



Catalog

# Softstarters Type PSR, PSE and PSTX

# PSTX – The advanced range

## PSTX – The advanced range

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# PSTX – The advanced range

## Introduction

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The PSTX combines many years of research and product development with extensive knowledge of application specific requirements and needs. It is our latest advancement in motor control and protection and adds new functionality and increased reliability.

- Three-phase controlled
- Operational voltage: 208...690 VAC
- Wide rated control supply voltage: 100...250 V, 50/60 Hz
- PSTX Rated operational current: 30...1250 A (inside-delta: 2160 A)
- Both in-line and inside-delta connection
- Coated circuit boards protecting from dust, moist and corrosive atmosphere
- Detachable keypad rated IP66 (Type 1, 4X,12)
- Graphical display with 16 languages for easy setup and operation
- Built-in bypass for energy saving and easy installation
- Built-in Modbus RTU for monitoring and control
- Support for all major communication protocols
- Analog output for measurement of current, voltage, power factor etc.

### Secure motor Reliability

#### Complete motor protection

The PSTX offers complete motor protection in only one unit and is able to handle both load and network irregularities. PT-100, earth fault protection and over/under voltage protection along with many other functions keep your motor safer than ever.

#### Three types of current limit

PSTX offers three types of current limit: standard, dual and ramp. This gives you full control of your motor during start. It also allows you to use your motor in weaker networks.

### Improve installation Efficiency

#### Built-in bypass saves time and energy

When reaching full speed, the PSTX will activate its bypass. This saves energy while reducing the softstarter's heat generation. On the PSTX, the bypass is built in and verified by ABB, saving you time during installation and space in your panel.

#### Easy-to-use and detachable keypad

A user-friendly and clear display saves you time and resources during both setup and operation. The detachable keypad is standard on all PSTX softstarters.

### Increase application Productivity

#### Complete control of pumps

Time to use your processes to their full potential. The PSTX features many application enhancing features, including torque control: the most efficient way to start and stop pumps. The pump cleaning feature can reverse pump flow and clean out pipes, securing uptime of your pump system.

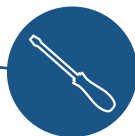
#### Jog with slow speed

The slow speed forward and backward jog feature will make you more flexible when operating e.g. conveyor belts and cranes. The PSTX provides positioning capabilities, letting you take control of your process.

# PSTX – The advanced range

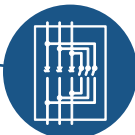
## Introduction

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### Keyhole mounting for quick installation

The PSTX is simple and quick to install using keyhole mounting, saving you valuable time during the installation.



### A compact motor starting solution

When your application reaches full speed, a bypass will reduce the softstarter's energy consumption. It also reduces heat generation which means you can save money by reducing the need of added cooling equipment. On the PSTX, the bypass is built in and verified by ABB.



### Clear markings on the front

With the PSTX, you do not need a manual to handle control circuit connections. With the self-explanatory markings on the front you can verify that the connections are done right. And with basic data on the front, identification is simple without having to take the product down.

### Customizable

The PSTX has 17 pre-installed languages along with options to customize your own specific home screens (up to seven different). You can use your customized home screens to show status information important to your process – and hide information that is not.



### Easy to learn

A large graphical display along with built-in assistants make learning how to handle the PSTX fun and simple. The interface resembles other interfaces from ABB which will streamline and help with training of field personnel.



### Detachable

The PSTX comes with a detachable keypad as standard. It can be placed on your panel door, meaning you do not have to interrupt your process in order to read status information or to change settings.



# PSTX – The advanced range

## Overview



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Normal start In-Line connected	PSTX30	PSTX37	PSTX45	PSTX60	PSTX72	PSTX85	PSTX105	PSTX142	PSTX170
(400 V) kW	15	18.5	22	30	37	45	55	75	90
IEC, max. A	30	37	45	60	72	85	106	143	171
(440-480 V) hp	20	25	30	40	50	60	75	100	125
UL, max. FLA	28	34	42	60	68	80	104	130	169
Using manual motor starter or MCCB, type 1 coordination will be achieved. <sup>1)</sup>	400 V, 40 °C								
	MCCB (50 kA)								
	XT2S160								XT4S250
Using gG fuses, type 1 coordination will be achieved. To achieve type 2 coordination, semiconductor fuses must be used. <sup>1)</sup>	Fuse protection (80 kA), Semiconductor fuses, Bussmann								
	170M1567	170M1568	170M1569		170M1571	170M1572	170M3819	170M5810	170M5812
Suitable switch fuse for the recommended semiconductor fuses. <sup>1)</sup>	Switch fuse								
	OS32G	OS63G			OS125G		OS250	OS400	
The line contactor is not required for the softstarter itself but often used to open if OL trips <sup>1)</sup>	Line contactor								
	AF30	AF38	AF52	AF65	AF80	AF96	AF116	AF140	AF190

<sup>1)</sup> This is an example of coordination. For more examples see: [applications.it.abb.com/SOC](http://applications.it.abb.com/SOC)

# PSTX – The advanced range

## Overview



Normal start In-Line connected	PSTX210	PSTX250	PSTX300	PSTX370	PSTX470	PSTX570	PSTX720	PSTX840	PSTX1050	PSTX1250
(400 V) kW	110	132	160	200	250	315	400	450	560	710
IEC, max. A	210	250	300	370	470	570	720	840	1050	1250
(440-480 V) hp	150	200	250	300	400	500	600	700	900	1000
UL, max. FLA	192	248	302	361	480	590	720	840	1062	1250

400 V, 40 °C

Using manual motor starter or MCCB, type 1 coordination will be achieved. <sup>1)</sup>	MCCB (50 kA)									
	T4S320	T5S400		T5S630	T7S800		T7S1250		E2.2N 2000	

Using gG fuses, type 1 coordination will be achieved. To achieve type 2 coordination, semiconductor fuses must be used. <sup>1)</sup>	Fuse protection (80 kA), Semiconductor fuses, Bussmann									
	170M5812	170M5813	170M6812	170M6813	170M6814	170M8554	170M6018	170M6020	170M6021	

Suitable switch fuse for the recommended semiconductor fuses. <sup>1)</sup>	Switch fuse									
	OS400		OS630			OS800		-		

The line contactor is not required for the softstarter itself but often used to open if OL trips. <sup>1)</sup>	Line contactor									
	AF205	AF265	AF305	AF370	AF460	AF580	AF750	AF1350	AF1650	-

<sup>1)</sup> This is an example of coordination. For more examples see: [applications.it.abb.com/SOC](http://applications.it.abb.com/SOC)

# PSTX – The advanced range

## Normal starts, class 10, in-line, ordering details



PSTX30 ... PSTX105



PSTX142 ... PSTX170



PSTX210 ... PSTX370



PSTX470 ... PSTX570



PSTX720 ... PSTX840



PSTX1050 ... PSTX1250

### Description

Selection table for normal start. Typical applications:

- Bow thruster
- Centrifugal pump
- Compressor
- Conveyor belt (short)
- Elevator



For a more precise selection, use the online softstarter selection tool available by scanning the shown QR code or using the selection tool available on:

[new.abb.com/low-voltage/products/softstarters](http://new.abb.com/low-voltage/products/softstarters)

