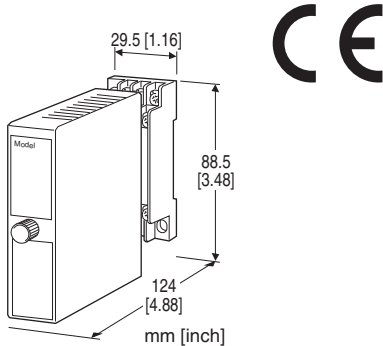


Space-saving Dual Output Signal Conditioners Mini-MW Series

RS-422 PULSE ISOLATOR

Functions & Features

- Converts RS-422 line driver pulse to open collector pulse
- High-density mounting



MODEL: W2YPD-J[1][2][3][4]-[5][6]

ORDERING INFORMATION

- Code number: W2YPD-J[1][2][3][4]-[5][6]
Specify a code from below for each of [1] through [6].
(e.g. W2YPD-J26RN-M2/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

INPUT

J: RS-422 line driver pulse

[1] OUTPUT 1

- 1: Open collector (max. frequency 100 kHz)
- 2: 3.3 V pulse (max. frequency 200 kHz)
- 3: 5 V pulse (max. frequency 200 kHz)
- 4: 10 V pulse (max. frequency 200 kHz)
- 5: 12 V pulse (max. frequency 200 kHz)

[2] OUTPUT 2

- Y: None
- 1: Open collector (max. frequency 100 kHz)
 - 2: 3.3 V pulse (max. frequency 200 kHz)
 - 3: 5 V pulse (max. frequency 200 kHz)
 - 4: 10 V pulse (max. frequency 200 kHz)
 - 5: 12 V pulse (max. frequency 200 kHz)
 - 6: RS-422 line driver pulse (max. frequency 200 kHz)

[3] OUTPUT 1 LOGIC

N: The same as the input
R: Inverted

[4] OUTPUT 2 LOGIC

N: The same as the input
R: Inverted
Y: None

[5] POWER INPUT

AC Power

M2: 100 – 240 V AC (Operational voltage range 85 – 264 V, 47 – 66 Hz)

DC Power

R: 24 V DC
(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)
P: 110 V DC
(Operational voltage range 85 – 150 V, ripple 10 %p-p max.)

[6] OPTIONS (multiple selections)

Standards & Approvals (must be specified)

/CE: CE marking

Other Options

blank: none

/Q: Option other than the above (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

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3 screw terminals (torque 0.8 N·m)

Screw terminal: Chromated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output 1 to output 2 to power

Frequency range: Input and output are the same.

INPUT SPECIFICATIONS

■ RS-422 Line Driver Pulse

Maximum frequency: 200 kHz

Receiver: Conforms to RS-422

(No receiving resistor incorporated)

OUTPUT SPECIFICATIONS

■ Open collector

Max. frequency: 100 kHz

Rating: 40 V DC @ 100 mA

Saturation voltage: 0.5 V DC

■ Voltage Pulse

Maximum frequency: 200 kHz

High level: Rating (3.3, 5, 10 or 12 V) $\pm 20\%$

Low level: $\leq 0.5\text{V}$

Load resistance:

$\geq 660\ \Omega$ for 3.3 V

$\geq 1\ \text{k}\Omega$ for 5 V

$\geq 2.0\ \text{k}\Omega$ for 10 V

$\geq 2.4\ \text{k}\Omega$ for 12 V

■ RS-422 Line Driver Pulse: Conforms to RS-422

Max. frequency: 200 kHz

Output current: $\pm 20\ \text{mA}$

INSTALLATION

Power Consumption

•AC:

$\leq 5\ \text{VA}$ at 100 V

$\leq 6\ \text{VA}$ at 200 V

$\leq 7\ \text{VA}$ at 264 V

•DC: $\leq 3\ \text{W}$

Operating temperature: -5 to $+55^{\circ}\text{C}$ (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 200 g (0.44 lb)

PERFORMANCE

Insulation resistance: $\geq 100\ \text{M}\Omega$ with 500 V DC

Dielectric strength: 2000 V AC @ 1 minute (input to output
1 to output 2 to power to ground)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive

EN 61010-1

Measurement Category II (output)

Installation Category II (power)

Pollution Degree 2

Input or output 1 or output 2 to power input:







Reinforced insulation (300 V)

Input to output 1 to output 2: Basic insulation (300 V)

