ABB

PRODUCT-DETAILS

PSE72-600-70

PSE72-600-70 Softstarter - 72 A - 208 ... 600 V AC

General Information

Global Commercial Alias	PSE72-600-70
Extended Product Type	PSE72-600-70
Product ID	1SFA897107R7000
ABB Type Designation	PSE72-600-70
EAN	7320500400654
Catalog Description	PSE72-600-70 Softstarter - 72 A - 208 ... 600 V AC
Long Description	The softstarter PSE72-600-70 has a rated maximum operational current of 72 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 pur-pose softstarter. It's a perfect balance be-tween high starting capacity and cost effi-ciency. 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	1SFC132427M0201
Instructions and Manuals (Part 2)	1SFC132057M0201
Instructions and Manuals (Part 3)	1SFC132060M0201
CAD Dimensional Drawing	2CDC001079B0201
EPLAN Data	9AAC170231_EPLAN
Wiring Diagram	N/A

Dimensions

Product Net Width	90 mm
Product Net Height	245 mm
Product Net Depth / Length	184 mm
Product Net Weight	2.5 kg

Technical

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 (Pe)	(230 V) 18.5 kW (400 V) 37 kW (500 V) 45 kW
Rated Operational Current - In-Line Connection (Ie)	72 A
Service Factor Percentage	100 %
Overload Protection	Build-in electronic overload protection
Integrated Electronic Overload	Yes
Starting Capacity at Maximum Rated Current Ie	4xIe 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 ... 7xIe
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*le 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	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
Tightening Torque	Control Circuit 0.5 N·m Main Circuit 9 N·m Supply Circuit 0.5 N·m
Product Main Type	PSE72
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 20 Hp (220 ... 240 V AC) Three Phase 25 Hp (440 ... 480 V AC) Three Phase 50 Hp (550 ... 600 V AC) Three Phase 60 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
Tightening Torque UL/CSA	Control Circuit 4.4 in·lb Main Circuit 79.7 Supply Circuit 4.4 in·lb

Environmental

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

Material Compliance

Conflict Minerals Reporting Template	9AKK108467A5658

(CMRT)

REACH Declaration	2CMT2022-006481
RoHS Information	2CMT2022-006500
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP	8462d3d9-3bdb-42b0-9715-4ea626c99564 Sweden
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	CQC2011010304468093
Declaration of Conformity - CCC	2020980304001546
Declaration of Conformity - CE	2CMT2015-005447
DNV Certificate	1SFC132383M0001 | TAE0000342

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	3.2 kg
Package Level 1 EAN	7320500400654
Package Level 1 Units	box 1 piece

External Classifications and Standards

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
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
1SFA899300R1020	PS-MBIA Communication Module	PS-MBIA	1	piece

2025/06/21
Subject to change without notice

Categories

Drives → Softstarters → Softstarters → PSE Softstarters → PSE72
Low Voltage Products and Systems → Control Products → Softstarters → Softstarters → PSE Softstarters → PSE72