0349
Cord relief for capacitor	dc	117U0349
(pos.1)		
Cover (alternative) with terminal board	b (pos.2)	117U1024
Mounting accessories (105G1622) Ø in.(mm)		
Bolt joint in quantities	0.63 (16)	118-1945
Bolt joint in quantities	0.75 (19)	118-1948
Snap-on in quantities	0.63 (16)	118-1944
Mounting accessories (105G1621) Ø in.(mm)		
Bolt joint for one compressor	0.63 (16)	118-1917
Bolt joint in quantities	0.63 (16)	118-1918
Snap-on in quantities	0.63 (16)	118-1919



Design limits:
Max. cond. temp. °F (°C) stable 120 (49)
Max. cond. temp. °F (°C) peak 135 (58)

NF7CLX

LBP/MBP Compressor

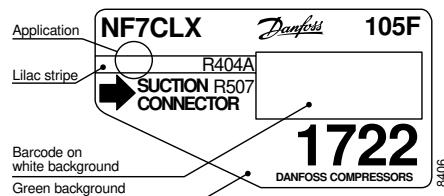
R404A/R507

115V 60Hz

Data Sheet

General

Compressor		NF7CLX
Connector-material	Sealing	Code number
Copper-plated steel	Aluminium caps	105F1721
Copper-plated steel	Rubber plugs	105F1722
Copper	Rubber plugs	



Application

Application	LBP/MBP
Evaporating temperature range °F (°C)	-49 to 45 (-45 to 7.2)
Voltage range V/Hz	LBP: 95 - 135 /60 MBP: 108 - 135 /60
Motor type	CSIR
Max. ambient temperature °F (°C)	110 (43)
Comp. cooling at max. ambient temperature 110°F (43°C)	F ₂

S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary



Design

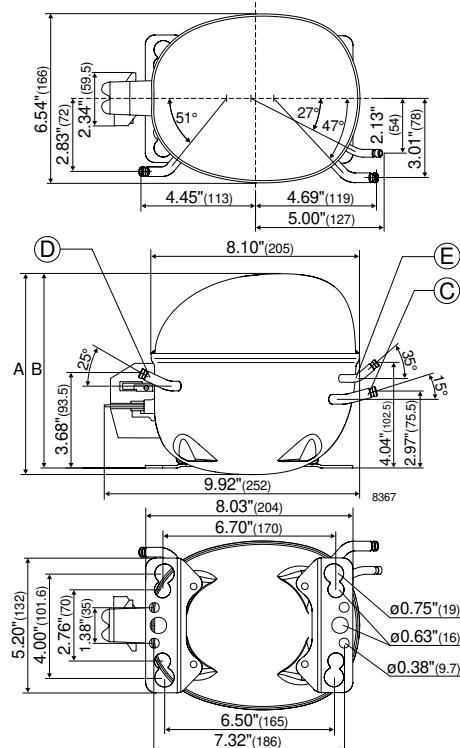
Displacement cu.in. (cm ³)	0.68 (7.27)
Oil quantity fl.oz. (cm ³)	10.8 (320)
Maximum refrigerant charge oz. (g)	14.0 (400)
Free gas vol. in compressor housing fl.oz. (cm ³)	76.9 (2280)
Weight without electrical equipment lbs. (kg)	22.2 (10.0)

Motor

Motor size watt	330
LRA (rated after 4 sec.UL984) HST A	28.0
Cut-in current HST A	28.0
Resistance, main and start winding (77°F) Ω	1.7/5.4
Approvals	UL984/CSA-C22.2

Dimensions

Height in. (mm)	A 8.00 (203)
	B 7.76 (197)
Suction connector location/I.D. in. (mm)	C 0.320-0.327 (8.2±0.09)
Process connector location/I.D. in. (mm)	D 0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E 0.252-0.259 (6.5±0.09)
Compressors on a pallet pcs.	80



Capacity

	ASHRAE in Btu/h - EN 12900/CECOMAF in watt											
Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	327	531	805	1137	1410	1539	2021	2595	3274	4069	4996	5513
ASHRAE LBP*	458	674	961	1306	1588	1719	2209	2785	3457	4234	5127	5620
ASHRAE MBP	279	454	688	971	1203	1312	1722	2209	2782	3452	4229	4661
EN 12900	111	166	238	326	397	430	553	699	868	1063	1286	1409

Power consumption (ASHRAE, EN 12900/CECOMAF) watt

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	176	221	270	318	353	368	419	472	529	590	656	691
ASHRAE LBP*	191	229	271	313	343	356	401	448	499	555	616	649
ASHRAE MBP	176	221	270	318	353	368	419	472	529	590	656	691
EN 12900	189	229	271	314	345	358	404	452	504	561	623	656

Current consumption (ASHRAE, EN 12900/CECOMAF)

Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	3.60	3.75	3.96	4.22	4.43	4.53	4.88	5.29	5.74	6.24	6.78	7.07
ASHRAE LBP*	3.65	3.76	3.93	4.14	4.32	4.40	4.71	5.07	5.47	5.93	6.43	6.70
ASHRAE MBP	3.60	3.75	3.96	4.22	4.43	4.53	4.88	5.29	5.74	6.24	6.78	7.07
EN 12900	3.64	3.76	3.93	4.15	4.33	4.42	4.74	5.10	5.51	5.97	6.48	6.76

EEER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

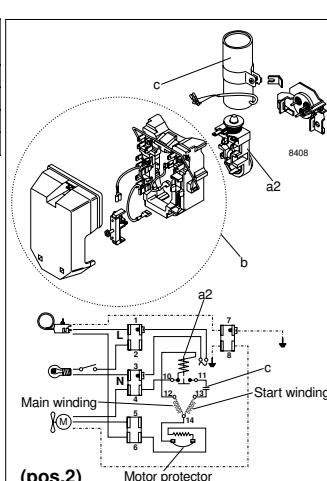
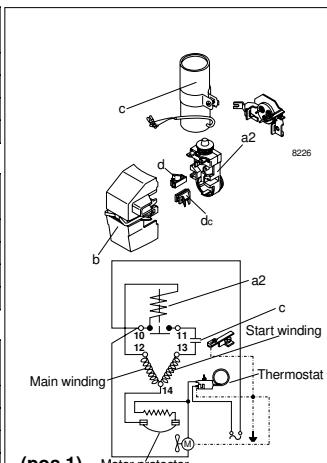
Evap. temp in°F	-49	-40	-30	-20	-13	-10	0	10	20	30	40	45
Evap. temp in°C	-45	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2
ASHRAE LBP	1.85	2.41	2.98	3.57	4.00	4.18	4.83	5.50	6.19	6.90	7.61	7.97
ASHRAE LBP*	2.39	2.94	3.54	4.17	4.63	4.83	5.52	6.22	6.92	7.63	8.32	8.66
ASHRAE MBP	1.58	2.06	2.55	3.05	3.41	3.57	4.11	4.68	5.26	5.85	6.45	6.74
EN 12900	0.59	0.72	0.88	1.04	1.15	1.20	1.37	1.54	1.72	1.89	2.07	2.15

Test conditions

	ASHRAE LBP	ASHRAE LBP*	ASHRAE MBP	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	130°F (54.4°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	115°F (46°C)	45°C (113°F)
Cooling	Fan F ₂	Fan F ₂	Fan F ₂	Fan F ₂
V/Hz	115/60	115/60	115/60	115/60

Accessories

Devices	Fig.	NF7CLX
Starting relay (Klixon incl.)	a2	117U4129
Klixon		MRT22AFZ-6
Starting capacitor 320 µF	c	117U5022
Cover (standard)	b	117U1021
Cord relief	d	117U0349
Cord relief for capacitor	dc (pos.1)	117U0349
Cover (alternative) with terminal board	b (pos.2)	117U1024
Mounting accessories (105G1722)	Ø in.(mm)	
Bolt joint in quantities	0.63 (16)	118-1945
Bolt joint in quantities	0.75 (19)	118-1948
Snap-on in quantities	0.63 (16)	118-1944
Mounting accessories (105G1721)	Ø in.(mm)	
Bolt joint for one compressor	0.63 (16)	118-1917
Bolt joint in quantities	0.63 (16)	118-1918
Snap-on in quantities	0.63 (16)	118-1919



Design limits:
Max. cond. temp. °F (°C) stable 120 (49)
Max. cond. temp. °F (°C) peak 135 (58)

SC10CL

LBP/MBP Compressor

R404A/R507

115V 60Hz

Data Sheet (Replaces CF.54.Q2.22)

General

Compressor	SC10CL
Codenumber (CU-plated steel connectors)	104L1503

Application

Application	LBP/MBP
Evaporating temperature range	°F (°C)
-40 to 45 (-40 to 7.2)	
Voltage range	V/Hz
103 - 127 /60	
Motor type	CSIR
Max. ambient temperature	°F (°C)
110 (43)	
Comp. cooling at max. ambient temperature	110°F (43°C)
	F ₂

