

H Serie Backplane Mounting Isolated Safety Barriers

PHD-12HZ-*11



Overview

Isolated safety barrier: PHD-12HZ-*11, RTD signal input, single input and dual output.
The isolated safety barrier can convert the RTD input signal in hazardous area to 4~20mA signal output and transmit it to the safe area. The circuit is equipped with single RTD signal input and DC dual output.
The output 4~20mA signal, can be intelligently configured. The actual range of RTD can be set by computer.
PHD-12HZ-*11, "*" indicates the input type of RTD, please use the code to indicate.
This product needs independent power supply.

Input signal types and measurement range				
Code	RTD model	Measurement range	Minimum range	Conversion accuracy
1	G53	-50 ~ 150℃	20℃	0.2℃/0.1%
2	Cu50	-50 ~ 150℃	20℃	0.2℃/0.1%
4	Pt100	-200 ~ 850℃	20℃	0.2℃/0.1%
6	Pt1000	-200 ~ 850℃	20℃	0.2℃/0.1%
7	Ni1000	-60 ~ 250℃	20℃	0.2℃/0.1%

Example: Isolated safety barrier Pt100 input, temperature range 0~400℃, dual output 4~20mA, the power supply is 20~35VDC. When the model is PHD-12HZ-411: (0~400℃) the measurement range can be set to the specified range of 0~400℃ by computer.

RTD input/4~20mA output (configurable) 1 input 2 outputs

Specifications	
Supply voltage	20~35VDC, power consumption<1.8W (when power supply 24VDC, output 20mA)
Input signal	Two-wire or three-wire RTD
Output signal	4~20mA
Signal and measurement range	Signal range: corresponding to the measurement range of RTD Measurement range: When make an order, the user shall make the configuration by himself, which shall be indicated in the tail number or extra explained
Allowable output load capacity	0~500Ω (customizable)
Alarm indication	L1 light is on at low-measurement range alarm; L2 light is on at high-measurement range alarm
Channel number of input and output	1 input 2 outputs
Applicable field devices	2-wire or 3-wire RTD (G53, Cu50, Pt100, Pt1000, Ni1000)
Output accuracy	0.1%F.S (Typical value: 0.05%F.S)
Temperature drift	0.005%F.S/℃
Temperature parameters	Working temperature: -20℃~+60℃, storage temperature: -40℃~+80℃
Relative humidity	10%~95% RH no condensation
Insulation strength	Between intrinsically safe side and non-intrinsically safe side (≥3000VAC/min); between power supply and non-intrinsically safe side (≥1500VAC/min)
Insulation resistance	≥100MΩ (between input/output/power supply)
External dimensions	Thickness 15.8mm * width 104.8mm * high 116.1mm
Electromagnetic compatibility	According to IEC 61326-1 (GB/T 18268), IEC 61326-3-1
Functional safety certification	SIL3 according to IEC 61508 EN 61511 standards
Explosion-proof mark	[Exia Ga]IIC, [Exia Da]IIIC
Certification body	CQST (China National Quality Supervision and Test Centre for Explosion Protected Electrical Products)
Certified parameters (between terminals 1-3,2-3)	Um=250V Uo=8.4V Io=31mA Po=65.1mW Co=4.8μF Lo=20mH
Installation site requirements	It can be connected with instruments in 0 zone with II A, II B, II C dangerous gas
MTBF	≤100000h

