





TEMPERATURE CONTROLLERS

มิเตอร์แสดงค่า และควบคุมอุณหภูมิ



***The Trusted Source for
Innovative Control
Solutions***

QUICK Specs





Temperature Controllers				
	CONTROL CUB5RT/TC	CUB4RT	INDICATION PAXLRT	PAXLTC
				
รายละเอียด	RTD/Thermocouple Meter With Output Option Card Capability	RTD Temperature Indicator	1/8 DIN RTD Temperature Indicator	1/8 DIN Thermocouple Temperature Indicator
ขนาดและรูปร่าง (สูง x กว้าง)	39 mm (H) x 75 mm (W)	39 mm (H) x 75 mm (W)	50 mm (H) x 97 mm (W)	50 mm (H) x 97mm (W)
ส่วนแสดงผล	5 Digit, .48" (12mm) Reflective and Red Backlight LCD	5 Digit, .48" (12mm) Reflective and Red Backlight LCD	4 Digit, .56" (14mm) Red LED	4 Digit, .56" (14mm) Red LED
ย่านการวัดของอินพุต	RTD (CUB5RT) Pt385, Pt392, Ni672, and Cu427 Thermocouple (CUB5TC) T, E, J, K, R, S, B, N, and mV	RTD Pt385, Pt392, Ni672, and Cu427	RTD Pt385 and Pt392	Thermocouple T, E, J, K, R, S, B, N, and mV
Control	Yes	No	No	No
Outputs	Single Form C Relay Dual Sinking	No	No	No
Communications	RS232 RS485	No	No	No
Other Features/ Options	User Input Min/Max Memory Custom Units Indicato	Programmable F or C Annunciator	Programmable Offset, Peak/Valley Memory, Custom Units Overlay	Programmable Offset, Peak/Valley Memory, Custom Units Overlay
แหล่งจ่ายไฟ	9 to 28 VDC	9 - 26 VDC @ 25 mA With Backlighting 65 mA	85 to 250 VAC	85 to 250 VAC

*See website for product information.

† Field Installable Option Card

QUICK Specs





เครื่องวัด และควบคุมอุณหภูมิระบบ ON-OFF

Temperature Controllers				
CONTROL			PID CONTROL	
	PAXLT	DP5T	PAXT	T16
				
รายละเอียด	RTD and Thermocouple Meter With Setpoint Capability	1/8 DIN RTD and Thermocouple Temperature Indicator	1/8 DIN RTD and Thermocouple Temperature Indicator	1/16 DIN Temperature Controller
ขนาดและรูปร่าง (สูง x กว้าง)	50 mm (H) x 97mm (W)	50 mm (H) x 97mm (W)	50 mm (H) x 97mm (W)	48 mm (H) x 48mm (W)
ส่วนแสดงผล	5 Digit, .56" (14mm) Red LED	4 1/2 Digit, .56" (14mm) Red LED	4 1/2 Digit, .56" (14mm) Standard Green or Sunlight Readable Red LED, Adjustable Intensity	2 x 4 Digit, Main Display .3" (7mm) Red Sec. Display .2" (5mm) Green LED
ย่านการวัดของอินพุต	RTD Pt385, Pt392, Ni672, and Cu427 Thermocouple T, E, J, K, R, S, B, N, and mV	Thermocouple T, E, J, K, R, S, B, N, and C RTD Pt385, Pt392, Ni672, and Cu427 Direct 10 Ohm, 100 Ohm, and mV	Thermocouple T, E, J, K, R, S, B, N, C, and mV RTD 2 or 3 Wire 100 Ohm (ALPHA = .00385, .00391 and .00672)	Thermocouple T, E, J, K, R, S, B, N, and mV RTD 2 or 3 Wire 100 Ohm (ALPHA = .00385 and .00391)
Control	Yes	No	On/Off	On/Off, PID
Outputs	Dual Form C	No	Dual Form C Quad Form A Quad Sinking Quad Sourcing	Main Control (Heat/Cool), Cooling Output, Dual Alarms (Relay, SSR Drive)
Communications	No	No	RS232 RS485 Modbus DeviceNet Profibus Ethernet w/ICM8	No
Other Features/Options	User Input Min/Max Memory, Custom Units Overlay	Min/Max Memory, Integrator/Totalizer, Custom Units Overlay	Analog Output*, Min/Max Memory, Integrator/Totalizer, Linearizer, Custom Units Overlay	Analog Output
แหล่งจ่ายไฟ	50 to 250 VAC 21.6 to 250 VDC	85 to 250 VAC 11 to 36 VDC 24 VAC	85 to 250 VAC 18 to 36 VDC 24 VAC	85 to 250 VAC 18 to 36 VDC 24 VAC

*See website for product information.

