Datasheet

Artificial Intelligence PID Regulator
SUP-2300

Supmea®

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Datasheet

Artificial Intelligence PID Regulator
SUP-2300

Artificial intelligence PID regulator adopts advanced experts PID intelligence algorithm, with high control precision, no overshoot, and fuzzy self-tuning function. The output is designed as modular architecture; you can acquire various control types by replacing different function modules. You can choose PID control output type as any of current, voltage, SSR solid state relay, single / three-phase SCR zero-over triggering and so on.

Applications

- Sea water
- Waster water
- Food industry
- Liquid cumulative flow measurement
- General gas cumulative flow measurement
- Superheated steam cumulative flow measurement
- Saturated vapor cumulative flow measurement

SUP-2300

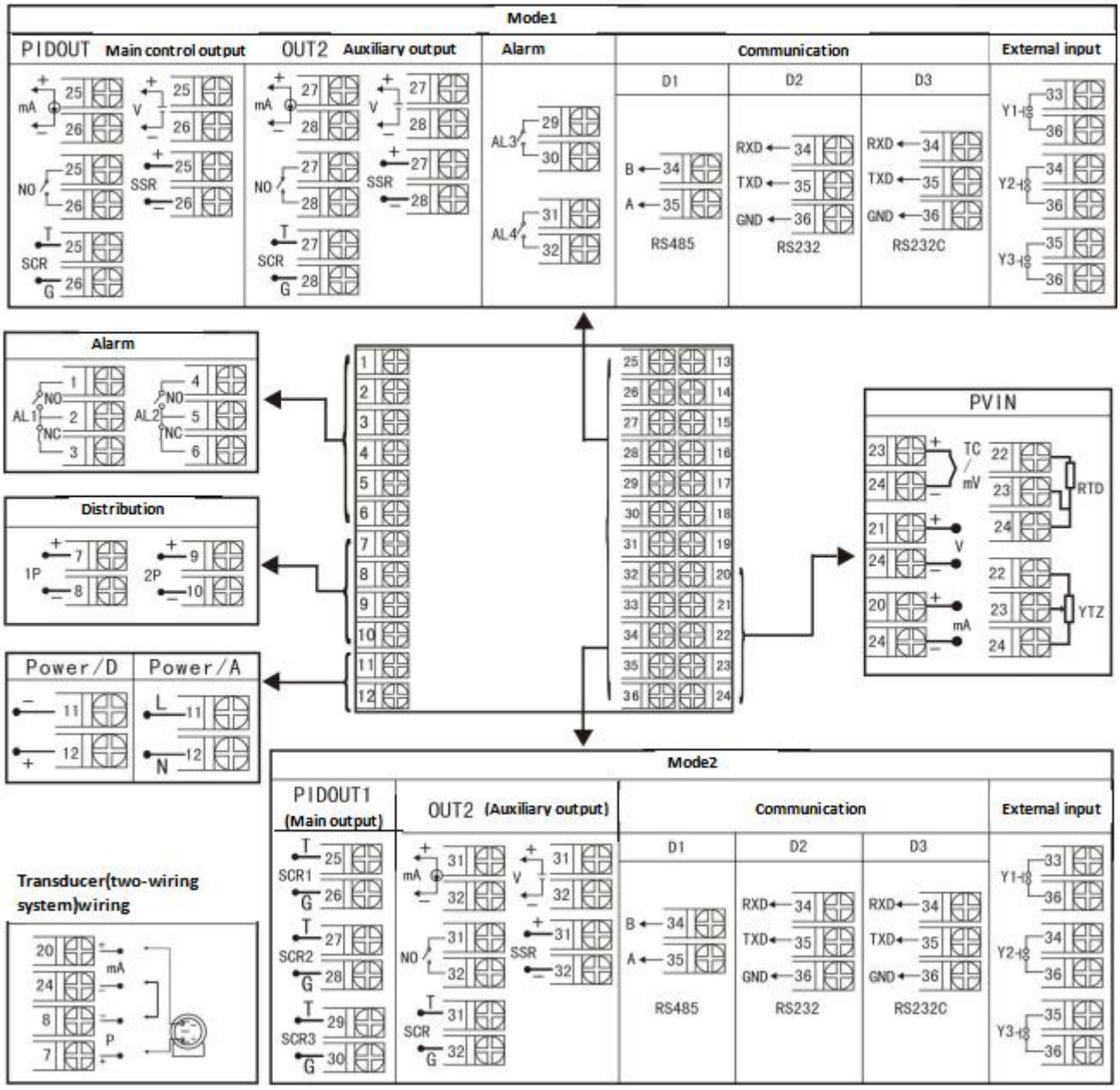
Features

- Double four-digit LED display;
- 8 types of dimensions available;
- Standard snap-in installation;
- high control precision
- fuzzy self-tuning function
- PID intelligence algorithm

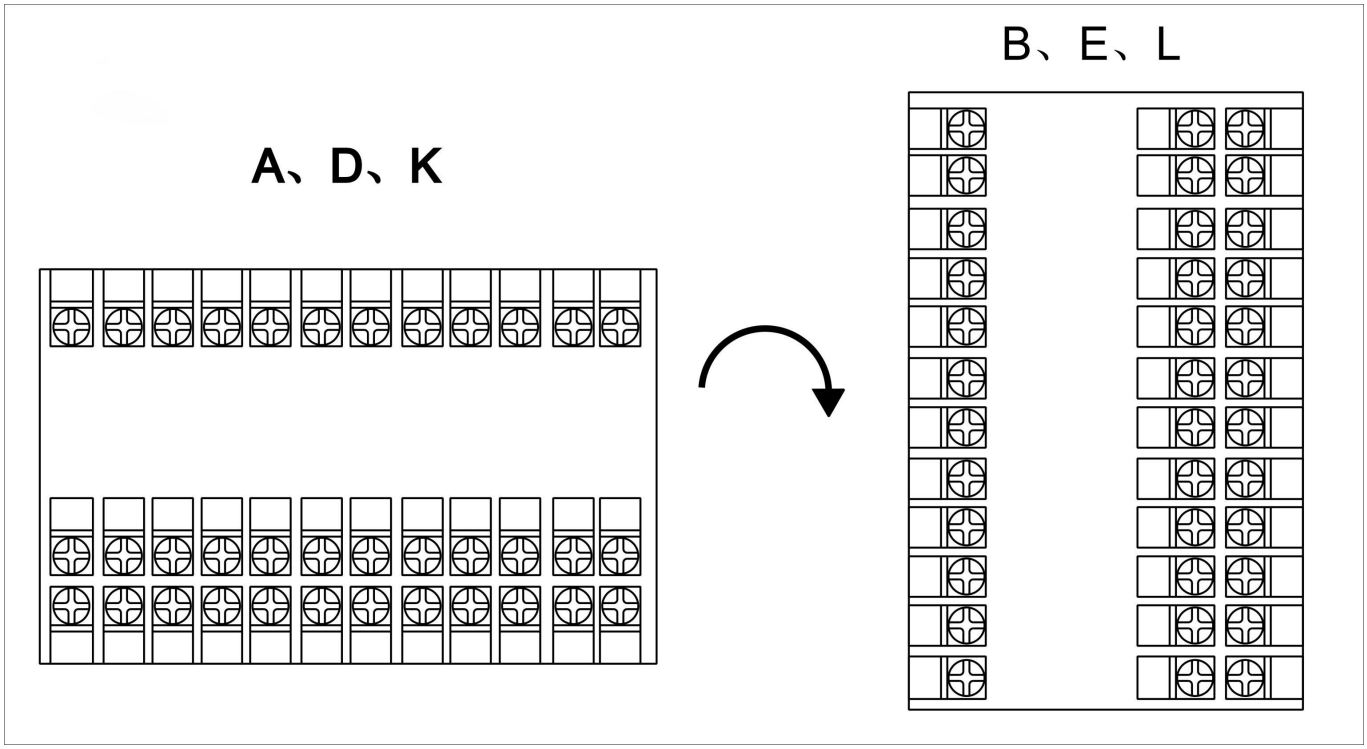
Input				
Input signal	Current	Voltage	Resistance	Couple