### Rated operational voltage $U_e$ , 208...600 V

#### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

IEC			UL/CSA					Type	Order code	Weight		
Rated operational power			current	Rated operational power						current	(1 pce)	
400 V	500 V	690 V		200 / 208 V	220 / 240 V	440 / 480 V	550 / 600 V				kg	(lb)
P <sub>e</sub>	P <sub>e</sub>	P <sub>e</sub>	I <sub>e</sub>	P <sub>e</sub>	P <sub>e</sub>	P <sub>e</sub>	P <sub>e</sub>	FLA				
kW	kW	kW	A	hp	hp	hp	hp	A				
15	18.5	-	30	7.5	10	20	25	28	PSTX30-600-70	1SFA898103R7000	6.10 (13.45)	
18.5	22	-	37	10	10	25	30	34	PSTX37-600-70	1SFA898104R7000	6.10 (13.45)	
22	25	-	45	10	15	30	40	42	PSTX45-600-70	1SFA898105R7000	6.10 (13.45)	
30	37	-	60	20	20	40	50	60	PSTX60-600-70	1SFA898106R7000	6.10 (13.45)	
37	45	-	72	20	25	50	60	68	PSTX72-600-70	1SFA898107R7000	6.10 (13.45)	
45	55	-	85	25	30	60	75	80	PSTX85-600-70	1SFA898108R7000	6.10 (13.45)	
55	75	-	106	30	40	75	100	104	PSTX105-600-70	1SFA898109R7000	6.10 (13.45)	
75	90	-	143	40	50	100	125	130	PSTX142-600-70	1SFA898110R7000	9.60 (21.16)	
90	110	-	171	50	60	125	150	169	PSTX170-600-70	1SFA898111R7000	9.60 (21.16)	
110	132	-	210	60	75	150	200	192	PSTX210-600-70	1SFA898112R7000	12.70 (27.99)	
132	160	-	250	75	100	200	250	248	PSTX250-600-70	1SFA898113R7000	12.70 (27.99)	
160	200	-	300	100	100	250	300	302	PSTX300-600-70	1SFA898114R7000	12.70 (27.99)	
200	257	-	370	125	150	300	350	361	PSTX370-600-70	1SFA898115R7000	12.70 (27.99)	
250	315	-	470	150	200	400	500	480	PSTX470-600-70	1SFA898116R7000	25.00 (55.12)	
315	400	-	570	200	200	500	600	590	PSTX570-600-70	1SFA898117R7000	25.00 (55.12)	
400	500	-	720	250	300	600	700	720	PSTX720-600-70	1SFA898118R7000	46.20 (101.85)	
450	600	-	840	300	350	700	800	840	PSTX840-600-70	1SFA898119R7000	46.20 (101.85)	
560	730	-	1050	400	450	900	1000	1062	PSTX1050-600-70	1SFA898120R7000	64.20 (141.54)	
710	880	-	1200	400	500	1000	1200	1250	PSTX1250-600-70	1SFA898121R7000	64.70 (142.64)	

### Rated operational voltage $U_e$ , 208...690 V

#### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

15	18.5	25	30	7.5	10	20	25	28	PSTX30-690-70	1SFA898203R7000	6.10 (13.45)
18.5	22	30	37	10	10	25	30	34	PSTX37-690-70	1SFA898204R7000	6.10 (13.45)
22	25	37	45	10	15	30	40	42	PSTX45-690-70	1SFA898205R7000	6.10 (13.45)
30	37	55	60	20	20	40	50	60	PSTX60-690-70	1SFA898206R7000	6.10 (13.45)
37	45	59	72	20	25	50	60	68	PSTX72-690-70	1SFA898207R7000	6.10 (13.45)
45	55	75	85	25	30	60	75	80	PSTX85-690-70	1SFA898208R7000	6.10 (13.45)
55	75	90	106	30	40	75	100	104	PSTX105-690-70	1SFA898209R7000	6.10 (13.45)
75	90	132	143	40	50	100	125	130	PSTX142-690-70	1SFA898210R7000	9.60 (21.16)
90	110	160	171	50	60	125	150	169	PSTX170-690-70	1SFA898211R7000	9.60 (21.16)
110	132	184	210	60	75	150	200	192	PSTX210-690-70	1SFA898212R7000	12.70 (27.99)
132	160	220	250	75	100	200	250	248	PSTX250-690-70	1SFA898213R7000	12.70 (27.99)
160	200	257	300	100	100	250	300	302	PSTX300-690-70	1SFA898214R7000	12.70 (27.99)
200	257	355	370	125	150	300	350	361	PSTX370-690-70	1SFA898215R7000	12.70 (27.99)
250	315	450	470	150	200	400	500	480	PSTX470-690-70	1SFA898216R7000	25.00 (55.12)
315	400	560	570	200	200	500	600	590	PSTX570-690-70	1SFA898217R7000	25.00 (55.12)
400	500	710	720	250	300	600	700	720	PSTX720-690-70	1SFA898218R7000	46.20 (101.85)
450	600	800	840	300	350	700	800	840	PSTX840-690-70	1SFA898219R7000	46.20 (101.85)
560	730	1000	1050	400	450	900	1000	1062	PSTX1050-690-70	1SFA898220R7000	64.20 (141.54)
710	880	1200	1250	400	500	1000	1200	1250	PSTX1250-690-70	1SFA898221R7000	64.70 (142.64)



# PSTX – The advanced range

## Heavy-duty, class 30, in-line, ordering details



PSTX30 ... PSTX105



PSTX142 ... PSTX170



PSTX210 ... PSTX370



PSTX470 ... PSTX570



PSTX720 ... PSTX840



PSTX1050 ... PSTX1250

### Description

Selection table for heavy-duty start. Typical applications:

- Centrifugal fan
- Conveyor belt (long)
- Crusher
- Mill
- Mixer
- Stirrer



For a more precise selection, use the online softstarter selection tool available by scanning the shown QR code or using the selection tool available on:

[new.abb.com/low-voltage/products/softstarters](http://new.abb.com/low-voltage/products/softstarters)

### Rated operational voltage $U_e$ , 208...600 V

### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

IEC				UL/CSA				Type	Order code	Weight (1 pce)	
Rated operational power				Rated operational power							
400 V	500 V	690 V	current	200 / 208 V	220 / 240 V	440 / 480 V	550 / 600 V	current			
$P_e$	$P_e$	$P_e$	$I_e$	$P_e$	$P_e$	$P_e$	$P_e$	FLA		kg	(lb)
kW	kW	kW	A	hp	hp	hp	hp	A			
11	15	-	22	5	7.5	15	20	25	PSTX30-600-70	1SFA898103R7000	6.10 (13.45)
15	18.5	-	30	7.5	10	20	25	28	PSTX37-600-70	1SFA898104R7000	6.10 (13.45)
18.5	22	-	37	10	10	25	30	34	PSTX45-600-70	1SFA898105R7000	6.10 (13.45)
22	25	-	45	10	15	30	40	42	PSTX60-600-70	1SFA898106R7000	6.10 (13.45)
30	37	-	60	20	20	40	50	60	PSTX72-600-70	1SFA898107R7000	6.10 (13.45)
37	45	-	72	20	25	50	60	68	PSTX85-600-70	1SFA898108R7000	6.10 (13.45)
45	55	-	85	25	30	60	75	80	PSTX105-600-70	1SFA898109R7000	6.10 (13.45)
55	75	-	106	30	40	75	100	104	PSTX142-600-70	1SFA898110R7000	9.60 (21.16)
75	90	-	143	40	50	100	125	130	PSTX170-600-70	1SFA898111R7000	9.60 (21.16)
90	110	-	171	50	60	125	150	169	PSTX210-600-70	1SFA898112R7000	12.70 (27.99)
110	132	-	210	60	75	150	200	192	PSTX250-600-70	1SFA898113R7000	12.70 (27.99)
132	160	-	250	75	100	200	250	248	PSTX300-600-70	1SFA898114R7000	12.70 (27.99)
160	200	-	300	100	100	250	300	302	PSTX370-600-70	1SFA898115R7000	12.70 (27.99)
200	257	-	370	125	150	300	350	361	PSTX470-600-70	1SFA898116R7000	25.00 (55.12)
250	315	-	470	150	200	400	500	480	PSTX570-600-70	1SFA898117R7000	25.00 (55.12)
315	400	-	570	200	200	500	600	590	PSTX720-600-70	1SFA898118R7000	46.20 (101.85)
400	500	-	720	250	300	600	700	720	PSTX840-600-70	1SFA898119R7000	46.20 (101.85)
450	600	-	840	300	350	700	800	840	PSTX1050-600-70	1SFA898120R7000	64.20 (141.54)
560	730	-	1050	400	450	900	1000	1062	PSTX1250-600-70	1SFA898121R7000	64.70 (142.64)

### Rated operational voltage $U_e$ , 208...690 V

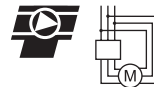
### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

