

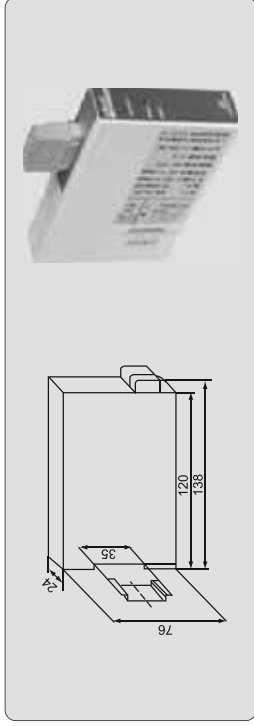
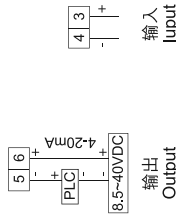
4 两线制输出回路供电隔离器 Two wire output circuit powered isolators
■ 用途 / Usage

输出回路供电的二线制直流隔离器，可以将现场的直流电流、电压信号隔离变为4-20mA输出。模块内有浪涌保护电路，适用于恶劣环境。

Two wire system DC isolator of output circuit power supply isolates DC current, voltage signal in site and exports 4-20mA. The module contains surge protection circuit, so it fits for four environment.

■ 产品规格 / Specification

BM-DV/IS
BM-DI/IS

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameter	指标 Value
输入 Input	范围 Range 电流(Current): 4-20mA, 0-1mA, 0-20 mA, 电压(Voltage): 0-1V, 0-5V, 0-75mV 等 阻抗 Impedance 电流(Current): 0(4)-20 mA, 100 Ω; 0-1mA, 1kΩ; 电压(Voltage) ≥ 100 kΩ 过载 Overload 电流(Current): 100 mA或1W; 电压(Voltage): 0-10V时, 50V 范围 Range 4-20mA
输出 Output	负载 Load resistance $R_{max} = [(V_s - 8.5) / 0.02] \Omega, 0.15775 \Omega (8.5-40V)$ 零点调节 Zero adjustment 5% 量程调节 Range adjustment 5% 保护 Protection 短路保护 Short protection 范围 Range 直流电压(DC voltage) 8.5-40V DC, 一般(Commonly) 24V DC/2W, 最大电流 Max current 24mA
电源 Power supply	精度 / 线性 Accuracy / Linearity 最大满量程 (Full scale) 0.15% 温度效应 Temperature effect $< 0.02\% / ^\circ C$ 响应时间 Response time $< 500ms$
其它 Other	隔离电压 Isolation voltage 2000V, 输入对输出 (Between input / output) 工作 / 贮藏温度 Work / storage temperature 0-70/-20-+85 °C 导线尺寸 / 剥线长度 Wire dimension / peel line length 0.5-4.0mm ² /7mm

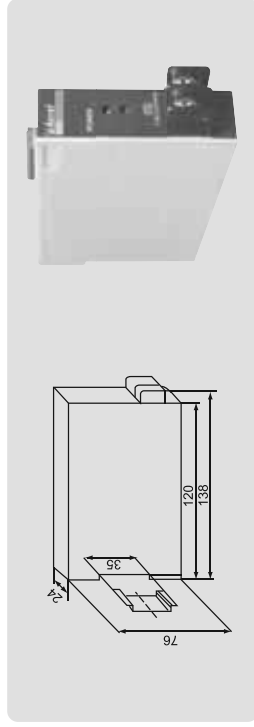
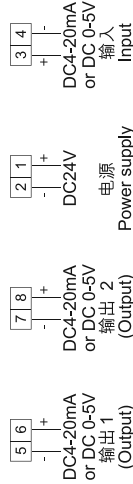
5 一进二出隔离器 One input and two output isolator
■ 用途 / Usage

该模块将一路直流电流或电压信号输入，隔离变送输出二路相互独立的模拟量，可应用在一个现场变送器产生一路信号到PLC、另一路接现场指示器。该模块只有一个单独的输入回路，输入电压几乎恒定，不大于3.5V，与负载没有关系。光耦隔离同时能达到2000V的隔离电压。

The module input one channel DC current or voltage signal, isolates, transmits and output 2-channel analog signal independently. It is used in one field transmitter to produce one-channel signal to PLC, and another channel signal to field indicator. The module has only one separate input circuit; input voltage drop is no more than 3.5V, almost invariableness, and has no relation with Load resistance. Isolation voltage reaches 2000V by optoisolator.

