MODEL: M8PT

Dual Output Super-mini Signal Conditioners Pico-M Series

PT CONVERTER

Functions & Features

- Converting an alternating voltage from a voltage transformer into a standard process signal
- True RMS sensing
- Space-saving, easy-to-maintain, multi-channel installation base



MODEL: M8PT-[1][2]-R[3]

ORDERING INFORMATION

• Code number: M8PT-[1][2]-R[3]

Specify a code from below for each of [1] through [3]. (e.g. M8PT-16A-R/Q)

 Specify the specification for option code /Q (e.g. /C01/V01)

[1] INPUT

Voltage

1: 0 - 110 V AC

2: 0 - 220 V AC

5: 0 - 150 V AC

[2] OUTPUT 1 / OUTPUT 2

6A: 1 – 5 V DC (Load resistance 2500 Ω min.)

/ 4 - 20 mA DC (Load resistance 300 Ω max.)

44: 0 - 10 V DC (Load Resistance 5000 Ω min.)

/ 0 – 10 V DC (Load Resistance 5000 Ω min.)

55: 0 - 5 V DC (Load resistance 2500 Ω min.)

 $/ 0 - 5 \text{ V DC (Load resistance } 2500 \Omega \text{ min.)}$

66: 1 – 5 V DC (Load resistance 2500 Ω min.)

/ 1 – 5 V DC (Load resistance 2500 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[3] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to our web site.)

/C01: Silicone coating /C02: Polyurethane coating /C03: Rubber coating

ADJUSTMENT

/V01: Multi-turn fine adjustment

RELATED PRODUCTS

• Installation Base or Single Mount Base Socket (model: M8BSx)

This unit must be mounted on dedicated base or socket.

GENERAL SPECIFICATIONS

Construction: Plug-in

Mounting screw: M3 screw (torque 0.3 N·m) Housing material: Flame-resistant resin (black) Power supply: Via the Installation Base terminals

(model: M8BSx)

Isolation: Input to output 1 to output 2 to power

Input waveform

RMS sensing: Up to 15 % of 3rd harmonic content

Zero adjustment: -2 to +2 % (front) Span adjustment: 98 to 102 % (front)

INPUT SPECIFICATIONS

Frequency: 50 or 60 Hz Input burden: 1 VA max.

Overload capacity: 200 % of rating for 1 minute, 120 %

continuous

Operational range: 0 - 120 % of rating

INSTALLATION

Current consumption: Approx. 30 mA (50 mA for current

output)

Operating temperature: 0 to 55°C (32 to 131°F)
Operating humidity: 30 to 95 %RH (non-condensing)

Mounting: Installation Base (model: M8BSx)

Weight: 70 g (2.5 oz)

PERFORMANCE in percentage of span

Accuracy: ±0.25 %

Temp. coefficient: ± 0.02 %/°C (± 0.01 %/°F) Response time: ≤ 0.25 sec. (0 - 90 %)

Ripple: 0.5 %p-p max.

MODEL: M8PT

Line voltage effect: ± 0.1 % over voltage range Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC

Dielectric strength:

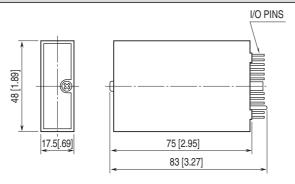
1500 V AC @1 minute (input to output 1 or output 2 or

power to ground)

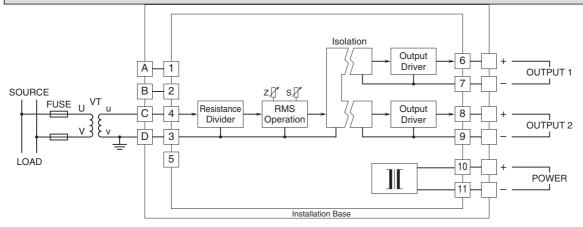
500 V AC @1 minute (output 1 to output 2 to power)

SWC test: ANSI/IEEE-C37.90.1-1989

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



 Λ

Specifications are subject to change without notice.