

AM 222

Analog input/output board

The analog I/O board AM 222 of the Compact PLC range provides 4 analog inputs, 2 analog outputs as well as one universal counter input.

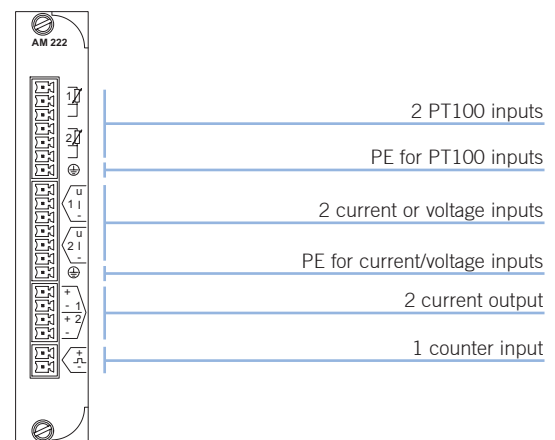
Features

- **2 PT100 inputs**
for range temperature measurement of 0°C (32°F) to 150 °C (302 °F).
- **2 current or voltage inputs**
current input 0 mA...20 mA or 4 mA...20 mA
voltage input 0 V...10 V
- **2 current outputs**
0 mA...20 mA or 4 mA...20 mA
- **1 counter input**
Universal counter input for up/down counting (max. 2 kHz), frequency and cycle duration measurement.



AM 222

Front view



Technical data

PT100 inputs

| | |
|---|---|
| Connection type: | DIN/JIS as three-conductor wiring |
| Influence of the connection cable: | automatic correction of the cable resistance by using the same cable length |
| Cable resistance: | max. 10 Ohm |
| Digital range: | 0...10 000 |
| Linearization: | Software |
| Linearity deviation: | < 0.2 % |
| Drift of temperature: | ± 0.03 %/10 K |
| Measurement range exceeds upper or lower limit: | display of error messages |
| Protection: | short circuit proof |
| Power consumption: | 1 mA |

Current inputs

| | |
|-------------------------|---------------------------------|
| Load: | 50 Ohm (± 0.1 % TK ≤ 10 ppm) |
| Digital range: | 0...10000 |
| Precision of measuring: | ± 0.4 % |
| Drift of temperature: | ± 0.03 %/10 K |
| Protection: | multi fuse |

Voltage inputs

| | |
|-------------------------|---------------|
| Digital range: | 0...10000 |
| Precision of measuring: | ± 0.5 % |
| Drift of temperature: | ± 0.03 %/10 K |
| Load: | > 400 kOhm |

Current outputs

Resolution D/A converter: 4096 steps at 12 Bit
Digital range: 0...10000
Output data refresh: all 0.1 s
Load: $\leq 500 \text{ Ohm}$
Load influence: $< 0.3 \%$
Precision of measuring: $< 1 \%$
Protection: short circuit proof

Counter input

Type of input: potential free opto-isolated
Min. impulse width: 100 μs
Protection: polarity and overload protection
Logical high: 10 V...36 V
Logical low: 0 V...3 V
Counting range: max. 0... 2^{32} , max. 2 kHz
Frequency measurement: max. 2 kHz
Cycle duration: 0.5 ms...10 s

Power consumption

max. 50 mA at +5 V
max. 8 mA at -5 V
max. 60 mA at +15 V

Mechanical data

Dimensions front panel: 120 x 20 mm
Slots required: 1
Weight: 80 g

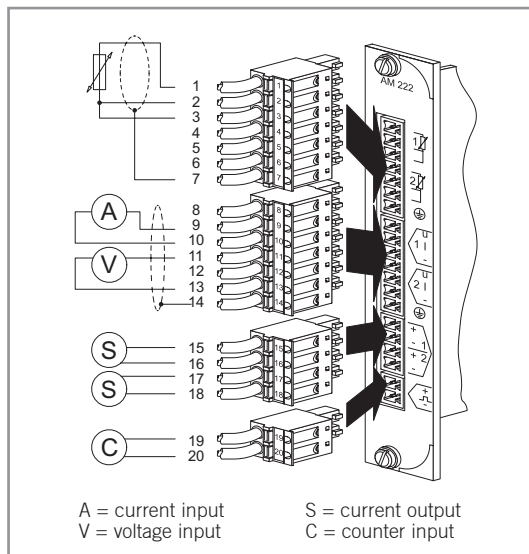
Temperature/protection

Storage temperature: -25 °C...+70 °C
(-13 °F...+158 °F)
Operating temperature: 0 °C...+55 °C
(32 °F...+131 °F)
Protective system: IP 20

EMC

Emitted Interference: DIN EN 55022
DIN EN 61000-6-4
Interference resistance: DIN EN 61000-6-2
Security: DIN EN 60950-1

Connection diagram



Connections (plugs)

Connection via spring-type terminal blocks.
Conductor size 0.14 to 1.5 mm² (stranded or solid)
or stranded with ferrule 0.25 to 1.5 mm², stripping length 8 mm.

Scope of delivery

Art. No. BGC05050

1 analog board AM 222
2 spring-type terminal blocks 7pole
1 spring-type terminal block 4pole
1 spring-type terminal block 2pole

Accessories

Art. No. BGC25050

2 spring-type terminal blocks 7pole
1 spring-type terminal block 4pole
1 spring-type terminal block 2pole