† Field Installable Option Card

QUICK Specs**เครื่องวัด และควบคุมอุณหภูมิระบบ PID**





Temperature Controllers				
PID CONTROL				
	T48	TCU	TSC	P16
				
รายละเอียด	1/16 DIN Temperature Controller	1/8 DIN Temperature Controller	1/8 DIN Temperature Setpoint Controller	1/16 DIN Process Controller
ขนาดและรูปร่าง (สูง x กว้าง)	48 mm (H) x 48mm (W)	96 mm (H) x 48mm (W)	96 mm (H) x 48mm (W)	48 mm (H) x 48mm (W)
ส่วนแสดงผล	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .3" (7mm) Red Sec. Display .2" (5mm) Green LED
ย่านการวัดของอินพุต	Thermocouple T, E, J, K, R, S, B, N, and mV RTD 2, 3, or 4 Wire 100 Ohm (ALPHA = .00385 and .00391)	Thermocouple T, E, J, K, R, S, B, N, and mV RTD 2, 3, or 4 Wire 100 Ohm (ALPHA = .00385 and .00391)	Process Input 0 to 10 VDC or 0 to 20 mA	Process Input 0 to 10 VDC or 0 to 20 mA
Control	On/Off, PID	On/Off, PID	On/Off, PID	On/Off, PID
Outputs	Main Control (Heat/Cool), Cooling Output, Dual Alarms (Relay, SSR Drive, Triac) Field Replaceable	Main Control (Heat/Cool), Cooling Output, Dual Alarms (Relay, SSR Drive, Triac) Field Replaceable	Main Control (Heat/Cool), Cooling Output, Dual Alarms (Relay, SSR Drive, Triac) Field Replaceable	Main Control (Direct/Reverse), Secondary Output, Dual Alarms
Communications	RS485	RS485	RS485	No
Other Features/Options	Heater Current Monitor, Analog Output, Remote Setpoint	Heater Current Monitor, Analog Output, Remote Setpoint	Analog Output	Analog Output
แหล่งจ่ายไฟ	85 to 250 VAC 18 to 36 VDC 24 VAC	115/230 VAC	115/230 VAC	85 to 250 VAC 18 to 36 VDC 24 VAC

*See website for product information.

† Field Installable Option Card

QUICK Specs











เครื่องวัด และควบคุมอุณหภูมิระบบ PID

Temperature Controllers				
PID CONTROL				CONTROL
	P48	PCU	PSC	TLA
				
รายละเอียด	1/16 DIN Process Controller	1/8 DIN Process Controller	1/8 DIN Process Setpoint Controller	1/16 DIN Temperature Limit Alarm
ขนาดและรูปร่าง (สูง x กว้าง)	48 mm (H) x 48mm (W)	96 mm (H) x 48mm (W)	96 mm (H) x 48mm (W)	48 mm (H) x 48mm (W)
ส่วนแสดงผล	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED	2 x 4 Digit, Main Display .4" (10mm) Red Sec. Display .3" (7mm) Green LED
ย่านการวัดของอินพุต	Process Input 0 to 10 VDC or 0 to 20 mA	Process Input 0 to 10 VDC or 0 to 20 mA	Thermocouple T, E, J, K, R, S, B, N, and mV RTD 2, or 3 Wire 100 Ohm (ALPHA = .00385 and .00391)	
Control	On/Off, PID	On/Off, PID	On/Off, PID	On/Off
Outputs	Main Control (Direct/Reverse), Secondary Output, Dual Alarms (Relay Only)	Main Control (Direct/Reverse), Secondary Output, Dual Alarms (Relay, SSR Drive, Triac) Field Replaceable	Main Control (Direct/Reverse), Secondary Output, Dual Alarms (Relay, SSR Drive, Triac) Field Replaceable	Limit Alarm Relay Alarm Output Single or Dual Relay
Communications	RS485	RS485	RS485	No
Other Features/Options	Dual Setpoint, Remote Setpoint, Analog Output	Motorized Valve Positioner, Analog Output, Remote Setpoint	Analog Output	No
แหล่งจ่ายไฟ	85 to 250 VAC 18 to 36 VDC 24 VAC	115/230 VAC	115/230 VAC	85 to 250 VAC 18 to 36 VDC 24 VAC

*See website for product information.

† Field Installable Option Card

REPLACEMENT *Guide* ตารางการเทียบรุ่น ระหว่างมิเตอร์ RED LION รุ่นเก่า กับรุ่นใหม่

