

H Serie Backplane Mounting Isolated Safety Barriers

PHC-11HF-14



Overview

H serie backplane mounting isolated safety barriers at operating side: PHC-11HF-14, digital input and output, single input and single output.

Safety barrier can convert the input quantity of contact switch and logic level in safety area into the driving quantity of intrinsically safe equipments, and output it to the field of dangerous area, so as to control solenoid valve, audible and visual alarm, etc.

The status indicator has red and yellow light colors, when alarm then the light is red, when it is with the output solenoid valve, then the light is yellow.

This product needs independent power supply.

Contact and logic level input/switch driving output

1 input 1 output

Specifications	
Supply voltage	20~35VDC, power consumption<2.2W
Input signal	Switch contact, logic level
Output signal	Open circuit voltage>24V, UE/IE=12.8V/45mA Inversion function: K1 is set to the "ON" side, the circuit output is inverted
Alarm relay function	The dial switch K2 is set to the "ON" side, the circuit adopts the alarm function Load Resistance<50Ω, short-circuit alarm (SC), load resistance>10KΩ, open circuit alarm (LB)
Alarm relay output characteristics	Response time: 20ms, driving capacity: 250VAC/2A, 30VDC/2A under resistive load
Number of input and output	1 input 1 output
Applicable field equipments	Safety solenoid valve, audible and visual alarm
Temperature parameter	Working temperature: -20℃~+60℃, storage temperature: -40℃~+80℃
Relative humidity	10%~95% RH no condensation
Dielectric strength	Between intrinsically safe side and non-intrinsically safe side (≥3000VAC/min); between power supply and non-intrinsically safe terminal (≥1500VAC/min)
Insulation resistance	≥100MΩ (between input/output/power supply)
External dimensions	Thickness 15.8mm * width 104.8mm * high 116.1mm
Explosion-proof mark	[Exia Ga]IIC, [Exia Da]IIIC
Functional safety certification	SIL2 according to IEC 61508 EN 61511 standards
Electromagnetic compatibility	According to IEC 61326-1 (GB/T 18268), IEC 61326-3-1
Certification body	CQST (China National Quality Supervision and Test Centre for Explosion Protected Electrical Products)
Certified parameters (between terminals 1-2)	Um: 250VAC/DC Uo=25.2V Io=147mA Po=0.92W Co=0.107μF Lo=1.5mH
Installation site requirements	It can be connected with instruments in 0 zone with Ⅱ A, Ⅱ B, Ⅱ C dangerous gas
MTBF	About 100000h

