

Side Panel Drive

Taco's premium design standards extend to our SmartDrive SP, where customization is the name of the game. Multiple enclosure ratings, bypass control styles, and physical arrangements give you all the choices you need for a trouble-free, highly flexible and efficient solution. No one knows more about controlling pumps than the people who build the pumps: Taco, America's leading manufacturer.



+TSL This symbol tell you that a +TSL upgrade is available for this unit.

+TSL

What does TSL do?

Taco System Logic controls the variable speed drive to optimize pump performance. Setpoints and controls are programmed at our factory to allow our pumps to run at much lower pressures than most industry professionals would consider. In addition, Taco Fault Tolerant Control maintains control even when the feedback signal wire is compromised. Pumping at much lower speeds will consume substantially less energy and require less maintenance, so along with peace of mind, you get superior efficiency, responsive comfort and reduced life cycle costs all in one neat package. Add the SmartDrive +TSL option when you choose your next Taco pump.



Side Panel Drive

Standard Product Features

- Nema 1, Nema 12, and Nema 3R enclosures
- Through 60hp @ 208v, 350hp @ 460/600v
- Built in dual DC-link choke. Equivalent: 5% AC input line reactor
- Both 2- and 3- contactor bypass designs with
- Fused disconnect or circuit breaker
- 24V control power
- Class 20 Overload
- UL/CUL certification
- Electromechanical bypass designs
- IBC and OSHPD Seismic certifications
- Imbedded controls protocols
- Field-installable in any commercial environment
- A wide range of standard products for HVAC applications

- Inherent phase loss/imbalance and brown-out protection to prevent product damage and downtime in adverse power quality installations
- Electrical standards compliance on every product
- Maximum geometric flexibility to meet the installation constraints
- BACnet inherent in every drive

Common Non-Standard Product Options

- 100kA SCCR protection
- AC line reactors
- Custom designs and larger horsepower sizes available



24 volt power supply insures maximum uptime

The engine driving the panel dependability is the 24VDC switch mode power supply, greatly improving on the outdated CPT power design.

The panel switch mode power supply—available below 100hp—provides steady, dependable control power even when the line voltage drops more than 30%, virtually eliminating contactor malfunction due to ‘brown out’ conditions or phase loss.

These panels are available with the traditional electro-mechanical bypass.



Electro-Mechanical Bypass (EMB2)

The traditional Electro-Mechanical Bypass utilizes contactors and relays to direct line power through the driver or the starter, wired in parallel. This design includes the standard performance and features:

- Automatic bypass operation selectable and programmable, including adjustable time delay
- Common start/stop selectable operation in drive and bypass mode, regardless of the command source
- Coordinated Run Permissive in both drive and bypass. A command to start the motor (regardless of operating mode) does not start the motor, but instead activates a relay used to actuate another device. Confirmation from this device then starts the motor.
- Firefighter's Override Mode runs the motor in bypass, ignoring stop commands

The Electro-mechanical bypass includes the following door-mounted operators:

- Drive-Off-Bypass selector
- Bypass pilot light indication
- Test selection added with three-contactor bypass units

These drives perform better because of their robust DC link reactor, standard in every SmartDrive SP. This device offers comparable harmonic performance to AC input reactors without detrimental input voltage reductions, and without the extra heat that would typically be removed via additional fans or other devices.

SmartDrive^{+TSL}

with integrated Taco System Logic

Control Options

Taco System Logic modulates and stages pumps as system demand changes. No need for external controllers. +TSL runs right on the drive.

+TSL Benefits

- Optimize your energy efficiency
- No additional hardware required
- No Programming required
- Fault Tolerant Control

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SmartDrive | HVAC



SmartDrive | SP



SmartDrive | VP

Four SmartDrive +TSL Control options to choose from:

- Delta-P HVAC Pump Set, 1-3 pump, Lead/Lag, 1-3 Zones
- Delta-T HVAC Pump Set, 1-3 pump, Lead/Lag
- Delta-T, Geothermal Hot/Cold Changeover, 1-2 Pump Alternation
- Domestic Water Booster Set, 1-3 pump, Lead/Lag



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