11	15	18.5	22	5	7.5	15	20	25	PSTX30-690-70	1SFA898203R7000	6.10 (13.45)
15	18.5	25	30	7.5	10	20	25	28	PSTX37-690-70	1SFA898204R7000	6.10 (13.45)
18.5	22	30	37	10	10	25	30	34	PSTX45-690-70	1SFA898205R7000	6.10 (13.45)
22	25	37	44	10	15	30	40	42	PSTX60-690-70	1SFA898206R7000	6.10 (13.45)
30	37	55	60	20	20	40	50	60	PSTX72-690-70	1SFA898207R7000	6.10 (13.45)
37	45	59	72	20	25	50	60	68	PSTX85-690-70	1SFA898208R7000	6.10 (13.45)
45	55	75	85	25	30	60	75	80	PSTX105-690-70	1SFA898209R7000	6.10 (13.45)
55	75	90	106	30	40	75	100	104	PSTX142-690-70	1SFA898210R7000	9.60 (21.16)
75	90	132	143	40	50	100	125	130	PSTX170-690-70	1SFA898211R7000	9.60 (21.16)
90	110	160	171	50	60	125	150	169	PSTX210-690-70	1SFA898212R7000	12.70 (27.99)
110	132	184	210	60	75	150	200	192	PSTX250-690-70	1SFA898213R7000	12.70 (27.99)
132	160	220	250	75	100	200	250	248	PSTX300-690-70	1SFA898214R7000	12.70 (27.99)
160	200	257	300	100	100	250	300	302	PSTX370-690-70	1SFA898215R7000	12.70 (27.99)
200	257	355	370	125	150	300	350	361	PSTX470-690-70	1SFA898216R7000	25.00 (55.12)
250	315	450	470	150	200	400	500	480	PSTX570-690-70	1SFA898217R7000	25.00 (55.12)
315	400	560	570	200	200	500	600	590	PSTX720-690-70	1SFA898218R7000	46.20 (101.85)
400	500	710	720	250	300	600	700	720	PSTX840-690-70	1SFA898219R7000	46.20 (101.85)
450	600	800	840	300	350	700	800	840	PSTX1050-690-70	1SFA898220R7000	64.20 (141.54)
560	730	1000	1050	400	450	900	1000	1062	PSTX1250-690-70	1SFA898221R7000	64.70 (142.64)



# PSTX – The advanced range

## Normal starts, class 10, inside delta, ordering details



PSTX30 ... PSTX105



PSTX142 ... PSTX170



PSTX210 ... PSTX370



PSTX470 ... PSTX570



PSTX720 ... PSTX840



PSTX1050 ... PSTX1250

### Description

Selection table for normal start. Typical applications:

- Bow thruster
- Centrifugal pump
- Compressor
- Conveyor belt (short)
- Elevator



For a more precise selection, use the online softstarter selection tool available by scanning the shown QR code or using the selection tool available on:

[new.abb.com/low-voltage/products/softstarters](http://new.abb.com/low-voltage/products/softstarters)

### Rated operational voltage $U_e$ , 208...600 V

#### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

IEC				UL/CSA				Type	Order code	Weight (1 pce)	
Rated operational power				Rated operational power							
400 V	500 V	690 V	current	200 / 208 V	220 / 240 V	440 / 480 V	550 / 600 V	current			
$P_e$	$P_e$	$P_e$	$I_e$	$P_e$	$P_e$	$P_e$	$P_e$	FLA		kg	(lb)
kW	kW	kW	A	hp	hp	hp	hp	A			
25	30	-	52	10	15	30	40	48	PSTX30-600-70	1SFA898103R7000	6.10 (13.45)
30	37	-	64	15	20	40	50	58	PSTX37-600-70	1SFA898104R7000	6.10 (13.45)
37	45	-	76	20	25	50	60	72	PSTX45-600-70	1SFA898105R7000	6.10 (13.45)
55	75	-	105	30	40	75	100	103	PSTX60-600-70	1SFA898106R7000	6.10 (13.45)
59	80	-	124	30	40	75	100	117	PSTX72-600-70	1SFA898107R7000	6.10 (13.45)
75	90	-	147	40	50	100	125	138	PSTX85-600-70	1SFA898108R7000	6.10 (13.45)
90	110	-	181	60	60	150	150	180	PSTX105-600-70	1SFA898109R7000	6.10 (13.45)
132	160	-	245	75	75	150	200	225	PSTX142-600-70	1SFA898110R7000	9.60 (21.16)
160	200	-	300	75	100	200	250	292	PSTX170-600-70	1SFA898111R7000	9.60 (21.16)
184	250	-	360	100	125	250	300	332	PSTX210-600-70	1SFA898112R7000	12.70 (27.99)
220	295	-	430	150	150	350	450	429	PSTX250-600-70	1SFA898113R7000	12.70 (27.99)
257	355	-	515	150	200	450	500	523	PSTX300-600-70	1SFA898114R7000	12.70 (27.99)
355	450	-	640	200	250	500	600	625	PSTX370-600-70	1SFA898115R7000	12.70 (27.99)
450	600	-	814	250	300	600	700	830	PSTX470-600-70	1SFA898116R7000	25.00 (55.12)
540	700	-	987	300	350	700	800	1020	PSTX570-600-70	1SFA898117R7000	25.00 (55.12)
710	880	-	1247	400	500	1000	1200	1240	PSTX720-600-70	1SFA898118R7000	46.20 (101.85)
800	1000	-	1455	500	600	1200	1500	1450	PSTX840-600-70	1SFA898119R7000	46.20 (101.85)
1000	1250	-	1810	600	700	1500	1800	1830	PSTX1050-600-70	1SFA898120R7000	64.20 (141.54)
1200	1500	-	2160	800	900	1800	2000	2160	PSTX1250-600-70	1SFA898121R1000	64.70 (142.64)

### Rated operational voltage $U_e$ , 208...690 V

#### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

25	30	45	52	10	15	30	40	48	PSTX30-690-70	1SFA898203R7000	6.10 (13.45)
30	37	55	64	15	20	40	50	58	PSTX37-690-70	1SFA898204R7000	6.10 (13.45)
37	45	59	76	20	25	50	60	72	PSTX45-690-70	1SFA898205R7000	6.10 (13.45)
55	75	90	105	30	40	75	100	103	PSTX60-690-70	1SFA898206R7000	6.10 (13.45)
59	80	110	124	30	40	75	100	117	PSTX72-690-70	1SFA898207R7000	6.10 (13.45)
75	90	132	147	40	50	100	125	138	PSTX85-690-70	1SFA898208R7000	6.10 (13.45)
90	110	160	181	60	60	150	150	180	PSTX105-690-70	1SFA898209R7000	6.10 (13.45)
132	160	220	245	75	75	150	200	225	PSTX142-690-70	1SFA898210R7000	9.60 (21.16)
160	200	257	300	75	100	200	250	292	PSTX170-690-70	1SFA898211R7000	9.60 (21.16)
184	250	315	360	100	125	250	300	332	PSTX210-690-70	1SFA898212R7000	12.70 (27.99)
220	295	400	430	150	150	350	450	429	PSTX250-690-70	1SFA898213R7000	12.70 (27.99)
257	355	500	515	150	200	450	500	523	PSTX300-690-70	1SFA898214R7000	12.70 (27.99)
355	450	600	640	200	250	500	600	625	PSTX370-690-70	1SFA898215R7000	12.70 (27.99)
450	600	800	814	250	300	600	700	720	PSTX470-690-70	1SFA898216R7000	25.00 (55.12)
540	700	960	987	300	350	700	800	840	PSTX570-690-70	1SFA898217R7000	25.00 (55.12)
710	880	1200	1247	400	500	1000	1200	1247	PSTX720-690-70	1SFA898218R7000	46.20 (101.85)
800	1000	1400	1455	500	600	1200	1500	1454	PSTX840-690-70	1SFA898219R7000	46.20 (101.85)
1000	1250	1700	1810	600	700	1500	1800	1839	PSTX1050-690-70	1SFA898220R7000	64.20 (141.54)
1200	1500	2000	2160	800	900	1800	2000	2160	PSTX1250-690-70	1SFA898221R7000	64.70 (142.64)

