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PRODUCT-DETAILS

## PSR85-600-70

## PSR85-600-70 Softstarter - 85 A - 208 ... 600 V AC



General Information	
Global Commercial Alias	PSR85-600-70
Extended Product Type	PSR85-600-70
Product ID	1SFA896114R7000
ABB Type Designation	PSR85-600-70
EAN	7320500362631
Catalog Description	PSR85-600-70 Softstarter - 85 A - 208 600 V AC
Long Description	The softstarter PSR85-600-70 has a rated maximum operational current of 85 A with an operating voltage span from 208600 V AC. The rated control voltage is between 100240 V AC at 50/60 Hz. PSR features a two-phase control soft start and stop through a voltage ramp. It has built-in bypass for easy installation and energy saving. A RUN and a TOR signal is available from a relay output in NO (normally open state). The start/stop ramp and time is easy to set by three potentiometers on the front. PSR is often used in combination with a manual motor starter (MMS) from ABB, so mechanical connection kits are available. Another popular option is Fieldbus communication, which can be enabled by an external adaptor and a Fieldbus plug. The PSR range is our most compact softstarters with basic functionality and values. They are suitable for small three-phase motors with nominal currents from 3105 A and can manage up to 100 starts per hour. Common applications are, for example, pumps,

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Ordering	
Minimum Order Quantity	1 piec
Customs Tariff Number	8537109
Popular Downloads	
Data Sheet, Technical Information	1SFC132012C020
Instructions and Manuals	1SFC132033M000
CAD Dimensional Drawing	2CDC001079B020
Wiring Diagram	N/A
Dimensions	
Product Net Width	180 mm
Product Net Height	220 mm
Product Net Depth / Length	70 mm
Product Net Weight	2.1 kg
Technical	
Rated Operational Voltage	208 600 V AC
Rated Control Supply Voltage (U <sub>S</sub> )	100 240 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) 22 kv (400 V) 45 kv (500 V) 55 kv
Rated Operational Current - In-Line Connection (le)	85 A
Service Factor Percentage	100 %
Overload Protection	Recommended MS495 70 90
Integrated Electronic Overload	No

