ENGINEERING TOMORROW



**Datasheets** 

# Danfoss scroll compressors **H series**





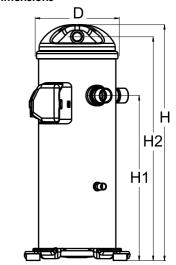
#### Datasheet, technical data

# Danfoss scroll compressor, HCM109T4

# **General Characteristics**

Model number (on compressor nameplate)		HCM109T4LC6
Code number for Singlepack*		120U0366
Code number for Industrial pack**		120U0363
Drawing number		0SR4103B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume	148,79	cm3/rev
Displacement @ Nominal speed	25.9 m3/h @ 2900 rpm - 31.3 m3/h @ 3500 rpm	
Net weight	45,2 kg	
Oil charge	2,66 litre, Alkylbenzene	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour		<u> </u>
Refrigerant charge limit	7,26 kg	
Approved refrigerants	R22	

#### **Dimensions**



#### **Electrical Characteristics**

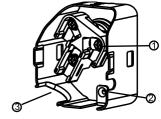
Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.326 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.276 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.293 Ω
Rated Load Amps (RLA)	16 A
Maximum Continuous Current (MCC)	24 A
Locked Rotor Amps (LRA)	110 A
Motor protection	Internal overload protector

D=184 mm H=545 mm H1=369 mm H2=519 mm H3=- mm

**Recommended Installation torques** 

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

**Terminal box** 



#### Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage



#### Datasheet, accessories and spare parts

# Danfoss scroll compressor, HCM109T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

# Rotolock accessories, discharge sideCode no.Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)8168030Gasket, 1-3/4"8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants	Code no.
Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories	Code no.
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

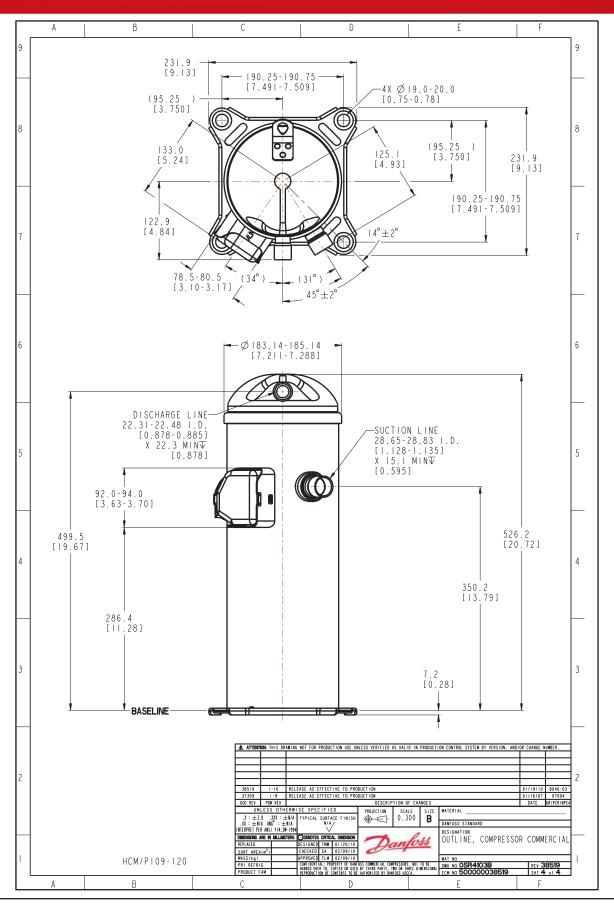
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)





Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

FRCC.PD.0SR4103B-4 page drawings



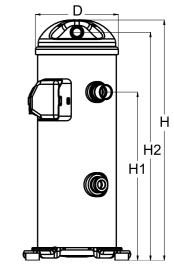
#### Datasheet, technical data

# Danfoss scroll compressor, HCM109T4

# **General Characteristics**

Model number (on compressor nameplate)		HCM109T4LC7
Code number for Singlepack*		120U0371
Code number for Industrial pack**		120U0368
Drawing number		0SR6169B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume	148,79	cm3/rev
Displacement @ Nominal speed	25.9 m3/h @ 2900 rpm - 31.3 m3/h @ 3500 rpm	
Net weight	45,2 kg	
Oil charge	2,66 litre, Alkylbenzene	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour		•
Refrigerant charge limit	7,26 kg	
Approved refrigerants	R	22

#### **Dimensions**



#### **Electrical Characteristics**

Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.326 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.276 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.293 Ω
Rated Load Amps (RLA)	16 A
Maximum Continuous Current (MCC)	24 A
Locked Rotor Amps (LRA)	110 A
Motor protection	Internal overload protector

D=184 mm H=545 mm

H1=369 mm H2=519 mm H3=- mm

#### **Recommended Installation torques**

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Terminal box



#### Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

 $\hbox{*Singlepack: Compressor in cardboard box}\\$ 

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage



#### Datasheet, accessories and spare parts

# Danfoss scroll compressor, HCM109T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

# Rotolock accessories, discharge sideCode no.Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)8168030Gasket, 1-3/4"8156132

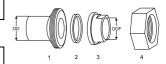
Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants	Code no.
Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories	Code no.
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

