



PRODUCT-DETAILS

PSTX170-600-70

PSTX170-600-70 Softstarter - 170 A - 208 ...
600 V AC



General Information

Global Commercial Alias:	PSTX170-600-70
Extended Product Type:	PSTX170-600-70
Product ID:	1SFA898111R7000
ABB Type Designation:	PSTX170-600-70
EAN:	7320500501436
Catalog Description:	PSTX170-600-70 Softstarter - 170 A - 208 ... 600 V AC

Long Description:

The softstarter PSTX170-600-70 has a rated maximum operational current of 170 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.

Display Name:	PSTX170-600-70
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Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85371091

Popular Downloads

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:	9AAC181167_EPLAN
Wiring Diagram:	N/A

Dimensions

Product Net Width:	199 mm
Product Net Height:	377 mm
Product Net Depth / Length:	283.3 mm
Product Net Weight:	8.9 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) 45 kW (400 V) 90 kW (500 V) 110 kW
Rated Operational Current - In-Line Connection (Ie):	170 A
Rated Operational Power - Inside Delta Connection:	at 230 V 90 kW at 400 V 160 kW at 500 V 200 kW
Rated Operational Current - Inside Delta Connection:	300 A
Service Factor Percentage:	100 %
Overload Protection:	Built-in electronic overload protection
Integrated Electronic Overload:	Yes
Starting Capacity at Maximum Rated Current Ie:	4xle for 10s
Ramp Time:	1 ... 120 s
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:	0...10 V, 0...20 mA, 4...20 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:	Main Circuit: Bars
Connecting Capacity Main Circuit:	Hole Diameter 8.5 mm
Connecting Capacity Control Circuit:	Rigid 1 x 2.5 mm ²
Connecting Capacity Supply Circuit:	Rigid 1 x 2.5
Tightening Torque:	Main Circuit 14 N·m
Product Main Type:	PSTX170

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 50 Hp
 (220 ... 240 V AC) Three Phase 60 Hp
 (440 ... 480 V AC) Three Phase 125 Hp
 (550 ... 600 V AC) Three Phase 150 Hp

Maximum Operating Voltage UL/CSA: Main Circuit 600 V

Tightening Torque UL/CSA: Main Circuit 123.9

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 Declaration:	2CMT2022-006500
RoHS Information:	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: CQC2014010304744407 / SE: CQC2014010304724379
Declaration of Conformity - CCC:	CN: 2020980304001092 / SE: 2020980304001485
Declaration of Conformity - CE:	2CMT005209
DNV Certificate:	TAE000087N

Container Information

Package Level 1 Width:	263 mm
Package Level 1 Depth / Length:	323 mm
Package Level 1 Height:	454 mm
Package Level 1 Gross Weight:	10.4 kg
Package Level 1 EAN:	7320500501436
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

Categories

Products > Drives > Softstarters > Softstarters > PSTX Softstarters > PSTX170

Products > Low Voltage Products and Systems > Control Products > Softstarters > Softstarters > PSTX Softstarters > PSTX170