Design

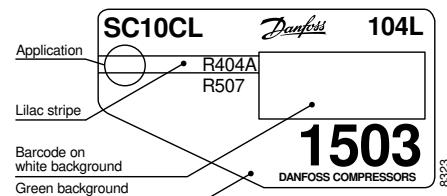
Displacement	cu.in. (cm ³)	0.63 (10.29)
Oil quantity	fl.oz. (cm ³)	18.6 (550)
Maximum refrigerant charge	oz. (g)	45.8 (1300)
Free gas vol. in compressor housing	fl.oz. (cm ³)	51.1 (1510)
Weight without electrical equipment	lbs. (kg)	27.7 (12.6)

Motor

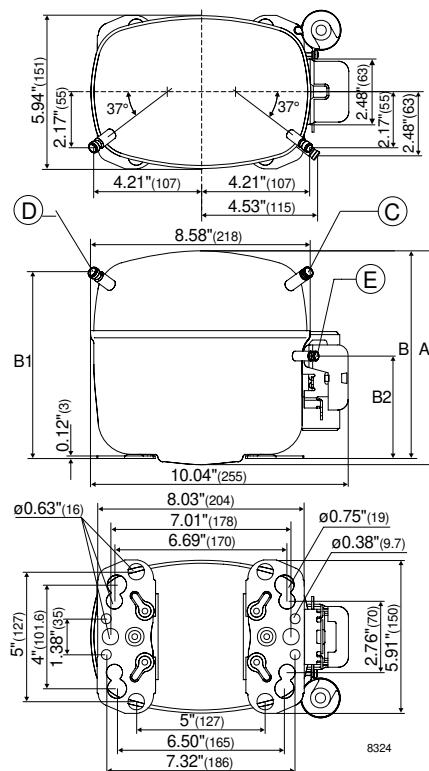
Motor size	watt	540
LRA (rated after 4 sec.UL984) HST	A	41.9
Cut-in current HST	A	41.9
Resistance, main and start winding (77°F) Ω		1.0/4.3
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A	8.23 (209)
		B	8.00 (203)
		B1	7.20 (183)
		B2	3.93 (100)
Suction connector location/I.D. in. (mm)	C	0.320-0.327 (8.2±0.09)	
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)	
Discharge connector location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)	
Compressors on a pallet	pcs.		80



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary



Capacity

	ASHRAE in Btu/h - EN 12900/CECOMAF in watt											
Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	147	624	1154	1568	1758	2453	3261	4200	5293	6563	6701	7272
ASHRAE LBP*	499	926	1422	1818	2001	2681	3477	4405	5483	6727	6861	7417
ASHRAE MBP	126	533	986	1338	1500	2091	2775	3570	4491	5556	5671	6148
EN 12900	113	223	349	450	497	668	869	1102	1372	1682	1716	1854

Power consumption (ASHRAE, EN 12900/CECOMAF)
watt

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	162	285	393	461	488	573	649	719	785	850	856	882
ASHRAE LBP*	240	332	413	464	484	548	608	664	720	778	784	808
ASHRAE MBP	162	285	393	461	488	573	649	719	785	850	856	882
EN 12900	230	327	412	465	487	554	616	674	732	790	796	821

Current consumption (ASHRAE, EN 12900/CECOMAF)
A

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	4.52	5.11	5.69	6.09	6.26	6.82	7.37	7.91	8.44	8.95	9.00	9.21
ASHRAE LBP*	4.83	5.30	5.77	6.08	6.22	6.66	7.08	7.50	7.91	8.31	8.34	8.50
ASHRAE MBP	4.52	5.11	5.69	6.09	6.26	6.82	7.37	7.91	8.44	8.95	9.00	9.21
EN 12900	4.79	5.28	5.76	6.09	6.23	6.69	7.13	7.57	8.00	8.41	8.45	8.61

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	0.91	2.19	2.94	3.40	3.60	4.28	5.02	5.84	6.74	7.73	7.83	8.25
ASHRAE LBP*	2.08	2.79	3.44	3.92	4.13	4.89	5.72	6.63	7.61	8.65	8.75	9.18
ASHRAE MBP	0.77	1.87	2.51	2.90	3.07	3.65	4.27	4.96	5.72	6.54	6.63	6.97
EN 12900	0.49	0.68	0.85	0.97	1.02	1.21	1.41	1.63	1.87	2.13	2.15	2.26

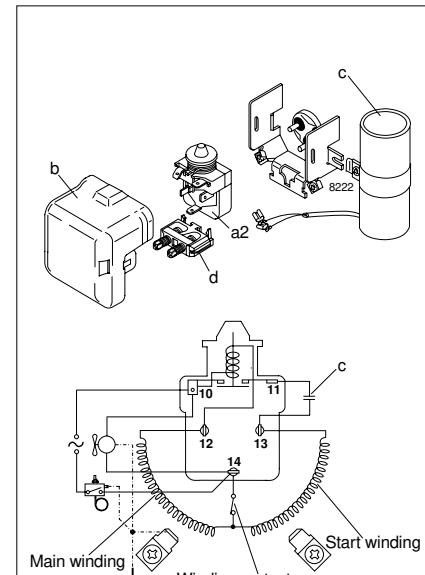
Test conditions	ASHRAE LBP	ASHRAE LBP*	ASHRAE MBP	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	130°F (54.4°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	115°F (46°C)	45°C (113°F)
Cooling	Fan F ₂	Fan F ₂	Fan F ₂	Fan F ₂
V/Hz	115/60	115/60	115/60	115/60

Design limits:

 Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)

Accessories

Devices	Fig.	SC10CL
Starting relay	a2	117U6020
Cover	b	103N2008
Starting capacitor 240 µF	c	117U5023
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



SC12CL

LBP Compressor

R404A/R507

115V 60Hz

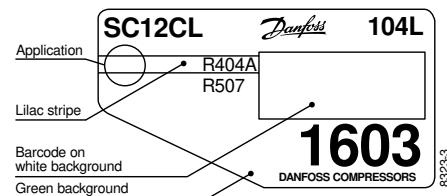
Data Sheet (Replaces CF.54.U1.22)

General

Compressor	SC12CL
Codenumber (CU-plated steel connectors)	104L1603

Application

Application	LBP
Evaporating temperature range °F (°C)	-40 to 10 (-40 to -12.2)
Voltage range V/Hz	103 - 127 /60
Motor type	CSIR
Max. ambient temperature °F (°C)	110 (43)
Comp. cooling at max. ambient temperature 110°F (43°C)	F ₂



S = Static cooling normally sufficient

O = Oil cooling

F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)

F₂ = Fan cooling 3.0 m/s necessary

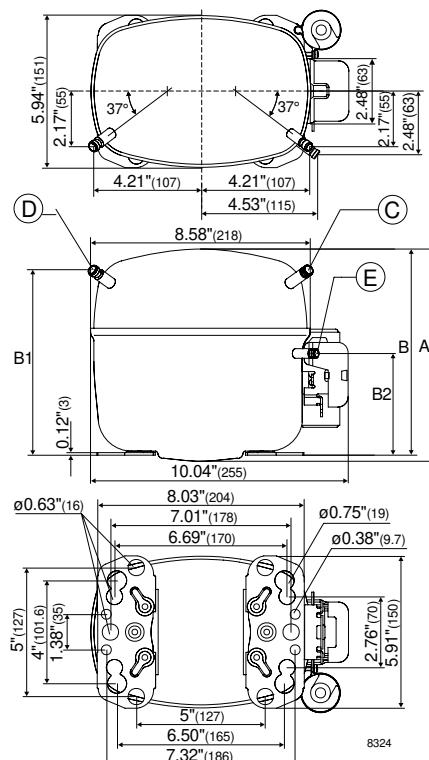
1603
DANFOSS COMPRESSORS

8323-4

SC12CL
115V-60Hz
1PH

THERMALLY PROTECTED

Approval mark



Design

Displacement cu.in. (cm ³)	0.78 (12.87)
Oil quantity fl.oz. (cm ³)	18.6 (550)
Maximum refrigerant charge oz. (g)	45.8 (1300)
Free gas vol. in compressor housing fl.oz. (cm ³)	51.1 (1510)
Weight without electrical equipment lbs. (kg)	27.7 (12.6)

Motor

Motor size	watt	540
LRA (rated after 4 sec.UL984) HST	A	41.9
Cut-in current HST	A	41.9
Resistance, main and start winding (77°F) Ω		1.0/4.3
Approvals		UL984/CSA-C22.2

Dimensions

Height in. (mm)	A 8.23 (209) B 8.00 (203) B1 7.20 (183) B2 3.93 (100)
Suction connector location/I.D. in. (mm)	C 0.320-0.327 (8.2±0.09)
Process connector location/I.D. in. (mm)	D 0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E 0.252-0.259 (6.5±0.09)

