

**SM148-4VAI****Scroll compressor, SM148T4VC**

Refrigerant: R22, Segment usage: Air conditioning, Compressor power supply
[V/Ph/Hz]: 400/3/50 460/3/60

PRODUCT DETAILS

Gross weight	97 kg
Net weight	88 kg
EAN	5702428583039
Approval standard	CE UL
Brand technique	Scroll compressor
Capacity control	Fixed speed
Colour	Blue
Compressor power supply [V/Ph/Hz]	400/3/50 460/3/60
Configuration code	Single
Connection type	Brazed
Description	SM148-4
Diameter [mm]	266 mm
Discharge connection height [mm]	556 mm
Discharge connection pipe size [in]	7/8 in
Discharge connection size [in]	7/8 in
Drawing number	8551106b
Economizer	No
Factory HP [bar]	33 bar
Factory LP [bar]	25 bar
Fitting standard	ODF
Frequency [Hz]	50/60
Gauge port HP	None
Gauge port LP	Schrader
Generation code	C
Glass mounting	Threaded
Glass torque [Nm]	50 Nm
GP LP torque [Nm]	15 Nm
High side max pressure (Ps)	30.2 bar
High Side TS Max	150 °C
High Side TS Min	-35 °C
High Side Volume	1.6 L
High value of nominal voltage at 50Hz [V]	400 V
High value of nominal voltage at 60Hz [V]	460 V
High value of voltage range at 50Hz [V]	440 V

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Product Detail | Scroll compressor, SM148T4VC

PRODUCT DETAILS

High value of voltage range at 60Hz [V]	506 V
IP protection class	IP54 (with cable gland)
Low side max pressure (Ps)	25 bar
Low Side TS Max	63 °C
Low Side TS Min	-35 °C
Low Side Volume	14.7 L
Low value of nominal voltage at 50Hz [V]	380 V
Low value of nominal voltage at 60Hz [V]	460 V
Low value of voltage range at 50Hz [V]	342 V
Low value of voltage range at 60Hz [V]	414 V
LRA	145 A
Maximum Operating Current [MOC]	29 A
MCC	32 A
Model number	SM148T4VC
Motor protection	Internal overload protector
Mounting torque [Nm]	21 Nm
Nominal cooling capacity 60 kBTU/h	149.49 kBTU/h
Nominal cooling capacity at 50Hz	32.6 kW
Nominal cooling capacity at 60Hz	43.8 kW
Number of starts per hour [Max]	12
Oil charge [L]	3.6 L
Oil equalization	3/8" flare SAE
Oil equalization torque [Nm]	48 Nm
Oil reference	160P
Oil type	Mineral
Packaging height [mm]	671 mm
Packaging length [mm]	470 mm
Packaging weight [Kg]	671 kg
Packaging width [mm]	370 mm
Packing format	Single pack
Packing quantity	1
Phase	3
Power connections	Screw 4.8 mm
Refrigerant	R22
Refrigerant charge [kg] [Max]	12.5 kg
Relief valve	None
RLA	22.9 A
Rotational speed at 50Hz [rpm]	2900 rpm
Rotational speed at 60Hz [rpm]	3500 rpm
Segment usage	Air conditioning
Shipped instructions	Installation instructions
Shipped mounting	Mounting kit with grommets, bolts, nuts, sleeves and washers
Shipped oil	Initial oil charge
Suction connection height [mm]	180 mm
Suction connection pipe size [in]	1 3/8 in

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Product Detail | Scroll compressor, SM148T4VC
PRODUCT DETAILS

Suction connection size [in]	1 3/8 in
Swept volume [cm³]	199 cm ³
Technology	Scroll
Test dif [bar] [Max]	24 bar
Test HP [bar] [Max]	32 bar
Test LP [bar] [Max]	25 bar
Torque earth [Nm]	2 Nm
Torque power [Nm]	3 Nm
Total height [mm]	591 mm
Type	SM
Type designation	Compressor
Viscosity [cP]	32 cP
Winding resistance for three-phase compressors with identical windings [Ohm]	0.94 Ohm

