

HD SIGNAL CONDITIONER SERIES

PULSE DIVIDER TRANSMITTER

MODEL
HD-PDC

MODEL & SUFFIX CODE SELECTION

MODEL HD-PDC

■ Input signal

1	Voltage pulse
2	Open collector
3	Dry contactor
4	Current pulse
0	Spec Order

■ Output1 signal

1	Voltage pulse
2	Open collector
3	Dry contactor
4	Current pulse
0	Spec Order

■ Output2 signal

Availability as Output1
N:None

■ Output3 signal

Availability as Output1
N:None

■ Power

X:110V AC Y:220V AC
Z:24V DC O:Others



INPUT & OUTPUT

■ INPUT

Excitation : 12V DC $\pm 2V$ @30mA ; shortcircuit protection

• Dry Contact

Maximum frequency : 30 Hz

Pulse width time requirement : 10 millsec. Min. for ON and OFF

Sensing : approx. 12V DC @3mA

ON/OFF level : $\leq 200\Omega$ for ON, $\geq 100k\Omega$ for OFF

• Open Collector

Maximum frequency : 10 kHz

Pulse width time requirement : 10 μ sec. Min. for ON and OFF

Sensing : approx. 12V DC @3mA

ON/OFF level : $\leq 200\Omega$ for ON, $\geq 100k\Omega$ for OFF

• Voltage Pulse : square or sine waveforms

Maximum frequency : 10 kHz

Pulse width time requirement : 10 μ sec. Min. for high and low levels

Hi/Lo level : 2 ~ 50V for high level;
 $\leq 1V$ for low level

Input impedance : 10k Ω minimum

ORDERING INFORMATION

Specify code number and variables.

•Code number : ex) HD-PDC-111NY

GENERAL SPECIFICATIONS

Construction : plug-in

Connection : M3.5 screw terminals

Housing material : flame-resistant resin (black)

Isolation : input to output to power

Front adjustments : 0 ~ 5% for zero ; $\pm 5\%$ for span

Chattering protection : filter provided for mechanical contact input

■ OUTPUT

- **Low Frequency Open Collector** : 50V DC @100mA (resistive load)

Maximum frequency : 30 Hz

Timer : limits ON time within 75 ±25 millisecc.
for wider than 75millisecc. pulse

Saturation voltage : 0.5V DC

- **Open Collector** : 50V DC @50mA (resistive load)

Maximum frequency : 10 kHz

Saturation voltage : 0.5V DC

- **Voltage Pulse**

Maximum frequency : 10 kHz

High level : rating (5, 12 or 24V) ±10%

Low level : ≤0.5V

Load resistance : 250Ω minimum for 5V;

600Ω minimum for 12V;

1200Ω minimum for 24V

- **Mercury Relay Contact** : 132V AC @200mA (cosφ=1)

264V AC @100mA (cosφ=1)

30V AC @200mA (resistive load)

100V AC @60mA (resistive load)

Maximum frequency : 30 Hz

Timer : limits ON time within 75 ±25 millisecc.
for wider than 75millisecc. pulse

Relay life : ≥5 × 10⁸ cycles (mechanical)

≥5 × 10⁷ cycles (electrical)

INSTALLATION

Power input

AC : 85 - 132V, 47 - 66Hz, approx. 2VA

DC : rating ±10% (ripple 10% p-p max.)
approx. 2W (80mA at 24V)

Operating temperature : -5 to +60°C (23 to 140°F)

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

Mounting : surface or DIN rail

Dimensions : W50 × H80 × D132 mm

See General Spec. Sheet Page B-1.

Weight :

Terminal assignment : See General Spec. Sheet Page B-1.

PERFORMANCE in percentage of span

Accuracy : ±0.1%

Temp. coefficient : ±0.02%/°C (±0.01%/°F)

Ripple : 0.25% p-p max. (100/120Hz)

Response time : ≤0.4(400ms) seconds (0 - 90%)

approx. 25 milliseconds with option

Line voltage effect : ±0.1% over voltage range

Insulation resistance : ≥100MΩ with 500V DC

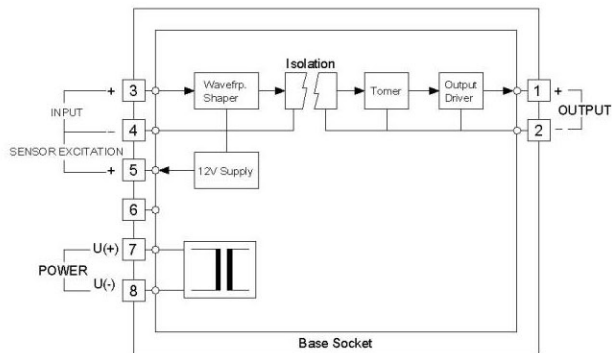
Dielectric strength : 1500V AC @1 minute

(input to output to power to ground)

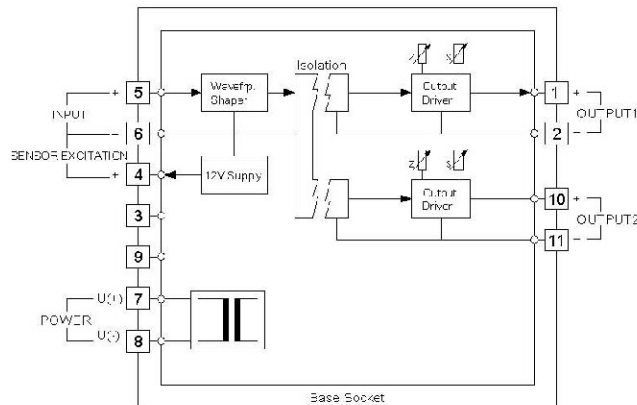
Surge withstand Voltage : 1.2/50μsec, ±5KV

(INPUT to OUTPUT to GROUND)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Low freq-open collector and mercury relay output only.



* Low freq-open collector and mercury relay output only.