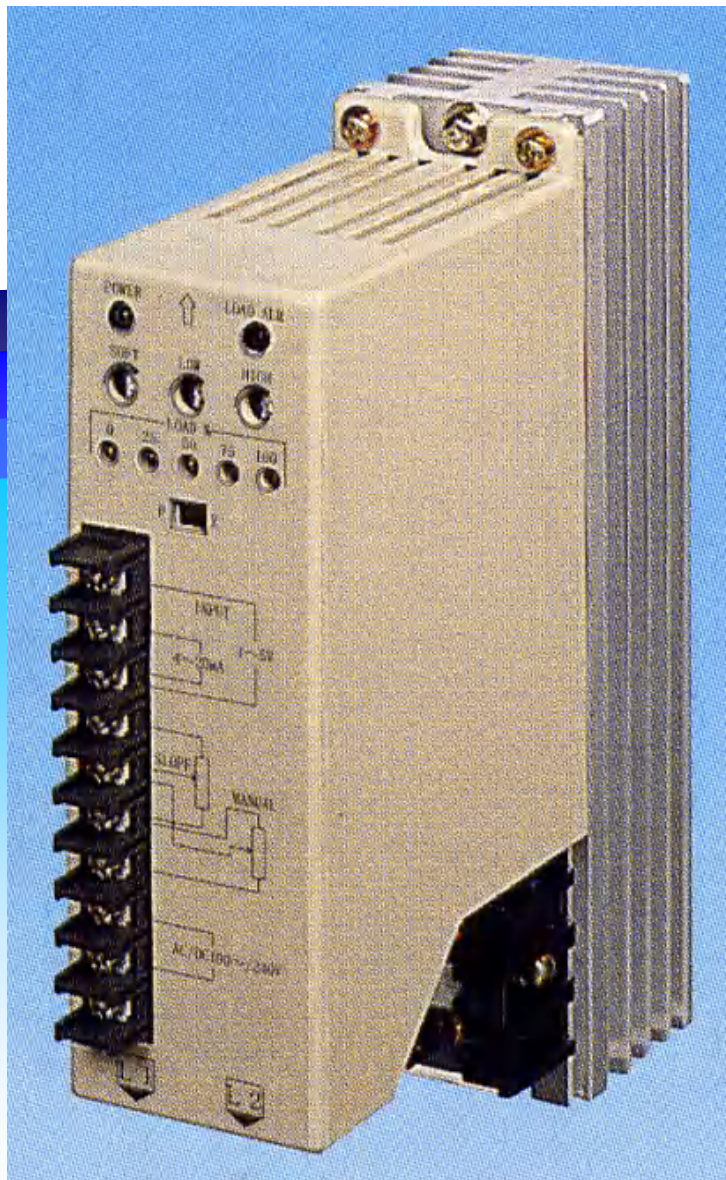


SCR alarm function is equipped standardly.

The change of Phase control and Zero crossing control is supported.

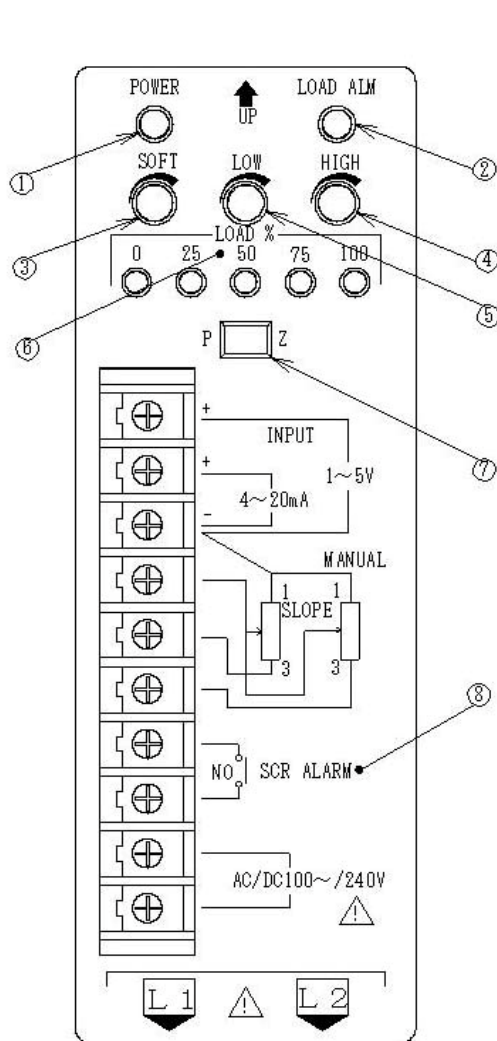
Single-phase Power Controller

FPZ series



Forest Co., Ltd.

