CIVACON THERMISTOR SERIES
8300 SERIES RACK MONITORS

FEATURES & BENEFITS

• Easy to mount and install
• Keyed bypass switch, available option
• Monitors up to six compartments (eight compartment, available option)
• NEMA 7, explosion proof enclosure
• Uses industry standard thermistor signal format
• Monitors two-wire Thermo-Optic Quick Start™ replacement sensors

ORDER GUIDE

8300  Explosion-proof Thermistor Monitor (NEMA 7), No Status Lights
8320  Explosion-proof Thermistor Monitor with Permissive and Non-permissive Status Lights
8340  Explosion-proof Thermistor Monitor, Permissive & Non-permissive Status Lights with Keyed Bypass Switch
8360  Explosion-proof Thermistor Monitor, Permissive & Non-Permissive Status Light, with Keyed Bypass Switch and Ground Verification
Civacon 8300 Series Thermistor Rack Monitors

**Operation**

Civacon thermistor rack monitors are used with up to eight compatible thermistor liquid level sensors or onboard monitors to monitor the status of liquid within transports (compartments) or other storage tanks. Overfill detection systems, such as the 8300 series thermistor rack monitors, provide automatic warning of product overflow at predetermined levels and warn of pending overflow conditions. The 8300 series thermistor rack monitors use the standard thermistor signal format to communicate with an onboard control monitor or straight thermistor system on transports.

A unique, pulsed — and intrinsically safe — electrical signal is generated by the control monitor and is transmitted to the sensors via a coiled cord and thermistor format plug. When sensors on the transport are dry a signal is returned to the monitor. If the signal meets predetermined characteristics the monitor goes to a “permissive” state. This “permissive” state closes a set of relay contacts which, in turn, changes the status light on the front of the 8300 series thermistor rack monitor from red (“non-permissive”) to green (“permissive”) signaling the terminal automation system (T.A.S.).

If the sensor becomes wetted during the loading process the monitor senses this condition and opens the relay. When the relay is opened, the status light will change to red (“non-permissive”) and stops the “permissive” signal that was being sent to the terminal automation system (T.A.S.).

Specific to the model 8360, overfill detection and ground verification are signaled to the pump control system separately.

**Specifications**

**Operating Temperature:**
-40°F to 158°F (-40°C to 70°F)

**Input Requirements:**
120 VAC 60 Hz, 10 VA (Standard)
240 VAC available — please inquire

**Output Relay Contacts:**
240 VAC - 5A DPDT

**Response Time:**
0.5 seconds maximum, dry to wet transition

**Electrical Connections:**
Internal terminal strips

**Enclosures:**
NEMA 7 explosion proof

**Housing Material:**
Aluminum

**Approximate Weight:**
8300 — 30 lbs.
8320 — 31 lbs.
8340 — 32 lbs.
8360 — 32 lbs.

**Approvals:**
Factory Mutual, CSA

**Installation Information:**
Provided with the monitor. If necessary, installation instructions can be ordered separately at no additional charge.
DIMENSIONAL DRAWING

Thermistor Series Rack Monitor 8300

TERMINAL LOAD RACK EQUIPMENT