Compressors on a pallet pcs. 80

Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	143	842	1577	2127	2374	3255	4246
ASHRAE LBP*	648	1229	1871	2366	2592	3414	4356
EN 12900	146	297	463	590	648	857	1095

Power consumption (ASHRAE, EN 12900/CECOMAF)
watt

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	212	374	510	595	629	739	848
ASHRAE LBP*	322	436	535	599	627	720	822
EN 12900	308	429	533	600	628	723	826

Current consumption (ASHRAE, EN 12900/CECOMAF)
A

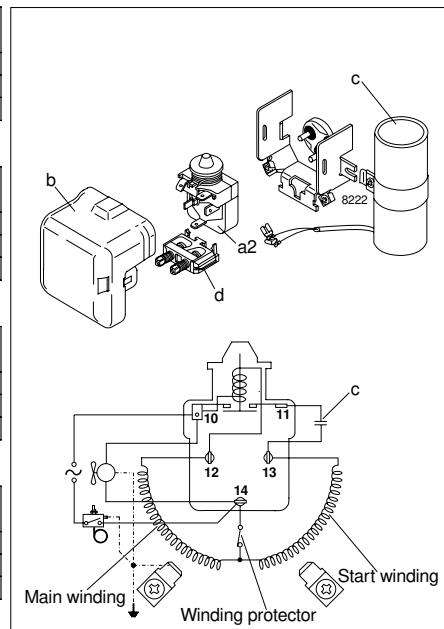
Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	4.92	5.44	6.08	6.60	6.84	7.73	8.74
ASHRAE LBP*	5.32	5.69	6.17	6.59	6.78	7.52	8.38
EN 12900	5.26	5.64	6.15	6.58	6.79	7.55	8.43

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	0.68	2.25	3.09	3.58	3.77	4.40	5.01
ASHRAE LBP*	2.01	2.82	3.50	3.95	4.14	4.74	5.30
EN 12900	0.48	0.69	0.87	0.98	1.03	1.18	1.33

Test conditions	ASHRAE LBP	ASHRAE LBP*	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	45°C (113°F)
Cooling	Fan F ₂	Fan F ₂	Fan F ₂
V/Hz	115/60	115/60	115/60

Design limits:

 Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)

Accessories

Devices	Fig.	SC12CL
Starting relay	a2	117U6020
Cover	b	103N2008
Starting capacitor 240 µF	c	117U5023
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12CLX.2

LBP Compressor

R404A/R507

115V 60Hz

Data Sheet

General

Compressor	SC12CLX.2
Codenumber (CU-plated steel connectors)	104L1696

Application

Application	LBP
Evaporating temperature range	°F (°C)
-40 to 20 (-40 to -6.7)	
Voltage range	V/Hz
103 - 127 /60	
Motor type	CSIR
Max. ambient temperature	°F (°C)
110 (43)	
Comp. cooling at max. ambient temperature	110°F (43°C)
	F ₂

Design

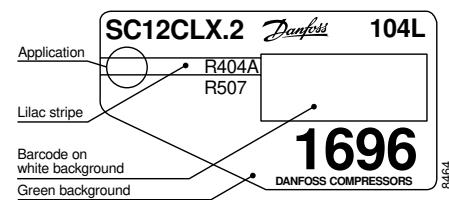
Displacement	cu.in. (cm ³)	0.78 (12.87)
Oil quantity	fl.oz. (cm ³)	18.6 (550)
Maximum refrigerant charge	oz. (g)	45.8 (1300)
Free gas vol. in compressor housing	fl.oz. (cm ³)	51.1 (1510)
Weight without electrical equipment	lbs. (kg)	27.7 (12.6)

Motor

Motor size	watt	540
LRA (rated after 4 sec.UL984) HST	A	41.9
Cut-in current HST	A	41.9
Resistance, main and start winding (77°F) Ω		1.0/4.3
Approvals		UL984/CSA-C22.2

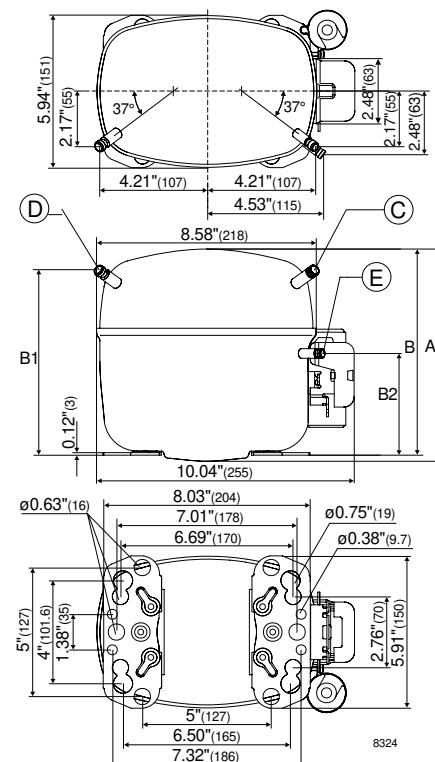
Dimensions

Height	in. (mm)	A	8.23 (209)
		B	8.00 (203)
		B1	7.20 (183)
		B2	3.93 (100)
Suction connector location/I.D. in. (mm)	C	0.320-0.327 (8.2±0.09)	
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)	
Discharge connector location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)	
Compressors on a pallet	pcs.		80



S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

THERMALLY PROTECTED Approval mark



Capacity

ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP					2550			5250
ASHRAE LBP*	950	1500		2540	2730			5350
EN 12900	240	380		645	690			1290

Power consumption (ASHRAE, EN 12900/CECOMAF)

watt

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP					617			930
ASHRAE LBP*	380	460		585	616			
EN 12900	360	450		585	616			

Current consumption (ASHRAE, EN 12900/CECOMAF)

A

Current consumption (ASHRAE, EN 12900, CECM-III)								
Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP					6.95			9.50
ASHRAE LBP*	5.35	6.10		6.65	6.90			
EN 12900	5.30	6.00		6.65	6.90			

EER / COP

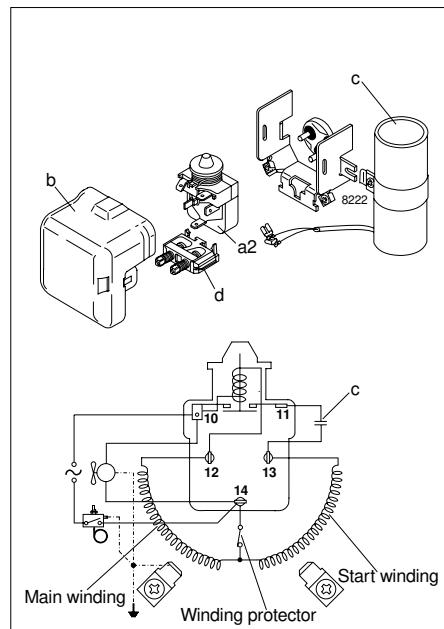
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

ASHRAE in Dg/W EN 12800/CECOSMART in W/W								
Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP					4.13			5.64
ASHRAE LBP*	2.50	3.26		4.34	4.43			
EN 12900	0.66	0.84		1.10	1.12			

Test conditions	ASHRAE LBP	ASHRAE LBP*	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	45°C (113°F)
Cooling	Fan F2	Fan F2	Fan F2
V/Hz	115/60	115/60	115/60

Design limits:

Design limits:
 Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)
 preliminary data



Accessories

Devices	Fig.	SC12CLX.2
Starting relay	a2	117U6020
Cover	b	103N2008
Starting capacitor 240 µF	c	117U5023
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12MLX

MBP Compressor

R404A/R507

115V 60Hz

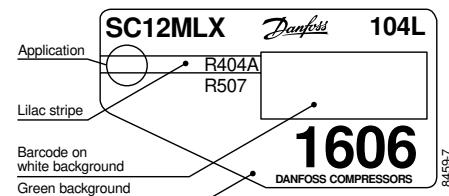
Data Sheet

General

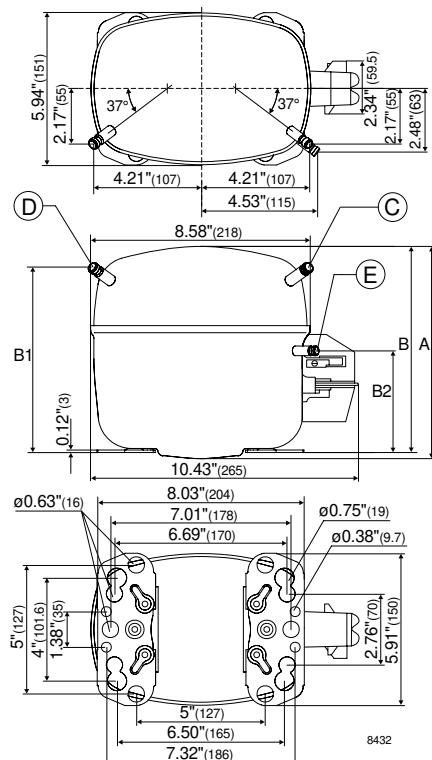
Compressor (CU-plated steel connectors)	SC12MLX
Codenumber	104L1606