# PSTX – The advanced range

## Heavy-duty, class 30, inside delta, ordering details



PSTX30 ... PSTX105



PSTX142 ... PSTX170



PSTX210 ... PSTX370



PSTX470 ... PSTX570



PSTX720 ... PSTX840



PSTX1050 ... PSTX1250

### Description

Selection table for heavy-duty start. Typical applications:

- Centrifugal fan
- Conveyor belt (long)
- Crusher
- Mill
- Mixer
- Stirrer



For a more precise selection, use the online softstarter selection tool available by scanning the shown QR code or using the selection tool available on:

[new.abb.com/low-voltage/products/softstarters](http://new.abb.com/low-voltage/products/softstarters)

### Rated operational voltage $U_e$ , 208...600 V

### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

IEC				UL/CSA					Type	Order code	Weight	
Rated operational power				Rated operational power							(1 pce)	
400 V	500 V	690 V	current	200 / 208 V	220 / 240 V	440 / 480 V	550 / 600 V	current				
P <sub>e</sub> kW	P <sub>e</sub> kW	P <sub>e</sub> kW	I <sub>e</sub> A	P <sub>e</sub> hp	P <sub>e</sub> hp	P <sub>e</sub> hp	P <sub>e</sub> hp	FLA A			kg	(lb)
18.5	25	-	42	7.5	10	25	30	34	PSTX30-600-70	1SFA898103R7000	6.10	(13.45)
25	30	-	52	10	15	30	40	48	PSTX37-600-70	1SFA898104R7000	6.10	(13.45)
30	37	-	64	15	20	40	50	58	PSTX45-600-70	1SFA898105R7000	6.10	(13.45)
37	45	-	76	20	25	50	60	72	PSTX60-600-70	1SFA898106R7000	6.10	(13.45)
55	75	-	105	30	40	75	100	103	PSTX72-600-70	1SFA898107R7000	6.10	(13.45)
59	80	-	124	30	40	75	100	117	PSTX85-600-70	1SFA898108R7000	6.10	(13.45)
75	90	-	147	40	50	100	125	138	PSTX105-600-70	1SFA898109R7000	6.10	(13.45)
90	110	-	181	60	60	150	150	180	PSTX142-600-70	1SFA898110R7000	9.60	(21.16)
132	160	-	245	75	75	150	200	225	PSTX170-600-70	1SFA898111R7000	9.60	(21.16)
160	200	-	300	75	100	200	250	292	PSTX210-600-70	1SFA898112R7000	12.70	(27.99)
184	250	-	360	100	125	250	300	332	PSTX250-600-70	1SFA898113R7000	12.70	(27.99)
220	295	-	430	150	150	350	450	429	PSTX300-600-70	1SFA898114R7000	12.70	(27.99)
257	355	-	515	150	200	450	500	523	PSTX370-600-70	1SFA898115R7000	12.70	(27.99)
355	450	-	640	200	250	500	600	625	PSTX470-600-70	1SFA898116R7000	25.00	(55.12)
450	600	-	814	250	300	600	700	720	PSTX570-600-70	1SFA898117R7000	25.00	(55.12)
540	700	-	987	300	350	700	800	840	PSTX720-600-70	1SFA898118R7000	46.20	(101.85)
710	880	-	1247	400	500	1000	1200	1247	PSTX840-600-70	1SFA898119R7000	46.20	(101.85)
800	1000	-	1455	500	600	1200	1500	1454	PSTX1050-600-70	1SFA898120R7000	64.20	(141.54)
1000	1250	-	1810	600	700	1500	1800	1830	PSTX1250-600-70	1SFA898121R7000	64.70	(142.64)

### Rated operational voltage $U_e$ , 208...690 V

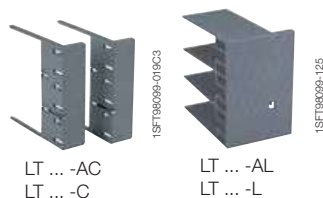
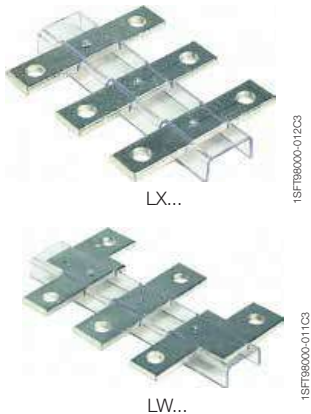
### Rated control supply voltage $U_s$ , 100...250 V AC, 50/60 Hz

18.5	25	37	42	7.5	10	25	30	34	PSTX30-690-70	1SFA898203R7000	6.10 (13.45)
25	30	45	52	10	15	30	40	48	PSTX37-690-70	1SFA898204R7000	6.10 (13.45)
30	37	55	64	15	20	40	50	58	PSTX45-690-70	1SFA898205R7000	6.10 (13.45)
37	45	59	76	20	25	50	60	72	PSTX60-690-70	1SFA898206R7000	6.10 (13.45)
55	75	90	105	30	40	75	100	103	PSTX72-690-70	1SFA898207R7000	6.10 (13.45)
59	80	110	124	30	40	75	100	117	PSTX85-690-70	1SFA898208R7000	6.10 (13.45)
75	90	132	147	40	50	100	125	138	PSTX105-690-70	1SFA898209R7000	6.10 (13.45)
90	110	160	181	60	60	150	150	180	PSTX142-690-70	1SFA898210R7000	9.60 (21.16)
132	160	220	245	75	75	150	200	225	PSTX170-690-70	1SFA898211R7000	9.60 (21.16)
160	200	257	300	75	100	200	250	292	PSTX210-690-70	1SFA898212R7000	12.70 (27.99)
184	250	315	360	100	125	250	300	332	PSTX250-690-70	1SFA898213R7000	12.70 (27.99)
220	295	400	430	150	150	350	450	429	PSTX300-690-70	1SFA898214R7000	12.70 (27.99)
257	355	500	515	150	200	450	500	523	PSTX370-690-70	1SFA898215R7000	12.70 (27.99)
355	450	600	640	200	250	500	600	625	PSTX470-690-70	1SFA898216R7000	25.00 (55.12)
450	600	800	814	250	300	600	700	720	PSTX570-690-70	1SFA898217R7000	25.00 (55.12)
540	700	960	987	300	350	700	800	840	PSTX720-690-70	1SFA898218R7000	46.20 (101.85)
710	880	1200	1247	400	500	1000	1200	1247	PSTX840-690-70	1SFA898219R7000	46.20 (101.85)
800	1000	1400	1455	500	600	1200	1500	1454	PSTX1050-690-70	1SFA898220R7000	64.20 (141.54)
1000	1250	1700	1810	600	700	1500	1800	1830	PSTX1250-690-70	1SFA898221R7000	64.70 (142.64)

