

Model 352 • Pump Controller, Two Relay, 4-20 mA

Features

- Available for mounting in Delta Controls housings or other enclosures
- Housings may be surface or pipe stand mounted
- Optional direct reading LCD display
- Accepts 4-20 mA signal from any type transmitter; 2, 3, or 4-wire
- Supplies DC power for 2-wire loops, 3 or 4-wire transmitters
- Field selectable fail-safe action
- Optional pump control functions
- Lead/lag control
- Relay operate time delays
- Two alarm points
- Built-in loop power supply
- Selectable starting time delay
- Self-checking diagnostic routine
- Continuous setpoint indication
- Optional explosion-proof housing

Description

The Delta Controls **Model 352** Pump Controller is designed to operate as an alarm and/or adjustable differential level controller and is equipped with two relays, each featuring an individual **0–100% on** and **0–100% off setpoint**. It accepts a 4-20 mA input signal which is proportional to a process variable such as level. The 352 is microprocessor based and checks its input signal loop for integrity. The relays may be set up for direct or reverse fail-safe action.

The 352 is equipped with a built-in loop power supply and accepts **remote powered** 4-20 mA signal. The 352 must be located in a safe area. The input signal wires may extend into the ignition hazard area through a suitable barrier. Features, such as lead/lag pump rotation, time delay starting, and alarms may be field programmed. Up to **two pumps** or **two alarm points** can be actuated from a single 352 pump controller.

The optional Model 328 3.5 digit LCD readout display, may be field calibrated for engineering units.



Model 352

Specifications

General Type:	Microprocessor based
Supply Power:	120 ACV , 240 ACV 50 Hz, 60 Hz, 24 DCV ± 15% variation
Input Range:	4-20 mA
Relays:	2, 10 A at 250 ACV SPDT
Switching Action:	Basic alarm action, adjustable differential for on/off control
Accuracy:	0.1% of full scale
Transmitter Loop Power Supply:	24 DCV
Multiple Pump Control:	Selectable lead/lag, rotation of up to 2 pumps
Temperature Range:	-20 °F to +170 °F (-20 °C to +77 °C)
Housing Rating:	Classes 1 & 2, Divisions 1 & 2, Groups ABCD, EFG

Model Numbering System

MODEL EXAMPLE	MODEL	-	SUPPLY VOLTAGE	-	HOUSING RATING	-	OPTIONS ²
	352	-	1	-	4X	-	AA

MODEL	DESCRIPTION
352	Pump Controller, Two Relay, 4-20mA

SUPPLY VOLTAGE	DESCRIPTION
1	120 ACV, 50/60 Hz
2	240 ACV, 50/60 Hz
3	24 DCV

HOUSING RATING	DESCRIPTION
AA	None
4X	Environment-proof, 4X, Fiberglass
6X	Submergible, 6X, PVC
7W	Explosion-proof, 7X, Aluminum
7C	Explosion-proof; 7X; Stainless steel

OPTIONS ²	DESCRIPTION
AA	None
328	Direct reading 3.5 digit plug-in display, Loop powered
PSM	2 in pipestand or surface remote kit

Notes:

- ² A hyphen will separate multiple options selected
- PSM not available with AA housing

REQUIRED ORDERING INFORMATION:

- Detailed model number
- Tag or nameplate detail (if required)
- Documentation & /testing packages (if required, refer to page Additional Resources)