Adjustable Rated Motor

Maximum Rated Current

Starting Capacity at

Initial Voltage During

Step Down Voltage

Switch for Inside Delta

Special Ramp
Current Limit Function

Connection

Current le

Ramp Time

le

Start

No

No

No

4xle for 6s

40 ... 70 %

100 ... 60 %

0 ... 20 second [unit of time] 1 ... 10 second [unit of time] PSR85-600-70 3/5

By-pass Signal Relay	Run Signal Relay	Yes	
Fault Signal Relay Overload Signal Relay Signal Indication Completed Start Ramp (LED) Signal Indication Ready Signal Indication Ready Signal Indication Ready Signal Indication Signal Indication Running R (LED)			
Overload Signal Relay Signal Indication Completed Start Ramp (LED) Signal Indication Ready to General Visional My On (LED) Signal Indication Ready to General Visional My On (LED) Signal Indication Signal Indica			
Signal Indication Completed Start Ramp (LED) Completed Start Ramp (LED) Signal Indication Ready to Start/Standby On (LED) Signal Indication Ready to Start/Standby On (LED) Signal Indication Re (LED) Signal Indication Rempting Up/Down (LED) Signal Indication Rempting Port (LED) Signal India			
Signal Indication Ready to Start/Standby ON (LED)  Signal Indication Ready (LED)  Filed SusPlug(Optional) Ready (LED)  Signal Indication Filed SusPlug(Optional) Filed SusPlug(Optional) Filed SusPlug(Optional) Ready (LED)  Filed SusPlug(Optional) Ready (LED)  Signal Indication Filed SusPlug(Optional) Filed SusPlug(Optional) Filed SusPlug(Optional) Region Filed SusPlug(Optional) Filed Su	Signal Indication Completed Start Ramp	Green	
Running R (LED) Signal Indication Ramping Up/Down (LED) Number of Starts Per 10 Hour at 3.5' in for 7 sec. 30' 60 Of Time 0 Terminal Type Communication Degree of Protection Terminal Type Rain Crucit	Signal Indication Ready to Start/Standby ON	Green	
Ramping Up/Down (LED) Number of Starts Per 10 Hour at 3.5'ne for 7 sec. 10 Hour at 3.5'ne for 7 sec. 10 Hour at 3.5'ne for 7 sec. 10 SOW ON Time 50% OFF Time 7 Time 8 Page of Protection FiledBusPlug(Optional) Degree of Protection Pilo Terminal Type Main Circuit. Bars Connecting Capacity Rigid tx 109 5 mm² Main Circuit Rigid tx 109 5 mm² Main Circuit Rigid tx 109 5 mm² Main Circuit Rigid tx 109 5 mm² Rigid 2 x 63 5 mm² Connecting Capacity Rigid tx 109 5 mm² Rigid 2 x 62 5 mm² Rigid 2 x 0.752.5 mm² Supply Circuit Tightening Torque Control Circuit 6.6 Nm Product Main Type Poduct Main Type Poses Function Soft start with voltage ramp Soft stop with voltag		Green	
Hour at 3.5 fle for 7 sec. 50% ON Time 50% OFF Time  Communication  Eggree of Protection  FiledBusPlug(Optional)  Fight 12	Ramping Up/Down	Green	
Degree of Protection PID Terminal Type Main Circuit: Bars Connecting Capacity Rigid 1x 0 95 mm² Main Circuit Rigid 2x 6 35 mm² Rigid 1x 0.75 25 mm² Supply Circuit Tightening Torque Control Circuit 0.6 Nm Main Circuit 0.6 Nm Main Circuit 8 Nm Supply Circuit 0.6 Nm Main Circuit 1.6 Nm Main Circuit 1.6 Nm Supply Circuit 0.6 Nm Main Circuit 1.6 Nm Supply Circuit 0.6 Nm Main Circuit 1.6 Nm Main Circuit 1.6 Nm Supply Circuit 0.6 Nm Main Circuit 1.6 Nm Notage ramp Soft start with voltage ramp Soft stop with voltage ra	Hour at 3.5*le for 7 sec. 50% ON Time 50% OFF	10	
Terminal Type Main Circuit: Bars Connecting Capacity Rigid 1 x 10 95 mm² Rigid 2 x 6 35 mm² Connecting Capacity 1 x 0.75 2.5 Control Circuit 1 2 x 0.75 2.5 mm² Rigid 1 x 0.7 2.5 mm² Rigid 1 x 0.75 2.5 mm² Supply Circuit  Connecting Capacity Rigid 2 x 0.75 1.5 mm² Supply Circuit  Tightening Torque Control Circuit 0.6 N·m Main Circuit 8 N·m Supply Circuit 0.6 N·m Main Circuit 0.0 N·m Main Circuit 0.6 N·m Main Circuit	Communication	FiledBusPlug(Optional)	
Connecting Capacity Main Circuit Connecting Capacity Control Circuit Connecting Capacity Control Circuit Control Circuit Control Circuit Connecting Capacity Control Circuit Connecting Capacity Connecting Capacity Connecting Capacity Connecting Capacity Connecting Capacity Connecting Capacity Rigid 1x 0.75 2.5 mm² Supply Circuit 0.6 N·m Main Circuit 0.6 N·m Supply Circuit 0.6 N·m Rain Circuit 600 V Rain Circuit 600 V Rain Circuit 600 V Rain Circuit 600 V Rain Circuit 6.0 V Supply Circuit 5.3 in-lb Circuit 6.0 V Supply Circuit 5.3 in-lb Circuit 6.0 V Rain Circuit 6.0 V Supply Circuit 5.3 in-lb Circuit 6.0 V Control Circuit 6.0 V Supply Circuit 5.3 in-lb Circuit 6.0 V Supply Circuit 6.	Degree of Protection	IP10	
Main Circuit Connecting Capacity Control Circuit Control Circuit Control Circuit Connecting Capacity Connecting Capacity Rigid 1 x 0.75 2.5 mm² Rigid 2 x 0.75 2.5 mm² Rigid 1 x 0.75 2.5 mm² Supply Circuit Connecting Capacity Rigid 1 x 0.75 2.5 mm² Supply Circuit Tightening Torque Control Circuit 0.6 Nm Main Circuit 0.6 Nm Product Main Type PSR85 Function Soft start with voltage ramp Soft stop with voltage ramp Soft stop with voltage ramp  Technical UL/CSA Maximum Operating Voltage UL/CSA Maximum Operating UL/CSA Control Circuit 5.3 in-ib Main Circuit 7.03 Main Circuit 7.03 Supply Circuit 5.3 in-ib Supply Circuit 5.3 in-ib Main Circuit 7.03 Supply Circuit 5.3 in-ib Main Circuit 7.03 Supply Circuit 5.3 in-ib Promental  Ambient Air Operation -25 +60 °C Temperature Storage -40 +70 °C Degree of Protection IP10  Material Compliance  Conflict Minerals Reporting Template (CMRT) CMRT) REACH Declaration 2CMT2022-006481	Terminal Type	Main Circuit: Bars	