Input resistance	≤250Ω	≥500KΩ		
Input current maximum limit	30mA			
Input voltage maximum limit		＜6V		
Output				
Output signal	Current	Voltage	Relay	24V distribution
Allowable load at output	≤500Ω	≥250KΩ	AC220V/0.5A DC24V/0.5A AC220V/2A DC24V/2A	≤30mA
Adjust output				
Control output	Relay	Single-phase controllable	Two-phase thyristor	Solid state relay
Output load	AC220V/0.5A DC24V/0.5A AC220V/2A DC24V/2A	AC660V/0.1A	AC600V/5A	DC5-24V/30mA
Parameters				
Accuracy	0.2%FS			
Setting	Panel touch key digital setting Parameter setting value password lock The set value is permanently saved when the power is turned off			
Use environment	Temperature:0-50℃ Relative humidity:≤85%RH Avoid strong corrosive gas			
Power supply	AC 100～240V(switching power supply) 50～60Hz； DC 20～29V(switching power supply)			
Power consumption	≤5W			
Display	-1999～9999 Measured value display, set value display, external given value display, 0～100.0% valve position feedback value display 0～100% output value display, LED working status display			
Structure	Standard snap-in			
Communication	Adopt standard MODBUS communication, RS485 communication distance up to 1 km, RS232 communication distance up to 15 meters			

