PRODUCT-DETAILS

PSE142-600-70

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

General Information

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 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

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Popular Downloads

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

Dimensions

Product Net Width	130 mm
Product Net Height	295 mm
Product Net Depth / Length	220 mm
Product Net Weight	4.4 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) 40 kW (400 V) 75 kW (500 V) 90 kW
Rated Operational Current - In-Line Connection (Ie)	143 A
Service Factor Percentage	100 %
Overload Protection	Build-in electronic overload protection
Integrated Electronic Overload	Yes
Adjustable Rated Motor Current Ie	30 ... 100 %
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

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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*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 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 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

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

Ambient Air Temperature	Operation -25 ... +60 °C Storage -40 ... +70 °C
Degree of Protection	IP00
RoHS Information	1SFC132043D0201
RoHS Status	Following EU Directive 2002/95/EC August 18, 2005 and amendment

Certificates and Declarations

CQC Certificate	CQC2011010304468089
Declaration of Conformity - CCC	2020980304001545

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Declaration of Conformity - CE	2CMT2015-005447

Container Information

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

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
1SFN074709R1000	LZ185-2C/120 Cable Clamp Connector	LZ185-2C/120	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
1SFA899221R1003	PSLE-300 TERMINAL KIT	PSLE-300	1	piece
1SFN074810R1000	LX205 Terminal Extension	LX205	1	piece
1SFN075410R1000	LX370 Terminal Extension	LX370	1	piece
1SFN124203R1000	LT140-30L Terminal Shroud	LT140-30L	1	piece
1SFN124701R1000	LT185-AC Terminal Shroud	LT185-AC	1	piece
1SFN124703R1000	LT185-AL Terminal Shroud	LT185-AL	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

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Categories

Drives → Softstarters → Softstarters → PSE Softstarters → PSE142

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

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