WHAT YOU'RE USING NOW		CURRENT PRODUCT	
MODEL NUMBER	FEATURES	MODEL NUMBER	FEATURES
 <p>APLTC</p>	<ul style="list-style-type: none"> ■ Display: 4 Digit, .56" (14 mm) Red LED ■ Construction: Metal Front Bezel ■ Power Source: 115/230 VAC ■ Measurement: Thermocouple 	 <p>PAXLTC</p>	<ul style="list-style-type: none"> ■ Display: 4 Digit, .56" (14 mm) Red LED ■ Power Source: 85 to 250 VAC ■ Measurement: Thermocouple
 <p>IMR</p>	<ul style="list-style-type: none"> ■ Display: 4 Digit, .56" (14 mm) Red LED ■ Construction: Metal Front Bezel ■ Power Source: 115/230 VAC ■ Measurement: RTD 	 <p>PAXT</p>	<ul style="list-style-type: none"> ■ Display: 6 Digit, .56" (14 mm) Red LED ■ Power Source: 85 to 250 VAC ■ Measurement: RTD ■ Requires Appropriate Option Card
 <p>IMT</p>	<ul style="list-style-type: none"> ■ Display: 4 Digit, .56" (14 mm) Red LED ■ Construction: Metal Front Bezel ■ Power Source: 115/230 VAC ■ Measurement: Thermocouple 	 <p>PAXT</p>	<ul style="list-style-type: none"> ■ Display: 6 Digit, .56" (14 mm) Red LED ■ Power Source: 85 to 250 VAC ■ Measurement: Thermocouple ■ Requires Appropriate Option Card
 <p>CUB4TC</p>	<ul style="list-style-type: none"> ■ Display: 5 Digit, .48" (12 mm) Reflective and Red Backlight LCD ■ Power Source: 9 to 26 VDC ■ Measurement: Thermocouple 	 <p>CUB5TC</p>	<ul style="list-style-type: none"> ■ Display: 5 Digit, .48" (12 mm) Reflective, Green and Red Backlight LCD ■ Power Source: 9 to 28 VDC ■ Measurement: Thermocouple
 <p>CUB4RT</p>	<ul style="list-style-type: none"> ■ Display: 5 Digit, .48" (12 mm) Reflective and Red Backlight LCD ■ Power Source: 9 to 26 VDC ■ Measurement: RTD 	 <p>CUB5RT</p>	<ul style="list-style-type: none"> ■ Display: 5 Digit, .48" (12 mm) Reflective, Green and Red Backlight LCD ■ Power Source: 9 to 28 VDC ■ Measurement: RTD

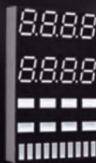
Note: Refer to the current product literature, as some differences may exist.

TAIE
www.fa-taie.com.tw

FY series

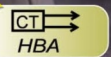
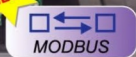
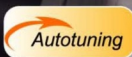
Digital PID
Temperature Controllers / Process Controllers

New Release
New LED Module



FY101

FY100



FY400

FY700

FY800

FY900

FY600

BEST CHOICE FOR PROCESS AND TEMPERATURE CONTROL

Application: Control temperature, humidity, pressure, flow and PH.

FY series controllers are microprocessor based controllers. Which have been designed with high accuracy input, various output selection, useful options and good reliability at a competitive price.

FY series use "PID+FUZZY" algorithm to implement excellent control. The output status is displayed on the built in "Bar-Graph" display.

FY series not only provide the basic control output selections but also plus advanced options such as "Motor Valve Control", "SCR/TRIAC Trigger", and "Programmable RAMP/SOAK".

FY series support MODBUS protocol. Communication with HMI is more convenient. New additional HBA function with competitive price, user can upgrade system safety easy.

Available in 7 sizes, the models and sizes are as below:

- FY400:48X48mm (DIN 1/16)
- FY600/800:48X96mm (DIN 1/8)
- FY700:72X72mm (DIN 1/16)
- FY900:96X96mm (DIN 1/4)
- FY100:175X110mm
- FY101:90X90mm



CE Approval & free power

All models get CE approval. Operate on any voltage from AC 85~265V at 50/60Hz. DC 24V is also available(optional function).

IP65 Proof



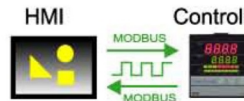
IP65 dust & water proof is available for all models(optional function).

Heater Break Alarm (HBA)



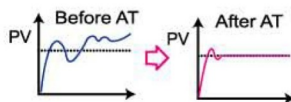
Heater current flowing through CT can be displayed on controller. If heater current is less than HBA set value, AL1 will be activated (optional function).

MODBUS Communication



FY series support both MODBUS RTU and MODBUS ASCII protocol. Communication between controller and HMI or other equipment is more convenient (optional function).

Autotuning (AT)



AT Function can calculate the optimize PID value for your control system, without trying and error manually.

Auto/Manual mode



Click!

Conveniently switched between auto/manual output mode by clicking "A/M" key (except "FY400").

Various Indication Lamps



Real time monitor the status of output (OUT1/OUT2), AT, alarm (AL1/AL2/AL3), manual output (MAN) and program (PRO).

Bar-Graph



Output percent displayed on the bar-graph in 10 LEDs resolution (except "FY400").

High Accuracy

Input with 14bit A/D resolution, 0.2% accuracy of FS. Built in "AutoZero-AutoSpan" function keep good accuracy.

Data Lock Function

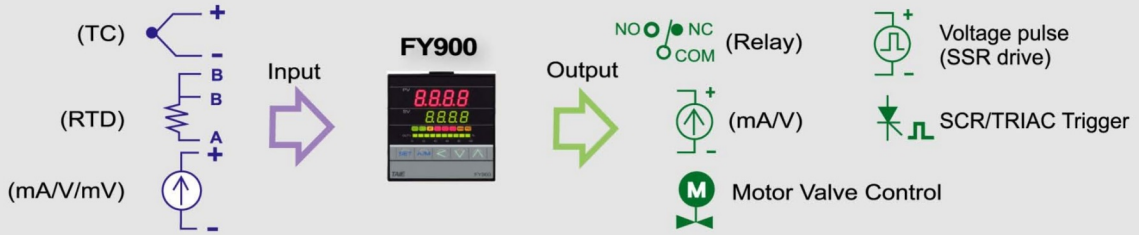
All parameters are separated in 3 operation levels. Each parameter can be hidden or locked to prevent unauthorized changes.

