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 PRODUCT-DETAILS

## PSE250-600-70-1

### PSE250-600-70-1 Softstarter - 250 A - 208 ... 600 V AC




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#### General Information

Global Commercial Alias	PSE250-600-70-1
Extended Product Type	PSE250-600-70-1
Product ID	1SFA897113R7001
ABB Type Designation	PSE250-600-70-1
EAN	7320500515037
Catalog Description	PSE250-600-70-1 Softstarter - 250 A - 208 ... 600 V AC

#### Long Description

The softstarter PSE250-600-70-1 has a rated maximum operational current of 250 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

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

Product Net Width	190 mm
Product Net Height	435 mm
Product Net Depth / Length	237 mm
Product Net Weight	10.6 kg

## Technical

Rated Operational Voltage	208 ... 600 V AC
Rated Control Supply Voltage (U <sub>s</sub> )	100 ... 250 V AC
Rated Control Circuit Voltage (U <sub>c</sub> )	24 V DC
Rated Frequency (f)	50/60 Hz Main Circuit 50 / 60 Hz
Rated Operational Power - In-Line Connection (P <sub>e</sub> )	(230 V) 75 kW (400 V) 132 kW (500 V) 160 kW
Rated Operational Current - In-Line Connection (I <sub>e</sub> )	250 A
Service Factor Percentage	100 %
Overload Protection	Built-in electronic overload protection
Integrated Electronic Overload	Yes
Adjustable Rated Motor Current I <sub>e</sub>	30 ... 100 %
Starting Capacity at Maximum Rated Current I <sub>e</sub>	4xI <sub>e</sub> 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 <sub>e</sub>

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	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Terminal Type	Main Circuit: Bars
Connecting Capacity Main Circuit	Hole Diameter 8.5 mm Rigid 1/2 x 2.5 ... 70 mm <sup>2</sup> Width and Thickness 17.5x5 mm
Connecting Capacity Control Circuit	Rigid 1 x 2.5 mm <sup>2</sup> Rigid 2 x 1.5 mm <sup>2</sup>
Connecting Capacity Supply Circuit	Rigid 1 x 2.5 mm <sup>2</sup>
Tightening Torque	Control Circuit 0.5 N-m Main Circuit 28 N-m Supply Circuit 0.5 N-m
Product Main Type	PSE250
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

Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 75 Hp (220 ... 240 V AC) Three Phase 100 Hp (440 ... 480 V AC) Three Phase 200 Hp (550 ... 600 V AC) Three Phase 250 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 600 V

Tightening Torque  
UL/CSA

Control Circuit 4.4 in-lb  
Main Circuit 247.8  
Supply Circuit 4.4 in-lb

## Environmental

Ambient Air Temperature	Operation -25 ... +60 °C Storage -40 ... +70 °C
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## Material Compliance

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

CQC Certificate	CQC2018010304109915
Declaration of Conformity - CCC	2020980304001510
Declaration of Conformity - CE	2CMT2015-005447
DNV Certificate	1SFC132383M0001   TAE0000342

## Container Information

Package Level 1 Width	261 mm
Package Level 1 Depth / Length	325 mm
Package Level 1 Height	510 mm
Package Level 1 Gross Weight	13.3 kg
Package Level 1 EAN	7320500515037
Package Level 1 Units	box 1 piece

## Classifications

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
1SDA055016R1	KIT FC Cu 1x240mm <sup>2</sup> T5 400 3pcs	KIT FC Cu 1x240mm <sup>2</sup> T5 400 3pcs	1	piece
1SDA055020R1	KIT FC CuAl 1x240mm <sup>2</sup> T5 400 3pcs	KIT FC CuAl 1x240mm <sup>2</sup> T5 400 3pcs	1	piece
1SFN075107R1000	LW300 Terminal Enlargement	LW300	1	piece
1SFA899221R1003	PSLE-300 TERMINAL KIT	PSLE-300	1	piece
1SFN075410R1000	LX370 Terminal Extension	LX370	1	piece
1SFN125101R1000	LT300-AC Terminal Shroud	LT300-AC	1	piece
1SFN125103R1000	LT300-AL Terminal Shroud	LT300-AL	1	piece
1SFA897100R1001	PSEK EXTERNAL KEYPAD	PSEK	1	piece
1SFA897201R1001	PSECA USB cable	PSECA	1	piece
1SFA896312R1002	PS-FBPA Fieldbus plug kit	PS-FBPA	1	piece
1SFA899222R1003	LXR370 Terminal Enlargement	LXR370	1	piece
1SFA899300R1020	PS-MBIA Communication Module	PS-MBIA	1	piece

## Categories

Drives → Softstarters → Softstarters → PSE Softstarters → PSE250

Low Voltage Products and Systems → Control Products → Softstarters → Softstarters → PSE Softstarters → PSE250

