



PHD-11TZ-*1
热电阻输入/4~20mA输出 (可组态)
一入一出
RTD input/ 4~20mA output (configurable)
1 input 1 output

概述 Overview

隔离式检测端安全栅：PHD-11TZ-*1，热电阻信号输入，一路输入一路输出。
安全栅可实现将危险区的热电阻信号输入，转换为4~20mA信号输出传送到安全区。电路设一路热电阻信号输入，一路直流信号输出。
输出4~20mA信号，可智能组态，热电阻的实际量程范围可通过计算机进行设定。
PHD-11TZ-*1，“*”表示热电阻的输入类型，请用代码表示。本产品需外接20~35VDC电源。

输入信号类型和量程表 Input signal types and measurement range

代码 Code	热电阻型号 RTD model	测量范围 Measurement range	最小量程 Minimum range	转换精度 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%

例：检测端安全栅Pt100输入，温度范围0~400℃，输出一路4~20mA，电源20~35VDC。型号为PHD-11TZ-41(0~400℃)，量程范围可通过计算机设定为指定的0~400℃范围。
*总线端子供电，详见附录。

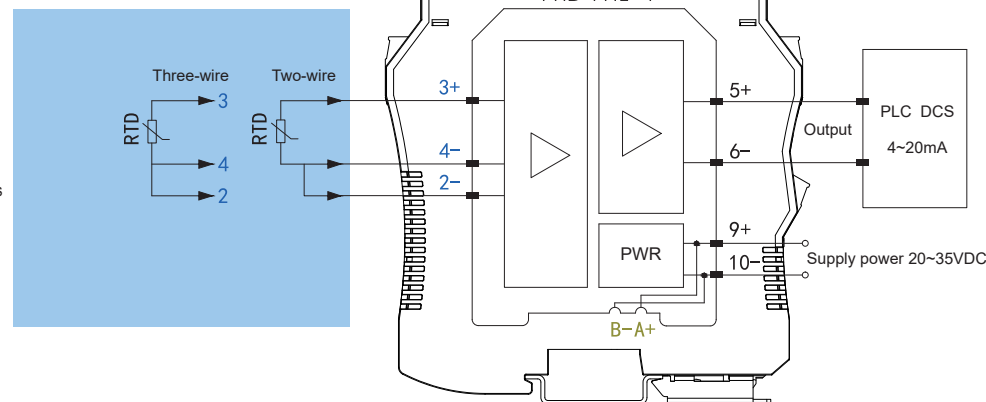
Isolated safety barrier: PHD-11TZ-*1, RTD signal input, one input and one output. The isolated safety barrier can convert the RTD input signal in hazardous area to 4~20mA signal output and transmit it to the safe area. The circuit is equipped with single RTD signal input and DC signal output. The output 4~20mA signal, can be intelligently configured. The actual range of RTD can be set by computer. PHD-11TZ-*1, "*" indicates the input type of RTD, please use the code to indicate. This product needs an external 20~35VDC power supply.

Example: Isolated safety barrier Pt100 input, temperature range 0~400℃, with one output 4~20mA, power supply is 20~35VDC, the model is PHD-11TZ-41 (0~400℃), the measurement range can be set to the specified range of 0~400℃ by computer.
* Bus terminal power supply, please see appendix for details.

接线图 Wiring diagram

- 注：1、三线制热电阻输入时，要尽可能保证三根导线等长。
2、二线制热电阻输入时，安全栅端子4和2必须短接。

Note: 1. When the input is with three-wire thermal resistance, it is better to ensure that the length of the three wires should be equal as much as possible.
2. When the input is with two-wire thermal resistance, terminals 4 and 2 of safety barrier must be shorted connected.



