PSE300-600-70-1 1/5



**PRODUCT-DETAILS** 

## PSE300-600-70-1

## PSE300-600-70-1 Softstarter - 300 A - 208 ... 600 V AC



General Information	
Global Commercial Alias	PSE300-600-70-1
Extended Product Type	PSE300-600-70-1
Product ID	1SFA897114R7001
ABB Type Designation	PSE300-600-70-1
EAN	7320500515044
Catalog Description	PSF300-600-70-1 Softstarter - 300 A - 208 600 V AC

Long Description

The softstarter PSE300-600-70-1 has a rated maximum operational current of 300 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 purlipose softstarter. It's a perfect balance belltween high starting capacity and cost effiliciency. 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.

PSE300-600-70-1 2/5

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 (Pe)	(230 V) 90 kW (400 V) 160 kW (500 V) 200 kW
Rated Operational Current - In-Line Connection (le)	300 A
Service Factor Percentage	100 %
Overload Protection	Built-in electronic overload protection
Integrated Electronic Overload	Yes
Adjustable Rated Motor Current le	30 100 %
Starting Capacity at Maximum Rated Current le	4xle 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 7xle

PSE300-600-70-1 3/5

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	420 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*le 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 mm² Width and Thickness 17.5x5 mm
Connecting Capacity Control Circuit	Rigid 1 x 2.5 mm² Rigid 2 x 1.5 mm²
Connecting Capacity Supply Circuit	Rigid 1 x 2.5 mm²
Tightening Torque	Control Circuit 0.5 N·m Main Circuit 28 N·m Supply Circuit 0.5 N·m
Product Main Type	PSE300
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)
Protection Function	Automatic restart Event log Electronic overload protection, EOL; Locked rotor protection; Current underload protection

Technical UL/CSA	
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

PSE300-600-70-1 4/5

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

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

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	7320500515044
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

PSE300-600-70-1 5/5

Identifier	Description Type G		Quantity	Unit Of Measure
1SDA055016R1	KIT FC Cu 1x240mm2 T5 400 3pcs 1	KIT FC Cu KIT FC Cu 1x240mm2 T5 400 3pcs 1x240mm2 T5 400 3pcs		piece
1SDA055020R1	KIT FC CuAl KIT FC CuAl 1x240mm2 T5 400 3pcs 1x240mm2 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	PSEEK EXTERNAL KEYPAD	PSEEK	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

 $\mathsf{Drives} \to \mathsf{Softstarters} \to \mathsf{Softstarters} \to \mathsf{PSE} \, \mathsf{Softstarters} \to \mathsf{PSE300}$ 

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Softstarters \rightarrow Softstarters \rightarrow PSE\ Softstarte$ 





