



SZ1144

Refrigeration Temperature Monitor



Description

The SZ1144 is a microprocessor-based refrigeration monitoring and alarm interface designed to monitor up to four 1000 Ω platinum RTD temperature sensor inputs and up to two 4-20 mA inputs.

The SZ1144 features:

- Stand-alone or network operation
- Independently programmable high and low limits for each input
- Independently programmable manual or automatic alarm reset
- Change of state factor with programmable hysteresis
- 32 character LCD display
- Status LEDs
- Relay output to activate additional auxiliary communication devices or external alarm circuit
- Four RTD temperature inputs
- Two 4-20 mA analog inputs suitable for a broad variety of transducers

Specifications

General

Accuracy: +/- 0.5%
Programming: EIA RS485 interface
Display: 32 character LCD
Communications: RS485, half duplex
Memory backup: Non-volatile EEPROM, no battery required

Environmental

Operating temperature: 32 to 131°F (0 to 55°C)
Operating humidity: 0 to 100% RH, non-condensing
Storage temperature: 14 to 140°F (-10 to 60°C)

Electrical

Supply voltage: 24 VAC +/- 20%
Inputs: Four platinum RTDs, range: -40 to 60°F (-40 to +15.6°C) two 4-20 mA analog and two digital (dry contact)
Outputs: One digital (SPST dry contact, 24 VAC @ 1 A) configurable
Analog input impedance: 250 Ω
Common mode rejection: 100 db @ 60 Hz
Power Consumption: 5 VA max.

Specifications subject to change without notice.

Specification Suggestions

Monitoring and alarm interfaces shall be microprocessor-based with suitable I/O points to perform monitoring and alarming functions. Monitoring and alarm interfaces shall be of the low voltage type.

Monitoring and alarm interfaces shall be capable of monitoring critical conditions and shall provide a configurable dry contact alarm output. Monitored points shall have independently programmable high and low limits, and manual or automatic reset selection.

The RS485 communications jack shall be accessible, without requiring the removal of the housing. Monitoring and alarm interfaces must support non-volatile memory, so that in the event of power loss, all programmed operating parameters shall be unaffected without the use of battery backup. All control functions shall continue in the event of a communications failure.

Monitoring and alarm interfaces shall provide both remote and local communications in accordance with EIA RS485 standards. All firmware communications protocol and command codes shall be published, open and non-proprietary. Monitoring and alarm interfaces shall be model SZ1144 as manufactured by TCS/Basys Controls.

Ordering Information

Part #	Description
SZ1144	Refrigeration Temperature Monitor
SZ1144 Accessories	
TS Series	Temperature sensors
TS/TX Series	Temperature sensors and transmitters
TH Series	Relative humidity transmitters
TD/TL Series	Differential pressure transducers
PR Series	Encased relays
PS Series	Current switches
PT Series	Control transformers

Dimensions

Note: inches [mm]

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