H Serie Backplane Mounting Isolated Safety Barriers

PHD-11HD-21

Overview

Isolated safety barrier at detection side: PHD-11HD-21, analog input and output, single input and single output.

The isolated barrier can isolate and transmit the 4~20mA signal or DC 4~20 mA signal generated by the transmitter in the dangerous area to the safe area. When the transmitter is two-wire or three-wire system, the safety barrier provides power for the transmitter.

This product needs independent power supply.

This product supports HART signal and disconnection alarm.

Two or three-wire transmitter or current source input /4~20mA output 1 input 1 output

Specifications

Supply voltage	20~35VDC, power consumption<1.5W (when supply power 24VDC, transmitter input, output 20mA)
Output power supply with provided power	When the circuit output is 20mA, the provided voltage is≥16V
Input signal	Two-wire or three-wire transmitter or current source signal (HART)
Output signal	4~20mA (HART)
Allowable output load capacity	0~500Ω (customizable)
Output accuracy	0.1%F.S (Typical value: 0.05% F.S)
Temperature drift	0.005% F.S/℃
Number of input and output	1 input 1 output
Applicable field equipments	2-wire, 3-wire transmitter and current source signal, this product is suitable for ABB, Fisher, Rosemount, Honeywell 11, as well as 3351, EJA, SIEMENS and other products with imported technology
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
Explosion-proof mark	[Exia Ga]IIC, [Exia Da]IIIC
Functional safety certification	SIL2 according to IEC 61508 EN 61511 standards
Certification body	CQST (China National Quality Supervision and Test Centre for Explosion Protected Electrical Products)
Certified parameters (between terminals 1-3)	Um=250V Uo=7.2V Io=-- Po=-- Co=12μF Lo=--
Certified parameters (between terminals 2-3,2-1)	Um=250V Uo=28V Io=93mA Po=0.65W Co=0.083μF Lo=4.2mH
Installation site requirements	It can be connected with instruments in 0 zone with ⅡA, ⅡB, ⅡC dangerous gas
MTBF	≤100000h