PRODUCT-DETAILS

PSTX105-690-70

PSTX105-690-70 Softstarter - 105 A - 208 ... 690 V AC

General Information

Global Commercial Alias	PSTX105-690-70
Extended Product Type	PSTX105-690-70
Product ID	1SFA898209R7000
ABB Type Designation	PSTX105-690-70
EAN	7320500501344
Catalog Description	PSTX105-690-70 Softstarter - 105 A - 208 ... 690 V AC
Long Description	The softstarter PSTX105-690-70 has a rated maximum operational current of 105 A with an operating voltage span from 208...690 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.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85371091

Popular Downloads

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

Dimensions

Product Net Width	150 mm
Product Net Height	314 mm
Product Net Depth / Length	198 mm
Product Net Weight	4.7 kg

Technical

Rated Operational Voltage	208 ... 690 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) 30 kW (400 V) 55 kW (500 V) 75 kW (690 V) 90 kW
Rated Operational Current - In-Line Connection (Ie)	105 A
Rated Operational Power - Inside Delta Connection	at 230 V 55 kW at 400 V 90 kW at 500 V 110 kW at 690 V 160 kW
Rated Operational Current - Inside Delta Connection	181 A
Service Factor Percentage	100 %
Overload Protection	Built-in electronic overload protection
Integrated Electronic Overload	Yes
Adjustable Rated Motor Current Ie	30 ... 100 %
Starting Capacity at Maximum Rated Current Ie	4xIe 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 xIe
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	IP00
Terminal Type	Cable Clamp
Connecting Capacity Main Circuit	Hole Diameter 8.5 mm
Connecting Capacity Control Circuit	Rigid 1 x 2.5 mm²
Connecting Capacity Supply Circuit	Rigid 1 x 2.5 mm²
Tightening Torque	Main Circuit 8 N·m
Product Main Type	PSTX105
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

Maximum Operating Voltage UL/CSA	Main Circuit 690 V
Tightening Torque UL/CSA	Main Circuit 70.8

Environmental

Ambient Air Temperature	Operation -25 ... +60 °C Storage -40 ... +70 °C
Degree of Protection	IP00
RoHS Information	2CMT005210
RoHS Status	Following EU Directive 2002/95/EC August 18, 2005 and amendment

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	7320500501344
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

Categories

Drives → Softstarters → Softstarters → PSTX Softstarters → PSTX105

Low Voltage Products and Systems → Control Products → Softstarters → Softstarters → PSTX Softstarters → PSTX105