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PRODUCT-DETAILS

# PSTX210-600-70

PSTX210-600-70 Softstarter - 210 A - 208 ... 600 V AC



**General Information** 

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Catalog Description	PSTX210-600-70 Softstarter - 210 A - 208 600 V AC
EAN	7320500501504
ABB Type Designation	PSTX210-600-70
Product ID	1SFA898112R7000
Extended Product Type	PSTX210-600-70
Global Commercial Alias	PSTX210-600-70

The softstarter PSTX210-600-70 has a rated maximum operational current of 210 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. PSTX features a three-phase control 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 relay outputs in NO (normally open state). The PSTX has functions such as current limit, kickstart, analog  $\,$ output, EOL, motor heating and pump cleaning. PSTX also features features jog, braking, stand-still brake, diagnostics, sequence start and emergency/fire pump mode as standard. To interact with PSTX, it has a detachable full graphic display with IP66 and 4x outdoor rating. There are four ways to communicate with PSTX. It can be done by hardwire inputs Start/Stop/Reset of fault, and by three programmable digital inputs. Another popular option is the built-in Fieldbus communication Modbus RTU and incl optional ANYBUS modules with every major protocol such as for example Profinet, Profibus, Modbus TCP, Ethernet IP and others. Another way to communicate with PSTX is to use an external adaptor and a Fieldbus plug. PSTX is the complete alternative for any motor starting application. It's suitable for medium to large-sized three-phase motors with nominal currents from 30...1250 A inline connection or 52...2160 A inside delta connection. Typical applications are, for example, pumps, fans, compressors, and conveyors.

Long Description

#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85371091

#### **Popular Downloads**

1 opular bowindads	
Data Sheet, Technical Information	1SFC132012C0201
Instructions and Manuals	1SFC132428M0201
Instructions and Manuals (Part 2)	1SFC132081M0201
Instructions and Manuals (Part 3)	1SFC132060M0201
CAD Dimensional Drawing	2CDC001079B0201
EPLAN Data	9AAC181168_EPLAN
Wiring Diagram	N/A

### **Dimensions**

Product Net Width	258 mm
Product Net Height	470 mm
Product Net Depth / Length	279 mm
Product Net Weight	13.3 kg

#### **Technical**

Rated Operational	208 600 V AC
Voltage	

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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) 59 kW (400 V) 110 kW (500 V) 132 kW
Rated Operational Current - In-Line Connection (Ie)	210 A
Rated Operational Power - Inside Delta Connection	at 230 V 102 kW at 400 V 184 kW at 500 V 250 kW
Rated Operational Current - Inside Delta Connection	360 A
Service Factor Percentage	100 %
Overload Protection	Built-in electronic overload protection
Integrated Electronic Overload	Yes
Starting Capacity at Maximum Rated Current le	4xle for 10s
Ramp Time	1 120 second [unit of time]
Initial Voltage During Start	10 99 %
Step Down Voltage Special Ramp	100 10 %
Current Limit Function	1.5 7.5 xle
Switch for Inside Delta Connection	Yes
Run Signal Relay	Yes
By-pass Signal Relay	Yes
Fault Signal Relay	Yes
Overload Signal Relay	Yes
Analog Outputs Signal Indication Ready to Start/Standby ON (LED)	010 V, 020 mA, 420 mA Green
Signal Indication Running R (LED)	Green
Signal Indication Protection (LED)	Yellow
Signal Indication Fault (LED)	Red
Communication	Modbus-RTU; Modbus-TCP; Ethernet-IP; EtherCAT; DeviceNet; CANopen; Profibus; Profinet; BACnet-IP; BACnet-MSTP
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Terminal Type	Main Circuit: Bars
Connecting Capacity Main Circuit	Hole Diameter 10.2 mm
Connecting Capacity Control Circuit	Rigid 1 x 2.5 mm <sup>2</sup>
Connecting Capacity Supply Circuit	Rigid 1 x 2.5 mm <sup>2</sup>
Tightening Torque	Main Circuit 25 N∙m
Product Main Type	PSTX210