# PSTX – The advanced range

## Accessories

4



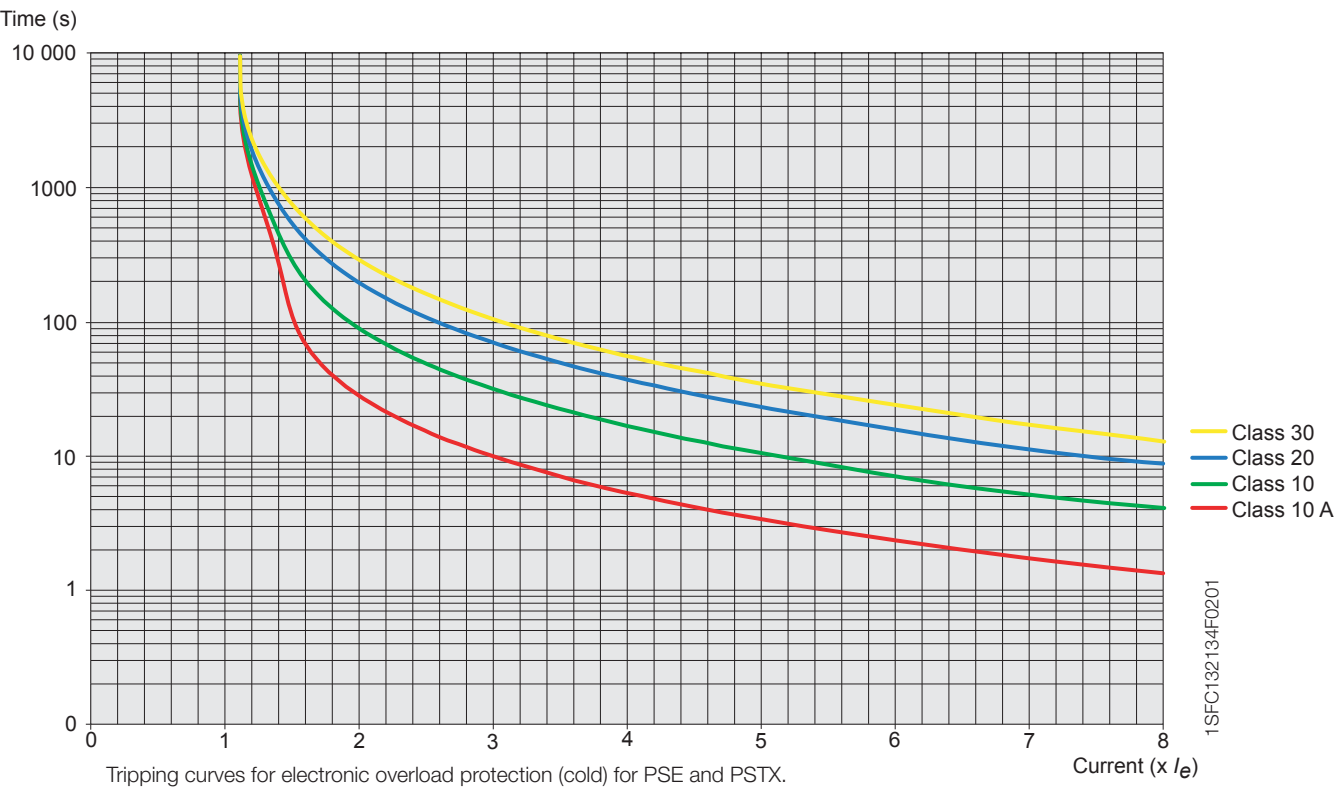
For softstarter type	Wire range mm²	Tightening torque max. Nm	Type	Order code		Pkg qty	Weight (1 pce) kg	(lb)
Cable connectors for Cu cables								
PSTX142 ... PSTX170	6...120	8	-	1SDA066917R1		3	0.113	(0.249)
PSTX142 ... PSTX170	2 x (50...95)	16	LZ185-2C/120	1SFN074709R1000		3	0.300	(0.661)
PSTX210 ... PSTX370	16...240	25	-	1SDA055016R1		3	0.133	(0.293)
PSTX210 ... PSTX370	2 x (70...185)	22	OZXB4	1SCA022194R0890		3	0.570	(1.257)
PSTX720 ... PSTX840	2 x (120...240)	35	-	1SDA013922R1		3	0.570	(1.257)
PSTX570 ... PSTX1050	3 x (70...185)	45	-	1SDA013956R1		3	0.570	(1.257)
Cable connectors for Al cables								
PSTX142 ... PSTX170	95...185	31	-	1SDA054988R1		3	0.078	(0.172)
PSTX210 ... PSTX370	185...240	43	-	1SDA055020R1		3	0.133	(0.293)
PSTX470 ... PSTX570	2 x (120...240)	31	-	1SDA023380R1		3	0.110	(0.243)
For softstarter type								
	Dimensions hole ø mm²	bar mm	Type	Order code		Pkg qty	Weight (1 pce) kg	(lb)
Terminal extensions								
PSTX142 ... PSTX170	8.5	17.5 x 5	LX205	1SFN074810R1000		1	0.250	(5.551)
PSTX210 ... PSTX370	10.5	20 x 5	LX370	1SFN075410R1000		1	0.350	(0.772)
PSTX470 ... PSTX570	10.5	25 x 5	LX460	1SFN075710R1000		1	0.500	(1.102)
PSTX720 ... PSTX840	13	40 x 6	LX750	1SFN076110R1003		1	0.850	(1.874)
Terminal enlargements								
PSTX30 ... PSTX105	6.5	15 x 3	LW110	1SFN074307R1000		1	0.100	(0.220)
PSTX142 ... PSTX170	10.5	17.5 x 5	LW205	1SFN074807R1000		1	0.250	(5.551)
PSTX210 ... PSTX370	10.5	20 x 5	LW370	1SFN075407R1000		1	0.450	(0.992)
PSTX470 ... PSTX570	10.5	25 x 5	LW460	1SFN075707R1000		1	0.730	(1.609)
PSTX720 ... PSTX840	13	40 x 6	LW750	1SFN076107R1000		1	1.230	(2.712)
For softstarter type								
		Req. qty	Type	Order code		Pkg qty	Weight (1 pce) kg	(lb)
Terminal shrouds								
PSTX142 ... PSTX170, short for use with cable clamps	2		LT205-30C	1SFN124801R1000		2	0.050	(0.110)
PSTX142 ... PSTX170, long for use with compression lugs	2		LT205-30L	1SFN124803R1000		2	0.220	(0.485)
PSTX210 ... PSTX370, short for use with cable clamps	2		LT370-30C	1SFN125401R1000		2	0.035	(0.077)
PSTX210 ... PSTX370, long for use with compression lugs	2		LT370-30L	1SFN125403R1000		2	0.280	(0.617)
PSTX210 ... PSTX370, long and deep for use with extending cable clamps, ATK300/2 and OZXB4	2		LT370-30D	1SFN125406R1000		2	0.150	(0.331)
PSTX470 ... PSTX570, short for use with cable clamps	2		LT460-AC	1SFN125701R1000		2	0.100	(0.220)
PSTX470 ... PSTX570, long for use with compression lugs	2		LT460-AL	1SFN125703R1000		2	0.800	(1.764)
PSTX720 ... PSTX840, short for use with cable clamps	2		LT750-AC	1SFN126101R1000		2	0.120	(0.265)
PSTX720 ... PSTX840, long for use with compression lugs	2		LT750-AL	1SFN126103R1000		2	0.825	(1.819)
For softstarter type								
			Type	Order code		Pkg qty	Weight (1 pce) kg	(lb)
FieldBusPlug connection accessory								
PSTX30 ... PSTX1250			PS-FBPA	1SFA896312R1002		1	0.060	(0.132)
I/O module, 24 V DC digital input								
PSTX30 ... PSTX1250			DX111-FBP.0	1SAJ611000R0101		1	0.220	(0.485)

# PSTX – The advanced range

## Technical data

### Tripping curves for the integrated electronic overload protection

PSTX has an integrated electronic overload protection that can be set to four different tripping classes. Below you find a curve for each tripping class in cold state.