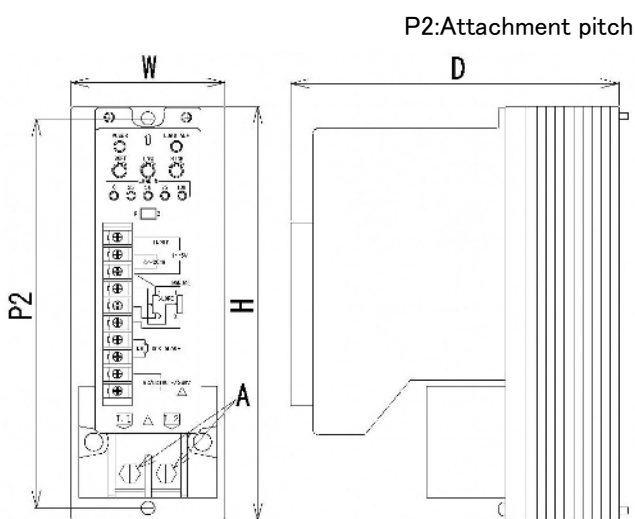
Description of the Panel



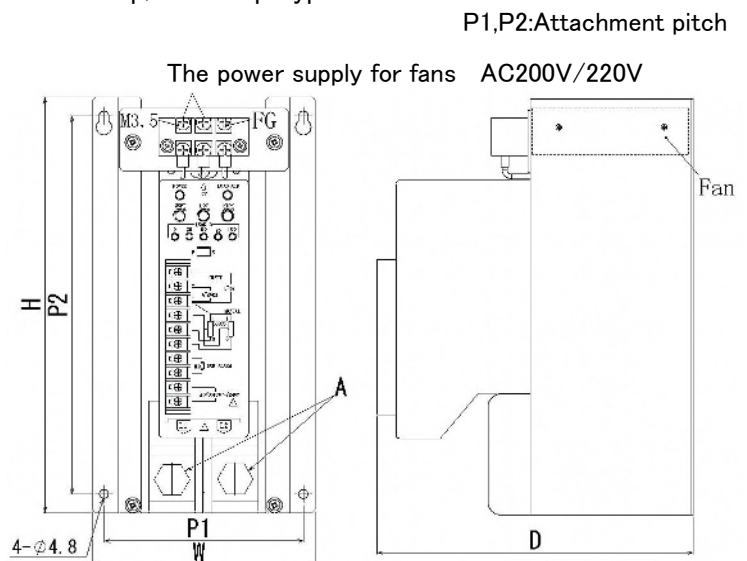
Numeral	Name	Description
①	POWER lamp (Green)	Comes on when you turn the operation power switch on. The lamp blinks when a problem occurs in the unit.
②	LOAD ALM lamp (Red)	Comes on when there is a load break or SCR short.
③	SOFT start dial	Use this dial to set soft startup. 0.5~10sec
④	HIGH control dial	Use this dial to set the HIGH control values 0~100%
⑤	LOW control dial	Use this dial to set the LOW control values 0~50%
⑥	LOAD % lamps (Yellow)	Indicate the percentage (%) of the load voltage.
⑦	Control selector switch	Turning this switch to 'P' position, phase control becomes active. Turning the switch to 'Z' position, zero cross control becomes active.
⑧	SCR alarm output	When load is disconnected, Or SCR short-circuit, Or SCR opens, between contacts opens.