Application

Application	MBP
Evaporating temperature range °F (°C)	-10 to 45 (-23.3 to 7.2)
Voltage range V/Hz	95 - 135 /60
Motor type	CSIR
Max. ambient temperature °F (°C)	110 (43)
Comp. cooling at max. ambient temperature 110°F (43°C)	F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary



Design

Displacement cu.in. (cm ³)	0.78 (12.86)
Oil quantity fl.oz. (cm ³)	20.3 (600)
Maximum refrigerant charge oz. (g)	45.5 (1300)
Free gas vol. in compressor housing fl.oz. (cm ³)	49.4 (1460)
Weight without electrical equipment lbs. (kg)	30.2 (13.7)

Motor

Motor size watt	755
LRA (rated after 4 sec.UL984) HST A	53
Cut-in current HST A	53
Resistance, main and start winding (77°F) Ω	0.7/2.9
Approvals	UL984/CSA-C22.2

Dimensions

Height in. (mm)	A 8.62 (219) B 8.39 (213) B1 7.60 (193) B2 4.33 (110)
Suction connector location/I.D. in. (mm)	C 0.320-0.327 (8.2±0.09)
Process connector location/I.D. in. (mm)	D 0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E 0.252-0.259 (6.5±0.09)
Compressors on a pallet pcs.	60

Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	1987	2640	3435	4391	5527	6865	7011	7616
EN 12900	667	864	1103	1388	1725	2118	2160	2337

Power consumption (ASHRAE, EN 12900/CECOMAF)
watt

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	581	676	770	865	960	1058	1067	1107
EN 12900	589	662	735	811	890	973	982	1017

Current consumption (ASHRAE, EN 12900/CECOMAF)
A

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	7.93	8.50	9.13	9.83	10.58	11.39	11.48	11.82
EN 12900	7.94	8.38	8.88	9.44	10.06	10.74	10.81	11.10

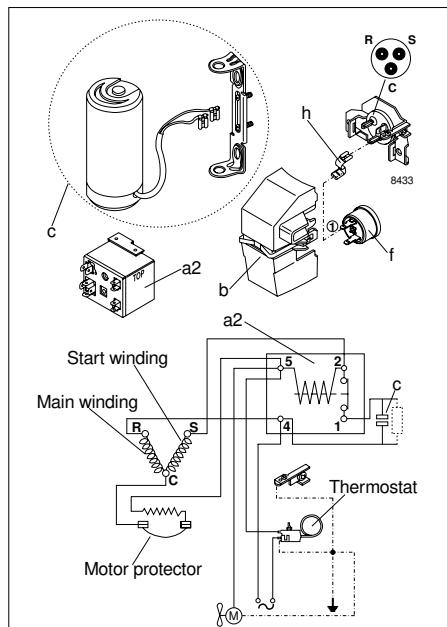
EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	3.42	3.90	4.46	5.08	5.76	6.49	6.57	6.88
EN 12900	1.13	1.31	1.50	1.71	1.94	2.18	2.20	2.30

Test conditions	ASHRAE MBP	EN 12900
Condensing temperature	130°F (54.4°C)	45°C (113°F)
Suction gas temperature	95°F (35°C)	32°C (90°F)
Ambient temperature	90°F (32°C)	32°C (90°F)
Liquid temperature	115°F (46°C)	45°C (113°F)
Cooling	Fan F2	Fan F2
V/Hz	115/60	115/60

Design limits:

Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)


Accessories

Devices	Fig.	SC12MLX
Starting relay	a2	117-7441
Starting capacitor 410 µF	c	117U5028
Cover	b	parts of compressor (117U1021) (117U3212) (117U0438)
Protector	f	
Protector holder	h	
Mounting accessories	Ø in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1917
Bolt joint in quantities	5/8 (16)	118-1918
Snap-on in quantities	5/8 (16)	118-1919

SC15CLX.2

LBP Compressor

R404A/R507

115V 60Hz

Data Sheet

General

Compressor (CU-plated steel connectors)	SC15CLX.2
Codenumber	104L1853

Application

Application	LBP
Evaporating temperature range °F (°C)	-40 to 20 (-40 to -6.7)
Voltage range V/Hz	103 - 127 /60
Motor type	CSIR
Max. ambient temperature °F (°C)	110 (43)
Comp. cooling at max. ambient temperature 110°F (43°C)	F ₂

Design

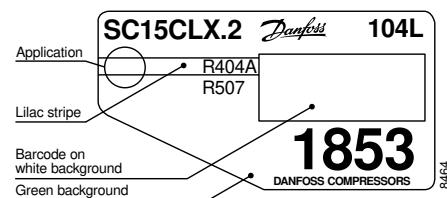
Displacement cu.in. (cm ³)	0.93 (15.28)
Oil quantity fl.oz. (cm ³)	18.6 (550)
Maximum refrigerant charge oz. (g)	45.5 (1300)
Free gas vol. in compressor housing fl.oz. (cm ³)	49.4 (1460)
Weight without electrical equipment lbs. (kg)	30.2 (13.7)

Motor

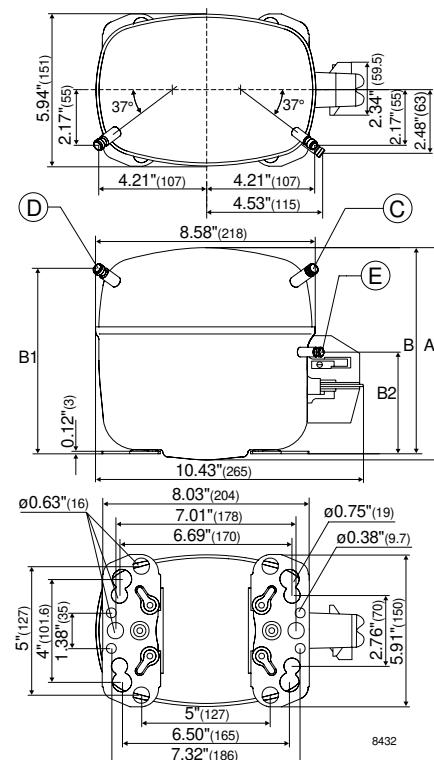
Motor size watt	755
LRA (rated after 4 sec.UL984) HST A	53
Cut-in current HST A	53
Resistance, main and start winding (77°F) Ω	0.7/2.9
Approvals	UL984/CSA-C22.2

Dimensions

Height in. (mm)	A 8.62 (219) B 8.39 (213) B1 7.60 (193) B2 4.33 (110)
Suction connector location/I.D. in. (mm)	C 0.387-0.385 (9.7±0.09)
Process connector location/I.D. in. (mm)	D 0.252-0.259 (6.5±0.09)
Discharge connector location/I.D. in. (mm)	E 0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs. 60



- S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary



Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	57	989	1964	2671	2980	4037	5134	6270
ASHRAE LBP*	783	1605	2473	3106	3384	4337	5331	6364
EN 12900	175	387	611	773	845	1088	1342	1604

Power consumption (ASHRAE, EN 12900/CECOMAF)
watt

	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	231	428	589	686	724	839	944	1046
ASHRAE LBP*	356	499	616	687	715	804	890	983
EN 12900	341	491	614	688	717	809	898	991

Current consumption (ASHRAE, EN 12900/CECOMAF)
A

	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	6.70	7.40	8.13	8.65	8.87	9.64	10.42	11.23
ASHRAE LBP*	7.03	7.62	8.23	8.67	8.86	9.51	10.18	10.87
EN 12900	7.00	7.61	8.24	8.69	8.88	9.55	10.24	10.95

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °F	-40	-30	-20	-13	-10	0	10	20
Evap. temp in °C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7
ASHRAE LBP	0.25	2.31	3.33	3.90	4.12	4.81	5.44	6.00
ASHRAE LBP*	2.20	3.22	4.01	4.52	4.73	5.40	5.99	6.48
EN 12900	0.51	0.79	0.99	1.12	1.18	1.34	1.49	1.62

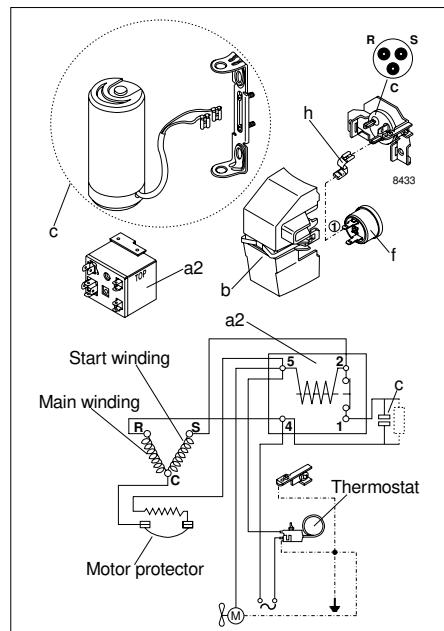
Test conditions	ASHRAE LBP	ASHRAE LBP*	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	45°C (113°F)
Cooling	Fan F ₂	Fan F ₂	Fan F ₂
V/Hz	115/60	115/60	115/60

