



PRODUCT-DETAILS

PSTX470-600-70

PSTX470-600-70 Softstarter - 470 A - 208 ...
600 V AC



General Information	
Global Commercial Alias:	PSTX470-600-70
Extended Product Type:	PSTX470-600-70
Product ID:	1SFA898116R7000
ABB Type Designation:	PSTX470-600-70
EAN:	7320500508954
Catalog Description:	PSTX470-600-70 Softstarter - 470 A - 208 ... 600 V AC

Long Description:

The softstarter PSTX470-600-70 has a rated maximum operational current of 470 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:

PSTX470-600-70

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:

9AAC184489_EPLAN

Wiring Diagram:

N/A

Dimensions

Product Net Width:

361 mm

Product Net Height:

493 mm

Product Net Depth / Length:

282 mm

Product Net Weight:

25 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) 132 kW (400 V) 250 kW (500 V) 315 kW
Rated Operational Current - In-Line Connection (Ie):	470 A
Rated Operational Power - Inside Delta Connection:	at 230 V 250 kW at 400 V 450 kW at 500 V 600 kW
Rated Operational Current - Inside Delta Connection:	814 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 %
Switch for Inside Delta Connection:	Yes
Run Signal Relay:	Yes
By-pass Signal Relay:	Yes
Fault Signal Relay:	Yes
Overload Signal Relay:	Yes
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 35 N·m
Product Main Type:	PSTX470

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 150 Hp (220 ... 240 V AC) Three Phase 200 Hp (440 ... 480 V AC) Three Phase 400 Hp (550 ... 600 V AC) Three Phase 500 Hp
Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
Tightening Torque UL/CSA:	Main Circuit 309.8

Environmental

Ambient Air Temperature:	Operation -25 ... +60 °C Storage -40 ... +70 °C
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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
SCIP:	a1346ff5-a835-4b95-a497-f7349f9614a9 China
Simplified SCIP:	04c90b97-2847-4b38-8586-2c52e68c2803 France 1d2ef622-7f17-48aa-905a-14014e83ea33 Estonia 1f55aada-8123-4933-bf2e-a63cd526a061 Czechia 59d52690-b3a4-44c8-978f-294be55c026d Portugal 6cd4fd1f-886a-4322-aafe-e044c756bffc Spain 6f3d86cb-c3bb-4bbe-be03-0693f54cee36 Finland 76df8cb2-6c83-45da-990a-936795358f20 Netherlands 816f3f03-ca29-40f5-9ae6-bfd14a07adfe Bulgaria 90514178-d668-4d9d-b1f3-869875c091d1 Poland afda64cc-5464-464b-9310-a63a4ae1f4d6 Romania b19e525d-e241-47ba-ae34-31b2a893fce7 Denmark c841af21-a7bb-4807-9b5e-5a2c9a934b43 Norway ca19eb0a-03f7-48db-8ac5-0b0278f5828b Belgium ce197f1b-2b8b-4e3a-836c-9d69b2dfd8ea Germany cefbbd15-a87c-4f87-9bf4-c21cff1238db Croatia d92c78a9-5a47-4cdf-81f5-512d9529c891 Greece e39d7aa1-75bc-410c-a45b-916b71fd7723 Sweden eda57887-2322-4d0d-bb63-813c008ed37d Hungary
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)

ABB EcoSolutions

ABB EcoSolutions:	Yes
ABB Site Meeting Group Waste To Landfill Target:	UL 2799 Zero Waste To Landfill Validation available
EcoSolutions Profile:	1SFC100125C0367
End Of Life Disassembling Instructions:	1SFC132453M0201
Environmental Product Declaration - EPD:	1SFC132447 1SFC132438
Extended Product Lifetime:	Product Durability
Improved Energy Efficiency for Customers:	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line
Recyclability Rate of the Product acc. to EN45555:	Design for Closing Resource Loops - Standard EN45555 - 83.6 %

Certificates and Declarations

CQC Certificate:	CN: CQC2015010304806588 / SE: CQC2015010304797766
Declaration of Conformity - CCC:	CN: 2020980304001094 / SE: 2020980304001859
Declaration of Conformity - CE:	2CMT005209
DNV Certificate:	TAE000087N
EU Data Act Compliance Declaration:	1SFC132498M0201

Container Information

Package Level 1 Width:	470 mm
Package Level 1 Depth / Length:	381 mm
Package Level 1 Height:	650 mm
Package Level 1 Gross Weight:	29 kg
Package Level 1 EAN:	7320500508954
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

Identifier	Description	Type	Qty	Unit Of Measure
1SDA013922R1	KIT FC CuAl 2x240mm2 T6 630-S6 630 6pcs	KIT FC CuAl 2x240mm2 T6 630-S6 630 6pcs	1	piece
1SDA023380R1	KIT FC CuAl 2x240mm2 T6 630-S6 630 3pcs	KIT FC CuAl 2x240mm2 T6 630-S6 630 3pcs	1	piece
1SFN075710R1000	LX460 Terminal Extension	LX460	1	piece
1SFN075707R1000	LW460 Terminal Enlargement	LW460	1	piece
1SFN125701R1000	LT460-AC Terminal shroud	LT460-AC	1	piece
1SFN125703R1000	LT460-AL Terminal shroud	LT460-AL	1	piece
1SFA899314R1001	PSCA-1 USB cable	PSCA-1	1	piece
1SFA899300R1001	AB-PROFIBUS-1 Communication Module	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	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	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	AB-ETHERCAT-IP-2	1	piece

Identifier	Description	Type	Qty	Unit Of Measure
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

Products > Drives > Softstarters > Softstarters > PSTX Softstarters > PSTX470

Products > Low Voltage Products and Systems > Control Products > Softstarters > Softstarters > PSTX Softstarters > PSTX470