Features

FY Series

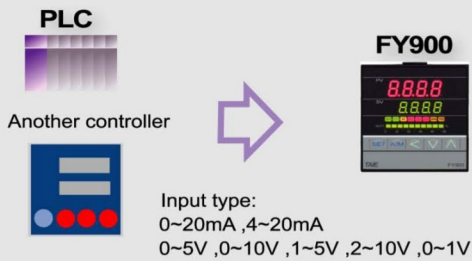
Digital PID Controller

Various I/O Types

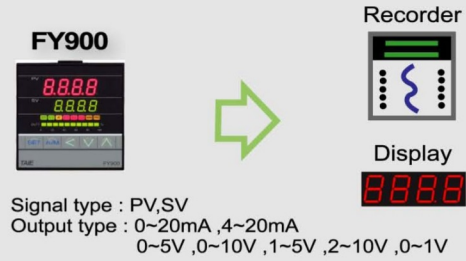


Peripheral Options

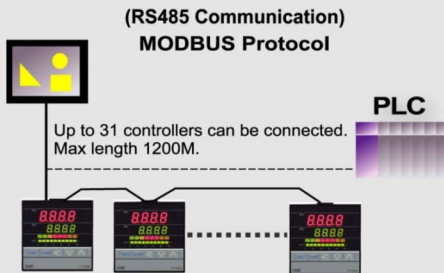
Remote SV



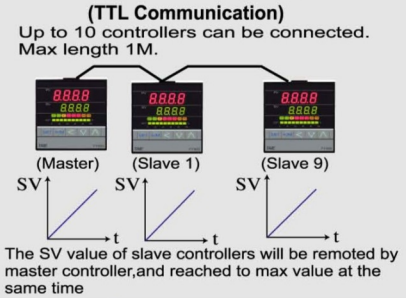
Transmission



Communication

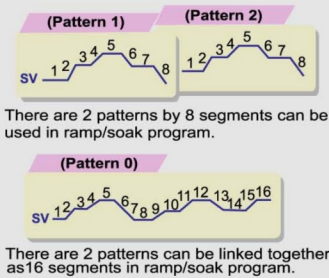


Communication

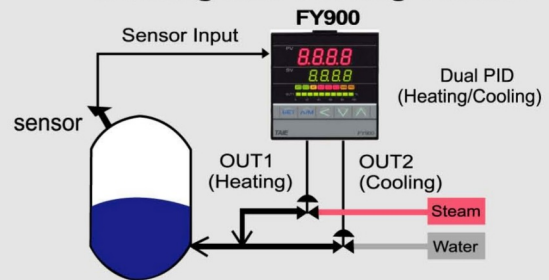


Special Application

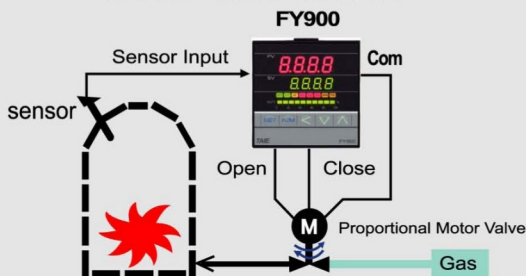
Ramp/Soak Program



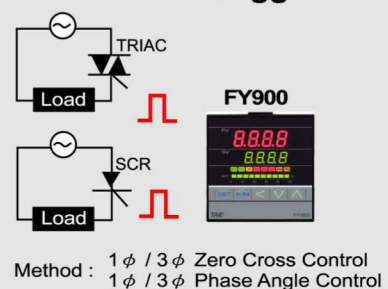
Heating and Cooling Control



Motor Valve Control



SCR/TRIAC Trigger



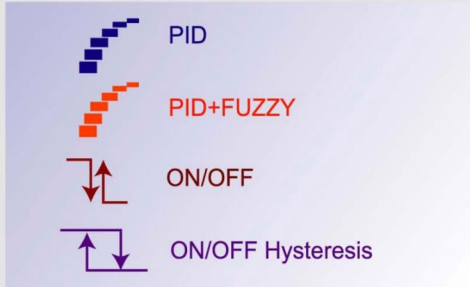
Features

FY Series

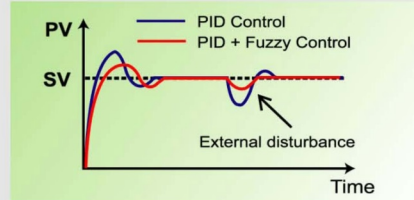
Digital PID Controller

Excellent Control

Control Method

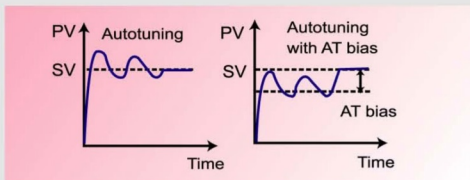


Fuzzy Logic



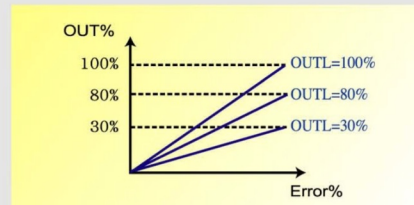
Built in fuzzy logic suppress the overshoot due to SV changes or external disturbance.