Design limits:

Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)

Accessories

Devices	Fig.	SC15CLX.2
Starting relay	a2	117-7441
Starting capacitor 410 µF	c	117U5028
Cover	b	(117U1021)
Protector	f	(117U3212)
Protector holder	h	(117U0438)
Mounting accessories	Ø in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1917
Bolt joint in quantities	5/8 (16)	118-1918
Snap-on in quantities	5/8 (16)	118-1919



SC15MLX

MBP Compressor

R404A/R507

115V 60Hz

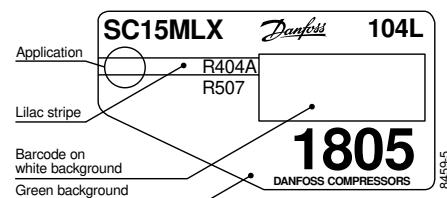
Data Sheet

General

Compressor (CU-plated steel connectors)	SC15MLX
Codenumber	104L1805

Application

Application	MBP
Evaporating temperature range	°F (°C)
-10 to 45 (-23.3 to 7.2)	
Voltage range	V/Hz
CSR: 95 - 135 /60	
CSIR: 103 - 135 /60	
Motor type	CSIR/CSR
Max. ambient temperature	°F (°C)
110 (43)	
Comp. cooling at	
max. ambient temperature	110°F (43°C)
	F ₂



- S = Static cooling normally sufficient
 O = Oil cooling
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temp.
 equal to ambient temperature)
 F₂ = Fan cooling 3.0 m/s necessary

Design

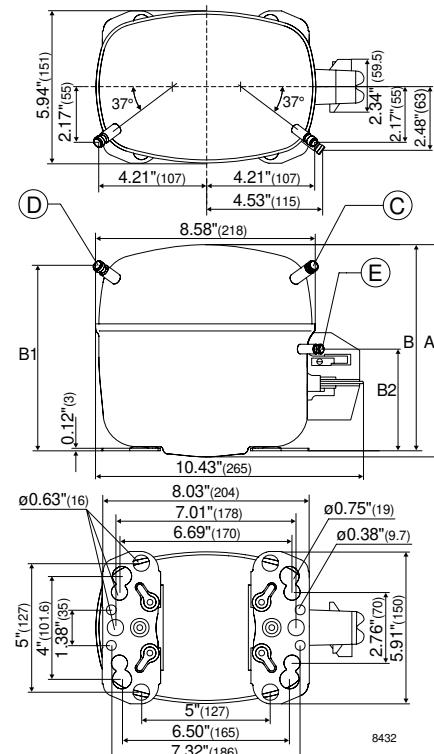
Displacement	cu.in. (cm ³)	0.93 (15.28)
Oil quantity	fl.oz. (cm ³)	20.3 (600)
Maximum refrigerant charge	oz. (g)	45.5 (1300)
Free gas vol. in compressor housing	fl.oz. (cm ³)	49.4 (1460)
Weight without electrical equipment	lbs. (kg)	30.9 (14.0)

Motor

Motor size	watt	965
LRA (rated after 4 sec.UL984) HST	A	64
Cut-in current HST	A	64
Resistance, main and start winding (77°F) Ω		0.6/2.7
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A	8.62 (219)
		B	8.39 (213)
		B1	7.60 (193)
		B2	4.33 (110)
Suction connector location/I.D. in. (mm)	C	0.387-0.385 (9.7±0.09)	
Process connector location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)	
Discharge connector location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)	
Compressors on a pallet	pcs.		60



Capacity
ASHRAE in Btu/h - EN 12900/CECOMAF in watt

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	2295	3049	3967	5070	6383	7928	8096	8795
EN 12900	770	998	1274	1603	1992	2446	2495	2698

Power consumption (ASHRAE, EN12900/CECOMAF)
watt

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	719	837	954	1070	1188	1309	1321	1371
EN 12900	729	819	910	1004	1102	1205	1216	1259

Current consumption (ASHRAE, EN12900/CECOMAF)
A

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	9.88	10.59	11.37	12.24	13.17	14.19	14.29	14.72
EN 12900	9.88	10.43	11.05	11.75	12.52	13.37	13.46	13.82

EER / COP
ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in °F	-10	0	10	20	30	40	41	45
Evap. temp in °C	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE MBP	3.19	3.64	4.16	4.74	5.37	6.06	6.13	6.42
EN 12900	1.06	1.22	1.40	1.60	1.81	2.03	2.05	2.14

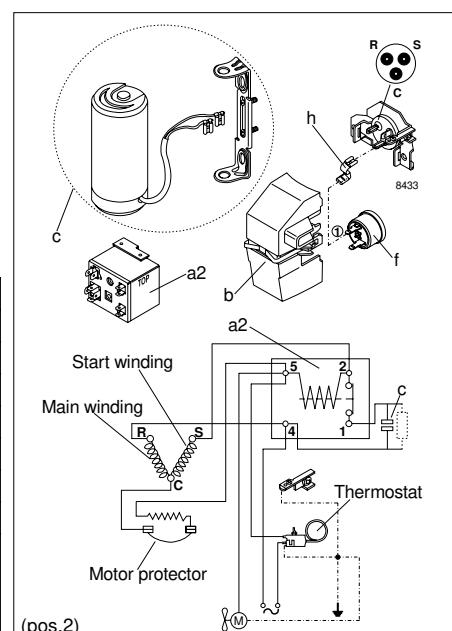
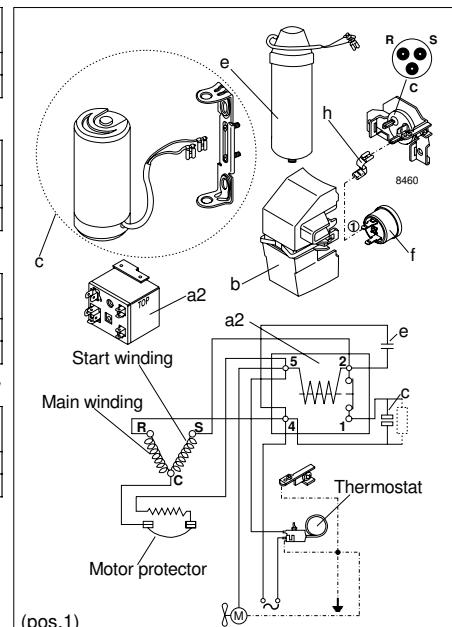
Test conditions	ASHRAE MBP	EN 12900/CECOMAF
Condensing temp.	130°F (54.4°C)	45°C (113°F)
Suction gas temp.	95°F (35°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	32°C (90°F)
Liquid temp.	115°F (46°C)	45°C (113°C)
Cooling	Fan F2	Fan F2
V/Hz	115/60	115/60

Design limits:

Max. cond. temp. °F (°C) stable 120 (49)
 Max. cond. temp. °F (°C) peak 135 (58)
 preliminary data

Accessories

Devices	Fig.	CSR (pos.1)
Run capacitor 23.5 µF	e	117-7114
Devices	Fig.	CSR/CSIR (pos.1 & pos.2)
Starting relay	a2	117-7441
Starting capacitor 410 µF	c	117U5028
Cover	b	parts of compressor (117U1021) (117U3212) (117U0438)
Protector	f	
Protector holder	h	
Mounting accessories	Ø in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1917
Bolt joint in quantities	5/8 (16)	118-1918
Snap-on in quantities	5/8 (16)	118-1919



SC10DL

MBP/HBP Compressor

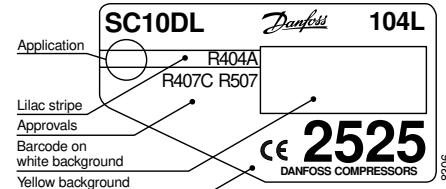
R407C

220-240V 50Hz

Data Sheet (Replaces CF.54.V1.02)

General

Compressor	SC10DL
Code number	104L2525



Application

Application	MBP/HBP
Evaporating temperature range °C	-15 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂

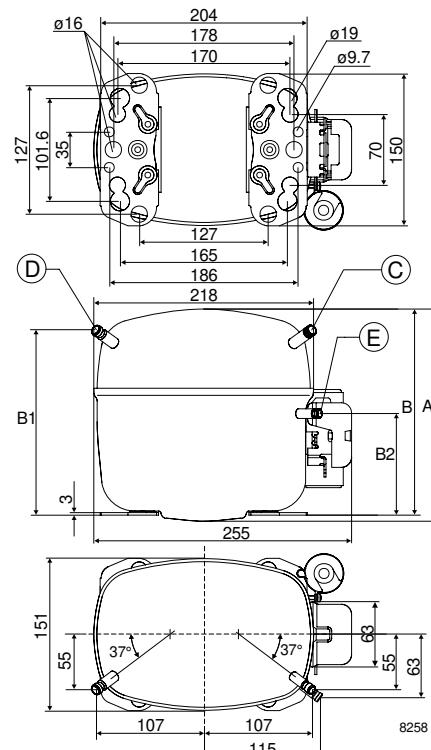
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	10.29
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1410
Weight without electrical equipment kg	13.1