# PSTX – The advanced range

## Technical data

4

Softstarter type		PSTX30 ... PSTX1250
Rated insulation voltage $U_i$		690V
Rated operational voltage $U_e$		208...600 V, 208...690V +10% / -15%, 50/60Hz ±5%
Rated control supply voltage $U_s$		100...250 V +10% / -15%, 50/60Hz ±5%
Rated control circuit voltage $U_c$		Internal or external 24 V DC
Starting capacity at $I_e$		4 x $I_e$ for 10 sec.
Number of starts per hour		10 for PSTX30 ... PSTX370 <sup>1)</sup> 6 for PSTX470 ... PSTX1250 <sup>1)</sup>
Overload capability		10
Ambient temperature	Overload class	10
	During operation	-25...+60 °C, (-13...+140 F) <sup>2)</sup>
	During storage	-40...+70 °C, (-40...+158 F)
Maximum altitude		4000 m (13123 ft) <sup>3)</sup>
Degree of protection		-
Main circuit	Main circuit	IP20
	Supply and control circuit	Yes
	Built-in bypass contactor	Yes (thermostat controlled)
HMI for settings (Human Machine Interface)	Cooling system - Fan cooled	Yes (thermostat controlled)
	Display	LCD type, graphical
	Languages	Arabic, Chinese, Czech, Dutch, English, Finnish, French, German, Greek, Indonesian, Italian, Polish, Portuguese, Russian, Spanish, Swedish and Turkish
	Keypad	2 selection keys, 4 navigation keys, start key, stop key, info key and remote/local key
Signal relays	Number of programmable signal relays	3 (each relay can be programmed to None, Run, Top of ramp, Event group 0-6, Sequence 1-3 Run, Sequence 1-3 Top of ramp or Run reverse)
	K4	Default as Run signal
	K5	Default as Top of Ramp (Bypass) signal
	K6	Default as Event group 0 (Faults)
	Rated operational voltage, $U_e$	250 V AC/24 V DC
	Rated thermal current $I_{th}$	5 A
Analog output	Rated operational current $I_e$ at AC-15 ( $U_e=250$ V)	1.5 A
	Output signal reference	0...10 V, 0...10 mA, 0...20 mA, 4...20 mA
	Type of output signal	Motor current (A), Main voltage (V), Active power (kW), Active power (HP), Reactive power (kVar), Apparent power (kVAh), Active energy (kWh), Reactive energy (kVAh), cos phi, Motor temperature (%), Thyristor temperature (%), Motor voltage (%), Main frequency (Hz), PT100 temperature (centigrade), PTC resistance (Ohm)
Control circuit	Number of inputs	2 (start, stop)
	Number of additional programmable inputs	3 (each input can be programmed to: None, Reset, Enable, Slow speed forward (Jog), Slow speed reverse (Jog), Motor heating, Stand still brake, Start reverse, User defined protection, Emergency mode (active high), Emergency mode (active low), Fieldbus disable control, Start 1, Start 2, Start 3, Switch to remote control or Cancel brake)
Signalling indication LED	Ready	Green
	Run	Green
	Fault	Red
	Protection	Yellow
External keypad	Detachable keypad	Yes
	Display	LCD type, graphical
	Ambient temperature	
	During operation	-25...+60 °C, (-13...+140 F)
	During storage	-40...+70 °C, (-40...+158 F)
	Degree of protection	IP66 (Type 1, 4X, 12)
Start and stop functions	Soft start with voltage ramp	Yes
	Soft stop with voltage ramp	Yes
	Soft start with torque control	Yes
	Soft stop with torque control	Yes
	Kick start	Yes
	Full voltage start	Yes
	Sequence start	Yes, 3 different sets of settings
	Current limit	Yes
	Dual current limit	Yes
	Current limit ramp	Yes
	Torque limit	Yes
	Pre-start function	Yes (Motor heating or Stand still brake)
	Jog with slow speed, forward and reverse	Yes (3 speed levels)
	Start reverse (external contactors)	Yes
	Dynamic brake	Yes
	Built-in Modbus RTU	Yes
Field bus connection	Connection for Anybus	Yes
	Connection for ABB FieldBusPlug	Yes, with adapter

<sup>1)</sup> Valid for normal start (class 10) for 50% on time and 50% off time. If other data if required, contact your local ABB office.

<sup>2)</sup> Above 40 °C (104 F) up to max. 60 °C (140 F) reduce the rated current with 0,8% per °C (0,44% per F).

<sup>3)</sup> When used at high altitudes, above 1000 meters (3281 ft) up to 4000 meters (13123 ft), de-rate the rated current using the following formula.

$[\% \text{ of } I_e = 100 - \frac{x-1000}{400}] \times x = \text{actual altitude of the softstarter in meter, } [\% \text{ of } I_e = 100 - \frac{x-3280}{497}] \times x = \text{actual altitude of the softstarter in feet. For de-rating of voltage, contact your local ABB office.}$



# PSTX – The advanced range

## Technical data

Softstarter type		PSTX30 ... PSTX1250
Protections	Electronic overload protection, EOL	Yes (Class 10A, 10, 20, 30)
	Dual overload (separate overload for start and run)	Yes
	PTC connection	Yes
	PT-100 connection	Yes
	Locked rotor protection	Yes
	Current underload protection	Yes
	Current imbalance protection	Yes
	Power factor underload protection	Yes
	Under voltage protection	Yes
	Over voltage protection	Yes
	Voltage imbalance protection	Yes
	Earth fault protection / ground fault protection	Yes
	Phase reversal protection	Yes
	24 V output protection	Yes
	Frequency range protection	Yes
	Bypass open protection	Yes
	User defined protection	Yes
	Too long current limit protection	Yes
	HMI failure protection	Yes
	Fieldbus failure protection	Yes
	Extension IO failure protection	Yes
	Max number of starts/hour	Yes
	Too long start time protection	Yes
Warnings	Current underload warning	Yes
	Current imbalance warning	Yes
	Voltage imbalance warning	Yes
	Thyristor overload warning (SCR)	Yes
	Electronic overload Time-to-trip	Yes
	Short circuit warning (for Limp mode)	Yes
	Over voltage warning	Yes
	Under voltage warning	Yes
	Power factor underload warning	Yes
	Locked rotor warning	Yes
	Faulty fan warning	Yes
	THD(U) - Total Harmonic Distortion warning	Yes
	Motor runtime limit warning	Yes
	Phase loss warning (for stand by)	Yes
	EOL warning	Yes
External faults detection	Phase loss	Yes
	Hight current	Yes
	Low control supply voltage	Yes
	Faulty usage (e.g. using limp mode inside-delta)	Yes
	Faulty connection	Yes
	Bad network quality	Yes
Internal faults detection	Thyristor overload	Yes
	Short circuit	Yes
	Open circuit thyristor or gate	Yes
	Heat sink over temperature	Yes
	Shunt fault	Yes
PTC input	Switch off resistance	2825 ohm ± 20%
	Switch on resistance	1200 ohm ± 20%
Other functions	Real time clock	Yes
	Event log	Yes
	Emergency mode	Yes
	Automatic restart	Yes
	Secure settings	Yes
	Keypad password	Yes
	Electronic overload Time-to-cool	Yes
	Thyristor runtime measurement	Yes
	Auto phase sequence detection	Yes
	Electricity metering	Yes
	Motor heating	Yes
	Stand still brake	Yes
	Voltage sags detection	Yes
	Limp mode with two-phase motor control if one set of thyristors is shorted	Yes

For all functions and features see installation and commissioning manual, 1SFC132081M0201 available on [new.abb.com/low-voltage/products/softstarters](http://new.abb.com/low-voltage/products/softstarters).



# PSTX – The advanced range

## Technical data

### Fuse ratings and power losses

For softstarter	Current range	Max power loss at rated I <sub>e</sub>	Max fuse rating - main circuit <sup>1) 2)</sup> Bussmann fuses, DIN43 620 (Knife)			Power requirements supply circuit Holding (VA) / Pull-in (VA)
Type	A	W	A	Type	Size	
PSTX30	9.0...30.0	0.8	100	170M1567	000	49/51
PSTX37	11.1...37.0	1.2	125	170M1568	000	49/51
PSTX45	13.5...45.0	1.8	160	170M1569	000	49/51
PSTX60	18.0...60.0	3.2	160	170M1569	000	49/51
PSTX72	21.6...72.0	4.7	250	170M1571	000	49/51
PSTX85	22.5...85.0	6.5	315	170M1572	000	49/51
PSTX105	31.8...106.0	10	400	170M3819	1*	49/51
PSTX142	42.9...143.0	18	500	170M5810	2	49/53
PSTX170	51.3...171.0	26	630	170M5812	2	49/53
PSTX210	63.0...210.0	48	630	170M5812	2	56/276
PSTX250	75.0...250.0	68	700	170M5813	2	56/276
PSTX300	90.0...300.0	97	800	170M6812	3	56/276
PSTX370	111.0...370.0	148	900	170M6813	3	56/276
PSTX470	141.0...470.0	99	900	170M6813	3	67/434
PSTX570	171.0...570.0	146	900	170M6814	3	67/434
PSTX720	216.0...720.0	78	1250	170M8554	3	61/929
PSTX840	252.0...840.0	106	1500	170M6018	3	61/929
PSTX1050 <sup>3)</sup>	315.0...1050.0	165	1800	170M6020	3	68/929
PSTX1250 <sup>3) 4)</sup>	375.0...1250.0	234	2000	170M6021	3	68/929

<sup>1)</sup> For the supply circuit 6 A delayed, for MCB use C characteristics.

