

Vertical Panel Drive

No one knows more about controlling pumps than the leader in building pumps: Taco. Our vertical panels live up to our reputation for quality and dependability, and provide you with a generous array of features. The Vertical Panel bypass configuration further ensures that you can have your drive panel your way. This design includes market-preferred bypass controls from your preferred panel supplier, along with maximum geometric flexibility to meet your strict installation constraints.



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



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.



Vertical Panel Drive

Standard Product Features

- Nema 1 enclosures
- Through 60hp @ 208v, 125hp @ 460/600v
- Built in dual DC-link choke. Equivalent: 5% AC input line reactor
- Standard 3-Contactor bypass
- 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

Common Non-Standard Product Options

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



Vertical Panel Drive

This panel is:

- Structured around the SmartDrive HVAC
- Same performance as traditional panel with smaller footprint.
- Sleek vertical layout that requires less horizontal wall space.
- Same high quality components and design as our traditional panel.

Inherent in the vertical bypass panels

The engine driving the panel dependability is a 24VDC switch mode power supply that greatly improves performance and dependability beyond traditional CPT power designs.

The panel power supply included on P2, P3, and P4 frame sizes provides steady, dependable control power, even when the input voltage drops more than 30%, virtually eliminating contactor malfunction due to brown-out conditions or phase loss. On P5 frame sizes, a voltage sensing relay provides similar protection.



These drives perform better because of their robust DC link reactor, standard in every SmartDriveVP. 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.

Frame Size	Panel Power Sizes					Panel Dimensions in Inches					
	Bypass and Non-Bypass			Bypass	Non-Bypass	Bypass			Non-Bypass		
	208V & 230V	230V	460V & 600V	208V		Length	Width	Depth	Length	Width	Depth
P2	7.5 - 15 HP		15 - 25 HP			41.8	9.1	16	29.9	8.9	11.5
P3	20 HP	25HP	30 - 50 HP		25 HP	43.2	9.6	17.7	34.3	9.6	11.2
P4	30 - 40 HP		60 - 75 HP	25 HP		54.4	12.7	18	39.6	12.7	14.8
P5	50 - 60 HP		100 - 125 HP			59.6	15.1	18.0	45.8	15.1	14.8

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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