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Function Auto phase sequence detection Automatic restart Current limit Current limit ramp Dual current limit Dynamic brake Electricity metering Electronic overload Time-to-cool Emergency mode Event log Full voltage start Jog with slow speed, forward and reverse Keypad password Kick start Limp mode with two-phase motor control if one set of thyristors is shorted Motor heating Pre-start function Pump cleaning Real time clock Sequence start Soft start with torque control Soft start with voltage ramp Soft stop with torque control Soft stop with voltage ramp Stand still brake Start reverse (external contactors) Thyristor runtime measurement Torque limit Voltage sags detection **Protection Function** Bypass open protection; Current imbalance protection; Current underload protection; Dual overload (separate overload for start and run); Earth fault protection / ground fault protection; Electronic overload protection, EOL; Extension IO failure protection; Fieldbus failure protection; HMI failure protection; Locked rotor protection; Max number of starts/hour; Over voltage protection; Phase reversal protection; Power factor underload protection; PT-100 connection; PTC connection; Too long current limit protection; Too long start time protection; Under voltage protection; User defined protection; Voltage imbalance protection Warning Details Current imbalance warning; Current underload warning; Electronic overload Time-to-trip; EOL warning; Faulty fan warning; Locked rotor warning; Motor runtime limit warning; Over voltage warning; Phase loss warning (for standby); Power factor underload warning; Short circuit warning (for Limp mode); THD(U) - Total Harmonic Distortion warning; Thyristor overload warning (SCR); Under voltage warning; Voltage imbalance warning

Technical UL/CSA	
Horsepower Rating UL/CSA	(200 208 V AC) Three Phase 60 Hp (220 240 V AC) Three Phase 75 Hp (440 480 V AC) Three Phase 150 Hp (550 600 V AC) Three Phase 200 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
Tightening Torque UL/CSA	Main Circuit 221.3

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

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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	CN: CQC2014010304744408 / SE: CQC2014010304724384
Declaration of Conformity - CCC	CN: 2020980304001093 / SE: 2020980304001490
Declaration of Conformity - CE	2CMT005209
DNV Certificate	TAE000087N

Container Information	
Package Level 1 Width	352 mm
Package Level 1 Depth / Length	379 mm
Package Level 1 Height	564 mm
Package Level 1 Gross Weight	16.3 kg
Package Level 1 EAN	7320500501504
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

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Unit Of Measure	Type Quantity		Description	Identifier
piece	1	KIT FC Cu 1x240mm2 T5 400 3pcs	KIT FC Cu 1x240mm2 T5 400 3pcs	1SDA055016R1
piece	1	OZXB4/1	OZXB4/1 AL-CU TERMINAL 1PC	1SCA022194R0890
piece	1	KIT FC CuAl 1x240mm2 T5 400 3pcs	KIT FC CuAl 1x240mm2 T5 400 3pcs	1SDA055020R1
piece	1	LX370	LX370 Terminal Extension	1SFN075410R1000
piece	1	LW370	LW370 Terminal Extension	1SFN075407R1000
piece	1	LT370-30C	LT370-30C Terminal Shroud	1SFN125401R1000
piece	1	LT370-30L	LT370-30L Terminal Shroud	1SFN125403R1000
piece	1	LT370-30D	LT370-30D Terminal Shroud	1SFN125406R1000
piece	1	PSCA-1	PSCA-1 USB cable	1SFA899314R1001
piece	1	AB-PROFIBUS- 1	AB-PROFIBUS-1 Communication Module	1SFA899300R1001
piece	1	AB- DEVICENET-1	AB-DEVICENET-1 Communication Module	1SFA899300R1002
piece	1	AB-MODBUS- RTU-1	AB-MODBUS-RTU-1 Communication Module	1SFA899300R1003
piece	1	AB-ETHERNET -IP-2	AB-ETHERNET-IP-2 Communication Module	1SFA899300R1006
piece	1	AB-MODBUS- TCP-2	AB-MODBUS-TCP-2 Communication Module	1SFA899300R1008
piece	1	AB-PROFINET- IO-2	AB-PROFINET-IO-2 Communication Module	1SFA899300R1010
piece	1	AB-BACNET- MSTP-1	AB-BACNET-MSTP-1 Communication Module	1SFA899300R1011
piece	1	AB-ETHERCAT -IP-2	AB-ETHERCAT-IP-2 Communication Module	1SFA899300R1012
piece	1	DX122-FBP.0	DX122-FBP.0 IO-Module for UMC100 DI 110/230VAC, supply 24VDC	1SAJ622000R0101
piece	1	PS-FBPA	PS-FBPA Fieldbus plug kit	1SFA896312R1002

## **Categories**

 $Drives \rightarrow Softstarters \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX210 \\ Low \ Voltage \ Products \ and \ Systems \rightarrow Control \ Products \rightarrow Softstarters \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX210 \\ Low \ Voltage \ Products \ and \ Systems \rightarrow Control \ Products \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX210 \\ Low \ Voltage \ Products \ and \ Systems \rightarrow Control \ Products \ and \ Systems \ and$ 

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