



PRODUCT-DETAILS

# PSRC3-600-70

## PSRC3-600-70 Softstarter - 3.9 A - 208 ... 600 V AC



| General Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Commercial Alias | PSRC3-600-70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Extended Product Type   | PSRC3-600-70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product ID              | 1SFA896203R7000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ABB Type Designation    | PSRC3-600-70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| EAN                     | 7320500465479                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Catalog Description     | PSRC3-600-70 Softstarter - 3.9 A - 208 ... 600 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Long Description        | <p>The softstarter PSRC3-600-70 has a rated maximum operational current of 3 A with an operating voltage span from 208...600 V AC. The rated control voltage is between 100...240 V AC at 50/60 Hz. PSRC features a two-phase control soft start through a voltage ramp. It has built-in bypass for easy installation and energy saving. A RUN signal is available from a relay output in NO (normally open state). The PSRC softstarter range is a true plug-and-play with a fixed setting optimized for scroll compressors. PSRC is often combined with a manual motor starter (MMS) from ABB, so mechanical connection kits are available. Another popular option is Fieldbus communication, which can be enabled by an external adaptor and a Fieldbus plug. The PSRC is fast and easy to install with fixed settings. Designed for scroll compressors results in less stress on the compressor reducing the maintenance cost to a minimum. The PSRC range are suitable for small three-phase motors with nominal currents from 3...105 A and can manage up to 100 starts per hour. Common applications are compressors.</p> |

## Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85371091 |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SFC132012C0201 |
| Instructions and Manuals          | 1SFC132041M0001 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Wiring Diagram                    | N/A             |

## Dimensions

|                            |        |
|----------------------------|--------|
| Product Net Width          | 114 mm |
| Product Net Height         | 140 mm |
| Product Net Depth / Length | 45 mm  |
| Product Net Weight         | 0.4 kg |

## Technical

|                                                                  |                                                     |
|------------------------------------------------------------------|-----------------------------------------------------|
| Rated Operational Voltage                                        | 208 ... 600 V AC                                    |
| Rated Control Supply Voltage (U <sub>s</sub> )                   | 100 ... 240 V AC                                    |
| Rated Control Circuit Voltage (U <sub>c</sub> )                  | 24 V DC                                             |
| Rated Frequency (f)                                              | 50/60 Hz<br>Main Circuit 50 / 60 Hz                 |
| Rated Operational Power - In-Line Connection (P <sub>e</sub> )   | (230 V) 0.75 kW<br>(400 V) 1.5 kW<br>(500 V) 2.2 kW |
| Rated Operational Current - In-Line Connection (I <sub>e</sub> ) | 3.9 A                                               |
| Service Factor Percentage                                        | 100 %                                               |
| Overload Protection                                              | Recommended MS116 0.63 ... 4.00                     |
| Integrated Electronic Overload                                   | No                                                  |
| Starting Capacity at Maximum Rated Current I <sub>e</sub>        | 4xI <sub>e</sub> for 6s                             |
| Ramp Time                                                        | Fixed setting<br>Fixed setting                      |
| Initial Voltage During Start                                     | Fixed setting                                       |
| Step Down Voltage Special Ramp                                   | Fixed setting                                       |
| Current Limit Function                                           | No                                                  |
| Switch for Inside Delta Connection                               | No                                                  |
| Run Signal Relay                                                 | Yes                                                 |
| By-pass Signal Relay                                             | No                                                  |

