



Scroll compressor, SM100S4VC

**SM100-4VI** **Where to buy** 

## Product specifications

| Characteristic                      | Value                                  |
|-------------------------------------|----------------------------------------|
| Approval                            | CE, UL, UKCA                           |
| Brand technique                     | Scroll compressor                      |
| CE evaluated                        | Yes                                    |
| Capacity control                    | Fixed speed                            |
| China RoHS compliance               | Yes with exemptions                    |
| Colour                              | Blue                                   |
| Compressor power supply [V]         | 380-415/3/50 460/3/60                  |
| Configuration code                  | Single                                 |
| Connection type                     | Brazed                                 |
| Contains batteries                  | No                                     |
| CoolselectorFilter                  | Active models                          |
| DG Indicator Profile                | Not relevant for dangerous goods       |
| Description                         | SM100-4                                |
| 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                               |
| EU RoHS compliance                  | Yes with exemptions                    |
| EU RoHS exemption clause            | 7(c)-I, 6(a), 6(a)-I, 6(c), 7(a), 8(b) |
| Economizer                          | No                                     |

| Characteristic                            | Value                   |
|-------------------------------------------|-------------------------|
| Factory HP [bar]                          | 33 bar                  |
| Factory LP [bar]                          | 25 bar                  |
| Family                                    | SM                      |
| Fitting standard                          | ODF                     |
| Frequency [Hz]                            | 50/60                   |
| GP LP torque [Nm]                         | 15 N-m                  |
| Gauge port HP                             | None                    |
| Gauge port LP                             | Schrader                |
| Glass mounting                            | Threaded                |
| Glass torque [Nm]                         | 50 N-m                  |
| High Side TS Max                          | 150.0 °C                |
| High Side TS Min                          | -35.0 °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                   |
| High value of voltage range at 60Hz [V]   | 506 V                   |
| IDV                                       | No                      |
| IP protection class                       | IP54 (with cable gland) |
| In scope of WEEE                          | No                      |
| LRA                                       | 98 A                    |
| Low Side TS Max                           | 63.0 °C                 |
| Low Side TS Min                           | -35.0 °C                |
| Low Side Volume                           | 13.0 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                   |
| MCC                                       | 19 A                    |

| Characteristic                  | Value                       |
|---------------------------------|-----------------------------|
| Material Description            | SM100-4VC-SINGLE            |
| Max pressure (PS) - high side   | 30.20 bar                   |
| Max pressure (PS) - low side    | 25.00 bar                   |
| Maximum Operating Current [MOC] | 18 A                        |
| Model number                    | SM100S4VC                   |
| Motor protection                | Internal overload protector |
| Mounting torque [Nm]            | 21.00 N-m                   |
| Network power supply [V/Ph/Hz]  | 380-415/3/50 460/3/60       |
| Number of starts per hour [Max] | 12                          |
| Oil charge [L]                  | 3.25 L                      |
| Oil equalization                | 3/8" flare SAE              |
| Oil equalization torque [Nm]    | 48 N-m                      |
| 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                |
| Product Type                    | SM100                       |
| Product group                   | Hermetic compressors        |
| Product line                    | Commercial Compressors      |
| Product name                    | Scroll compressor SM        |
| REACH Candidate List substances | Lead (CAS no. 7439-92-1)    |
| RLA                             | 13.6 A                      |
| Refrigerant charge [kg] [Max]   | 8.50 kg                     |

| Characteristic                                                               | Value                                                                                                                     |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Refrigerants                                                                 | R22                                                                                                                       |
| Rotational speed at 50Hz [rpm]                                               | 2900 rpm                                                                                                                  |
| Rotational speed at 60Hz [rpm]                                               | 3500 rpm                                                                                                                  |
| SCIP dossier no.                                                             | 2e9b0776-281a-4205-bf1f-dbeea526b31d                                                                                      |
| SCIP dossier product name                                                    | SM084/SM090/SM100/SM110/SM120/SM148/SM161/SZ084/SZ090/SZ100/SZ110/SZ120/SZ148/SZ161                                       |
| 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 material                                                  | -                                                                                                                         |
| Suction connection pipe size [in]                                            | 1-1/8 in                                                                                                                  |
| Suction connection size [in]                                                 | 1-1/8 in                                                                                                                  |
| Swept volume [cm <sup>3</sup> ]                                              | 127.20 cm <sup>3</sup>                                                                                                    |
| Technology                                                                   | Scroll                                                                                                                    |
| Test HP [bar] [Max]                                                          | 32.0 bar                                                                                                                  |
| Test LP [bar] [Max]                                                          | 25.0 bar                                                                                                                  |
| Test dif [bar] [Max]                                                         | 24 bar                                                                                                                    |
| Torque earth [Nm]                                                            | 2.00 N-m                                                                                                                  |
| Torque power [Nm]                                                            | 3.00 N-m                                                                                                                  |
| Total height [mm]                                                            | 508.0 mm                                                                                                                  |
| U.S. EPA label                                                               | For installations using U.S. EPA restricted refrigerants, this product may be used for servicing existing equipment only. |
| UL evaluated                                                                 | Yes                                                                                                                       |
| Viscosity [cP]                                                               | 32.0 cP                                                                                                                   |
| Winding resistance for three-phase compressors with identical windings [Ohm] | 1.48 Ohm                                                                                                                  |

## General specifications

| Characteristic | Value                        |
|----------------|------------------------------|
| Gross weight   | 70.84 Kilogram               |
| Net weight     | 65 Kilogram                  |
| Volume         | 0.23 Cubic meter             |
| EAN/UPC        | 5702428839464                |
| Proposition 65 | Cancer and Reproductive Harm |

For the most current information and other product assets, please use this link to visit the product page on Danfoss Design Center [☑](#)