■ 产品规格 / Specification

BM-DI/VI BM-DV/VI

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
范围 Range	直流电流(DC current):4-20mA、 电压(Voltage):0-5V
阻抗 Impedance	阻抗可变, 压降不大于3.5V (Impedance may change, voltage drop)
过载 Overload	电流(Current):100mA或1W; 电压(Voltage): 0-10V时,50V
范围 Range	一路(One):4-20 mA 另一路(Another):4-20 mA或0-5V
负载 Load resistance	0-500Ω或(or)Rmax=[(Vs-14) / 0.02]Ω
烧损电平 Burnout	输入开路3.6 mA, 输入过流24 mA Input open 3.6 mA, input over current 24 mA
零点调节 Zero adjustment	15%
量程调节 Range adjustment	15%
范围 Range	24V DC
精度 / 线性 Accuracy / Linearity	满量程 (Full scale) 0.5%
温度效应 Temperature effect	100ppm / °c
响应时间 Response time	< 500ms
隔离电压 Isolation voltage	2000V, 输入对每路输出, 输出之间 (Between input / output / power supply)
工作 / 贮存温度 Work / storage temperature	-5-50/-20--+70 °c
导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm ² /7mm

6 四线隔离器 4-wire isolator
■ 用途 / Usage

4线隔离器为所有直流电流和电压信号提供2000V 三端隔离，可消除地回路。具有多种电源供电标准。

4-wire isolator, which can avoid ground return circuit, is designed to supply 2000V three-terminal isolation for all DC current and voltage signal. It has kinds of power supply standard.

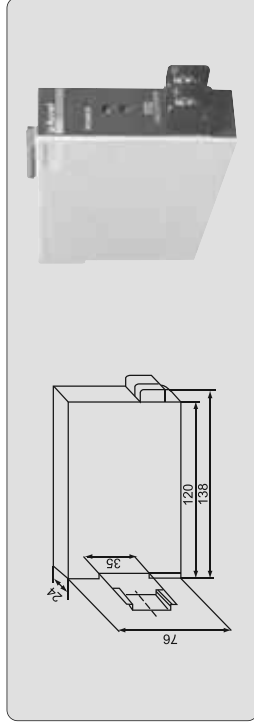
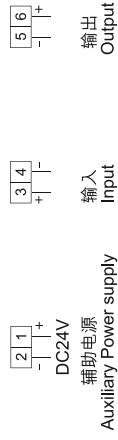
■ 特点 / Feature

紧凑型外壳、可安装于TS35 导轨。

Compact container, fixed on TS35 rail.

■ 产品规格 / Specification

BM-DI/I BM-DI/V BM-DV/V BM-DV/I

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数		指标
Technical parameters		Value
输入 Input	范围 Range	电流(Current): 0-20mA, 4-20mA, 0~1mA 电压(Voltage): 0-5V, 0-10V
	阻抗 Impedance	电流(Current): 100Ω; 电压(voltage)≥1000Ω
	最大输入 Max input	电流(Current):100mA或1W; 电压(Voltage): 50V DC
输出 Output	范围 Range	0-20mA, 4-20 mA, 0-5V或0-10V
	负载 Load resistance	电流(Current)(when 20mA时)≤950Ω, 电压(Voltage):≥1000Ω
	保护 Protection	短路保护 Short protection
	零点调节 (只有部分模块) Zero adjustment (part of module)	5%
	量程调节 Range adjustment	5%
电源 Power supply		DC24V ±20%
其它 Other	精度 / 线性 Accuracy / Linearity	最大满量程 (Full scale) 0.15%
	温度效应 Temperature effect	< 0.02% / °C
	响应时间 Response time	< 500ms
	隔离电压 Isolation voltage	2000V, 输入对输出和电源 (Between input / output / power)
	工作 / 贮存温度 Work / storage temperature	0-60 / -20~+85 °C
	导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm; 7mm