|                                                                                  |                                                                     |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Fault Signal Relay                                                               | No                                                                  |
| Overload Signal Relay                                                            | No                                                                  |
| Signal Indication<br>Completed Start Ramp<br>(LED)                               | Green                                                               |
| Signal Indication Ready<br>to Start/Standby ON<br>(LED)                          | Green                                                               |
| Signal Indication<br>Running R (LED)                                             | Green                                                               |
| Signal Indication<br>Ramping Up/Down<br>(LED)                                    | Green                                                               |
| Number of Starts Per<br>Hour at 3.5*Ie for 7 sec.<br>50% ON Time 50% OFF<br>Time | 10                                                                  |
| Communication                                                                    | FiledBusPlug(Optional)                                              |
| Degree of Protection                                                             | IP20                                                                |
| Terminal Type                                                                    | Screw Terminals                                                     |
| Connecting Capacity<br>Main Circuit                                              | Rigid 2 x 0.75 ... 1.5 mm <sup>2</sup>                              |
| Connecting Capacity<br>Supply Circuit                                            | Rigid 2 x 0.75 ... 1.5 mm <sup>2</sup>                              |
| Tightening Torque                                                                | Control Circuit 1 N·m<br>Main Circuit 1 N·m<br>Supply Circuit 1 N·m |
| Product Main Type                                                                | PSRC3                                                               |
| Function                                                                         | Soft start with voltage ramp<br>Soft stop with voltage ramp         |

## Technical UL/CSA

|                                     |                                                                           |
|-------------------------------------|---------------------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA | Main Circuit 600 V                                                        |
| Tightening Torque<br>UL/CSA         | Control Circuit 8.9 in·lb<br>Main Circuit 8.9<br>Supply Circuit 8.9 in·lb |

## Environmental

|                            |                                                    |
|----------------------------|----------------------------------------------------|
| Ambient Air<br>Temperature | Operation -25 ... +60 °C<br>Storage -40 ... +70 °C |
| Degree of Protection       | IP20                                               |

## Material Compliance

|                                                   |                                                                        |
|---------------------------------------------------|------------------------------------------------------------------------|
| Conflict Minerals<br>Reporting Template<br>(CMRT) | 9AKK108467A5658                                                        |
| REACH Declaration                                 | 2CMT2022-006481                                                        |
| RoHS Information                                  | 2CMT2022-006500                                                        |
| RoHS Status                                       | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances<br>Control Act - TSCA            | 2CMT2023-006524                                                        |
| WEEE B2C / B2B                                    | Business To Business                                                   |
| WEEE Category                                     | 5. Small Equipment (No External Dimension More Than 50 cm)             |

| Certificates and Declarations      |                     |
|------------------------------------|---------------------|
| CQC Certificate                    | CQC2006010304208085 |
| Declaration of<br>Conformity - CCC | 2020980304001087    |
| Declaration of<br>Conformity - CE  | 2CMT003878          |

| Container Information             |               |
|-----------------------------------|---------------|
| Package Level 1 Width             | 121 mm        |
| Package Level 1 Depth /<br>Length | 50 mm         |
| Package Level 1 Height            | 156 mm        |
| Package Level 1 Gross<br>Weight   | 0.5 kg        |
| Package Level 1 EAN               | 7320500465479 |
| Package Level 1 Units             | box 1 piece   |

| Classifications                       |                         |
|---------------------------------------|-------------------------|
| Object Classification<br>Code         | Q                       |
| ETIM 7                                | EC000640 - Soft starter |
| ETIM 8                                | EC000640 - Soft starter |
| ETIM 9                                | EC000640 - Soft starter |
| eClass                                | V11.0 : 27370907        |
| UNSPSC                                | 39121521                |
| IDEA Granular Category<br>Code (IGCC) | 4740 >> Soft starter    |

| Accessories     |                            |  |                |          |                    |
|-----------------|----------------------------|--|----------------|----------|--------------------|
| Identifier      | Description                |  | Type           | Quantity | Unit Of<br>Measure |
| 1SFA896211R1001 | PSR16-MS116 Connection Kit |  | PSR16-MS116    | 1        | piece              |
| 1SFA896312R1002 | PS-FBPA Fieldbus plug kit  |  | PS-FBPA        | 1        | piece              |
| 1SFA896311R1001 | PSR-FAN3-45A FAN           |  | PSR-FAN3-45A   | 1        | piece              |
| 1SFA896313R1001 | PSR-FAN60-105A FAN         |  | PSR-FAN60-105A | 1        | piece              |

| Categories |
|------------|
|------------|

Drives → Softstarters → Softstarters → PSR Softstarters → PSRC3  
Low Voltage Products and Systems → Control Products → Softstarters → Softstarters → PSR Softstarters → PSRC3