Motor

Motor size watt	385
LRA (rated after 4 sec. UL984) HST A	14.8
Cut-in current HST A	14.8
Resistance, main and start winding (25°C) Ω	5.0/13.7
Approvals	EN 60 335-2-34



Dimensions

Height mm	A	209
	B	203
	B1	183
	B2	100
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)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	480	636	821	1039	1293	1417	1588	1927	

Capacity (ASHRAE)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	515	682	881	1114	1388	1522	1706	2073	

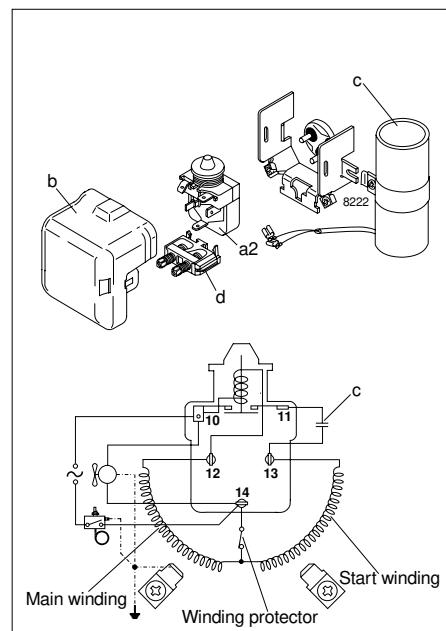
Power consumption									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	346	394	437	476	510	524	540	568	

Current consumption								A	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	2.50	2.66	2.81	2.95	3.08	3.14	3.20	3.31	

COP (EN 12900/CECOMAF)								W/W	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	1.39	1.61	1.88	2.18	2.54	2.71	2.94	3.40	

COP (ASHRAE)								W/W	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10DL	1.49	1.73	2.01	2.34	2.72	2.91	3.16	3.65	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature no subcooling 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	Fig.	SC10DL
Starting relay	a2	117U6005
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

SC12DL

MBP/HBP Compressor

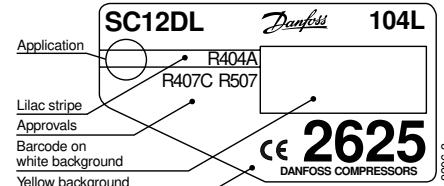
R407C

220-240V 50Hz

Data Sheet (Replaces CF.54.W1.02)

General

Compressor	SC12DL
Code number	104L2625



Application

Application	MBP/HBP
Evaporating temperature range °C	-15 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp. 32°C	F ₂
38°C	F ₂

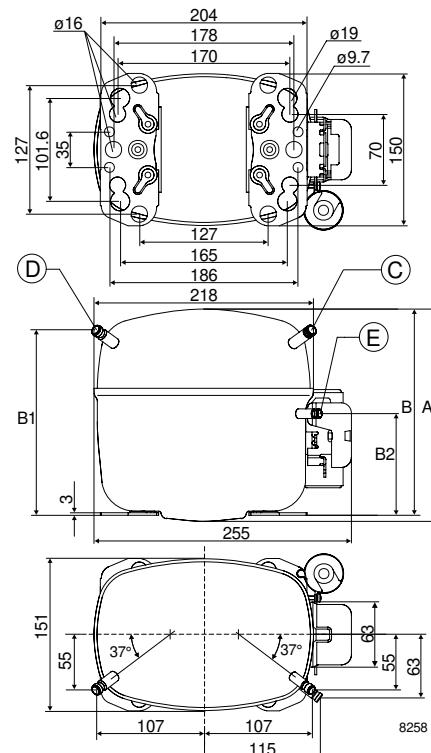
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	12.87
Oil quantity cm ³	600
Maximum refrigerant charge g	1300
Free gas vol. in compressor cm ³	1460
Weight without electrical equipment kg	13.6

Motor

Motor size watt	495
LRA (rated after 4 sec. UL984) HST A	18.6
Cut-in current HST A	18.6
Resistance, main and start winding (25°C) Ω	3.7/14.1
Approvals	EN 60335-2-34



Dimensions

Height mm	A	219
	B	213
	B1	193
	B2	110
Suction connector location/I.D. mm	C	10.2 ±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)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	632	831	1065	1340	1660	1817	2031	2456	

Capacity (ASHRAE)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	677	891	1143	1438	1783	1951	2182	2642	

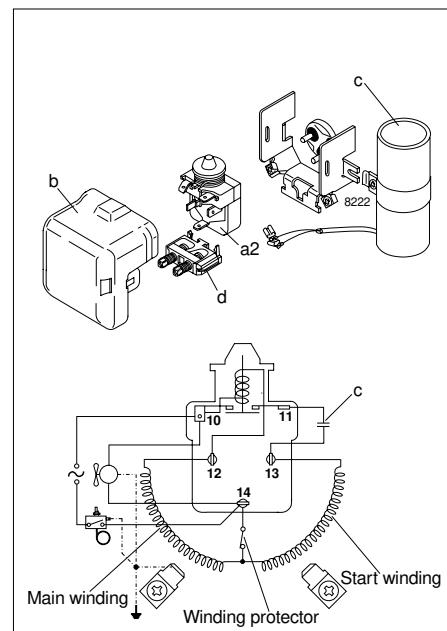
Power consumption									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	456	512	562	606	643	658	675	700	

Current consumption									A
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	3.11	3.31	3.49	3.65	3.79	3.85	3.91	4.01	

COP (EN 12900/CECOMAF)									W/W
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	1.39	1.62	1.89	2.21	2.58	2.76	3.01	3.51	

COP (ASHRAE)									W/W
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC12DL	1.48	1.74	2.03	2.37	2.77	2.97	3.23	3.77	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature no subcooling 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	Fig.	SC12DL
Starting relay	a2	117U6019
Cover	b	103N2009
Starting capacitor 80 µF	c	117U5017
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

**SC15DL
MBP/HBP Compressor
R407C
220-240V 50Hz**

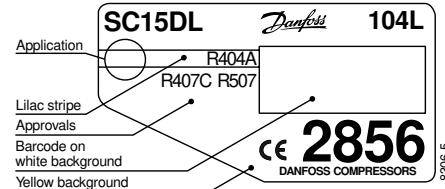
Data Sheet (Replaces CF.54.X1.02)

General

Compressor	SC15DL
Code number	104L2856

Application

Application		MBP/HBP
Evaporating temperature range	°C	-15 to 15
Voltage range	V/Hz	198 - 254 /50
Motor type		CSR
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂



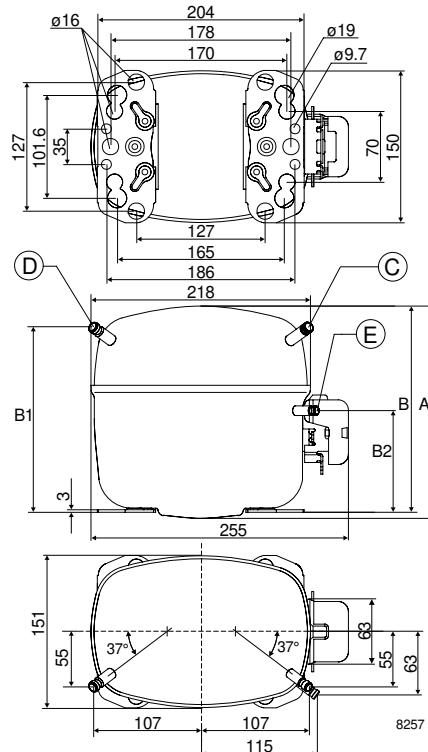
- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement	cm ³	15.28
Oil quantity	cm ³	600
Maximum refrigerant charge	g	1300
Free gas vol. in compressor	cm ³	1460
Weight without electrical equipment	kg	13.5

Motor

Motor size	watt	550
LRA (rated after 4 sec. UL984) HST	A	21.8
Cut-in current HST	A	21.8
Resistance, main and start winding (25°C)	Ω	3.5/12.2
Approvals		EN 60 335-2-34



Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm	C	10.2 ± 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)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	777	1011	1293	1629	2023	2217	2483	3014	

Capacity (ASHRAE)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	833	1084	1387	1748	2173	2381	2668	3241	

