PHD-12TT-*11

热电偶输入/4~20mA输出（可组态）
一入二出

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

概述 Overview

隔离式检测端安全栅：PHD-12TT-*11，热电偶信号输入，一路输入两路输出。
安全栅可实现将危险区的热电偶信号输入，转换为4～20mA信号输出传送到安全区。电路设一路热电偶信号输入，二路直流4～20mA信号输出。
输出4～20mA信号，可智能组态，实际量程范围可通过计算机进行设定。
PHD-12TT-*11，“*”表示热电偶的输入类型，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

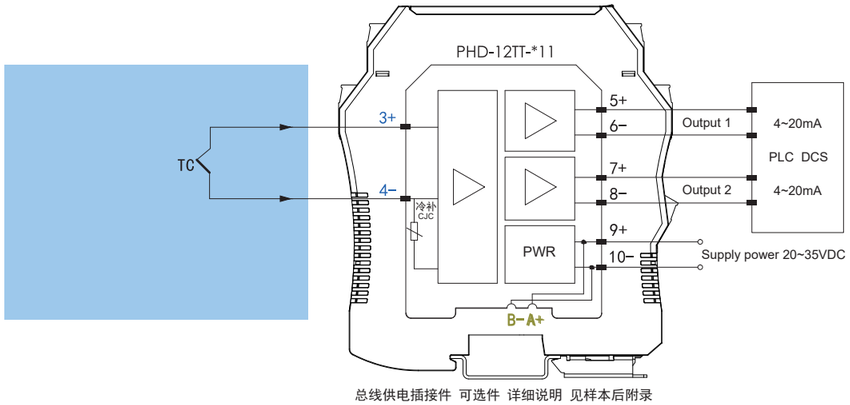
代码 Code	热电偶型号 RTD model	测量范围 Measurement range	最小量程 Minimum range	转换精度 Conversion accuracy
1	K	-200～1370℃	50℃	0.5℃/0.1%
2	S	-50～1760℃	500℃	1.5℃/0.1%
3	E	-140～1000℃	50℃	0.5℃/0.1%
4	J	-160～1200℃	50℃	0.5℃/0.1%
5	B	250～1800℃	500℃	1.5℃/0.1%
6	T	-200～400℃	50℃	0.5℃/0.1%
7	R	-50～1760℃	500℃	1.5℃/0.1%
8	N	-200～1300℃	50℃	0.5℃/0.1%

例：检测端安全栅K偶输入，温度范围0～1200℃，输出二路4～20mA信号，电源20～35VDC。型号为PHD-12TT-111(0～1200℃)，量程范围可通过计算机设定为指定的0～1200℃范围。
*总线端子供电，详见附录。

Isolated safety barrier: PHD-12TT-*11, thermocouple signal input, 1 input and 2 outputs, the safety barrier can realize the conversion of thermocouple signal input in dangerous area into 4~20mA signal output and transmit it to safe area. The circuit has one thermocouple input and two DC signal 4~20mA outputs.
The output 4~20mA signal can be intelligently configured, and the actual measuring range can be set by computer.
PHD-12TT-*11, "*" indicates the input type of thermocouple, please use code to indicate it.
This product needs an external power supply of 20~35VDC.

Example: when the input is with K-couple, temperature range is 0~1200℃, 2 outputs are 4~20mA, power supply 20~35VDC, then the model should be PHD-12TT-111 (0~1200℃).
The measuring range can be set to the specified 0~1200℃ range by computer.
* Bus terminal power supply, please see appendix for details.

接线图 Wiring diagram



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＜1.8W（24VDC供电，20mA输出时） 20~35VDC, power consumption<1.8W (when power supply 24VDC, output 20mA)
输入信号 Input signal	K、S、E、J、B、T、R、N热电偶信号 K, S, E, J, B, T, R, N, TC Signals
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：对应热电偶的测量范围-10～100mV Signal range: corresponding to the measuring range of TC -10~100mV 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，两路输出 1 input 2 outputs
适用的现场设备 Applicable field devices	K、S、E、J、B、T、R、N热电偶传感器 K, S, E, J, B, T, R, N, TC sensors
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
冷端补偿 Cold junction compensation	±1℃（补偿范围-20℃～+60℃） ±1℃ (Compensation range -20℃~+60℃)
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
功能安全认证 Functional safety certification	SIL2 符合IEC 61508 EN 61511标准 SIL2 according to IEC 61508 EN 61511 standards
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3-4之间） Certified parameters (between terminals 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 -	
3	输入+ Input+	TC
4	输入- Input-	
5	输出1+ Output 1+	4～20mA
6	输出1- Output 1-	
7	输出2+ Output 2+	4～20mA
8	输出2- Output 2-	

厚12.5mm × 宽108mm × 高118mm
Thickness 12.5mm* width 108mm* height 118mm

Information maybe revised without prior notice
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