



 PRODUCT-DETAILS

PSE142-600-70

PSE142-600-70 Softstarter - 143 A - 208 ... 600 V AC



General Information

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|-------------------------|--|
| Global Commercial Alias | PSE142-600-70 |
| Extended Product Type | PSE142-600-70 |
| Product ID | 1SFA897110R7000 |
| ABB Type Designation | PSE142-600-70 |
| EAN | 7320500400685 |
| Catalog Description | PSE142-600-70 Softstarter - 143 A - 208 ... 600 V AC |

Long Description

The softstarter PSE142-600-70 has a rated maximum operational current of 142 A with an operating voltage span from 208...600 V AC. The rated control voltage is between 100...250 V AC at 50/60 Hz. PSE features a two-phase control with a soft start and stop through a voltage or a torque ramp. It has built-in bypass for easy installation and energy saving. A RUN, TOR, and Event signal is available from a relay output in NO (normally open state). The PSE has functions such as current limit, kickstart, analog output, EOL, underload, and locked rotor protection. To interact with PSE, it has an illuminated display that uses symbols to become language neutral. As an option, you can add an identical external keypad with a rating of IP66. There are three ways to communicate with PSE. It can be done by hardwire inputs Start/Stop or by Reset of fault. Another popular option is the built-in fieldbus communication Modbus RTU. You can also use an external adaptor and a Fieldbus plug. PSE is a true general purpose softstarter. It's a perfect balance between high starting capacity and cost efficiency. Very suitable for small to medium-sized three-phase motors with nominal currents from 18...370 A. Typical applications are, for example, pumps, fans, compressors, and conveyors.

Ordering

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

Popular Downloads

| | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SFC132012C0201 |
| Instructions and Manuals | 1SFC132057M0201 |
| CAD Dimensional Drawing | 2CDC001079B0201 |
| Wiring Diagram | N/A |

Dimensions

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| Product Net Width | 130 mm |
| Product Net Height | 295 mm |
| Product Net Depth / Length | 220 mm |
| Product Net Weight | 4.4 kg |

Technical

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| Rated Operational Voltage | 208 ... 600 V AC |
| Rated Control Supply Voltage (U _s) | 100 ... 250 V AC |
| Rated Control Circuit Voltage (U _c) | 24 V DC |
| Rated Frequency (f) | 50/60 Hz Main Circuit 50 / 60 Hz |
| Rated Operational Power - In-Line Connection (P _e) | (230 V) 40 kW (400 V) 75 kW (500 V) 90 kW |
| Rated Operational Current - In-Line Connection (I _e) | 143 A |
| Service Factor Percentage | 100 % |
| Overload Protection | Build-in electronic overload protection |
| Integrated Electronic Overload | Yes |
| Adjustable Rated Motor Current I _e | 30 ... 100 % |
| Starting Capacity at Maximum Rated Current I _e | 4xI _e for 10s |
| Ramp Time | 0 ... 30 second [unit of time] 1 ... 30 second [unit of time] |
| Initial Voltage During Start | 30 ... 70 % |
| Step Down Voltage Special Ramp | No % |
| Current Limit Function | 1.5 ... 7xI _e |

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| Switch for Inside Delta Connection | No |
| Run Signal Relay | Yes |
| By-pass Signal Relay | Yes |
| Fault Signal Relay | Yes |
| Overload Signal Relay | Yes |
| Analog Outputs | 4...20 mA |
| Signal Indication Completed Start Ramp (LED) | Green |
| Signal Indication Ready to Start/Standby ON (LED) | Green |
| Signal Indication Running R (LED) | Green |
| Signal Indication Ramping Up/Down (LED) | Green |
| Signal Indication Protection (LED) | Yellow |
| Signal Indication Fault (LED) | Red |
| Number of Starts Per Hour at 3.5*Ie for 7 sec. 50% ON Time 50% OFF Time | 10 |
| Communication | Modbus-RTU |
| Degree of Protection | IP00 |
| Terminal Type | Main Circuit: Bars |
| Connecting Capacity Main Circuit | Hole Diameter 8.5 mm Rigid 1/2 x 2.5 ... 70 mm ² Width and Thickness 17.5x5 mm |
| Connecting Capacity Control Circuit | Rigid 1 x 2.5 mm ² Rigid 2 x 1.5 mm ² |
| Connecting Capacity Supply Circuit | Rigid 1 x 2.5 mm ² |
| Tightening Torque | Control Circuit 0.5 N-m Main Circuit 18 N-m Supply Circuit 0.5 N-m |
| Product Main Type | PSE142 |
| Function | Soft start with torque control Soft start with voltage ramp Soft stop with torque control Soft stop with voltage ramp Kick start Sequence start Current limit Start reverse (external contactors) Automatic restart Event log |
| Protection Function | Electronic overload protection, EOL; Locked rotor protection; Current underload protection |

Technical UL/CSA

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|----------------------------------|---|
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V |
| Tightening Torque UL/CSA | Control Circuit 4.4 in-lb Main Circuit 159.3 Supply Circuit 4.4 in-lb |

Environmental

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|-------------------------|--|
| Ambient Air Temperature | Operation -25 ... +60 °C Storage -40 ... +70 °C |
| Degree of Protection | IP00 |

Material Compliance

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|---|--|
| Conflict Minerals Reporting Template (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 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

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|---------------------------------|---------------------|
| CQC Certificate | CQC2011010304468089 |
| Declaration of Conformity - CCC | 2020980304001545 |
| Declaration of Conformity - CE | 2CMT2015-005447 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Width | 203 mm |
| Package Level 1 Depth / Length | 282 mm |
| Package Level 1 Height | 363 mm |
| Package Level 1 Gross Weight | 5.4 kg |
| Package Level 1 EAN | 7320500400685 |
| Package Level 1 Units | box 1 piece |

Classifications

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|------------------------------------|-------------------------|
| Object Classification 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 Code (IGCC) | 4740 >> Soft starter |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|------------------------------------|------------------------------------|----------|-----------------|
| 1SDA066917R1 | KIT FC Cu XT4 3pcs | KIT FC Cu XT4 3pcs | 1 | piece |
| 1SDA054988R1 | KIT FC CuAl 1x185mm2 T4 3pcs | KIT FC CuAl 1x185mm2 T4 3pcs | 1 | piece |
| 1SFN074707R1000 | LW185 Terminal Enlargement | LW185 | 1 | piece |
| 1SFA899221R1002 | PSLE-185 TERMINAL KIT | PSLE-185 | 1 | piece |
| 1SFN074810R1000 | LX205 Terminal Extension | LX205 | 1 | piece |
| 1SFN124701R1000 | LT185-AC Terminal Shroud | LT185-AC | 1 | piece |
| 1SFN124703R1000 | LT185-AL Terminal Shroud | LT185-AL | 1 | piece |
| 1SFN074709R1000 | LZ185-2C/120 Cable Clamp Connector | LZ185-2C/120 | 1 | piece |
| 1SFA897100R1001 | PSEEK EXTERNAL KEYPAD | PSEEK | 1 | piece |
| 1SFA897201R1001 | PSECA USB cable | PSECA | 1 | piece |
| 1SFA896312R1002 | PS-FBPA Fieldbus plug kit | PS-FBPA | 1 | piece |
| 1SFA899300R1020 | PS-MBIA Communication Module | PS-MBIA | 1 | piece |

Categories

Drives → Softstarters → Softstarters → PSE Softstarters → PSE142

Low Voltage Products and Systems → Control Products → Softstarters → Softstarters → PSE Softstarters → PSE142