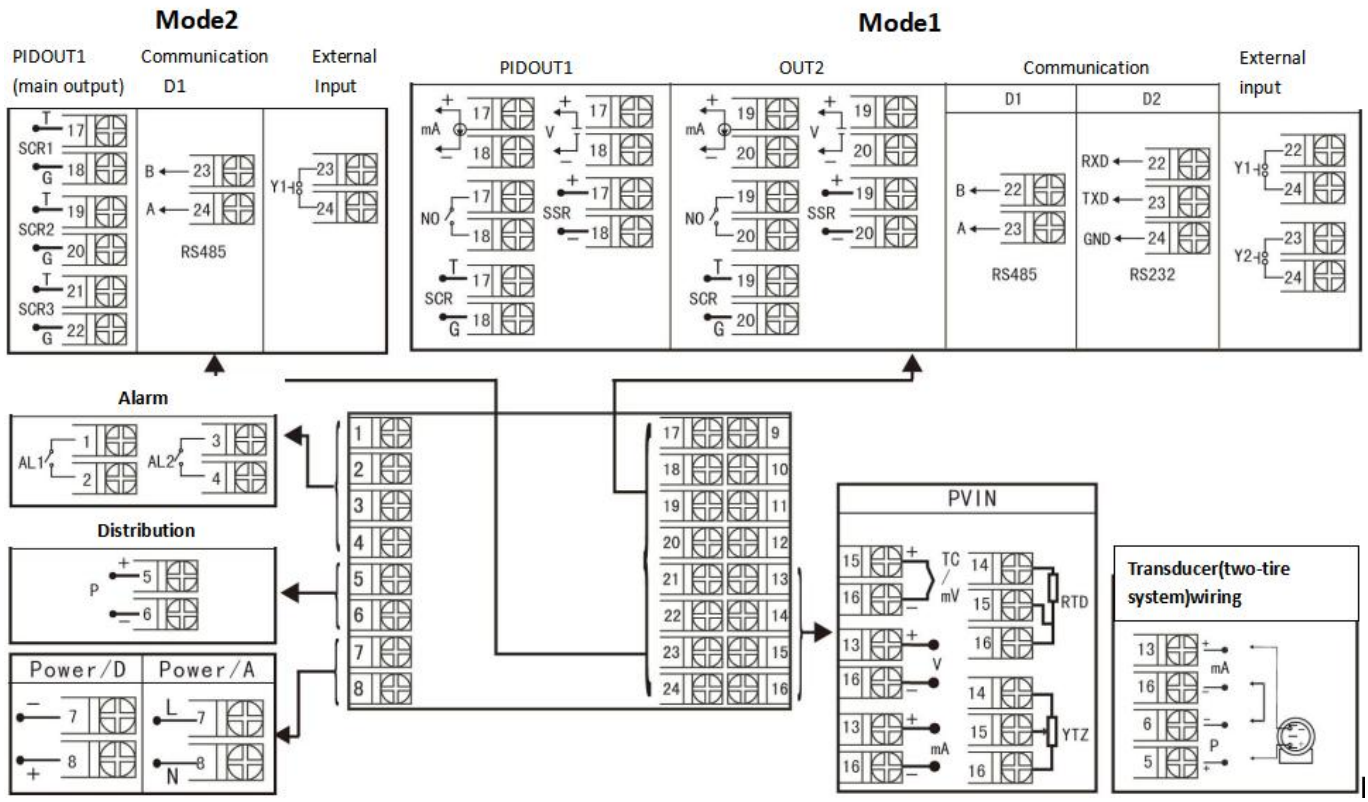
Wiring

Single Input PID Thermostat/Regulator Wiring Diagram

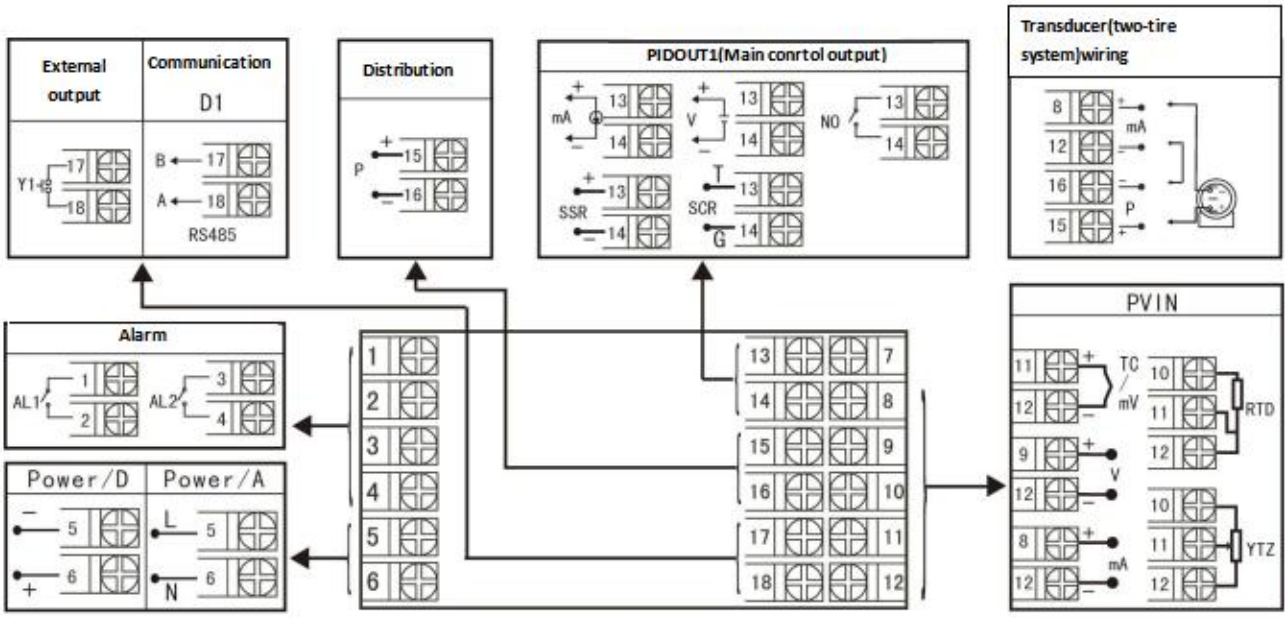


Dimensions are A, B, C, D, E, K, L, M wiring diagram



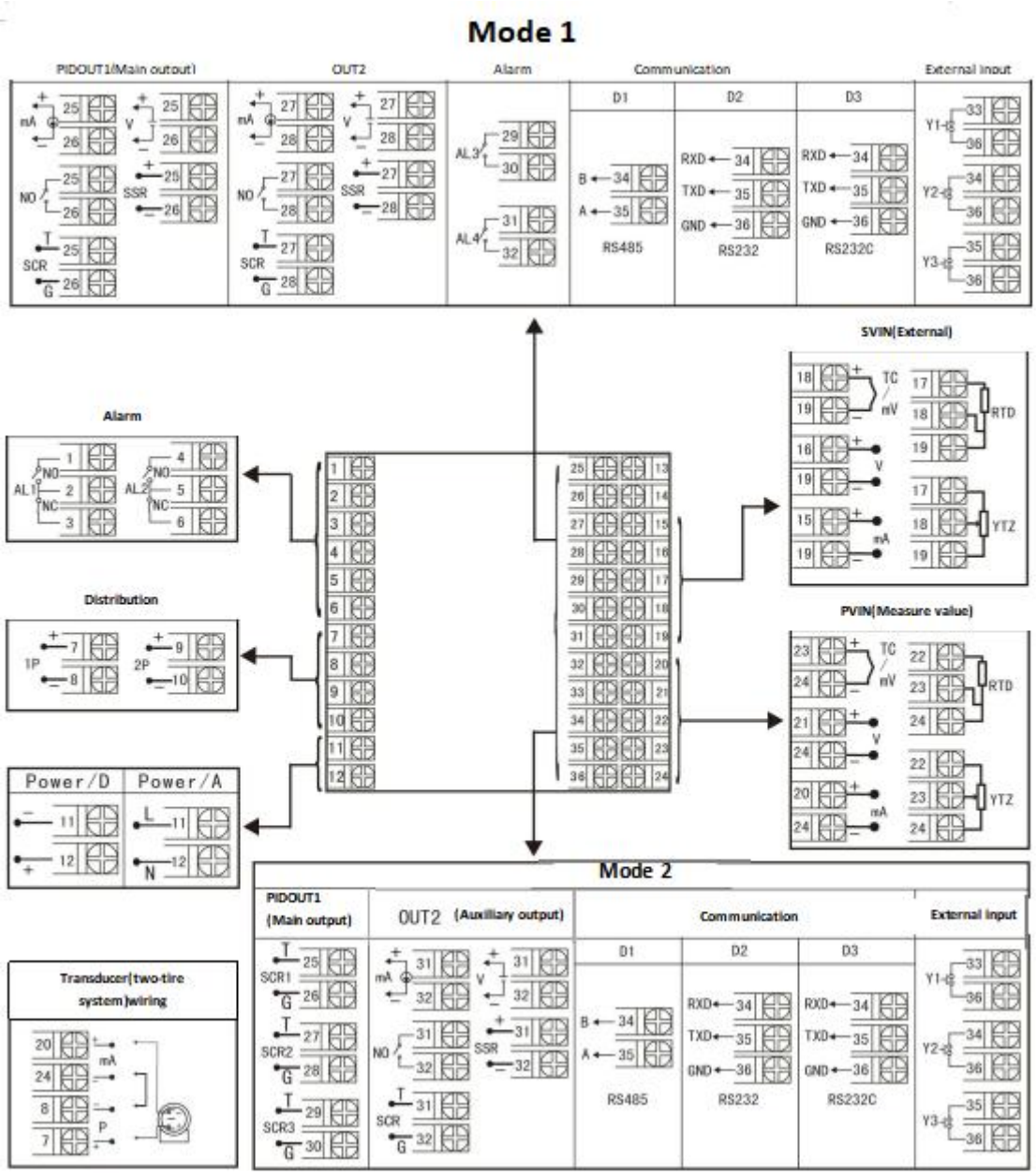


Dimensions is F wiring diagram

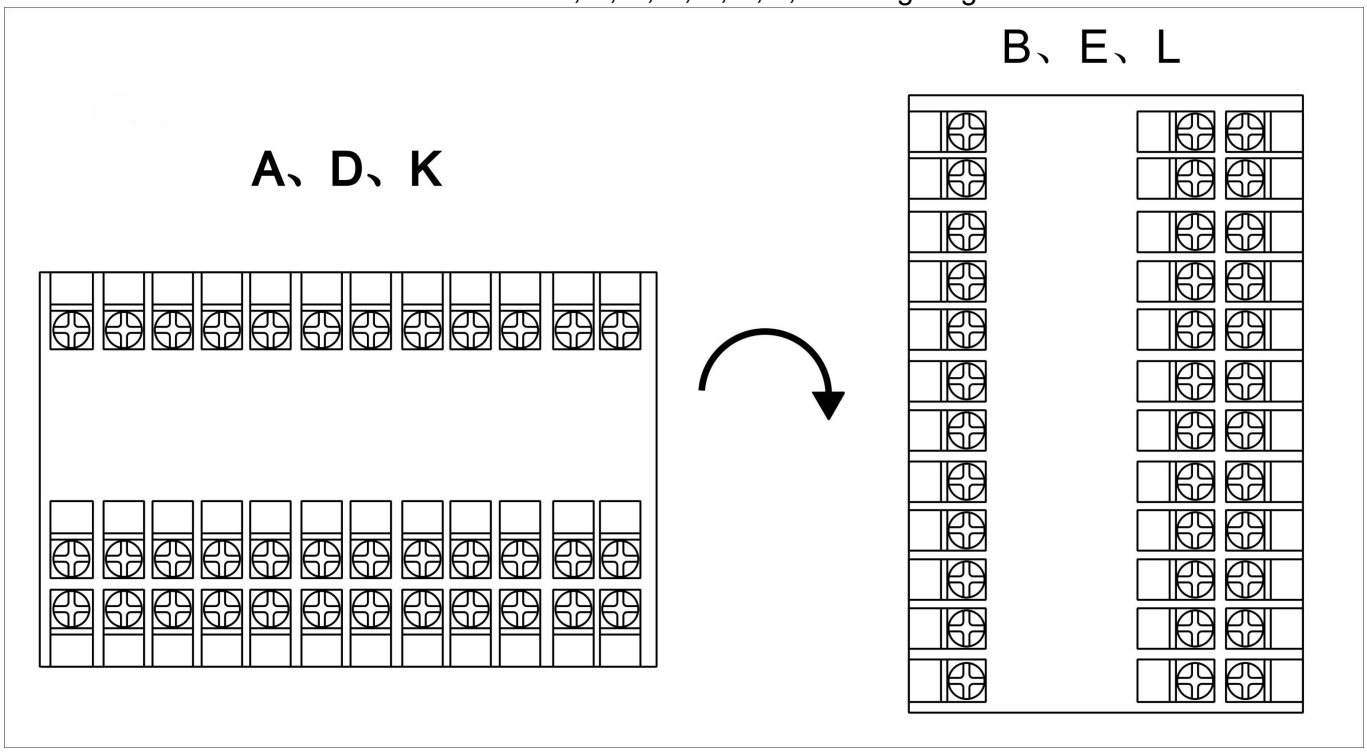


Dimensions is H wiring diagram

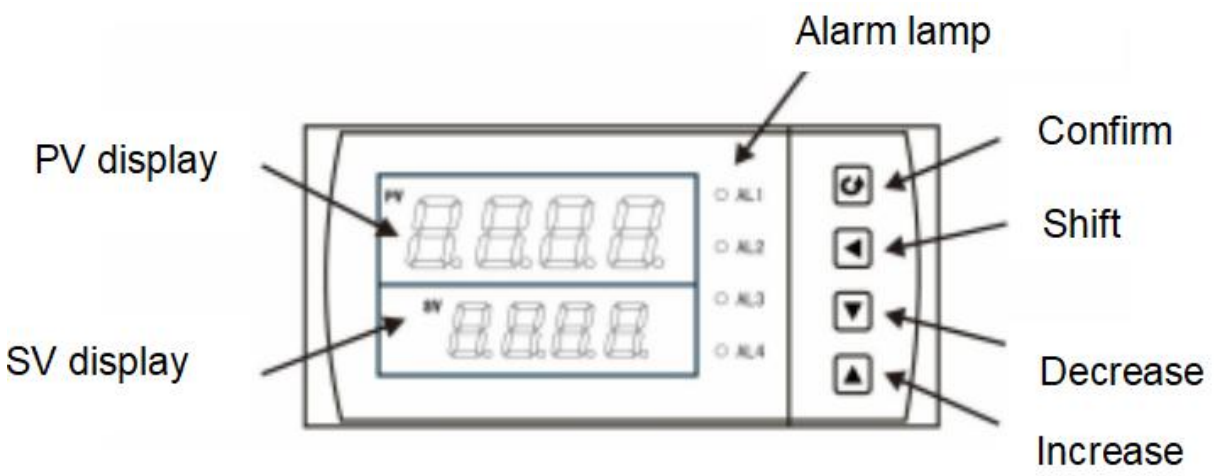
Dual input (external given) PID thermostat/regulator wiring diagram



Dimensions are A, B, C, D, E, K, L, M wiring diagram