Autotuning (AT)



When autotuning acts, it will make PV hunting 1~2 cycle to calculate optimize PID value. To protect user's device, FY series controller can perform PV hunting below SV by setting AT bias value(ATVL).

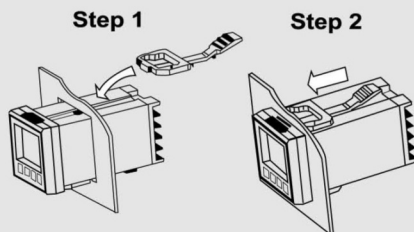
Limit Setting



Built in output limit function. Use this function to get different gradient output and set limit for output.

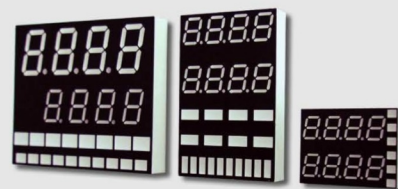
Convenient Installation

Easy Mounting



Just push the mounting bracket to panel. Without using any screws.

New Display Module



New display module design more clear display and easy to read

Alarm Function

Alarm Types

Maximum with 3 sets of alarm.

Alarm types list as below:

Deviation

Deviation High Alarm
Deviation Low Alarm
Deviation High/Low Alarm
Band Alarm

System

System Failed Alarm
System Normal Alarm

PV

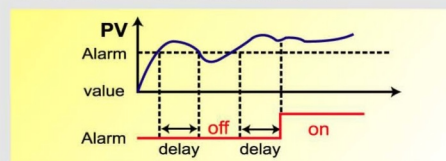
PV High Alarm
PV Low Alarm

Program

Program Run Alarm
Program End Alarm
Segment End Alarm

Delay Time

Use this function can avoid alarm acts frequently or acts due to external disturbance.

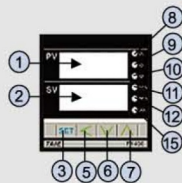


Hold Function

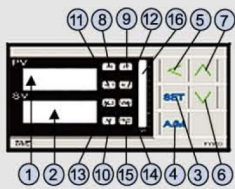
Use this function can avoid alarm acts at start-up. The alarm action is suppressed at start-up until PV enters the non-alarm range.

Parts Description

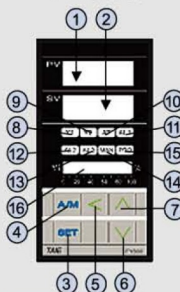
FY400



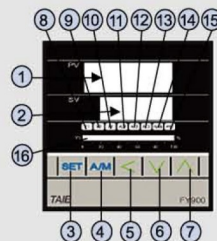
FY600



FY800



FY700/900/100 External Interface Unit.



SYMBOL	NAME	FUNCTION
PV ①	Measured value (PV) display	Displays PV or various parameter symbols(Red)
SV ②	Setting value (SV) display	Displays SV or various parameter values(Green)
SET ③	Set Key	Used for parameter calling up and set value registration
A/M ④	Auto/Manual key	Switches between Auto(PID) output mode and Manual output
< ⑤	Shift Key	Shift digits when settings are changed
∨ ⑥	Down Key	Decrease numbers (*Only for programmable controller)
∧ ⑦	Up Key (*Program Run)	Increase numbers (*Only for programmable controller)

SYMBOL	NAME	FUNCTION
OUT1 ⑧	OUT1 lamp	Lights when OUT 1 is on(Green)
OUT2 ⑨	OUT2 lamp	Lights when OUT 2 is on(Green)
AT ⑩	Autotuning lamp	Lights when Autotuning is activated(Orange)
AL1 ⑪	Alarm 1 lamp	Lights when Alarm 1 is activated(Red)
AL2 ⑫	Alarm 2 lamp	Lights when Alarm 2 is activated(Red)
AL3 ⑬	Alarm 3 lamp	Lights when Alarm 3 is activated(Red)
MAN ⑭	Manual output lamp	Lights when manual output is activated(Orange)
PRO ⑮	*Program Running lamp	*Flashes when program running (Only for programmable controller)
OUT1% ⑯	Output 1% Bar-Graph display	Output 1% is displayed on 10-dot LEDs

External Dimension

Unit : mm

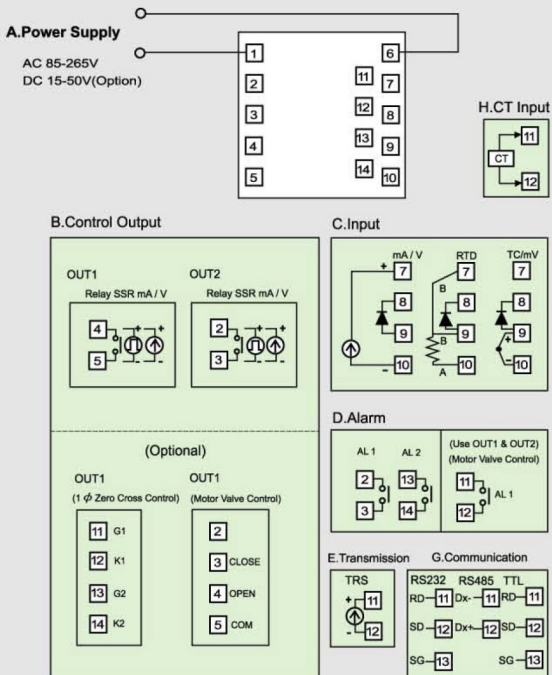
FY400			
FY600			
FY700			
FY800			
FY900			
FY100/FY101			
	FY100		FY101

