

**SM090-4VI****Scroll compressor, SM090S4VC**

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

PRODUCT DETAILS

Gross weight	70.53 kg
Net weight	65 kg
EAN	5702428839488
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	SM090-4
Diameter [mm]	254 mm
Discharge connection height [mm]	465 mm
Discharge connection pipe size [in]	3/4 in
Discharge connection size [in]	3/4 in
Drawing number	8552036b
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	1.1 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

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Product Detail | Scroll compressor, SM090S4VC

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	13 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	98 A
Maximum Operating Current [MOC]	17 A
MCC	18.5 A
Model number	SM090S4VC
Motor protection	Internal overload protector
Mounting torque [Nm]	21 Nm
Nominal cooling capacity 60 kBTU/h	90.1 kBTU/h
Nominal cooling capacity at 50Hz	19.7 kW
Nominal cooling capacity at 60Hz	26.4 kW
Number of starts per hour [Max]	12
Oil charge [L]	3.25 L
Oil equalization	3/8" flare SAE
Oil equalization torque [Nm]	48 Nm
Oil reference	160P
Oil type	Mineral
Packaging height [mm]	596 mm
Packaging length [mm]	470 mm
Packaging weight [Kg]	69 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]	8.5 kg
Relief valve	None
RLA	13.2 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]	142 mm
Suction connection pipe size [in]	1 1/8 in

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Product Detail | Scroll compressor, SM090S4VC
PRODUCT DETAILS

Suction connection size [in]	1 1/8 in
Swept volume [cm³]	120.5 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]	508 mm
Type	SM
Type designation	Compressor
Viscosity [cP]	32 cP
Winding resistance for three-phase compressors with identical windings [Ohm]	1.48 Ohm

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

Accessories

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


8156138 [🔗](#)
Mounting kit

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


8156132 [🔗](#)
Gasket, 1-3/4"

Gasket, 1-3/4"


7755011 [🔗](#)
Acoustic hood for scroll compressor S084-S090-S100

Acoustic hood for scroll compressor S084-S090-S100


7765005 [🔗](#)
Adaptor

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


8153004 [🔗](#)
Adaptor

Solder sleeve, P02 (1-3/4" rotolock, 1-1/8" ODF)

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

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories



8156131 [↗](#)
Gasket, 1-1/4"
Gasket, 1-1/4"



8153008 [↗](#)
Adaptor
Solder sleeve, P04 (1-1/4" rotolock, 3/4" ODF)



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



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

Spare Parts



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



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



7705006 [↗](#)
MCI
Electronic soft start kit, MCI 15 C



7754001 [↗](#)
Mineral oil, 160P, 2-litre can
Mineral oil, 160P, 2-litre can

For more information, please use this link to visit the product page on Danfoss Product Store [↗](#)

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Spare Parts



7773117 [🔗](#)

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

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



8168028 [🔗](#)

Rotolock valve, V02 (1-3/4" rotolock, 1-1/8" ODF), Service kit

VALVE SETS V02 1 3/4"-1 1/8"



120Z0039 [🔗](#)

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

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



8156019 [🔗](#)

Oil sight glass with gaskets (black and white)

Oil sight glass with gaskets (black and white)



7773107 [🔗](#)

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

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



8156129 [🔗](#)

Gasket for oil sight glass (white teflon)

Gasket for oil sight glass (white teflon)



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



7703009 [🔗](#)

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



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

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

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Spare Parts



8168029 [🔗](#)

Rotolock valve, V04 (1-1/4" rotolock, 3/4" ODF), Service kit

VALVE SETS V04 1 1/4"-3/4"

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

Danfoss can accept no responsibility for possible errors in catalogs, 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 alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.