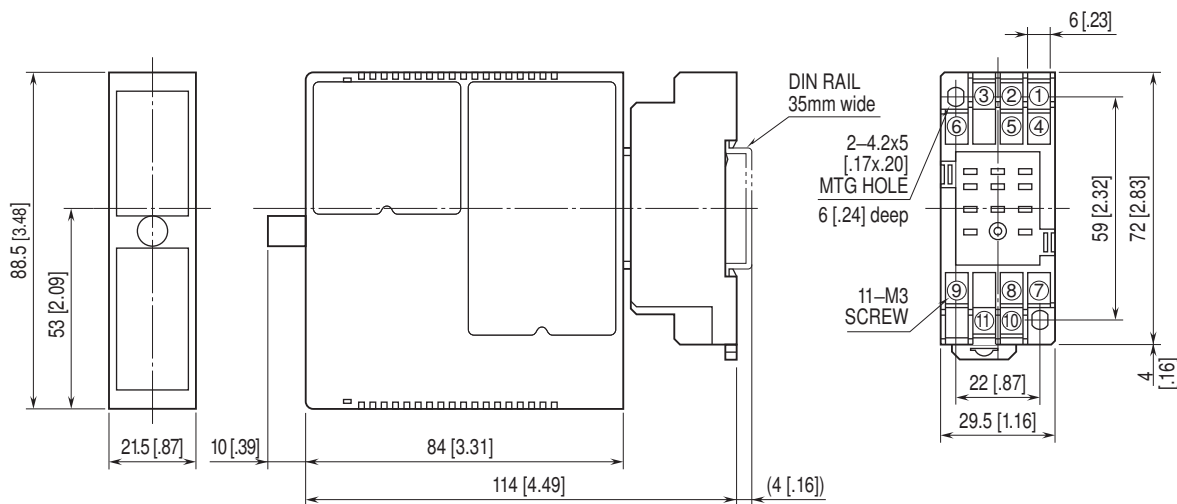
RoHS Directive

OUTPUT LOGIC

Applicable for both Output 1 and 2.

INPUT		RS-422 line driver pulse	
OUTPUT		H	
		L	
Voltage pulse or RS-422 line driver pulse	Same as the input	H	
	Inverted	H	
Open collector	Same as the input	OFF	
	Inverted	OFF	

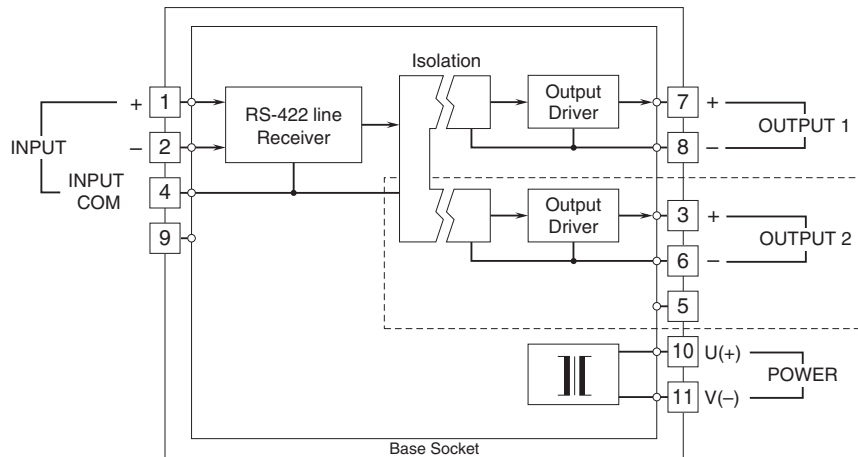
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



- When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

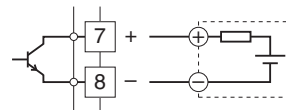
■ OUTPUT 2 CODE: Other than 6



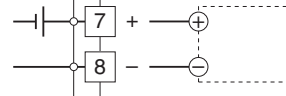
Note: The section enclosed by broken line is only with 2nd output option.

Output Connection Examples

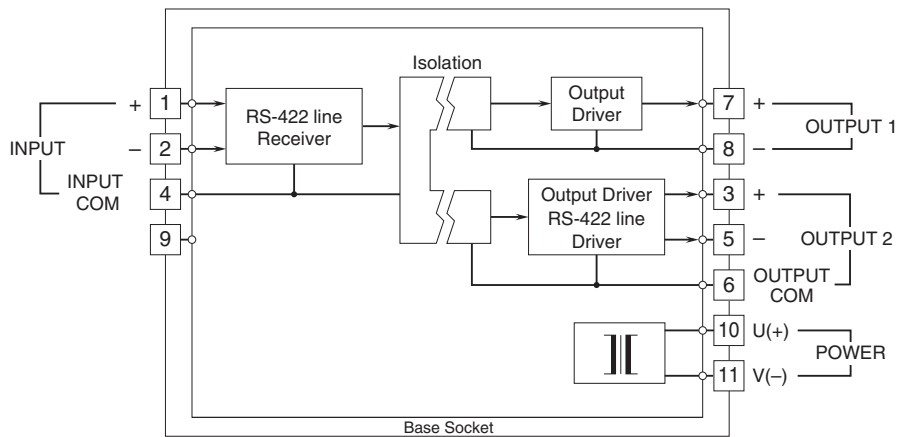
■ Open Collector



■ Voltage Pulse

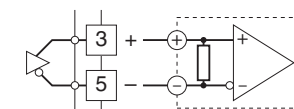


■ OUTPUT 2 CODE: 6 (RS-422 line driver pulse)



Output Connection Examples

■ RS-422 line driver pulse output





Specifications are subject to change without notice.