Integrated Multi-Function

EZ-ZONE PM

The EZ-ZONE PM panel mount controller offers control options that reduce system complexity and thermal loop ownership cost. It can be ordered as a PID controller, an over/under limit controller or its functions can be combined into an integrated controller. An option to integrate a high amperage power controller output with a high-performance PID controller and an over/under limit controller in one space-saving, panel mount package is also available. Many communications options are offered to support connectivity needs.

Because the EZ-ZONE PM controller is highly scalable, pay only for what is needed. This controller is available in $1/32$, $1/16$, $1/8$ and $1/4$ DIN panel mount packages. The EZ-ZONE PM controller is easy to use and is ideal for PID, over/under limit or integrated controller needs.

Features and Benefits

Integrated PID and limit controller
- Reduces wiring time and termination complexity compared with connecting discrete products
- Decreases required panel space
- Lowers installation costs
- Increases user and equipment safety for over/under temperature conditions

High amperage power control output
- Drives 15 ampere resistive loads directly
- Reduces component count
- Decreases cost of ownership

Current monitoring
- Detects heater current flow and provides alarm indication of a failed output device or heater load

Serial communication capabilities
- Provides a wide range of protocol choices including Modbus® RTU, EtherNet/IP™, Modbus® TCP, PROFIBUS DP and DeviceNet™
- Supports network connectivity to a PC or PLC

Dual-channel controller
- Provides two PID controllers in one space-saving package

Enhanced control options
- Easily handles complex process problems such as cascade, ratio, differential, square-root, motorized valve control without slidewire feedback, wet-bulb/dry-bulb, compressor control and peltier loads

Advanced PID control algorithm
- Offers TRU-TUNE®+ adaptive control to provide tighter control for demanding applications
- Provides auto-tune for fast, efficient startup

Configuration communications with software
- Includes Watlow standard bus communications and EZ-ZONE configurator software
- Saves time and improves reliability of controller setup

Ten-point linearization curve
- Improves sensor accuracy

Built-in sensor compensation curves
- Saves cost of buying compensated sensors
- Includes Vaisala RH and altitude (pressure) curves

Remote set point operation
- Supports convenient set point manipulation from a remote device such as a master control or PLC

Profile capability
- Offers pre-programmed process control
- Allows ramp/soak programming with 40 total steps, battery backup and real time clock

Retransmit Output
- Supports industry needs for recording

Factory Mutual (FM) approved over/under limit with auxiliary outputs
- Increases user and equipment safety for over/under temperature conditions

Integrated Multi-Function

EZ-ZONE PM Express

The EZ-ZONE PM Express panel mount controller is an industry-leading PID controller that allows optimal performance utilizing simple control and menu functionality without complex features. It is ideal for basic applications and usage levels.

The EZ-ZONE PM Express is the next generation controller to follow the legacy of Watlow's SERIES 93, SERIES 935 AND SERIES SD controllers that offer easy-to-use features to perform many basic applications. The EZ-ZONE PM Express includes one universal input and an option for up to two outputs and is available in $\frac{1}{32}$ and $\frac{1}{16}$ DIN panel mount packages. It can be ordered as a PID process controller or as a dedicated over and under-temperature limit controller.

The EZ-ZONE PM Express is a valuable addition to the EZ-ZONE PM controller family which also includes the EZ-ZONE PM integrated controller and the EZ-ZONE PM standard version.

Features and Benefits

Simplified menu
- Fits basic applications with a user-friendly interface supported by two menus and a streamlined list of parameters
- Eliminates complexity often experienced with more advanced controllers and unnecessary features
- Reduces training costs and user programming errors

PID auto-tune
- Provides auto-tune for fast, efficient startup

Standard bus communications
- Allows easy product configuration via PC communications protocol and free software
- Saves time, simplifies programming process and improves reliability of controller setup

Factory Mutual (FM) approved over and under limit with auxiliary outputs
- Increases user and equipment safety for over and under-temperature conditions

Agency approvals: UL® listed, CSA, CE, RoHS, W.E.E.E., FM, SEMI F47-0200, Class 1, Div. 2 rating on selected models
- Assures prompt product acceptance
- Reduces end product documentation costs

Front panel removable
- Saves time and labor for replacements and troubleshooting

P3T armor sealing system
- Complies with NEMA 4X, IP66 specifications
- Allows controller to be cleaned and washed
- Certified UL® 50 independent to NEMA 4X specification

Touch-safe package
- Increases installer and operator safety
- Complies with IP2X requirements

Consistent Termination Labeling (CTL) connection system
- Simplifies switching between products
- Speeds up user's system documentation

Three-year warranty
- Demonstrates Watlow's reliability and product support

High-amperage power control output
- Drives 15 ampere resistive loads direct
- Reduces component count
- Saves panel space and simplifies wiring
- Reduces cost of ownership

Class 1, Div. 2
- Rated UL® 1604 for use in hazardous locations
- Saves agency and component costs