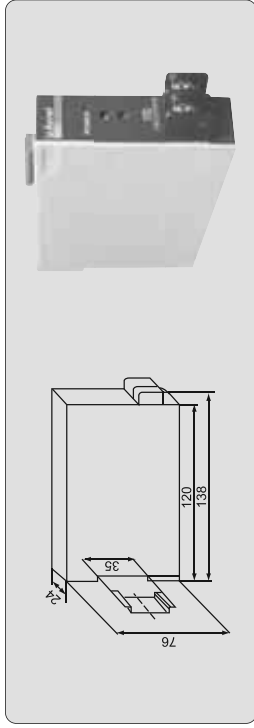
7 无源隔离器 Passive isolator
■ 用途 / Usage

该模块是标准的4-20mA输入，信号通过2000V的隔离，成比例地输出4-20mA信号。可以应用在不便使用电源的场合，输入信号向模块供电并通过变压器进行耦合，不必外加电源。

This module is input with standard 4-20mA signal, which is isolated through 2000V and linearly exports 4-20mA signal. It is used in situation without power supply. The input signal supplies power to module, and couples through transformer. So power in addition is unnecessary.

■ 产品规格 / Specification

BM-DISI/

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

4	3
-	+
4~20mA 输入 Input	

5	6
-	+
4~20mA 输出 Output	

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
范围 Range	直流电流(DC current)4-20mA
阻抗 Impedance	可变, 6V电压在输入负载 Variable, 6V voltage drop at input load
最大值输入值 Max input value	电流(Current): 30mA 电压(Voltage): 50V DC
范围 Range	直流电流(DC current)4-20mA
负载 Load resistance	100-400Ω (100Ω以下非线性) 默认为250Ω (Below 100Ω is nonlinearity)
量程调节 Range adjustment	依靠输出负载调节平衡 Adjust balance depending on output load
保护 Protection	短路保护 Short protection
精度/线性 Accuracy/Linearity	满量程(Full scale)0.3%
温度效应 Temperature effect	< 0.02% / °C
响应时间 Response time	< 500ms
隔离电压 Isolation voltage	2000V, 输入对输出和电源 (Between input and output)
工作 / 贮存温度 Work / storage temperature	0-70/-20~+85 °C
导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm ² /7mm
输入 Input	
输出 Output	
其它 Other	

8 两线制输出回路供电的交流电流隔离器

AC current isolator with two wire system output circuit power supply

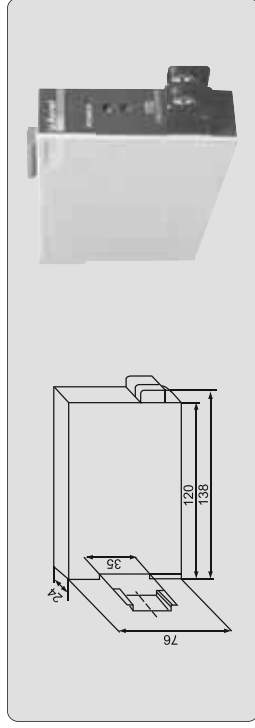
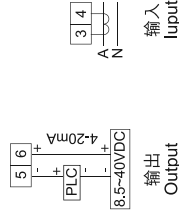
■ 用途 / Usage

该模块可以直接将最大5A AC或直接将CT的电流进行调制，隔离输出4-20mA。回路工作状态和输出电平由LED进行指示，模块内有浪涌保护电路，适用于恶劣环境。

The module can modulate Max 5A AC or current of CT directly, isolate and export 4-20mA. LED indicates circuit working state and output electrical level. The module contains surge protection circuit, so it fits for foul environment.

