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PRODUCT-DETAILS

## PSTX72-600-70

# PSTX72-600-70 Softstarter - 72 A - 208 ... 600 V AC



**General Information** 

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Catalog Description	PSTX72-600-70 Softstarter - 72 A - 208 600 V AC
EAN	7320500501405
ABB Type Designation	PSTX72-600-70
Product ID	1SFA898107R7000
Extended Product Type	PSTX72-600-70
Global Commercial Alias	PSTX72-600-70

The softstarter PSTX72-600-70 has a rated maximum operational current of 72 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**

Wiring Diagram	N/A
CAD Dimensional Drawing	2CDC001079B0201
Instructions and Manuals	1SFC132081M0201
Data Sheet, Technical Information	1SFC132012C0201

#### **Dimensions**

Product Net Width	150 mm
Product Net Height	314 mm
Product Net Depth / Length	198 mm
Product Net Weight	4.7 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 (U <sub>c</sub> )	24 V DC
Rated Frequency (f)	50/60 Hz

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	Main Circuit 50 / 60 Hz
Rated Operational Power - In-Line Connection (Pe)	(230 V) 18.5 kW (400 V) 37 kW (500 V) 45 kW
Rated Operational Current - In-Line Connection (le)	72 A
Rated Operational Power - Inside Delta	at 230 V 37 kW at 400 V 59 kW
Connection  Rated Operational Current - Inside Delta Connection	at 500 V 80 kW 124 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 Ie	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  Analog Outputs	Yes 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	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 mm²
Tightening Torque	Main Circuit 8 N·m
Product Main Type	PSTX72
Function	Auto phase sequence detection Automatic restart Current limit
	Current limit Current limit ramp

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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 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 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 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

Toch	nical	111 /	CCA
recn	micai	UL/	CSA

**Protection Function** 

Warning Details

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
Tightening Torque	Main Circuit 70.8
UL/CSA	

## **Environmental**

Ambient Air	Operation -25 +60 °C
Temperature	Storage -40 +70 °C
Degree of Protection	IPOO

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Material	Compl	ıance

Conflict Minerals	9AKK108467A5658
Reporting Template	
(CMRT)	
REACH Declaration	2CMT2022-006481
RoHS Information	2CMT2022-006500

imbalance warning

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RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP	ac10f14a-1b4e-426d-af4a-2e5fd406051c 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	5.7 kg
Package Level 1 EAN	7320500501405
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

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Unit Of Measure	uantity	Type Qu	Description	Identifier
piece	1	LW110	LW110 Terminal Enlargement	1SFN074307R1000
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	DX111-FBP.0	DX111-FBP.0 IO-Module for UMC100 DI 24 VDC, supply 24VDC	1SAJ611000R0101
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

 $Drives \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX72 \\ Low \ Voltage \ Products \ and \ Systems \rightarrow Control \ Products \rightarrow Softstarters \rightarrow PSTX \ Softstarters \rightarrow PSTX72 \\$ 