Dimensional Outline Drawings

30-amp/50-amp.Type



70-amp/100-amp.Type



Outside size table

(UNIT:mm)

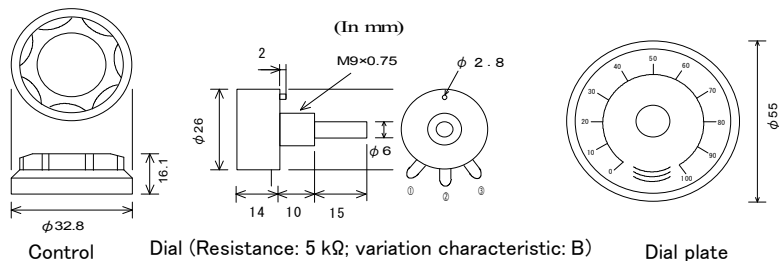
	W	H	P1	P2	D	weight(kg)	A
30 A	48	170	---	160 ±0.5	135	1	M4 bolt
50 A	68	185	---	175 ±0.5	145	1.5	M5 bolt
70 A	116	220	104	200	165	2.6	M5 bolt
100 A	116	220	104	200	165	2.6	M8 bolt

Specifications

Item	Specifications		Note
Control system	Phase control, zero crossing control		P/Z Panel slide switch change
Load	Current capacity	30A,50A,70A,100A	
	The minimum load current	0.3A (At the time of a full output)	
	Application load	Resistance load	
Load power supply	voltage	AC100 to 240V・380V/400V/440V	It specifies either.
	Rated frequency	50Hz,60Hz (Automatic sorting)	
	Permission frequency change	±1Hz of rated frequency	
	Number of phases	Single phase	
Operation power supply	voltage	100 to 240V AC/DC	Free power supply
	Power consumption	7VA MAX	
Control input (Automatic setup)	Current signal	4 to 20mA DC (100Ω)	The change by the terminal connection position
	voltage signal	1 to 5V DC (25KΩ)	
External setting function	MANUAL manual setup	0 to 100%	External volume setup
	SLOPE External slope setup	0 to 100%	External volume
Internal setting function	SOFT software start setup	0.5 to 10sec	Panel volume setup
	HIGH output setup	0 to 100%	Panel volume setup
	LOW output setup	0 to 50%	Panel volume setup
Output	Output voltage range	0 to 98%	
	Input-and-output property	Straight line property	
Monitor function	POWER Power supply display lamp	The light is switched on with a power supply ON.	It blinks at the time of the abnormalities in CPU.
	LOAD ALM alarm lamp	Heater disconnection alarm	When the heater is being used one
	LOAD% Load factor display lamp	0%,25%,50%,75%,100%	Five-step display
Ambient temperature of operation	Performance guarantee range	0°C to +40°C	Humidity 30% to 90%RH
Cooling system	Natural air cooling (30A・50A AC), Compulsive cooling (70A・100A AC)		
Insulation resistance	between the main circuit terminals and the case	Over 50 MΩ (500 VDC)	
Insulation withstand voltage	between the main circuit terminals and the case	2000 VAC for one minute	

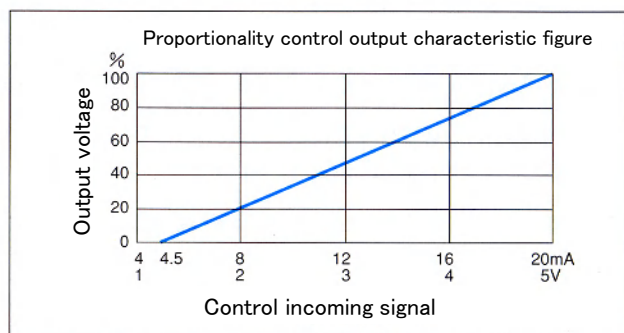
Accessories

By connecting optional accessories
(Slope setting machine, Manual setting machine)
to a unit terminal,
Slope setup and the change of manual operation
[be / automatic] are possible from the outside.