■ 产品规格 / Specification

BM-AI/IS

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
范围 Range	0-1A AC或0-5A AC(跳线选择); 工厂设定0-5A AC 0-1A AC or 0-5A AC (Jump wire choice); Factory default setting 0-5A AC
输入 Input	
阻抗 Impedance	0.01Ω
最大 Max	持续1.2倍, 瞬时10倍/1秒 Persistence 1.2 times, Instantaneous 10 times / 1s
范围 Range	直流(DC):4-20mA
输出 Output	
负载 Load resistance	$R_{max} = [(V_s - 8.5) / 0.02] \Omega$, 0-1575Ω (8.5-40V)
零点调节 Zero adjustment	5%
量程调节 Range adjustment	5%
保护 Protection	短路保护 Short protection
范围 Range	8.5-40V DC, 一般(commonly)24V DC / 2W
电源 Power supply	
最大电流 Max current	24mA
精度 / 线性 Accuracy / Linearity	满量程(Full scale)0.15%
温度效应 Temperature effect	0.02%/°C
响应时间 Response time	< 500ms
其它 Other	
隔离电压 Isolation voltage	2000V, 输入对输出 (Between input / output)
工作 / 贮存温度 Work / storage temperature	0-70/-20--+80 °C
导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm ² /7mm

9 两线制输出回路供电的交流电压隔离器

AC voltage isolator with two wire system output circuit power supply

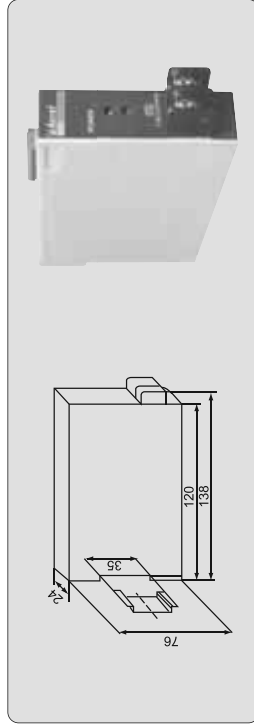
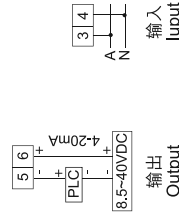
■ 用途 / Usage

该模块可以将最大450V AC电压变换并隔离输出标准的4-20mA电流，该模块具有浪涌保护，可以应用于电机启动和停止时监视。

The module can transmit Max 450V AC voltage, isolate and export normal 4-20mA current. The module contains surge protection circuit, so it fits for electric machine start and stop supervision.

■ 产品规格 / Specification

BM-AV/IS

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
输入 Input	范围 Range AC100V, 220V, 380V 阻抗 Impedance >100kΩ 最大 Max 持续1.2倍, 瞬时2倍 / 1秒 Persistence 1.2 times, Instantaneous 2 times / 1s
输出 Output	范围 Range 4-20mA 负载 Load resistance $R_{max}=[(V_s-8.5) / 0.02]Ω$, 0-1575Ω (8.5-40V) 零点调节 Zero adjustment 5% 量程调节 Range adjustment 5% 保护 Protection 短路保护 Short protection
电源 Power supply	范围 Range 8.5-40V DC, 一般 (commonly) 24V DC / 2W 最大电流 Max current 24mA 精度 / 线性 Accuracy / Linearity 满量程0.5% Of span(Max)
其它 Other	温度效应 Temperature effect < 0.02% / °C 响应时间 Response time < 500ms 隔离电压 Isolation voltage 2000V, 输入对输出 (Between input / output) 工作 / 贮存温度 Work / storage temperature 0-70 / -20 ~ +80 °C 导线尺寸 / 剥线长度 Wire dimension / peel line length 0.5-4mm / 7mm

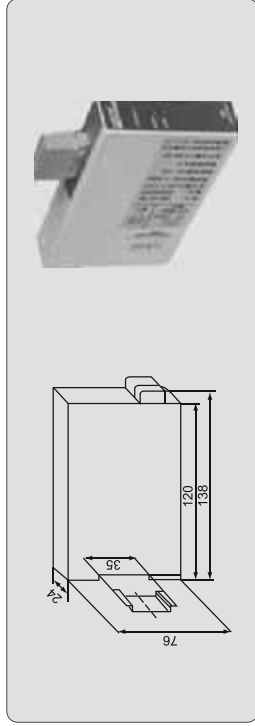
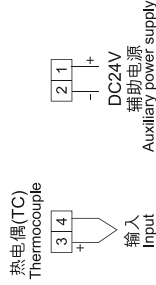
10 热电偶隔离器 Thermocouple Isolator
■ 用途 / Usage

该模块是输出回路供电，热电偶输入，线性比例输出的4-20mA信号，具备自动冷端补偿(CJC)，模块内具有浪涌保护电路。

The module have features of power supply by output circuit, thermocouple input, linear pro rata 4-20mA signal output, fitted with automatic cold junction compensation (CJC), and built-in surge protection circuit.

