PSTX60-600-70 1/5



**PRODUCT-DETAILS** 

## PSTX60-600-70 PSTX60-600-70 Softstarter - 60 A - 208 ... 600 V AC



General Information	
Global Commercial Alias	PSTX60-600-70
Extended Product Type	PSTX60-600-70
Product ID	1SFA898106R7000
ABB Type Designation	PSTX60-600-70
EAN	7320500501368
Catalog Description	PSTX60-600-70 Softstarter - 60 A - 208 600 V AC

Long Description

The softstarter PSTX60-600-70 has a rated maximum operational current of 60 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,

PSTX60-600-70 2/5

Minimum Order Quantity	1 piece
Customs Tariff Number	8537109 <sup>-</sup>
Popular Downloads	
Data Sheet, Technical Information	1SFC132012C020
Instructions and Manuals	1SFC132081M020
CAD Dimensional Drawing	2CDC001079B020
Wiring Diagram	N/A
Dimensions	
Product Net Width	150 mm
Product Net Height	314 mm
Product Net Depth / Length	198 mm
Product Net Weight	4.6 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 ( $\rm U_c$ )	24 V DC
Rated Frequency (f)	50/60 H: Main Circuit 50 / 60 H:
Rated Operational Power - In-Line Connection (Pe)	(230 V) 15 kV (400 V) 30 kV (500 V) 37 kV
Rated Operational Current - In-Line Connection (le)	60 A
Rated Operational Power - Inside Delta Connection	at 230 V 30 kW at 400 V 55 kW
- Inside Delta Connection	at 500 V 75 kW
Rated Operational Current - Inside Delta Connection	105 A
Service Factor Percentage	100 %
Overload Protection	Built-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	1 120 second [unit of time
Initial Voltage During Start	1099 %
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

PSTX60-600-70 3/5

Fault Signal Relay	Yes
Overload Signal Relay	Yes
Analog Outputs	010 V, 020 mA, 420 mA
Signal Indication Ready to Start/Standby ON (LED)	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	Cable Clamp
Connecting Capacity Main Circuit	Hole Diameter 8.5 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 8 N·m
Product Main Type	PSTX60
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
B E	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; Voltage 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

(200 ... 208 V AC) Three Phase 20 Hp

PSTX60-600-70 4/5

UL/CSA	(220 240 V AC) Three Phase 20 Hp
	(440 480 V AC) Three Phase 40 Hp (550 600 V AC) Three Phase 50 Hp
Maximum Operating	Main Circuit 600 V
Voltage UL/CSA	
Tightening Torque <u>UL/CSA</u>	Main Circuit 70.8
Environmental	
Ambient Air Temperature	Operation -25 +60 °C Storage -40 +70 °C
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
SCIP	d1eab0cb-c4c6-4233-8fa0-1a9d9a9b7de8 China (CN)
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: CQC2014010304744405 / SE: CQC2014010304724380
Declaration of Conformity - CCC	CN: 2020980304001091 / SE: 2020980304001489
Declaration of Conformity - CE	2CMT005209

Container Information	
Package Level 1 Width	200 mm
Package Level 1 Depth / Length	282 mm
Package Level 1 Height	388 mm
Package Level 1 Gross Weight	5.6 kg
Package Level 1 EAN	7320500501368
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

**DNV** Certificate

TAE000087N

PSTX60-600-70 5/5

Accessories				
Identifier	Description	Туре	Quantity	Unit Of Measure
1SFN074307R1000	LW110 Terminal Enlargement	LW110	1	piece
1SFA899314R1001	PSCA-1 USB cable	PSCA-1	1	piece
1SFA899300R1001	AB-PROFIBUS-1 Communication Module A	AB-PROFIBUS -1	1	piece
1SFA899300R1002	AB-DEVICENET-1 Communication Module	AB- DEVICENET-1	1	piece
1SFA899300R1003	AB-MODBUS-RTU-1 Communication Module	AB-MODBUS- RTU-1	1	piece
1SFA899300R1006	AB-ETHERNET-IP-2 Communication Module B	AB- ETHERNET-IP -2	1	piece
1SFA899300R1008	AB-MODBUS-TCP-2 Communication Module	AB-MODBUS- TCP-2	1	piece
1SFA899300R1010	AB-PROFINET-IO-2 Communication Module A	AB-PROFINET -IO-2	1	piece
1SFA899300R1011	AB-BACNET-MSTP-1 Communication Module	AB-BACNET- MSTP-1	1	piece
1SFA899300R1012	AB-ETHERCAT-IP-2 Communication Module B	AB- ETHERCAT-IP -2	1	piece
1SAJ611000R0101	DX111-FBP.0 IO-Module for UMC100 DI 24 VDC, supply 24VDC	DX111-FBP.0	1	piece
1SAJ622000R0101	DX122-FBP.0 IO-Module for UMC100 DI 110/230VAC, supply 24VDC	DX122-FBP.0	1	piece
1SFA896312R1002	PS-FBPA Fieldbus plug kit	PS-FBPA	1	piece

## Categories

 $Drives \rightarrow Softstarters \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX60 \\ Low \ Voltage \ Products \ and \ Systems \rightarrow Control \ Products \rightarrow Softstarters \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX60 \\$ 