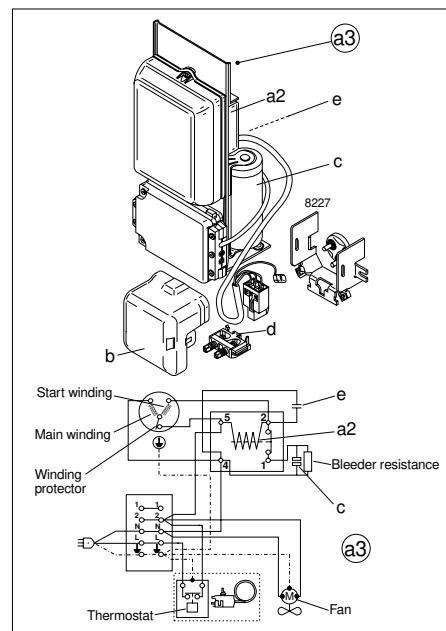
Power consumption									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	534	590	640	686	726	742	761	790	

Current consumption									A
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	2.84	3.08	3.30	3.50	3.67	3.74	3.82	3.94	

COP (EN 12900/CECOMAF)									W/W
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	1.45	1.71	2.02	2.37	2.79	2.99	3.26	3.82	

COP (ASHRAE)									W/W
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC15DL	1.56	1.84	2.17	2.55	2.99	3.21	3.51	4.10	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature no subcooling 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	Fig.	SC15DL
Starting device	a3	117-7028 (470 mm cable length) 117-7029 (550 mm cable length) 117-7032 (650 mm cable length)
Cover	b	103N2009
Starting relay	a2	Components of starting device
Starting capacitor 80 µF	c	
Run capacitor	e	
Cord relief	d	103N1004
Mounting accessories		118-1917 118-1918 118-1919
Bolt joint for one compressor		
Bolt joint in quantities		
Snap-on in quantities		

SC10/10DL

MBP/HBP Twin Compressor

R407C

220-240V 50Hz

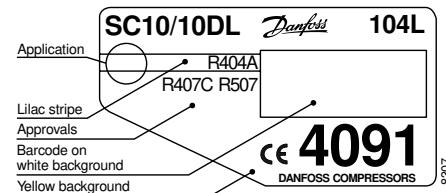
Data Sheet (Replaces CF.54.Y1.02)

General

Compressor	SC10/10DL
Code number	104L4091

Application

Application	MBP/HBP
Evaporating temperature range °C	-15 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 10.29
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2820
Weight without electrical equipment kg	26.8

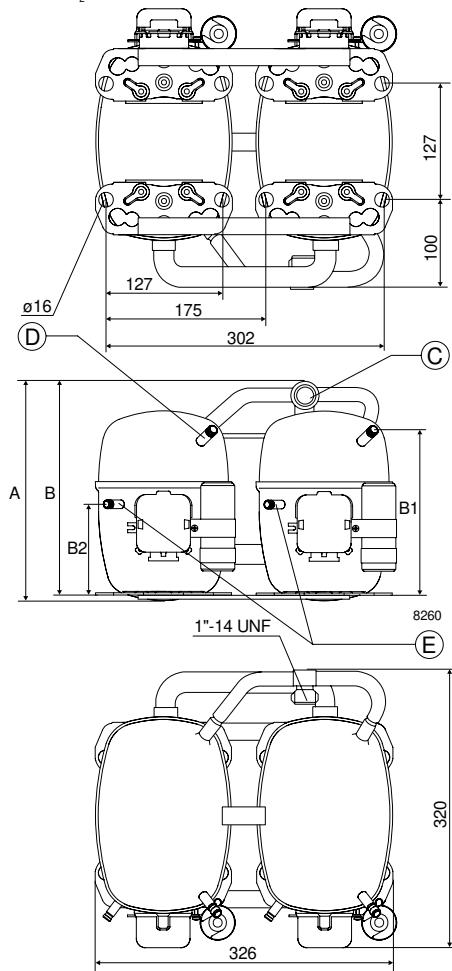
Motor

Motor size watt	2 x 385
LRA (rated after 4 sec. UL984) HST*	A 14.8
Cut-in current HST*	A 14.8
Resistance, main and start winding (25°C) Ω	5.0/13.7
Approvals	EN 60335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 249 B 244 B1 183 B2 100
Suction connector	
Service valve location/I.D. mm	C 12
Solder connector location/I.D. mm	C 12
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.	18



Capacity (EN 12900/CECOMAF)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	961	1272	1642	2077	2586	2835	3176	3855	

Capacity (ASHRAE)									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	1030	1364	1761	2229	2776	3045	3412	4146	

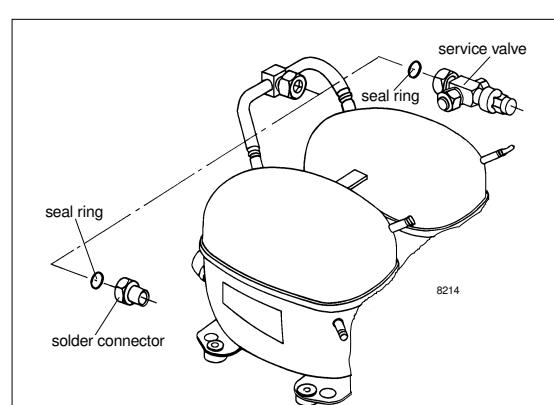
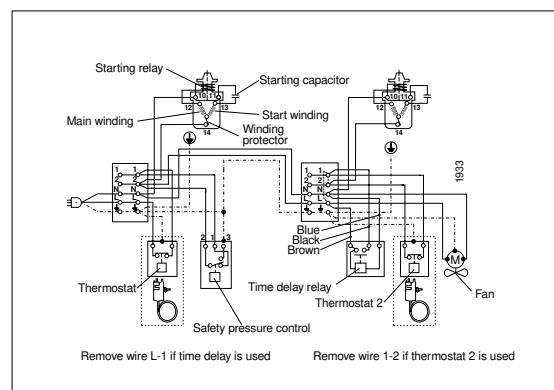
Power consumption									watt
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	693	788	874	951	1020	1047	1081	1135	

Current consumption								A	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	5.00	5.32	5.62	5.90	6.16	6.27	6.40	6.63	

COP (EN 12900/CECOMAF)								W/W	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	1.39	1.61	1.88	2.18	2.54	2.71	2.94	3.40	

COP (ASHRAE)								W/W	
Comp.\°C	-15	-10	-5	0	5	7.2	10	15	
SC10/10DL	1.49	1.73	2.01	2.34	2.72	2.91	3.16	3.65	

Test conditions
 Condensing temperature EN 12900/CECOMAF ASHRAE
 45°C 45°C
 Ambient and suction gas temp. 32°C 32°C
 Liquid temperature no subcooling 32°C
 Fan cooling F₂, 220V 50Hz



Accessories

Devices	pcs.	SC10/10DL
Starting relay	2	117U6005
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories Bolt joint for one compressor Bolt joint in quantities	2	118-1917 118-1918

SC12/12DL

MBP/HBP Twin Compressor

R407C

220-240V 50Hz

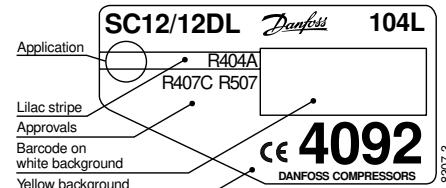
Data Sheet (Replaces CF.54.Z1.02)

General

Compressor	SC12/12DL
Code number	104L4092

Application

Application	MBP/HBP
Evaporating temperature range °C	-15 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSIR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 12.87
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	27.8

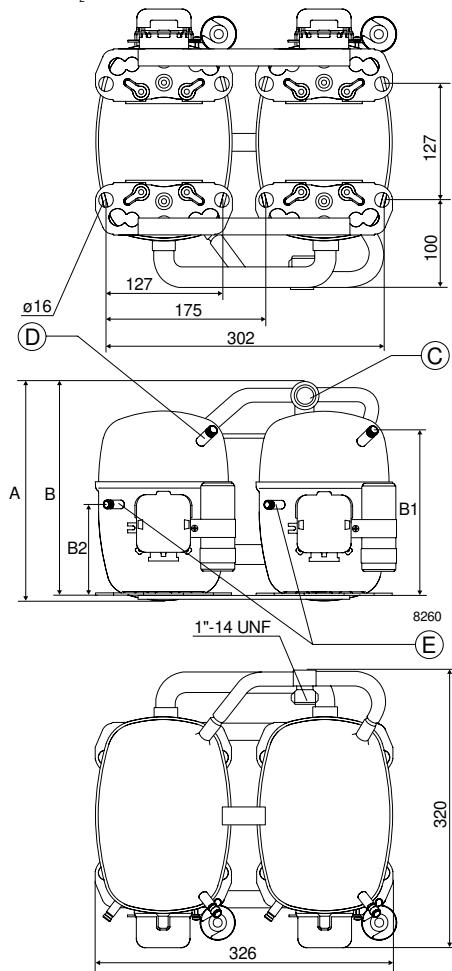
Motor

Motor size watt	2 x 495
LRA (rated after 4 sec. UL984) HST*	A 18.6
Cut-in current HST*	A 18.6
Resistance, main and start winding (25°C) Ω	3.7/14.1
Approvals	EN 60 335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 249 B 244 B1 183 B2 100
Suction connector	
Service valve location/I.D. mm	C 12
Solder connector location/I.D. mm	C 12
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. 18



Capacity (EN 12900/CECOMAF)

watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	1263	1662	2130	2680	3321	3634	4062	4913

Capacity (ASHRAE)

watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	1354	1781	2285	2876	3566	3903	4364	5284

Power consumption

watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	912	1025	1124	1212	1287	1316	1350	1400

Current consumption

A

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	6.23	6.62	6.98	7.30	7.58	7.69	7.82	8.03

COP (EN 12900/CECOMAF)

W/W

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	1.39	1.62	1.89	2.21	2.58	2.76	3.01	3.51

COP (ASHRAE)

W/W

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC12/12DL	1.48	1.74	2.03	2.37	2.77	2.97	3.23	3.77

Test conditions

EN 12900/CECOMAF

ASHRAE

Condensing temperature

45°C

45°C

Ambient and suction gas temp.