Terminal Arrangement

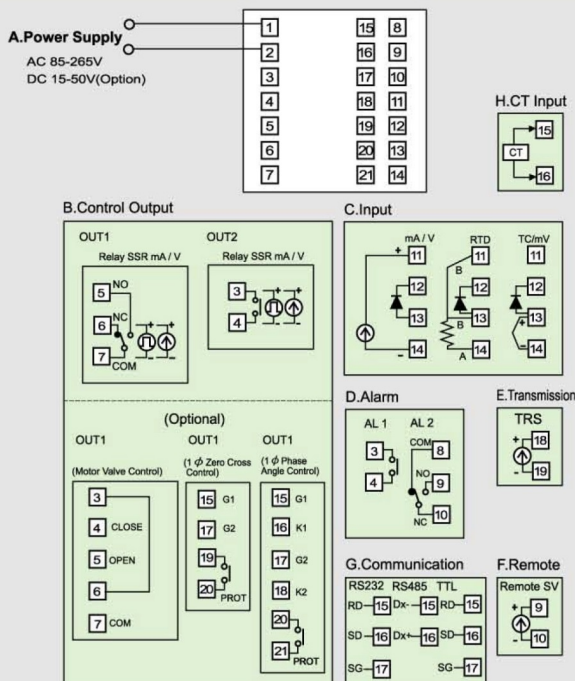
FY Series

Digital PID Controller

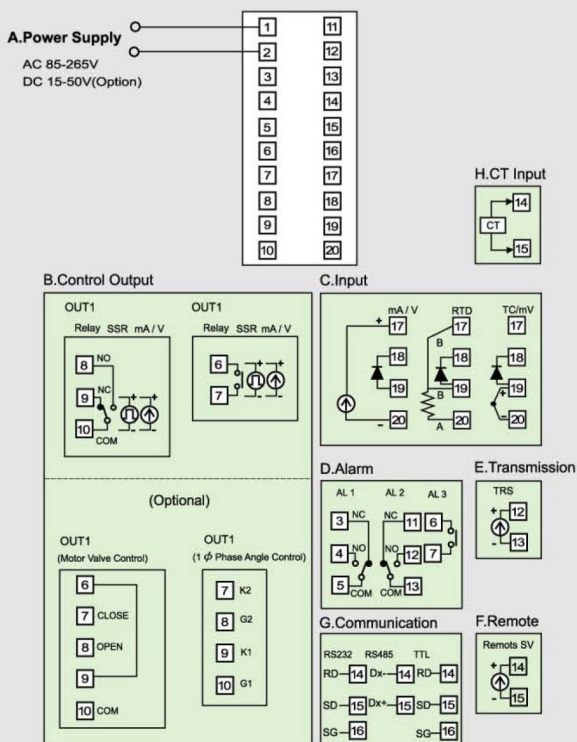
FY400



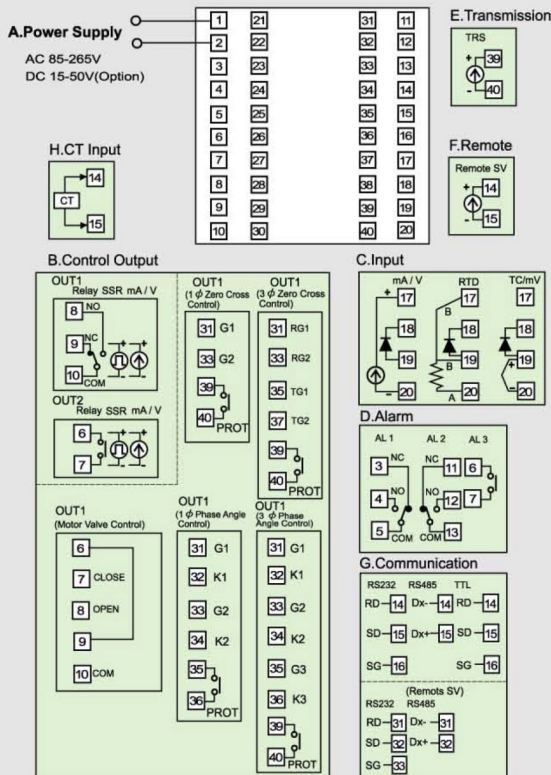
FY700



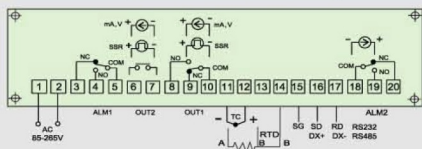
FY600/800



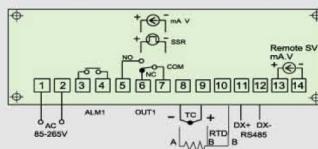
FY900



FY100



FY101



Specifications

FY Series

Digital PID Controller

Standard Spec.

