Softstarters
Type PSR, PSE and PSTX

Motors use almost one third of the world's generated electricity. So it is safe to say that reliable motor operation is crucial to our modern way of life.

Why motor starting matters

Motor starting solutions

Common applications for softstarters

42% of all electricity used by powers industry
2/3 of this is used by electric motors
= 28% global electricity consumption

ABB softstarter is a full-speed starter that accelerates, decelerates, and protects three phase motors.

DOL and Y/D
Direct start and stop
Full speed application

Softstarters
Soft start and stop
Full speed applications

Drives
Soft start and stop
Variable speed applications

- Compressor
- Computer
- Softstarter
- Motor

- Pump - eliminating water hammering with torque control
  The ABB softstarter feature torque control stop eliminates water hammering and prolongs the lifetime of the system, while reducing pump downtime.

- Fan - soft starting adjusted to application
  It is possible to adjust the settings to its almost any starting condition, from unloaded to fully loaded.

- Compressor - full control of current with current limit
  The feature current limit makes it possible to start the motor under critical conditions, improving the availability of the system. Reducing the current means reducing the stress on cables, network and motor.

- Conveyor belt - avoid overheating with overload protection
  ABB's overload protection feature shuts down the motor in case of overload, avoiding overheating.

For more information, please contact your local ABB representative or visit www.abb.com/low-voltage/products/softstarters

Softstarters a part of your motor starting solution.

To get more information, please scan the QR code below the code and see more.
ABB softstarters

Overview

PSTX - The advanced range
PSTX is our most advanced softstarter with full control and motor protection. Built-in PSTX is the most complete alternative for any motor starting application. Featuring built-in graphics and anybus modules that support all major communication protocols.

PSR - The efficient range
The new generation PSR is a true general-purpose softstarter. It’s a perfect balance between high starting capacity and cost efficiency. Now featuring built-in fieldbus communication.

PSE - The compact range
PSE is our most compact softstarter with basic benefits and values. PSE can handle up to 100 starts per hour. Suitable for small motors.

Softstarter values, benefits, case studies and features

**PSTX**
- The advanced range
- Built-in bypass
- Fieldbus communication

**PSR**
- The efficient range
- Built-in motor protections
- Multiple languages

**PSE**
- The compact range
- Built-in motor protections
- Multiple languages

**NSH**
- Key features
  - Customisable display for important status information
  - Easy to use with the large backlit graphical display
  - Detachable for easy panel door mounting.

**NSH**
- Key features
  - Integrated bypass for high output power
  - Easy to use with the large backlit graphical display

**Toolbox**
To get more information about anybus standard, scan the code and your mobile device.

**Modbus RTU**
- Available
- Secure connection - no need of supply or main voltage

**EtherCAT**
- Available
- High precision positioning

**DeviceNet**
- Available
- Secure connection - no need of supply or main voltage

**Profinet**
- Available
- High performance and flexibility

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Profibus DP**
- Available
- Secure connection - no need of supply or main voltage

**Ethernet/IP**
- Available
- Secure connection - no need of supply or main voltage

**Safety**
- Remote control via touch screen or PC
- Fault tolerant control with internal redundancy

**Reliability**
- Increased safety and availability

**Efficiency**
- Improved energy efficiency

**Scalability**
- Expandable memory and flexibility

**Ease of use**
- Intuitive operation with large backlit display

**Installation**
- Compact design and easy to install

**Productivity**
- Increased application efficiency

**Total panel costs reduced by 50%**

**Examples**
- South Africa: ABB’s softstarters providing efficiency to the mining industry
- South Africa: ABB’s softstarters reducing the number of needed motors, shortened installation time by 10%.

**Xylem - South Africa**
- ABB’s softstarters providing efficiency to the mining industry
- Xylem in South Africa have managed to reduce the starting current.