总线供电插接件 可选件 详细说明 见样本后附录
Bus power supply plug connector Optional parts Detailed description please see appendix

危险区，本安端子：1~4
Hazardous area, intrinsically safe terminals: 1~4

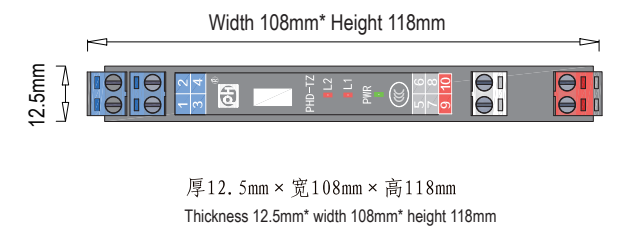
安全区，非本安端子：5~10
Safe area, not intrinsically safe terminals: 5~10

技术数据 Specifications

供电电压 Supply voltage	20~35VDC, 功耗<1.2W (24VDC供电, 20mA输出时) 20~35VDC, power consumption<1.2W (when power supply 24VDC, output 20mA)
输入信号 Input signal	二线制或三线制热电阻 Two-wire or three-wire RTD
输出信号 Output signal	4~20mA
信号范围及量程范围 Signal and measurement range	信号范围：对应热电阻的测量范围 Signal range: corresponding to the measurement range of RTD 量程范围：用户订货时自行制定组态，在尾号指明或另说明 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.
允许输出负载能力 Allowable output load capacity	0~500Ω (可定制) 0~500Ω (customizable)
报警指示 Alarm indication	低量程报警L1灯亮；高量程报警L2灯亮 L1 light is on at low-measurement range alarm; L2 light is on at high-measurement range alarm
输入输出路数 Channel number of input and output	一路输入，一路输出 1 input 1 output
适用的现场设备 Applicable field devices	二线制或三线制热电阻G53, Cu50, Pt100, Pt1000, Ni1000 2-wire or 3-wire RTD G53, Cu50, Pt100, Pt1000, Ni1000
输出精度 Output accuracy	见上页“输入信号类型和量程表” Please see the "Input signal types and measurement table" in above page
温度漂移 Temperature drift	0.005%F. S/℃
温度参数 Temperature parameters	工作温度：-20℃~+60℃，存储温度：-40℃~+80℃ Working temperature: -20℃~+60℃, storage temperature: -40℃~+80℃
空气相对湿度 Relative humidity	10%~95%RH无凝露 10%~95%RH no condensation
绝缘强度 Dielectric strength	本安端与非本安端 (≥3000VAC/min)；电源与非本安端之间 (≥1500VAC/min) Between intrinsically safe side and non-intrinsically safe side (≥3000VAC/min); between power supply and non-intrinsically safe terminal (≥1500VAC/min)
绝缘电阻 Insulation resistance	≥100MΩ (输入/输出/电源间) ≥100MΩ (between input/output/power supply)
电磁兼容性 Electromagnetic compatibility	符合IEC 61326-1 (GB/T 18268), IEC 61326-3-1 According to IEC 61326-1 (GB/T 18268), IEC 61326-3-1
防爆标志 Explosion-proof mark	[Exia Ga] IIC
认证机构 Certification body	国家防爆电气产品质量监督检验中心CQST认证 CQST (China National Quality Supervision and Test Centre for Explosion Protected Electrical Products)
认证参数 (端子2-3-4之间) Certified parameters (between terminals 2-3-4)	Um=250V Uo=8.4V Io=31mA Co=4.8μF Lo=20mH Po=65mW
安装场所要求 Installation place requirements	可与具有IIA、IIB、IIC危险气体的0区本安仪表相连接 It can be connected with instruments in 0 zone with IIA, IIB, IIC dangerous gas
平均无故障时间 MTBF	≤100000小时 (h)

端子定义及外形尺寸 Terminal assignments and dimensions

端子 Terminal	接线端子功能定义 Terminal assignments	
9	供电电源+ Power supply +	20~35VDC
10	供电电源- Power supply -	
	二线制 2-wire	三线制 3-wire
2	与4短接 with 4 short connected	输入- Input-
3	输入+ Input+	输入+ Input+
4	输入- Input-	输入- Input-
5	输出+ Output+	4~20mA
6	输出- Output-	



Information maybe revised without prior notice

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