Model	FY400	FY600	FY700	FY800	FY900	FY100	FY101
Dimension	48X48mm	96X48mm	72X72mm	48X96mm	96X96mm	175X110mm	90X90mm
Supply voltage	AC 85~265V, DC24V (Optional)					AC 85~265V	
Frequency	50/60 HZ						
Power Consumption	approx 3VA	approx 4VA	approx 3VA	approx 4VA	approx 4VA	approx 4VA	approx 3VA
Memory	Non-volatile memory E ² PROM						
Input	Accuracy : 0.2%FS, Sample time : 250ms						
TC	K, J, R, S, B, E, N, T, W5Re/W26Re, PL2, U, L						
RTD	DPT100, JPT100, JPT50						
mA dc	4~20mA, 0~20mA						
Voltage dc	0~1V, 0~5V, 0~10V, 1~5V, 2~10V -10~10mV, 0~10mV, 0~20mV, 0~50mV, 10~50mV						
DP Position	0000, 000.0, 00.00, 0.000 (available for mA or Voltage dc input)						
Output 1	Main control output						
Relay	SPST type	SPDT type	SPDT type	SPDT type	SPDT type	SPDT type	SPDT type
	3A, 220V, electrical life : 100,000 times or more(under the rated load).						
Voltage Pulse	For SSR drive. ON:24V, OFF:0V, maximum load current:20mA.						
mA dc	4~20mA, 0~20mA. Maximum load resistance:560 Ω						
Voltage dc	0~5V, 0~10V, 1~5V, 2~10V. Maximum load current:20mA.						
Alarm 1	SPST type	SPDT type	SPST type	SPDT type	SPDT type	SPDT type	SPST type
	3A, 220V, electrical life : 100,000 times or more(under the rated load).						
Control algorithms	PID, P, PI, PD, ON/OFF(P=0), FUZZY						
PID range	P:0~200%, I:0~3600 Secs, D:0~900 Secs						
Isolation	Output terminal (control output, alarm, transmission) and Input terminal are isolated separately.						
Isolated resistance	10M Ω or more between input terminals and case(ground) at DC 500V 10M Ω or more between output terminals and case(ground) at DC 500V						
Dielectric strength	1000V AC for 1 minute between input terminals and case(ground) 1500V AC for 1 minute between output terminals and case(ground)						
Operating temperature	0~50° C						
Humidity range	20~90% RH						
Weight (approx)	approx 150g	approx 225g	approx 225g	approx 225g	approx 300g	approx 130g	approx 80g
Display Height	PV: 8mm SV: 8mm	PV: 7mm SV: 7mm	PV: 14mm SV: 10mm	PV: 8mm SV: 8mm	PV: 14mm SV: 10mm	—	—

Optional Spec.

Model	FY400	FY600	FY700	FY800	FY900	FY100	FY101
RAMP/SOAK Program	2 Patterns with 8 segments each . The 2 patterns can be linked together as 16 segments use						
Output 2	For heating and cooling control use						
Relay	SPST type	SPST type	SPST type	SPST type	SPST type	SPST type	SPST type
Voltage Pulse	For SSR drive. ON:24V, OFF:0V, maximum load current:20mA.						
mA dc	4~20mA, 0~20mA. Maximum load resistance:560 Ω						
Voltage dc	0~5V, 0~10V, 1~5V, 2~10V. Maximum load current:20mA.						
Alarm 2	SPST type	SPDT type	SPDT type	SPDT type	SPDT type	SPDT type	—
Alarm 3	—	SPST type	SPST type	SPST type	SPST type	SPST type	—
Heater Break Alarm (HBA)	Display Range of Heater Current:0.0~99.9A, Accuracy : 1%FS Included CT :SC_80.T (5.8mm dia, 0.0~80.0A) or SC_100.T(12mm dia, 0.0~99.9A) Alarm Relay : AL1						
Transmission	Available for PV or SV transmission						—
mA dc	4~20mA, 0~20mA. Maximum load resistance : 560 Ω						—
Voltage dc	0~5V, 0~10V, 1~5V, 2~10V. Maximum load current : 20mA.						—
Remote SV Input	4~20mA, 0~20mA, 0~5V, 0~10V, 1~5V, 2~10V are available						
Communication	Protocol : MODBUS RTU, MODBUS ASCII, TAIE Interface : RS232, RS485, TTL Baudrate : 38400, 19200, 9600, 4800, 2400 bps. 8 bit, Start bit : 1 bit, Parity : Odd or Even, Stop bit : 1 or 2 bit						
WaterProof/DustProof	IP65					—	—

