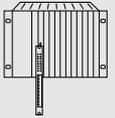


# ANALOG INPUT MODULES

## PTE8 - 8 INPUTS FOR TEMPERATURE SENSORS

PLC SYSTEMS  
MULTICONTROL COMPONENTS

# A6



## PTE8

- 8 Analog Inputs for Temperature Sensors
- Optional FeCuNi or NiCrNi Sensor (Type J, K, L) conforming to DIN 43710 or DIN IEC 584
- Temperature Ranges 0 to 400 °C, 0 to 500 °C, 0 to 600 °C, 0 to 1200 °C
- Resolution 10 Bit
- Conversion Time ca. 300 µsec per Channel
- Software Operation with Standard Function Blocks

### SLOTS

The analog input module PTE8 can be operated in the following slots of racks MULTI, MIDI and M264.

| Rack                 | Slot | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|----------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MULTI Base Rack      |      | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| MULTI Expansion Rack |      | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| MIDI                 |      | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| M264                 |      | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

● The module can be operated in this slot  
○ The module cannot be operated in this slot

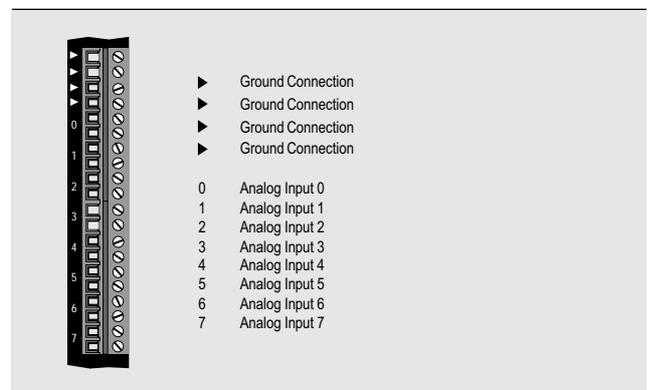
### ORDER DATA

|   |   |
|---|---|
| Analog Input module for Temperature Measurement, 8 Channels, 10 Bit Resolution, for direct connection of temperature sensors, not galvanically isolated |   |
| <b>ECPT8-0</b>  | FeCuNi Temperature sensors conforming to DIN 43710 (Type L), Measurement Range 0 to 400 °C    |
| <b>ECPT8-1</b>  | NiCrNi Temperature sensors conforming to DIN IEC 584 (Type K), Measurement Range 0 to 600 °C  |
| <b>ECPT8-2</b>  | NiCrNi Temperature sensors conforming to DIN IEC 584 (Type K), Measurement Range 0 to 1200 °C |
| <b>ECPT8-3</b>  | FeCuNi Temperature sensors conforming to DIN IEC 584 (Type J), Measurement Range 0 to 500 °C  |

### TECHNICAL DATA

|                                   | PTE8-0                       | PTE8-1        | PTE8-2        | PTE8-3        |
|-----------------------------------|------------------------------|---------------|---------------|---------------|
| Number of Inputs                  | 8                            |               |               |               |
| Galvanic Isolation                | NO                           |               |               |               |
| Sensor Type                       | FeCuNi                       | NiCrNi L      | NiCrNi K      | FeCuNi K J    |
| Standard                          | DIN 43710                    | DIN IEC 584   | DIN IEC 584   | DIN IEC 584   |
| Measurement Range                 | 0 - 400 °C                   | 0 - 600 °C    | 0 - 1200 °C   | 0 - 500 °C    |
| Resolution                        | 10 Bit                       |               |               |               |
| Conversion Time                   | ca. 300 µsec per Channel     |               |               |               |
| Measurement Precision             |                              |               |               |               |
| Basic Precision at 20 °C          | ±0.6 %                       | ±0.6 %        | ±0.6 %        | ±0.6 %        |
| Offset Drift                      | ±0.062 % / °C                | ±0.062 % / °C | ±0.046 % / °C | ±0.062 % / °C |
| Gain Drift                        | ±0.052 % / °C                | ±0.062 % / °C | ±0.052 % / °C | ±0.062 % / °C |
| Linearity                         | ±0.7 % / V                   | ±0.7 % / V    | ±0.7 % / V    | ±0.7 % / V    |
| Linearization                     | Hardware                     | Software      | Software      | Hardware      |
| Terminal Block Temp. Compensation | YES                          |               |               |               |
| Power Consumption                 |                              |               |               |               |
| At +8 V                           |                              |               | 1.4 W         |               |
| At +15 V                          |                              |               | 1.0 W         |               |
| At -30 V                          |                              |               | 1.9 W         |               |
| Documentation                     | Hardware Manual MULTICONTROL |               |               |               |
| German                            | MAHWMULTI-0                  |               |               |               |
| English                           | MAHWMULTI-E                  |               |               |               |
| French                            | MAHWMULTI-F                  |               |               |               |
| Italian                           | MAHWMULTI-I                  |               |               |               |
| Spanish                           | MAHWMULTI-S                  |               |               |               |

### CONNECTIONS



### SOFTWARE OPERATION

The analog inputs are controlled with standard function blocks TINC and TIND. These function blocks are standard components of software package SWSPSTD01-0 (see section A7 "PLC Programming" for more information). Either TINC or TIND is used depending on the module version:

| Module Version | Sensor Type | Measurement Range | Function Block |
|----------------|-------------|-------------------|----------------|
| PTE8-0         | FeCuNi      | 0 to 400 °C       | TIND           |
| PTE8-1         | NiCrNi      | 0 to 600 °C       | TINC           |
| PTE8-2         | NiCrNi      | 0 to 1200 °C      | TINC           |
| PTE8-3         | FeCuNi      | 0 to 500 °C       | TIND           |