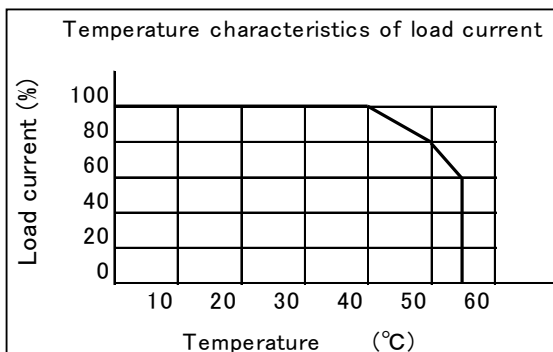


Property

Input-and-output property



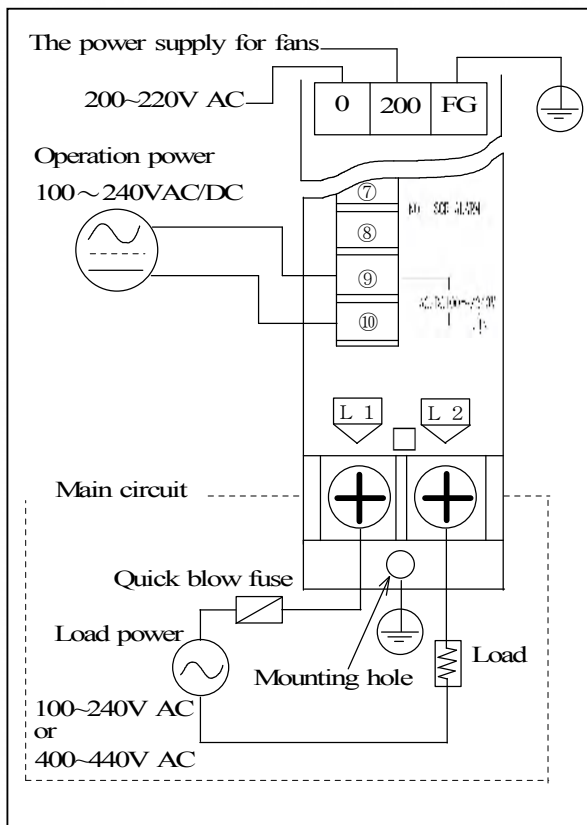
Load current temperature property



Description of Type Code

Specification	Description	Specification Code				Load power voltage	
		FPZ	-	[]	R	S	- []
Product type		FPZ					
Rated current	Max. load current - 30 A		03				- 2200V AC
	Max. load current - 50 A		05				- 4400V AC
	Max. load current - 70 A		07				
	Max. load current - 100 A		10				
Applicable load	Linear (R) load				R		
Alarm output	With SCR alarm output					S	

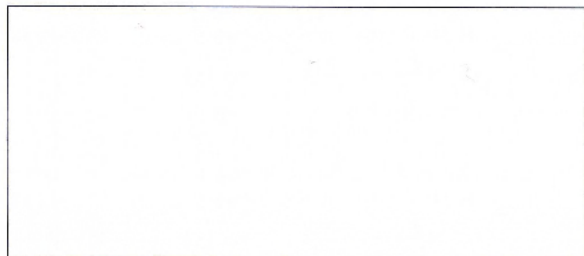
The example of external connection



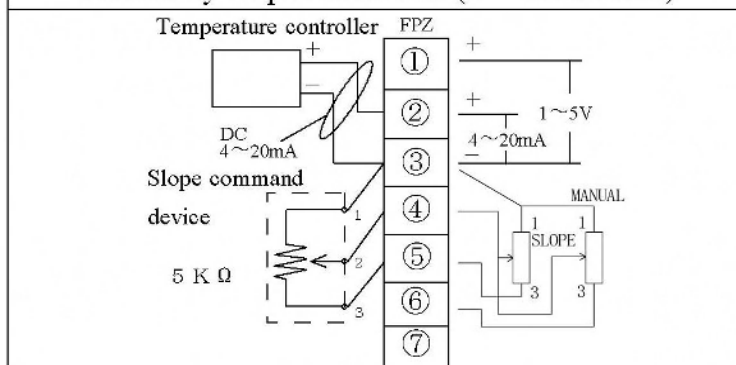
* As for the product of 70A and 100A, a fan drive power supply is needed separately.



1S09001
Q3223



Control by slope commands (4 ~ 20 mADC)



Business line

Automatic temperature control meter

Various temperature detection edges

Direct-current ampere-hour meter

Direct-current ampere-hour meter by microcomputer control

Thyristor power controller

Heater disconnection alarm

In addition, electronic application apparatus



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Caution in using

- Since this product is not manufactured for the applications stipulated in the Export Trade Control Ordinance, it cannot be used for the purpose of weapons of mass destruction.
- The final application and final customer must be checked so that it will not be used for weapons of mass destruction (military application, military equipment). Due attention must also be paid to the re-sale so that it will not be illegally exported.

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