■ 产品规格 / Specification

BM-TC/1

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
范围 Range	0-250 ℃, 0-500 ℃, 0-1000 ℃, 0-1200 ℃
其它特性 Other characteristics	与mV信号成线性而非温度信号 Linearity with mV signal, not temperature signal
负载 Load resistance	0-775Ω或(or) $R_{max}=[(V_s-8.5 / 0.02)]$
零点调节 Zero adjustment	5%
量程调节 Range adjustment	5%
保护 Protection	短路保护 Short protection
范围 Range	24V DC/2W
最大电流 Max current	24mA
精度 / 线性 Accuracy / Linearity	满量程(Full scale) 0.5%
温度效应 Temperature effect	< 0.02% / ℃
响应时间 Response time	< 500ms
隔离电压 Isolation voltage	2000V, 输入对输出 (Between input / output)
工作 / 贮存温度 Work / storage temperature	0-70/-20→+80 ℃
导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm ² /7mm

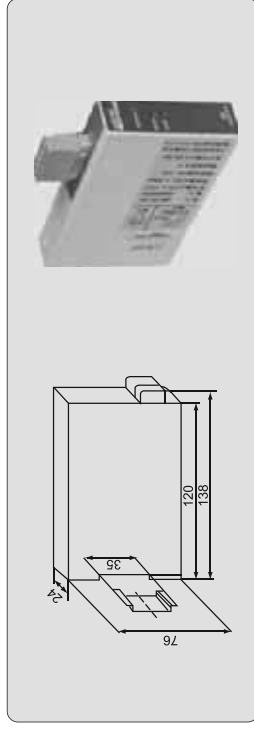
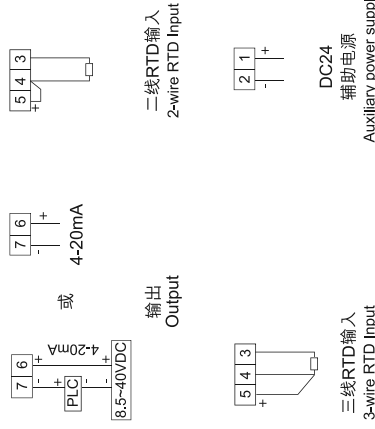
11 热电阻隔离器 Thermistor isolator
■ 用途 / Usage

该模块是输出回路供电，RTD输入，比例输出2000V隔离的4-20mA信号。模块内具有浪涌保护电路，也适用于恶劣的环境工作。

The module have features of power supply by output circuit, RTD input, 4-20mA signal output to be isolated from 2000 V, fitted with surge protection circuit, so fits for foul environment.

■ 产品规格 / Specification

BM-TR/IS BM-TR/I

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
输入 Input	范围 Range 2线或3线RTD(2 or 3 wire RTD), PT100 ($\alpha=0.00385$), 0-200 °C 其它特性 Other characteristics 与温度成线性关系 Linearized to temperature
输出 Output	范围 Range DC 4-20mA 负载 Load resistance 0-775Ω或(or)Rmax=[(Vs-8.5/0.02)] 零点调节 Zero adjustment 5% 量程调节 Range adjustment 5% 保护 Protection 短路保护 Short protection
电源 Power supply	范围 Range 8.5-40Vdc, 一般(Commonly)24V DC / 2W 或(or) 24VDC 最大电流 Max current 24mA
其它 Other	精度 / 线性 Accuracy / Linearity 满量程(Full scale) 0.15% 温度效应 Temperature effect < 0.02% / °C 响应时间 Response time < 500ms 工作 / 贮存温度 Work / storage temperature 0-70 / -20~+80 °C 导线尺寸 / 剥线长度 Wire dimension / peel 0.5-4.0mm / 7mm

