

# PSTX enclosed softstarters

For normal-duty and heavy-duty applications



Designed to perform reliably in nearly any environment and on almost any application, the PSTX-ND series softstarters combine the best of ABB’s wide range of industrial low voltage controls.

### Short circuit protection

To handle the role of short-circuit protection and disconnection, the PSTX-ND series utilizes the Tmax® XT molded case circuit breaker to provide the utmost protection under short circuit conditions, with a short circuit rating of 65 kAIC up to the X700 unit. The X900 and X1000 units are protected with Class L fuses with a short circuit rating of 100 kAIC.

### Electronic overload protection

Every PSTX softstarter comes with integral electronic overload protection that is adjustable to four different tripping classes, preset to Class 10 tripping for normal-duty applications. This feature also allows the unit to select Class 30 tripping for heavy-duty applications, per the selection guide chart.

### The PSTX softstarter

Designed around the PSTX softstarter for normal-duty use with all the exceptional standard features inherent to the open PSTX shown below. The enclosed offering also comes with the following additional features:

- UL 508A label
- UL 3-wire service entrance rating up to and including the X700 design
- NEMA Type 4 enclosure meets NEMA 1, 12, 3R and 4 protection requirements
- Door-mounted keypad and six pilot devices
- Built-in Modbus-RTU communications
- Optional Anybus communication modules available for most communication protocols

### PSTX softstarter standard features

Current limit		
Current limit ramp and dual current limit		
Electronic motor overload protection		
Dual overload protection		
Underload protection		
Power factor protection		
Locked rotor underload protection		
Current/ Voltage protection		
Phase reversal imbalance protection		
Customer defined protection		
Motor heating		
PTC/PT100 input for motor protection		
Overvoltage/undervoltage protection		
Earth-fault protection		
Built-in bypass		
Inside-delta connection possible		
Graphical display and keypad		
Detachable keypad		
Motor runtime and start count		
Programmable warning functions		
Diagnostics		
Overload time-to-trip		
Overload time-to-cool		
Analog output		
Fieldbus output		
Event log		
Multiple languages		
Electricity metering		
Torque control		
Torque limit		
Coated PCBA		
Limp mode		
Jog with slow speed forward/ reverse		
Dynamic brake		
Stand still brake		
Sequence start		
Full voltage start		
Kick start		
Automatic pump cleaning		
PSTX	• • • • •	• • • • • 17 • • • • •
	Secure motor reliability	Improve installation efficiency
		Increase application productivity

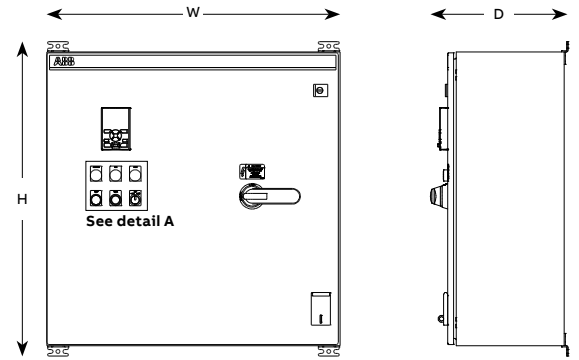
• Standard

# Selection guide

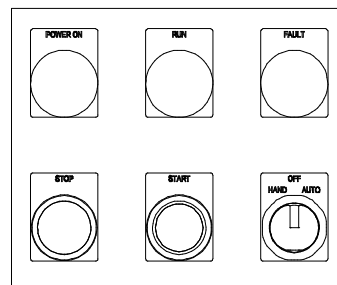
## Ratings and dimensions

Type code	Order code	Heavy-duty HP / amps Class 30 starts	Normal-duty HP / amps Class 10 starts	Volts	SCCR rating (kA)	Enclosure size H" x W" x D"	Weight in lbs
X20-B4-48-ND	3AUA0000224500	15 HP / 25 amps	20 HP / 28 amps	480	65	24 x 20 x 12	77
X50-B4-48-ND	3AUA0000224501	40 HP / 60 amps	50 HP / 68 amps	480	65	24 x 20 x 12	78
X75-B4-48-ND	3AUA0000224502	50 HP / 68 amps	75 HP / 104 amps	480	65	24 x 20 x 12	78
X100-B4-48-ND	3AUA0000224503	75 HP / 104 amps	100 HP / 130 amps	480	65	30 x 30 x 12	131
X125-B4-48-ND	3AUA0000224504	100 HP / 130 amps	125 HP / 169 amps	480	65	30 x 30 x 12	131
X150-B4-48-ND	3AUA0000224505	125 HP / 169 amps	150 HP / 192 amps	480	65	48 x 36 x 16	280
X200-B4-48-ND	3AUA0000224506	150 HP / 192 amps	200 HP / 248 amps	480	65	48 x 36 x 16	280
X250-B4-48-ND	3AUA0000224507	200 HP / 248 amps	250 HP / 302 amps	480	65	48 x 36 x 16	291
X300-B4-48-ND	3AUA0000224508	250 HP / 302 amps	300 HP / 361 amps	480	65	48 x 36 x 16	300
X400-B4-48-ND	3AUA0000224509	300 HP / 361 amps	400 HP / 480 amps	480	65	48 x 36 x 16	327
X500-B4-48-ND	3AUA0000224510	400 HP / 480 amps	500 HP / 590 amps	480	65	48 x 36 x 16	353
X600-B4-48-ND	3AUA0000224511	500 HP / 590 amps	600 HP / 720 amps	480	65	72 x 36 x 24	637
X700-B4-48-ND	3AUA0000224512	600 HP / 720 amps	700 HP / 840 amps	480	65	91 x 36 x 24	770
X900-F4-48-ND	3AUA0000224513	800 HP / 840 amps	900 HP / 1062 amps	480	100	85 x 72 x 24 *	1562
X1000-F4-48-ND	3AUA0000224514	900 HP / 1062 amps	1000 HP / 1050 amps	480	100	85 x 72 x 24 *	1562

\*Includes pedestal base for floor mounting  
NEMA Type 4 enclosure meets NEMA 1, 12, 3R and 4 protection requirements.



Detail A



### Typical heavy-duty applications include:

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

### Typical normal-duty applications include:

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

### Door-mounted pilot devices include:

- PSTX keypad
- Hand-off-auto selector switch
- Start and stop pushbuttons
- Power on pilot light
- Run pilot light
- Fault pilot light

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