For Documents, Software, Visuals and more information, please use this link to visit the product page on Danfoss Product Store [🔗](#)

Accessories

8156135 [🔗](#)
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp

Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp


7750009 [🔗](#)
Discharge thermostat kit

Discharge thermostat kit


8156013 [🔗](#)
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black and white

Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black and white


7755017 [🔗](#)
Acoustic hood for scroll compressor S148-S161 (except code 3)

Acoustic hood for scroll compressor S148-S161 (except code 3)


8156132 [🔗](#)
Gasket, 1-3/4"

Gasket, 1-3/4"


8173230 [🔗](#)
T block connector 52 x 57 mm

T block connector 52 x 57 mm

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Accessories



8156138 [🔗](#)

Mounting kit

Mounting kit for one-scroll compressor, including 4 grommets, 4 sleeves, 4 bolts, 4 washers



7765006 [🔗](#)

Adaptor

Solder sleeve adaptor set (1-3/4" rotolock, 1-3/8" ODF), (1-1/4" rotolock, 7/8" ODF)



8153003 [🔗](#)

Adaptor

Solder sleeve, P10 (1-3/4" rotolock, 1-3/8" ODF)

Spare Parts



120Z0039 [🔗](#)

Belt type crankcase heater, 65 W, 400 V, CE mark, UL

Belt type crankcase heater, 65 W, 400 V, CE mark, UL



7754001 [🔗](#)

Mineral oil, 160P, 2-litre can

Mineral oil, 160P, 2-litre can



120Z0381 [🔗](#)

Surface sump heater + bottom insulation, 48 W, 400 V, CE mark, UL

Surface sump heater + bottom insulation, 48 W, 400 V, CE mark, UL



120Z0382 [🔗](#)

Surface sump heater + bottom insulation, 48 W, 460 V, CE mark, UL

Surface sump heater + bottom insulation, 48 W, 460 V, CE mark, UL



7773117 [🔗](#)

Belt type crankcase heater, 65 W, 400 V, CE mark, UL

Belt type crankcase heater, 65 W, 400 V, CE mark, UL



8156129 [🔗](#)

Gasket for oil sight glass (white teflon)

Gasket for oil sight glass (white teflon)

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Spare Parts

**8156019** [🔗](#)**Oil sight glass with gaskets (black and white)**

Oil sight glass with gaskets (black and white)

**7705007** [🔗](#)**MCI**

Electronic soft start kit, MCI 25 C

**120Z0380** [🔗](#)**Surface sump heater + bottom insulation, 48 W, 230 V, CE mark, UL**

Surface sump heater + bottom insulation, 48 W, 230 V, CE mark, UL

**8168022** [🔗](#)**Rotolock valve, V10 (1-3/4" rotolock, 1-3/8" ODF), Service kit**

VALVE SETS V10 1 3/4"-1 3/8"

**7773107** [🔗](#)**Belt type crankcase heater, 65 W, 230 V, CE mark, UL**

Belt type crankcase heater, 65 W, 230 V, CE mark, UL

**120Z0466** [🔗](#)**Belt type crankcase heater, 65 W, 460 V, CE mark, UL**

Belt type crankcase heater, 65 W, 460 V, CE mark, UL

**7703392** [🔗](#)**Valve set**

Packing format: Multi pack, Packing quantity: 6

**120Z0361** [🔗](#)**Surface sump heater + bottom insulation, 48 W, 24 V, CE mark, UL**

Surface sump heater + bottom insulation, 48 W, 24 V, CE mark, UL

**8168030** [🔗](#)**Rotolock valve, V05 (1-1/4" rotolock, 7/8" ODF), Service kit**

VALVE SETS V05 1 1/4"-7/8"

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