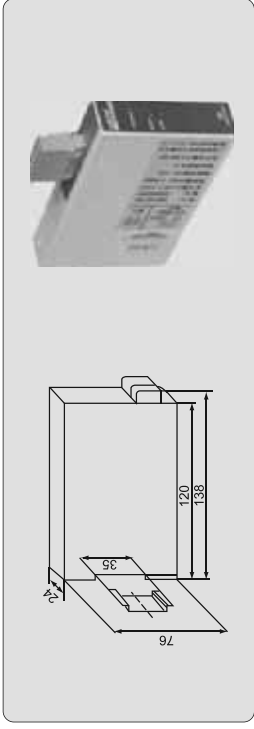
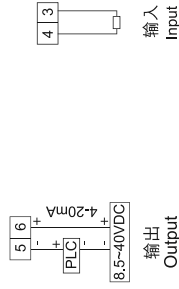
12 两线输出回路供电电阻隔离器 Resistance Isolator with 2-wire output circuit power supply
■ 用途 / Usage

可对标准的2线电阻信号提供4-20mA的输出及2000V的隔离，其精度优于0.2%。

The module have features of providing 4-20mA output and 2000V isolation for 2-wire standard resistance signal, with accuracy better than 0.2%.

■ 产品规格 / Specification

BM-R/IS

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
输入 Input	
范围 Range	0-100Ω, 0-1kΩ, 0-5 kΩ, 0-10 kΩ
保护类型 Protection type	齐纳二极管 Zener diode
范围 Range	4-20mA
负载 Load resistance	0-775Ω 或 (or) Rmax=(Vs-8.5/0.02)Ω
负载影响 Load influence	<0.1%
保护 Protection	短路保护 Short protection
零点调节 Zero adjustment	最小(Min)5%
量程调节 Range adjustment	最小(Min)5%
电源 Power supply	
范围 Range	8.5-40Vdc, 一般(Commonly)24V DC/2W
最大电流 Max current	24mA
精度 / 线性 Accuracy / Linearity	满量程(Full scale) 0.5%
其它 Other	
工作 / 贮存温度 Work / storage temperature	0--+70 / -20--+85 c
导线尺寸 / 剥线长度 Wire dimension/peel line length	0.5-4.0mm ² /7mm

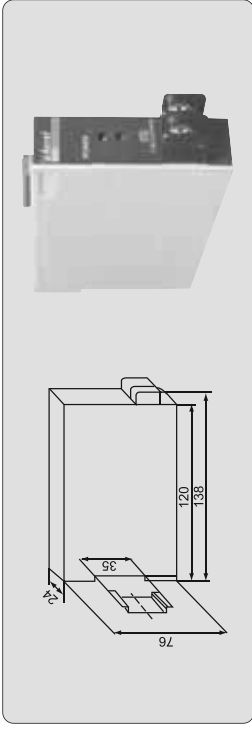
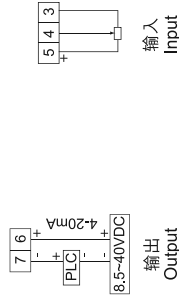
13 两线输出回路供电电位计隔离器 Potentiometer isolator with 2-wire output circuit power supply
■ 用途 / Usage

电位计隔离器可对350 Ω到10k Ω的电位计提供4-20mA的输出及2000V隔离。其精度为0.15%。

The potentiometer isolator supplies 4-20mA output and 2000V isolation for potentiometer which ranges from 350Ω to 10kΩ. The accuracy is 0.15%.

■ 产品规格 / Specification

BM-VR/IS

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters		指标 Value
输入 Input	范围 Range	0-350Ω(-10kΩ)
	默认设置 Default setting	0-1 kΩ
	保护类型 Protection type	齐纳二极管 Zener diode
输出 Output	范围 Range	4-20mA
	负载 Load resistance	0-775Ω, Rmax=(Vs-8.5/0.02)Ω
	负载影响 Load influence	<0.1%
	保护 Protection	短路保护 Short protection
	零点调节 Zero adjustment	5%
	量程调节 Range adjustment	5%
	精度 / 线性 Accuracy / Linearity	满量程(Full scale) 0.2%
电源 Power supply	范围 Range	8.5-40V DC, 一般(Commonly)24V DC/2W
	最大电流 Max current	24mA
其它 Other	工作 / 贮存温度 Work / storage temperature	0--+70 / -20--+80 °C
	温度漂移 Temperature drift	< 0.02% / °C
	隔离 Isolation	输入与输出之间2000V (Between input & output)
	导线尺寸 / 剥线长度 Wire dimension / peel line length	0.5-4.0mm ² /7mm