<sup>2)</sup> For inside delta connection the fuses shall be placed inside the delta. Contact ABB for more information.

<sup>3)</sup> 170M6019 with fuse rating 1600 A should be used for 690 V version.




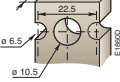
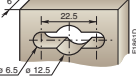
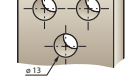








<sup>4)</sup> For 690 V version, Bussmann fuses are only available for motors with rated current up to 1150 A.

### PSTX Integrated bypass ratings

Softstarter	PSTX470	PSTX570	PSTX720	PSTX840	PSTX1050	PSTX1250
Integrated contactor	AF370			AF750		AF1250
AC-3 rating at 400 V (A)	370			750		-
IEC AC-3 Rated operational power at 400 V (kW)	200			400		-
UL/CSA 3-phase motor rating at 480 V (hp)	300			600		-

# PSTX – The advanced range

## Technical data

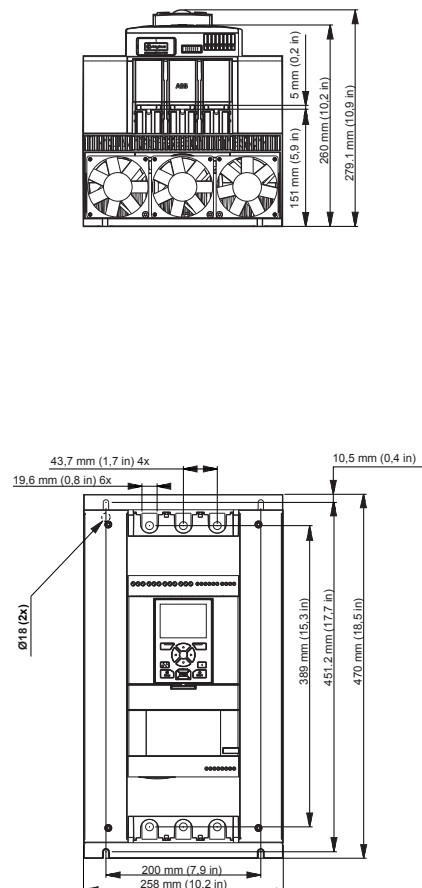
Main terminals			PSTX30 ... PSTX105	PSTX142 ... PSTX170	PSTX210 ... PSTX370	PSTX470 ... PSTX570	PSTX720 ... PSTX1050	PSTX1250
								
	Cu cable - flexible	1 x mm <sup>2</sup>	10...70 mm <sup>2</sup>	6...120 mm <sup>2</sup>	16...240 mm <sup>2</sup>	-	-	-
	Clamp type		Included	1SDA066917R1	1SDA055016R1	-	-	-
	Tightening torque		8 Nm	14 Nm	25 Nm	-	-	-
	Cu cable - flexible	2 x mm <sup>2</sup>	6...35 mm <sup>2</sup>	50...95 mm <sup>2</sup>	70...185 mm <sup>2</sup>	-	-	-
	Clamp type		Included	LZ185-2C/120 1SFN074709R1000	OZXB4 <sup>1)</sup> 1SCA022194R0890	-	-	-
	Tightening torque		8 Nm	16 Nm	22 Nm	-	-	-
	Cu cable - Stranded	1 x mm <sup>2</sup>	10...95 mm <sup>2</sup>	6...150 mm <sup>2</sup>	16...300 mm <sup>2</sup>	-	-	-
	Clamp type		Included	1SDA066917R1	1SDA055016R1	-	-	-
	Tightening torque		8 Nm	14 Nm	25 Nm	-	-	-
	Cu cable - Stranded	2 x mm <sup>2</sup>	6...35 mm <sup>2</sup>	50...120 mm <sup>2</sup>	70...185 mm <sup>2</sup>	120...240 mm <sup>2</sup>	-	-
	Clamp type		Included	LZ185 - 2C/120 1SFN074709R1000	OZXB4 <sup>1)</sup> 1SCA022194R0890	1SDA013922R1	-	-
	Tightening torque		8 Nm	16 Nm	22 Nm	35 Nm	-	-
	Cu cable - Stranded	3 x mm <sup>2</sup>	-	-	-	-	70...185 mm <sup>2</sup>	-
	Clamp type		-	-	-	-	1SDA013956R1	-
	Tightening torque		-	-	-	-	45 Nm	-
	Al cable - Stranded	1 x mm <sup>2</sup>	-	95...185 mm <sup>2</sup>	185...240 mm <sup>2</sup>	-	-	-
	Clamp type		-	1SDA0549881R1	1SDA055020R1	-	-	-
	Tightening torque		-	31 Nm	43 Nm	-	-	-
	Al cable - Stranded	2 x mm <sup>2</sup>	-	-	-	120...240 mm <sup>2</sup>	-	-
	Clamp type		-	-	-	1SDA023380R1	-	-
	Tightening torque		-	-	-	31 Nm	-	-
	Lugs	Width ≤	-	24 mm (0.945 in)	32 mm (1.260 in)	47 mm (1.850 in)	50 mm (1.969 in)	50 mm (1.969 in)
		Diameter ≥	-	8 mm (0.355 in)	10.2 mm (0.402 in)	10.5 mm (0.413 in)	12.5 mm (0.492 in)	13 mm (0.519 in)
		Tightening torque	-	18 Nm (160 in lb)	28 Nm (248 in lb)	35 Nm (310 in lb)	45 Nm (398 in lb)	45 Nm (398 in lb)
Connection capacity acc to UL / CSA 1 x AWG / kcmil			6...2/0	6...300 kcmil	4...400 kcmil	-	-	-
	Clamp type		Included	ATK185	ATK300	-	-	-
	Tightening torque		71 in lb	300 in lb	375 in lb	-	-	-
Connection capacity acc to UL / CSA 2 x AWG / kcmil			-	-	4...500 kcmil	2/0...500 kcmil	2/0...500 kcmil	-
	Clamp type		-	-	ATK300/2 <sup>2)</sup>	ATK580/2	ATK580/2	-
	Tightening torque		-	-	375 in lb	375 in lb	375 in lb	-
Connection capacity acc to UL / CSA 3 x AWG / kcmil			-	-	-	2/0...500 kcmil	2/0...500 kcmil	-
	Clamp type		-	-	-	ATK750/3	ATK750/3	-
	Tightening torque		-	-	-	375 in lb	375 in lb	-
Supply and control circuit								
	Cu cable - Stranded 1 x mm <sup>2</sup>		0.75...2.5 mm <sup>2</sup> (19...14 AWG)					
	Cu cable - Stranded 2 x mm <sup>2</sup>		0.75...1.5 mm <sup>2</sup> (19...16 AWG)					
	Tightening torque		0.5 Nm (4.4 in lb)					

<sup>1)</sup> Terminal shrouds 1SFN125406R1000 must be used.

<sup>2)</sup> Terminal shrouds 1SFN125406R1000 can be used.