Dimension



Dimension/Code	Hole Size
160*80mm(A)	152*76mm
80*160mm(B)	76*152mm
96*96mm(C)	92*92mm
96*48mm(D)	92*45mm
48*96mm(E)	45*92mm
72*72mm(F)	68*68mm
48*48mm(H)	45*45mm
160*80mm(K)	152*76mm
80*160mm(L)	76*152mm
96*96mm(M)	92*92mm

Ordering code

SUP-2300-M1IT3DS1O1T1D0O2T0A1DO1V2															Description
SUP-2300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Type	M1														Single control type
	M2														External control type
	M3														Valve control type
Signal input		IT2													2 channel signal input
			DS1												160×80×110mm
			DS2												80×160×110mm
			DS3												96×96×110mm
			DS4												96×48×110mm
			DS5												48×96×110mm
			DS6												72×72×110mm
			DS7												48×48×110mm
			DS8												160×80×110mm
			DS9												80×160×110mm
			DS10												96×96×110mm
				O1T0											/
				O1T1											4-20mA
				O1T2											0-20mA
				O1T3											0-10mA
				O1T4											（1～5）V
The first output signal type				O1T5											（0～5）V
				O1T6											（0～10）V
				O1T8											Single-phase SCR zero-cross trigger pulse output
				O1T9											SSR Voltage Output
				O1T10											Three-phase SCR zero-cross trigger pulse output
					D0										/
					D1										RS485
					D2										RS232
					D3										RS232C Print
Communication					D4										External event input 1 (manual forced)
					D5										External event input 2 (Customized)
					D6										External event input 2 (Customized)
The second output signal type						O2T0									/

	O2T1							4-20mA
	O2T2							0-20mA
	O2T3							0-10mA
	O2T4							（1～5）V
	O2T5							（0～5）V
	O2T6							（0～10）V
	O2T8							Single-phase SCR zero-cross trigger pulse output
	O2T9							SSR Voltage Output
	O2T10							Three-phase SCR zero-cross trigger pulse output
Relay output		A0						No
		A1						1 channel
		A2						2 channel
		A3						3 channel
		A4						4 channel
Distribution output			DO0					No
			DO1					1 channel
			DO2					2 channel
Power supply				V1				24VDC
				V2				220VAC