ENGINEERING



Datasheets

# Danfoss scroll compressors **H series**





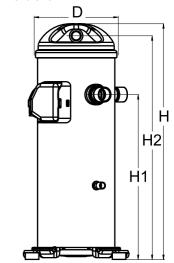
#### Datasheet, technical data

# Danfoss scroll compressor, HCM120T4

# **General Characteristics**

Model number (on compressor nameplate)		HCM120T4LC6	
Code number for Singlepack*		120U0391	
Code number for Industrial pack**		120U0388	
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	162,4 cm3/rev		
Displacement @ Nominal speed	28.3 m3/h @ 2900 rpm - 34.1 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	7,20	7,26 kg	
Approved refrigerants	R:	R22	

#### **Dimensions**



#### **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℃	1.125 Ω	
Winding resistance between phases 1-3 +/- 7% at 25℃	1.110 Ω	
Winding resistance between phases 2-3 +/- 7% at 25℃	1.100 Ω	
Rated Load Amps (RLA)	19.2 A	
Maximum Continuous Current (MCC)	25 A	
Locked Rotor Amps (LRA)	140 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, HCM120T4

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

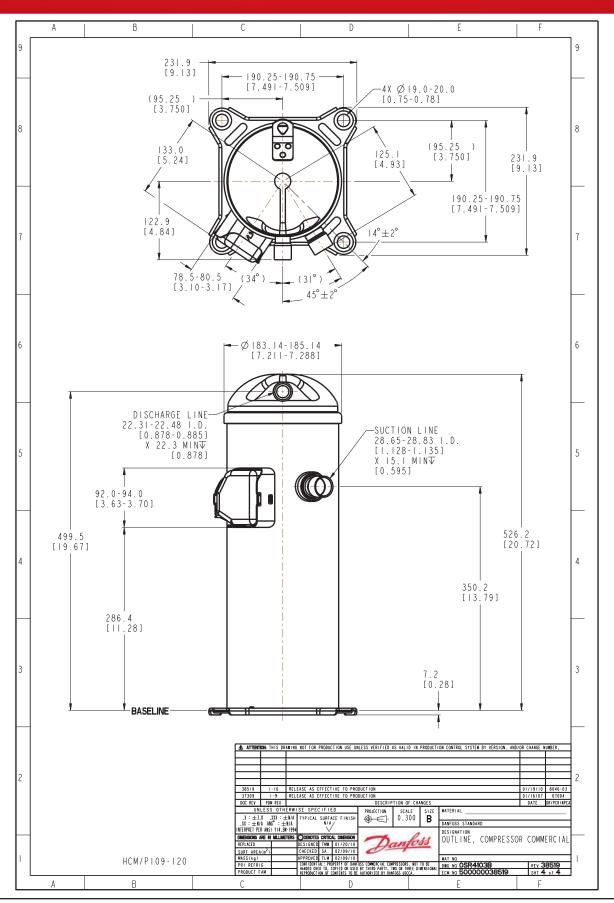
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sle	eeves, 4 bolts, 4 washers 120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



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





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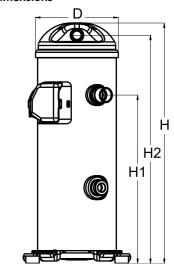
#### Datasheet, technical data

# Danfoss scroll compressor, HCM120T4

# **General Characteristics**

Model number (on compressor nameplate)		HCM120T4LC7
Code number for Singlepack*		120U0396
Code number for Industrial pack**		120U0393
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	162,4 c	m3/rev
Displacement @ Nominal speed	28.3 m3/h @ 2900 rpm - 34.1 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	1.125 Ω	
Winding resistance between phases 1-3 +/- 7% at 25°C	1.110 Ω	
Winding resistance between phases 2-3 +/- 7% at 25°C	1.100 Ω	
Rated Load Amps (RLA)	19.2 A	
Maximum Continuous Current (MCC)	25 A	
Locked Rotor Amps (LRA)	140 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, HCM120T4

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

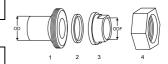
Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

