

HD SIGNAL CONDITIONER SERIES

SIGNAL REVERSE TRANSMITTER

MODEL
HD-RVC

MODEL & SUFFIX CODE SELECTION

MODEL HD-RVC

Input signal

1	0-10mVDC	A	4-20mADC
2	0-100mVDC	B	1-5mADC
3	0-1VDC	C	0-20mADC
4	0-10VDC	D	0-1mADC
5	0-5VDC	O	Spec Order
6	1-5VDC		

Output1 signal

1	10-0mVDC	A	20-4mADC
2	100-0mVDC	B	5-1mADC
3	1-0VDC	C	20-0mADC
4	10-0VDC	D	1-0mADC
5	5-0VDC	O	Spec Order
6	5-1VDC		

Output2 signal

Availability as Output1
N:None

Display

A:Percent
B:Input signal
C:Output signal
O:Others
N:None

Power

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



GENERAL SPECIFICATIONS

Construction : plug-in

Connection : M3.5 screw terminals

Housing material : flame-resistant resin (black)

Isolation : input to output to power
(non-isolated between I/O)

LCD meter : indicating reversed values ; 0.1% increments

Overrange output : approx. -10 ~ +120% at 1 ~ 5V

Front adjustments : zero and span ; $\pm 5\%$

INPUT & OUTPUT

• **DC Current** : shunt resistor attached to input terminals (0.5W)

Input resistance : For resistance values other than listed below, specify when ordering.

Input	Input Resistance
20 - 4mA	: 250 (Ω) (100 Ω for orders)
10 - 2mA	: 500
5 - 1mA	: 1000
20 - 0mA	: 50
16 - 0mA	: 62.5
10 - 0mA	: 100
1 - 0mA	: 1000
50 - 10mA	: 100
10 - 0 μ A	: 1000
100 - 0 μ A	: 1000
+1 ~ -1mA	: 1000
+10 ~ -10mA	: 100

ORDERING INFORMATION

Specify code number and variables.

• **Code number** : HD-RVC-AANY

• **Special input and output ranges** : code:0
A : -10 ~ 20mA
V : 0 ~ ± 15 V

- **DC Voltage** : -300 ~ +300V DC
- Minimum span** : 3mV
- Zero suppression/elevation** : max. 1.5 times span
- Input resistance**

Input Span	Input Resistance
3 ~ 10mV	: 10k (Ω minimum)
10 ~ 100mV	: 10k
0.1 ~ 1V	: 100k
$\geq 1V$	: 1M

■ OUTPUT

- **DC Current** : 0~20mA DC
- Minimum span** : 1mA
- Zero suppression/elevation** : max. 1.5 times span
- Load resistance** : output drive 15V maximum

Output	Load Resistance
20 ~ 4mA	: 750 (Ω maximum)
10 ~ 2mA	: 1500
5 ~ 1mA	: 3000
20 ~ 0mA	: 750
16 ~ 0mA	: 900
10 ~ 0mA	: 1500
1 ~ 0mA	: 15k

- **DC Voltage** : -10 ~ +12V DC
- Minimum span** : 5mA
- Zero suppression/elevation** : max. 1.5 times span
- Load resistance** : output drive 10mA maximum;

Output	Load Resistance
5mA for negative voltage output : at $\geq 0.5V$	
10 ~ 0mV	: 10k (Ω minimum)
100 ~ 0mV	: 100k
1 ~ 0V	: 100
10 ~ 0V	: 1000
5 ~ 0V	: 500
5 ~ 1V	: 500
+10 ~ -10V	: 2000
+5 ~ -5V	: 1000

INSTALLATION

Power input

- AC** : rating $\pm 10\%$, 50/60 ± 2 Hz, approx. 2VA
- DC** : rating $\pm 10\%$, or 85 ~ 150V for 110V rating
(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 x H80 x 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 : $\pm 0.1\%$

Temp. coefficient : $\pm 0.015\%/^{\circ}\text{C}$ ($\pm 0.008\%/^{\circ}\text{F}$)

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

Response time : $\leq 0.4(400\text{ms})$ seconds (0 ~ 90%)

Line voltage effect : $\pm 0.1\%$ over voltage range

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

Dielectric strength : 1500V AC @1 minute

(UD: input or output to power to ground)

(UDS: input to output to power to ground)

Surge withstand Voltage : 1.2/50 μsec , $\pm 5\text{KV}$

(INPUT to OUTPUT to GROUND)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