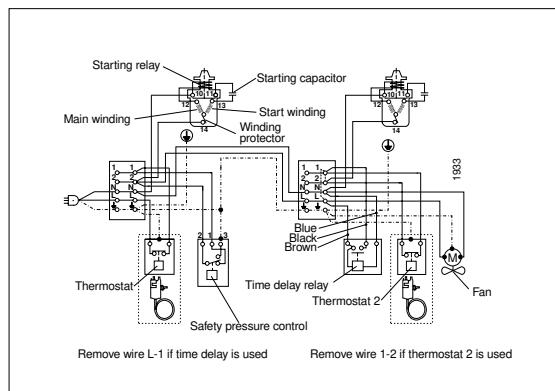
32°C

32°C

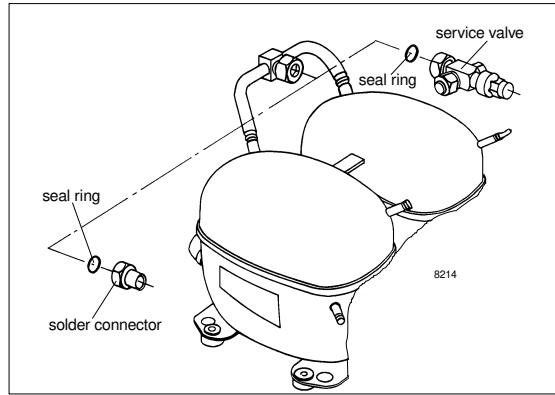
Liquid temperature

no subcooling

32°C

Fan cooling F₂, 220V 50Hz
Accessories

Devices	pcs.	SC12/12DL
Starting relay	2	117U6019
Starting capacitor 80 µF	2	117U5017
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve (to be used with time-delay relay)	2	020-1014
Service valve	1	118-7350 (12 mm)
Solder connector (alternative)	1	104B0584 (12 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories Bolt joint for one compressor Bolt joint in quantities	2	118-1917 118-1918



SC15/15DL

MBP/HBP Twin Compressor

R407C

220-240V 50Hz

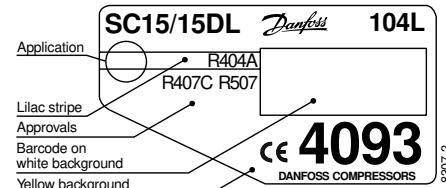
Data Sheet (Replaces CJ.54.A1.02)

General

Compressor	SC15/15DL
Code number	104L4093

Application

Application	MBP/HBP
Evaporating temperature range °C	-15 to 15
Voltage range V/Hz	198 - 254 /50
Motor type	CSR
Max. ambient temperature °C	38
Comp. cooling at ambient temp.	32°C F ₂ 38°C F ₂



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary

Design

Displacement cm ³	2 x 15.28
Oil quantity cm ³	1220
Maximum refrigerant charge g	2200
Free gas vol. in compressor cm ³	2920
Weight without electrical equipment kg	28.0

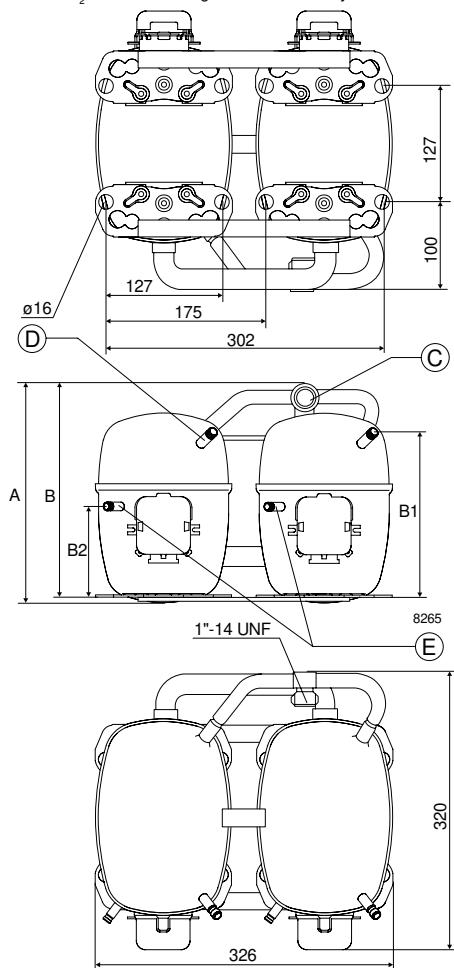
Motor

Motor size watt	2 x 550
LRA (rated after 4 sec. UL984) HST*	A 21.8
Cut-in current HST*	A 21.8
Resistance, main and start winding (25°C) Ω	3.5/12.1
Approvals	EN 60 335-2-34

* Operational current for the second compressor time-delayed.

Dimensions

Height mm	A 259 B 254 B1 193 B2 110
Suction connector	
Service valve location/I.D. mm	C 16
Solder connector location/I.D. mm	C 16
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. 18



Capacity (EN 12900/CECOMAF)

watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1554	2022	2586	3257	4047	4434	4966	6027

Capacity (ASHRAE)

watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1665	2168	2774	3495	4345	4763	5336	6482

Power consumption

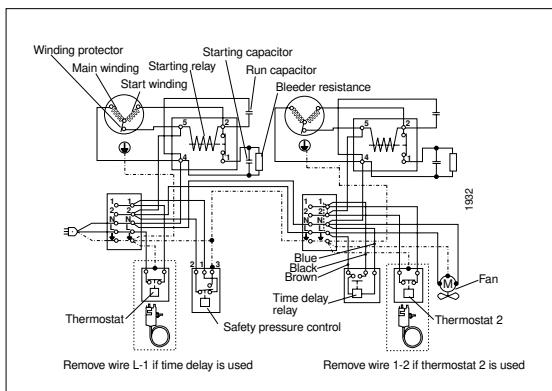
watt

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1069	1180	1281	1372	1452	1484	1521	1579

Current consumption

A

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	5.68	6.17	6.60	6.99	7.34	7.47	7.63	7.88


COP (EN 12900/CECOMAF)

W/W

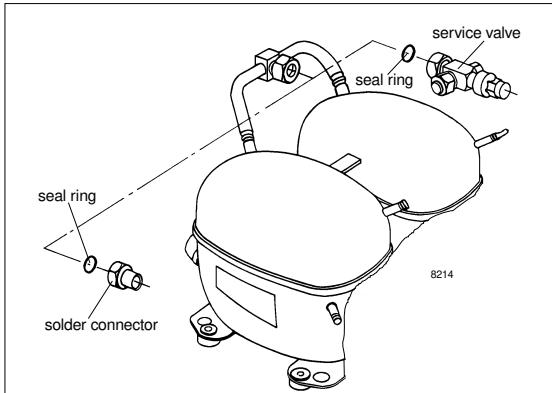
Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1.45	1.71	2.02	2.37	2.79	2.99	3.26	3.82

COP (ASHRAE)

W/W

Comp.\°C	-15	-10	-5	0	5	7.2	10	15
SC15/15DL	1.56	1.84	2.17	2.55	2.99	3.21	3.51	4.10

Test conditions
Condensing temperature EN 12900/CECOMAF ASHRAE
45°C 45°C
Ambient and suction gas temp. 32°C 32°C
Liquid temperature no subcooling 32°C
Fan cooling F₂, 220V 50Hz


Accessories

Devices	pcs.	SC15/15DL
Starting device	2	117-7028 (470 mm cable length) 117-7029 (550 mm cable length) 117-7032 (650 mm cable length)
Cover	2	103N2009
Cord relief	2	103N1004
Time-delay relay	1	117N0001
Check valve	2	020-1014
(to be used with time-delay relay)		
Service valve	1	118-7351 (16 mm)
Solder connector (alternative)	1	118-7405 (16 mm)
Seal ring for service valve and solder connector	1	118-3638
Mounting accessories		
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities		118-1918

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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