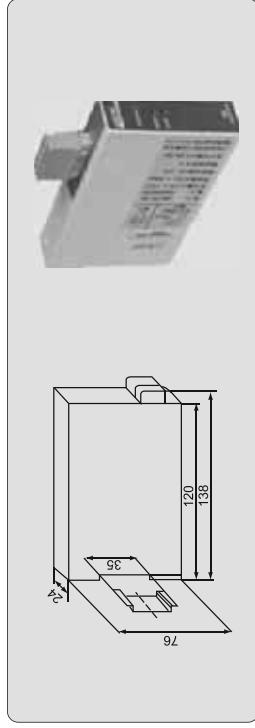
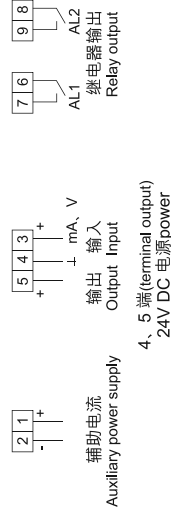
14 带设定点的直流电流、电压报警器 DC current、voltage annunciator with set point
■ 用途 / Usage

直流输入，输出双路报警控制器，可对直流电流信号或电压信号进行报警。设置点电位器可在输入的0—100%内设置。报警点1%的回滞量，可消除继电器触点抖动的影响。前面的LED能显示继电器的状态。可向现场提供24V辅助电源，通过顶部的跳线可设置高(正向)或低(反向)报警。

DC input and output 2 alarm control device is designed to alarm DC current or voltage signal. Set point potentiometer can be set between 0—100% of input. Hysteresis coefficient 1% of alarm point may clear the influence of relay contact chatter. The former LED display the state of relay. It supplies 24V auxiliary power for field, and sets high (forward direction) or low (backward direction) alarm through jumpwire on the top.

■ 产品规格 / Specification

BM—DI/J BM—DV/J

■ 外形尺寸 / Outline dimension

■ 接线方式 / Wiring

■ 技术数据 / Technical data

技术参数 Technical parameters	指标 Value
输入范围 Range	0-20mA / 0-10VDC
阻抗 Impedance	50Ω/1MΩ
最大输入值/保护类型 Max input/Protection type	100mA或1W / 50V DC 齐纳二极管(Zener diode)
现场激励 Field excitation	最大24V DC, 25mA(Max)
输出范围 Range	2个独立的继电器, 跳线设置高/低 2 separate relay, jump wire set high/low
负载 Load resistance	220V AC时5A, 125V AC时10A, 30V DC5A (阻性负载) (impedance load)
设定点调节 Set point adjustment	输入量程的0-110% Of input range
报警功能 Alarm	高(正向)/低(反向)/报警 high(forward)/ low(backward)/ alarm
保护 Protection	继电器触点用于通断感性负载时需外加保护 Relay terminal, used to inductive load, need protection
死区 Blind spot	回滞量为满量程的1% Hysteresis coefficient, 1% of full range
范围 Range	100-130V AC / 50-60Hz、200-260V AC / 50-60Hz
电源 Power supply	损耗 Consumption < 20mA AC (2VA) 精度 / 线性 Accuracy / Linearity 满量程(Full scale) 0.1% 温度效应 Temperature effect < 0.02% / °C
其它 Other	响应时间 Response time (90%量程) < 10ms (90% of fullscale) LED状态 LED state 每个继电器一个红色LED (当继电器工作时LED亮) Each relay matches one red LED (LED is bright when the relay works) 隔离 Isolation 2000V(输入与电源), 1500V (触点与输入 / 输出) 2000V(between input and power), 1500V(between relay and input / output) 工作 / 贮存温度 Work / storage temperature 0-60/-20-85 °C