* — Not available

Order Information

FY Series

Digital PID Controller

Model & Suffix codes

Model	Output1	Output2	Alarm	TRS	Remote SV	Communication	Input Type	Power	Water/Dust Proof
FY400	1	0	1	0	0	0	02	A	N
FY400	48x48mm	0 None	0 None	0 None	0 None	0 None	See Input Codes	A AC 85~265V	N None
FY600	96x48mm	1 Relay	1 Relay	1 1 Set	1 4~20mA	1 RS232		D DC 24V	W IP65
FY700	72x72mm	2 Voltage Pulse (SSR Drive)	2 Voltage Pulse (SSR Drive)	2 2 Sets	2 0~20mA	2 RS485			
FY800	48x96mm	3 4~20mA	3 4~20mA	3 3 Sets	A 0~5V	3 TTL			
FY900	96x96mm	4 0~20mA	4 0~20mA	A 0~5V	B 0~10V	A RS232_MODBUS	NEW		
FY100	175x110mm			B 0~10V	C 1~5V	B RS485_MODBUS			
FY101	90x90mm			C 1~5V	D 2~10V				
(STANDARD)				D 2~10V					
PFY400	48x48mm	A 0~5V	A 0~5V	A HBA*					
PFY600	96x48mm	B 0~10V	B 0~10V	B HBA+AL2					
PFY700	72x72mm	C 1~5V	C 1~5V	C HBA+AL2+AL3					
PFY800	48x96mm	D 2~10V	D 2~10V						
PFY900	96x96mm								
PFY100	175x110mm	5 1 φ SCR zero cross control							
PFY101	90x90mm	6 3 φ SCR zero cross control							
(RAMP/SOAK Programmable)		7 Motor valve control							
		8 1 φ SCR phase angle control							
		9 3 φ SCR phase angle control							

FY100	AN Fixed terminals, AC 85~265V
	BN Plug in terminals, AC 85~265V
FY101	AN Fixed terminals, AC 85~265V

* Block means optional functions with additional charge
 * HBA : Heater Break Alarm(HBA must use AL1 as alarm relay)

Combination of options and models

Options	RAMP/SOAK PROGRAM	Output 1			Output2	Alarm2	Alarm3	HBA	Transmission	Remote SV	Communication	DC 24V Power
Model		1 φ SCR_Z	3 φ SCR_Z	Motor valve control	1 φ SCR_P	3 φ SCR_P						
FY400	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	-	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FY600	<input type="checkbox"/>	-	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FY700	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FY800	<input type="checkbox"/>	-	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FY900	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FY100	<input type="checkbox"/>	-	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
FY101	<input type="checkbox"/>	-	-	<input type="checkbox"/>	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

Available - Not available * Remote SV function is not available, if HBA Function has been specified.

Input type table

	TYPE	CODE	RANGE	TYPE	CODE	RANGE	TYPE	CODE	RANGE	TYPE	CODE	RANGE			
TC	K	K1	01	0.0~200.0°C(392.0°F)	K2	02	0.0~400.0°C(752.0°F)	K3	03	0~600°C(1112°F)	LINEAR	AN1	61	-10~10mV	
		K4	04	0~800°C(1472°F)	K5	05	0~1000°C(1832°F)	K6	06	0~1200°C(2192°F)		62	-2~2V		
		J	J1	07	0.0~200.0°C(392.0°F)	J2	08	0.0~400.0°C(752.0°F)	J3	09		0~600°C(1112°F)	63	-5~5V	
			J4	10	0~800°C(1472°F)	J5	11	0~1000°C(1832°F)	J6	12		0~1200°C(2192°F)	64	-10~10V	
			R	R1	13	0~1600°C(2912°F)	R2	14	0~1769°C(3216°F)					AN2	71
		S		15	0~1600°C(2912°F)	S2	16	0~1769°C(3216°F)					AN3	76	0~20mV
	B	17		0~1820°C(3308°F)								AN4	81	0~50mV	
	E	18	0~800°C(1472°F)	E2	19	0~900°C(1652°F)						82	0~20mA	-1999~9999	
	N	20	0~1200°C(2192°F)	N2	21	0~1300°C(2372°F)						83	0~1V	-199.9~999.9	
	T	22	-199.9~400.0°C(752.0°F)	T2	23	-199.9~200.0°C(392.0°F)	T3	24	0.0~350.0°C(662.0°F)				84	0~5V	-19.99~99.99
	W	25	0~2000°C(3632°F)	W2	26	0~2320°C(4208°F)							85	0~10V	-1.999~9.999
	PLII	27	0~1300°C(2372°F)	PL2	28	0~1390°C(2534°F)							86	0~5K ohm	-1.999~9.999
U	29	-199.9~600.0°C(999.9°F)	U2	30	-199.9~200.0°C(392.0°F)	U3	31	0.0~400.0°C(752.0°F)			87	0~2V			
RTD	JPT	L1	32	0~400°C(752°F)	L2	33	0~800°C(1472°F)				AN5	91	10~50mV		
		JP1	41	-199.9~600.0°C(999.9°F)	JP2	42	-199.9~400.0°C(752.0°F)	JP3	43	-199.9~200.0°C(392.0°F)			92	4~20mA	
		JP4	44	0~200°C(392°F)	JP5	45	0~400°C(752°F)	JP6	46	0~600°C(1112°F)			93	1~5V	
		PT	47	-199.9~600.0°C(999.9°F)	DP2	48	-199.9~400.0°C(752.0°F)	DP3	49	-199.9~200.0°C(392.0°F)			94	2~10V	
		100	DP4	50	0~200°C(392°F)	DP5	51	0~400°C(752°F)	DP6	52	0~600°C(1112°F)				
		JPT	53	-199.9~600.0°C(999.9°F)	JP.2	54	-199.9~400.0°C(752.0°F)	JP.3	55	-199.9~200.0°C(392.0°F)					
	50	JP.4	56	0~200°C(392°F)	JP.5	57	0~400°C(752°F)	JP.6	58	0~600°C(1112°F)					