## 4

PSTX210 ... PSTX370

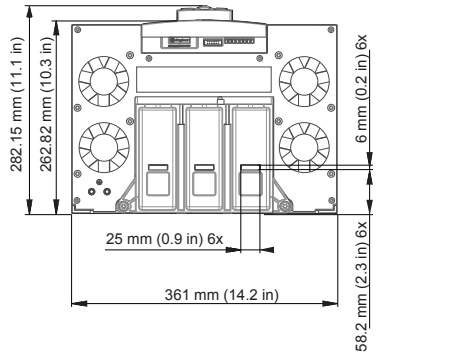


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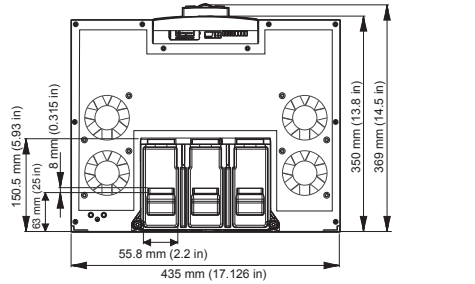
# PSTX – The advanced range

## Dimensions

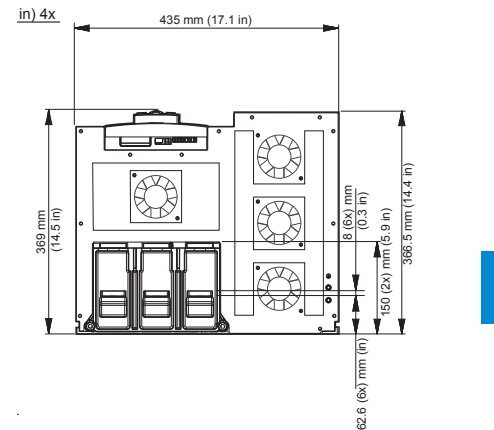
PSTX470 ... PSTX570



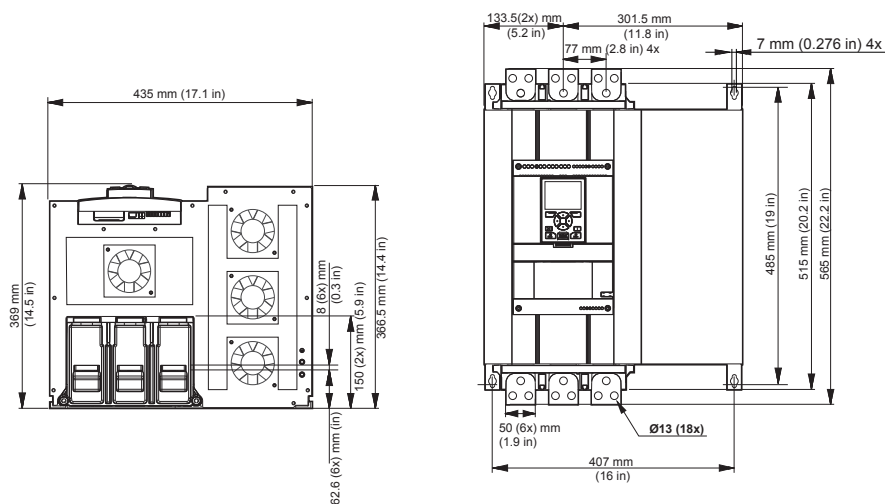
PSTX720 ... PSTX840



PSTX1050



PSTX1250



Dimensions in mm (in)

## 4



## PSTX30 ... PSTX1250



The diagram shows an alternative wiring configuration for the HOA. It features a common ground (GND) and a +24V supply. The +24V line is connected to the STOP (13) and START (14) terminals. The GND line is connected to the DNGND (18) and GND (19) terminals. The HOA's internal logic is shown with a switch labeled 'OFF' and 'AUTO'. The 'OFF' position connects the +24V line to the STOP (13) terminal. The 'AUTO' position connects the +24V line to the START (14) terminal. The DNGND (18) and GND (19) terminals are connected to the common ground.

\* Only on PSTX470 ... PSTX1250

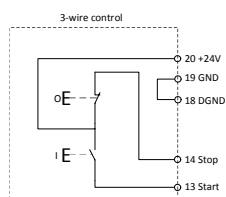
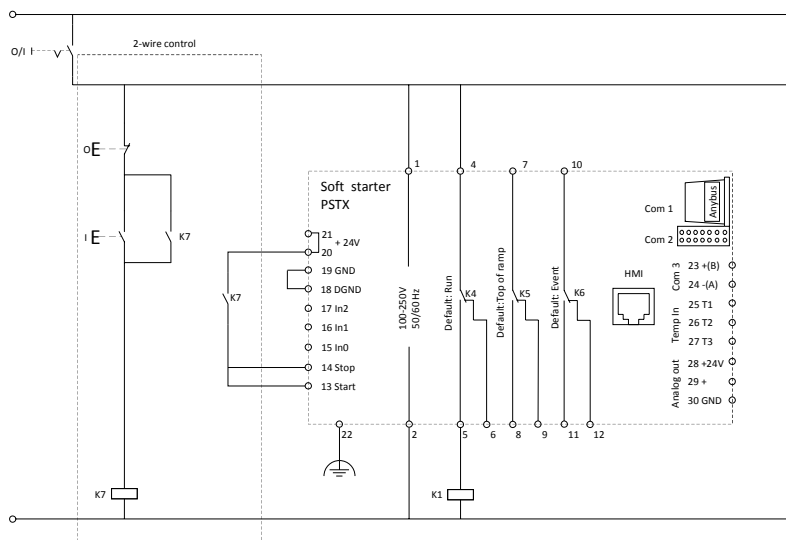


# PSTX – The advanced range

## Circuit diagrams

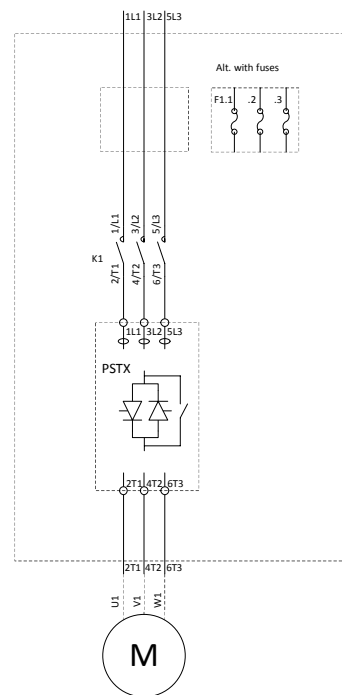
### PSTX30 ... PSTX1250

#### In-line connected with line contactor and fuses

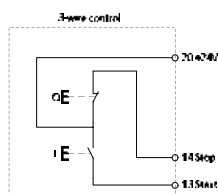
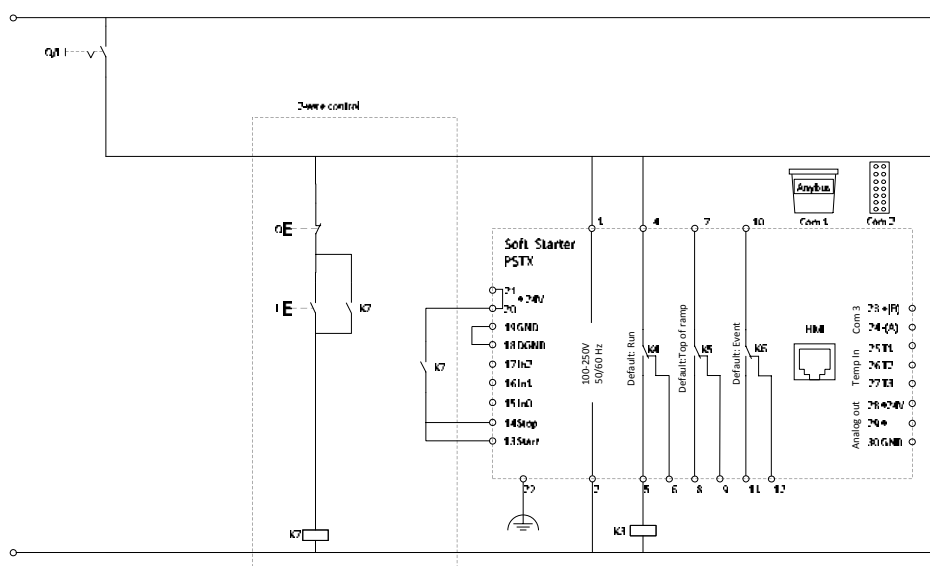


Coil consumption for main contactors.  
Pull-in max 15A  
Holding max 1.5A

If the pull-in or holding values are higher, the main contactors must be controlled via an auxiliary contactor.



#### Inside-delta connected with contactor and fuses



Coil consumption for Inside Delta contactor.  
Pull-in max 15A  
Holding max 1.5A

If the pull-in or holding values are Higher, the Inside Delta contactor must be controlled via an auxiliary contactor.