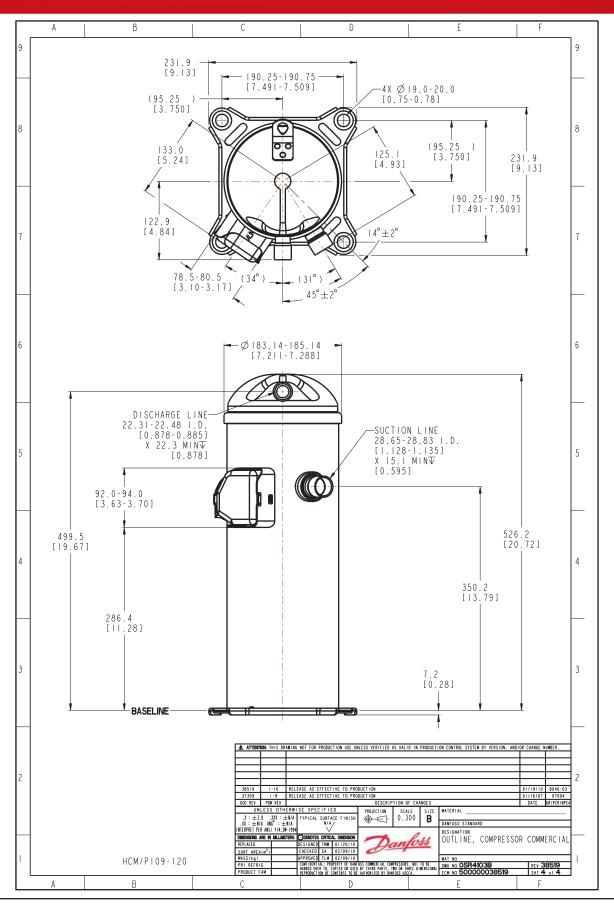
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)





Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

FRCC.PD.0SR4103B-4 page drawings



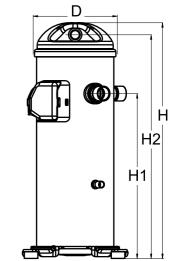
#### Datasheet, technical data

# Danfoss scroll compressor, HCM109T4

# **General Characteristics**

Model number (on compressor nameplate)		HCM109T4LC8
Code number for Singlepack*		120U1924
Code number for Industrial pack**		120U1921
Drawing number		0SR4103B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume	148,79	cm3/rev
Displacement @ Nominal speed	25.9 m3/h @ 2900 rpm	- 31.3 m3/h @ 3500 rpm
Net weight	45,2	2 kg
Oil charge	2,66 litre, Alk	ylbenzene
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)
Maximum differential test pressure	- b	oar
Maximum number of starts per hour		•
Refrigerant charge limit	7,26	5 kg
Approved refrigerants	R	22

#### **Dimensions**



#### **Electrical Characteristics**

Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.326 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.276 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.293 Ω
Rated Load Amps (RLA)	16 A
Maximum Continuous Current (MCC)	24 A
Locked Rotor Amps (LRA)	110 A
Motor protection	Internal overload protector

D=184 mm H=545 mm H1=369 mm H2=519 mm H3=- mm

**Recommended Installation torques** 

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Terminal box



#### Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage



#### Datasheet, accessories and spare parts

# Danfoss scroll compressor, HCM109T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

# Rotolock accessories, discharge sideCode no.Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)8168030Gasket, 1-3/4"8156132

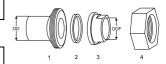
Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants	Code no.	
Crankcase heaters	Code no.	
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059	
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060	
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040	
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040	

Miscellaneous accessories	Code no.
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

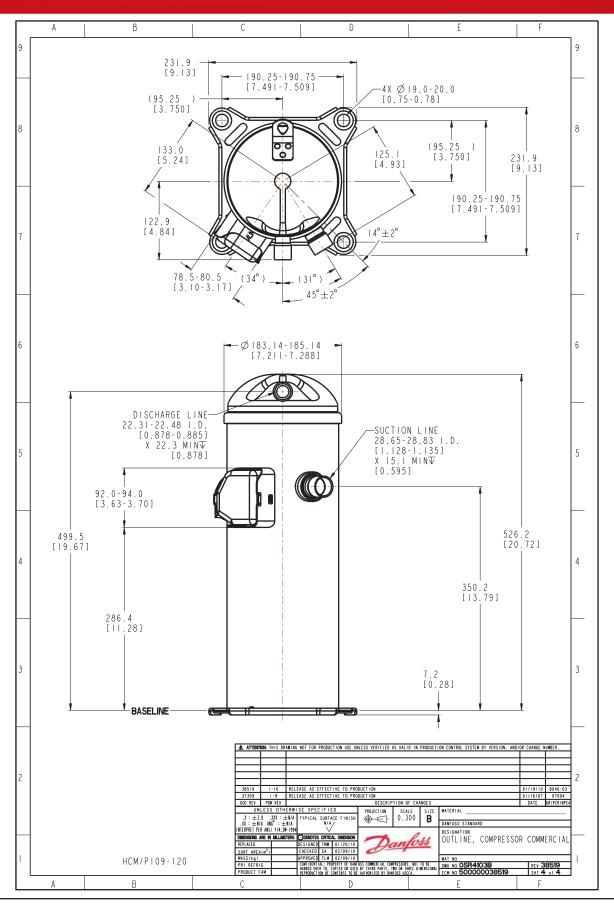
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sle	eeves, 4 bolts, 4 washers 120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)





Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

FRCC.PD.0SR4103B-4 page drawings