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

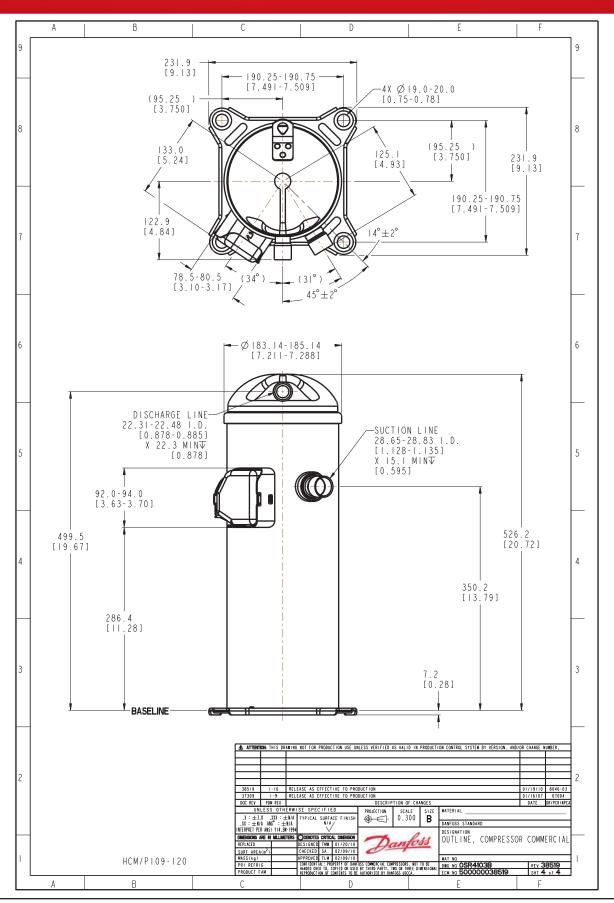
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



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





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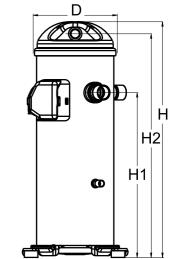
#### Datasheet, technical data

# Danfoss scroll compressor, HCM120T4

# **General Characteristics**

Model number (on compressor nameplate)	HCM120T4LC8	
Code number for Singlepack*	120U2207	
Code number for Industrial pack**	120U2204	
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	162,4 cm3/rev	
Displacement @ Nominal speed	28.3 m3/h @ 2900 rpm - 34.1 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	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
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Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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** 



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- 3: Power cable passage



#### Datasheet, accessories and spare parts

# Danfoss scroll compressor, HCM120T4

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Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
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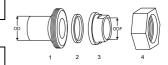
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Miscellaneous accessories	Code no.
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Discharge thermostat kit	7750009

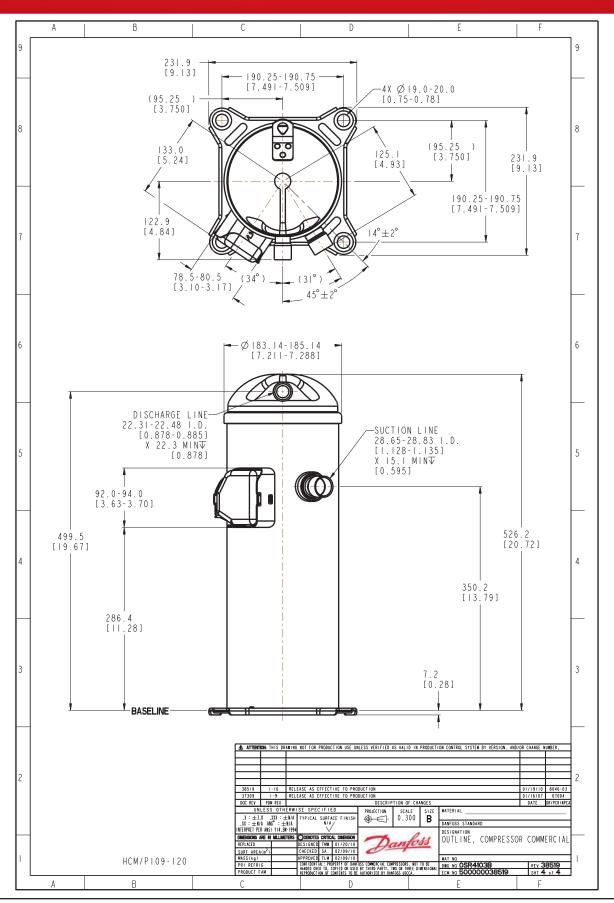
Spare parts	Code no.
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Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031

#### Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
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- 4: Rotolock nut (Suc & Dis)





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