

PRODUCT-DETAILS

# PSE105-600-70 PSE105-600-70 Softstarter - 106 A - 208 ... 600 V AC



General Information	
Global Commercial Alias	PSE105-600-70
Extended Product Type	PSE105-600-70
Product ID	1SFA897109R7000
ABB Type Designation	PSE105-600-70
EAN	7320500400678
Catalog Description	PSE105-600-70 Softstarter - 106 A - 208 600 V AC
Long Description	The softstarter PSE105-600-70 has a rated maximum operational current of 105 A with an operating voltage span from 208600 V AC. The rated control voltage is between 100250 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 pur-pose softstarter. It's a perfect balance be-tween high starting capacity and cost efficiency. Very suitable for small to medium-sized three-phase motors with nominal currents from 18370 A. Typical applications are, for example, pumps, fans, compressors, and convevors.

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Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	<u>85371091</u>

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

Dimensions	
Product Net Width	90 mm
Product Net Height	245 mm
Product Net Depth / Length	184 mm
Product Net Weight	2.9 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 ( $U_c$ )	24 V DC
Rated Frequency (f)	50/60 Hz Main Circuit 50 / 60 Hz
Rated Operational Power - In-Line Connection (Pe)	(230 V) 30 kW (400 V) 55 kW (500 V) 75 kW
Rated Operational Current - In-Line Connection (Ie)	106 A
Service Factor Percentage	100 %
Overload Protection	Build-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
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

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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	Screw Terminals
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 mm <sup>2</sup>
Tightening Torque	Control Circuit 0.5 N·m
· ·	Main Circuit 9 N·m Supply Circuit 0.5 N·m
Product Main Type	PSE105
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
Protection Function	Event log Electronic overload protection, EOL; Locked rotor protection; Current underload protection
Technical UL/CSA	
Technical UL/CSA Maximum Operating Voltage UL/CSA	Main Circuit 600 V
Maximum Operating	Main Circuit 600 V Control Circuit 4.4 in·lb Main Circuit 79.7
Maximum Operating Voltage UL/CSA Tightening Torque	Control Circuit 4.4 in Ib
Maximum Operating Voltage UL/CSA Tightening Torque	Control Circuit 4.4 in-lb Main Circuit 79.7
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA	Control Circuit 4.4 in-lb Main Circuit 79.7
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental	Control Circuit 4.4 in·lb Main Circuit 79.7 Supply Circuit 4.4 in·lb Operation -25 +60 °C
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection Material Compliance Conflict Minerals Reporting Template	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection Material Compliance Conflict Minerals Reporting Template (CMRT)	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C IP00 9AKK108467A5658
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection Material Compliance Conflict Minerals Reporting Template (CMRT) REACH Declaration	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C IP00 9AKK108467A5658 2CMT2022-006481
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection Material Compliance Conflict Minerals Reporting Template (CMRT)	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C IP00 9AKK108467A5658 2CMT2022-006481 2CMT2022-006500
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C IP00 9AKK108467A5658 2CMT2022-006481
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Environmental Ambient Air Temperature Degree of Protection Material Compliance Conflict Minerals Reporting Template (CMRT) REACH Declaration RoHS Information RoHS Status	Control Circuit 4.4 in-lb Main Circuit 79.7 Supply Circuit 4.4 in-lb Operation -25 +60 °C Storage -40 +70 °C IP00 9AKK108467A5658 2CMT2022-006481 2CMT2022-006500 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

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Subject to change without notice

#### WEEE Category

Certificates and Declarations	
CQC Certificate	CQC2011010304468093
Declaration of Conformity - CCC	2020980304001546
Declaration of Conformity - CE	2CMT2015-005447

## Container Information

Package Level 1 Width	178 mm
Package Level 1 Depth / Length	257 mm
Package Level 1 Height	288 mm
Package Level 1 Gross Weight	3.6 kg
Package Level 1 EAN	7320500400678
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 Unit Of Identifier Type Quantity Description Measure 1SFN074307R1000 LW110 Terminal Enlargement LW110 1 piece 1SFN124203R1000 LT140-30L Terminal Shroud LT140-30L 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 PS-MBIA Communication Module 1SFA899300R1020 PS-MBIA 1 piece

## Categories

 $\label{eq:Drives} \begin{array}{l} \mbox{Drives} \rightarrow \mbox{Softstarters} \rightarrow \mbox{PSE} \mbox{Softstarters} \rightarrow \mbox{PSE105} \\ \mbox{Low Voltage Products and Systems} \rightarrow \mbox{Control Products} \rightarrow \mbox{Softstarters} \rightarrow \mbox{Softstarters} \rightarrow \mbox{PSE Softstarters} \rightarrow \mbox{PSE105} \\ \mbox{Softstarters} \rightarrow \mbox{PSE Softstarters} \rightarrow \mbox{PSE105} \\ \mbox{Softstarters} \rightarrow \mbox{Softstarters} \rightarrow \mbox{PSE105} \\ \mbox{Softstarters} \rightarrow \mbox{$ 





