

### **Description**

The SZ1145 is a microprocessor-based monitoring and alarm interface designed to monitor up to four  $1000~\Omega$  platinum RTD temperature sensor inputs and up to two 4-20 mA inputs.

#### The SZ1145 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: 20 to 120°F (-6.7 to 48.9°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.

## **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 SZ1145 as manufactured by TCS/Basys Controls.

### Ordering Information

Part # Description

SZ1145 General Purpose Monitor

SZ1145 Accessories

TS Series Temperature sensors

TS/TX Series Temperature sensors and transmitters

TH Series Relative humidity transmitters
TD/TL Series Differential pressure tranducers
PD Series Differential pressure switches

PR Series Encased relays
PS Series Current switches
PT Series Control transformers

### **Dimensions**

### Note: inches [mm]

#### SZ1145