Control Circuit  Rigid 1 x 0.75 2.5 mm² Rigid 2 x 0.75 1.5 mm² Rigid 2 x 0.75 1.5 mm² Rigid 2 x 0.75 1.5 mm² Supply Circuit  Tightening Torque  Control Circuit 0.6 N·m Main Circuit 8 N·m Supply Circuit 0.6 N·m Supply Circuit 5.3 in-ib  Technical UL/CSA  Maximum Operating Main Circuit 600 V Voltage UL/CSA  Maximum Operating UL/CSA  Main Circuit 5.3 in-ib Main Circuit 5.3 in-ib Main Circuit 70.8 Supply Circuit 5.3 in-ib  Environmental  Ambient Air Operation -25 +60 °C Engrea of Protection IP10  Material Compliance  Conflict Minerals Reporting Template (CMRT) ERACH Declaration 2CMT2022-006481			
Connecting Capacity Supply Circuit  Tightening Torque Control Circuit 0.6 N-m Main Circuit 8 N-m Supply Circuit PSR55 Function PSR55 Function Soft start with voltage ramp Soft stop with voltage ramp Soft stop with voltage ramp  Technical UL/CSA Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Control Circuit 5.3 in-lb Main Circuit 600 V Supply Circuit 5.3 in-lb Main Circuit 7.08 Supply Circuit 5.3 in-lb  Environmental  Ambient Air Operation -25+60 °C Emererature Storage -40+70 °C Degree of Protection IP10  Material Compliance Conflict Minerals Reporting Template (CMRT) (CMRT) REACH Declaration 2CMT2022-006481		2 x 0.75 2.5 mm² Rigid 1 x 0.75 2.5 mm²	
Tightening Torque  Tightening Torque  Product Main Type  Main Circuit 6.8 N-m Soft start with voltage ramp Soft stop with voltage ramp Soft stop with voltage ramp  Main Circuit 6.0 V  Main Circuit 5.3 in-lb Control Circuit 5.3 in-lb Main Circuit		<del>-</del>	
Function  Soft start with voltage ramp Soft stop with volt	Tightening Torque	Main Circuit 8 N·m	
Technical UL/CSA  Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Tightening Torque UL/CSA  Environmental  Ambient Air Ceperature Coperation Degree of Protection  Material Compliance  Conflict Minerals Reporting Template (CMRT) REACH Declaration  Main Circuit 5.3 in-lb  Control Circuit 5.3 in-lb  Main Circuit 5.3 in-lb  Control Circuit 5.3 in-lb  Main Circuit 70.8 Supply Circuit 5.3 in-lb  Operation -25 +60 °C Storage -40 +70 °C  Pagree of Protection IP10  PAKK108467A5658	- · · · · · · · · · · · · · · · · · · ·		
Maximum Operating Voltage UL/CSA Tightening Torque UL/CSA Control Circuit 5.3 in-lb Main Circuit 70.8 Main Circuit 70.8 Main Circuit 70.8 Supply Circuit 5.3 in-lb  Environmental  Ambient Air Operation -25 +60 °C Temperature Storage -40 +70 °C Degree of Protection IP10  Material Compliance  Conflict Minerals Reporting Template (CMRT) REACH Declaration 2CMT2022-006481	Function	- · · · · · · · · · · · · · · · · · · ·	
Voltage UL/CSA Tightening Torque UL/CSA Control Circuit 5.3 in-lb Main Circuit 70.8 Supply Circuit 5.3 in-lb Control Circuit 5.3 in-lb Main Circuit 70.8 Supply Circuit 5.3 in-lb Corporation -25 +60 °C Temperature Storage -40 +70 °C Degree of Protection IP10  Material Compliance Conflict Minerals Reporting Template (CMRT) REACH Declaration 2CMT2022-006481	Technical UL/CSA		
UL/CSA  Main Circuit 70.8 Supply Circuit 5.3 in-lb  Environmental  Ambient Air Operation -25 +60 °C Temperature Storage -40 +70 °C Degree of Protection IP10  Material Compliance  Conflict Minerals PAKK108467A5658 Reporting Template (CMRT)  REACH Declaration 2CMT2022-006481		Main Circuit 600 V	
Ambient Air Temperature Degree of Protection  Material Compliance  Conflict Minerals Reporting Template (CMRT)  REACH Declaration  Operation -25 +60 °C Storage -40 +70 °C  Ploop Storage -40 +70 °C  IP10		Main Circuit 70.8	
Temperature Storage -40 +70 °C  Degree of Protection IP10  Material Compliance  Conflict Minerals 9AKK108467A5658  Reporting Template (CMRT)  REACH Declaration 2CMT2022-006481	Environmental		
Material Compliance  Conflict Minerals 9AKK108467A5658  Reporting Template (CMRT)  REACH Declaration 2CMT2022-006481			
Conflict Minerals 9AKK108467A5658 Reporting Template (CMRT) REACH Declaration 2CMT2022-006481	Degree of Protection	IP10	
Reporting Template (CMRT)  REACH Declaration 2CMT2022-006481	Material Compliance		
	Reporting Template	9AKK108467A5658	
RoHS Information 2CMT2022-006500		2CMT2022-006481	
	RoHS Information	2CMT2022-006500	

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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	CQC2008010304295498	
Declaration of Conformity - CCC	2020980304001090	
Declaration of Conformity - CE	1SFA1-95	

Container Information	
Package Level 1 Width	195 mm
Package Level 1 Depth / Length	86 mm
Package Level 1 Height	230 mm
Package Level 1 Gross Weight	2.3 kg
Package Level 1 EAN	7320500362631
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
1SFA899002R1072	PSLW-72 Terminal Enlargement	PSLW-72	1	piece
1SFA896312R1002	PS-FBPA Fieldbus plug kit	PS-FBPA	1	piece
1SFA896313R1001	PSR-FAN60-105A FAN	PSR-FAN60- 105A	1	piece

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## Categories

 $\mathsf{Drives} \to \mathsf{Softstarters} \to \mathsf{PSR}\,\mathsf{Softstarters} \to \mathsf{PSR85}$ 

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products\ \rightarrow\ Softstarters\ \rightarrow\ PSR\ Sof$ 





