

Single-phase Power Controller

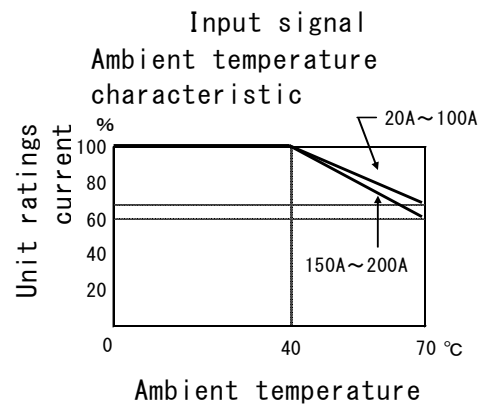
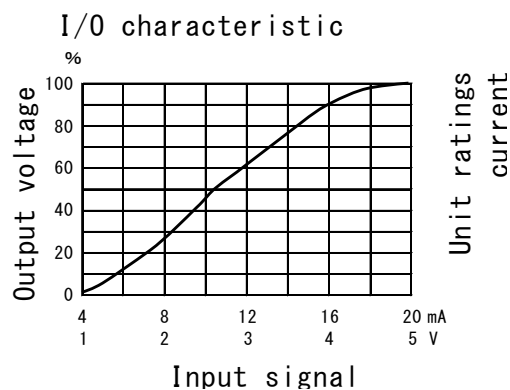
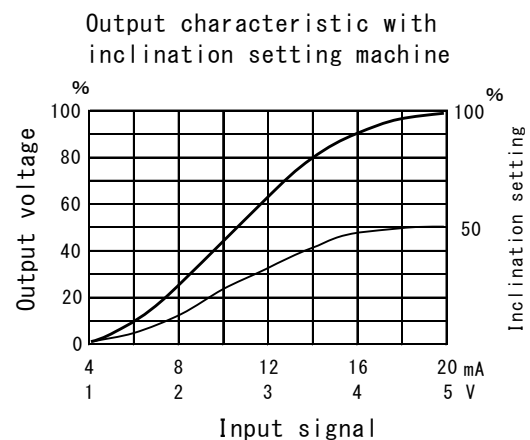
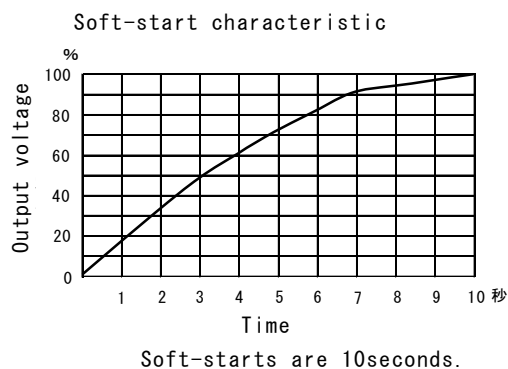
FPG1 series

RoHS



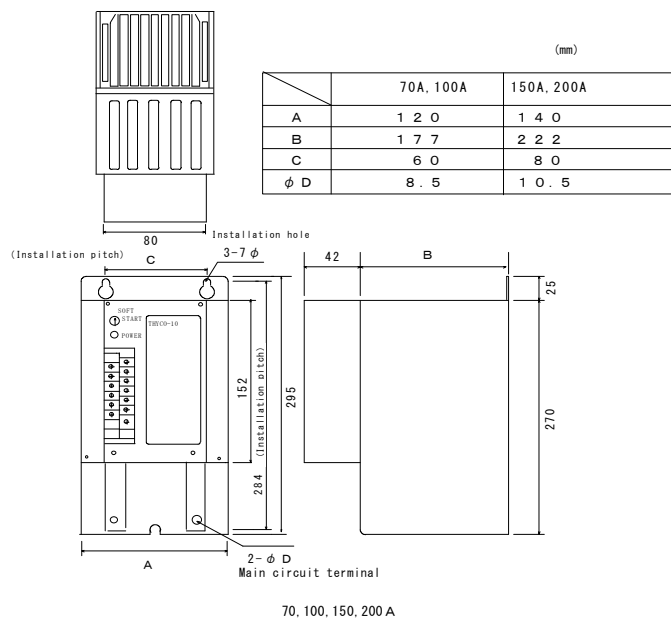
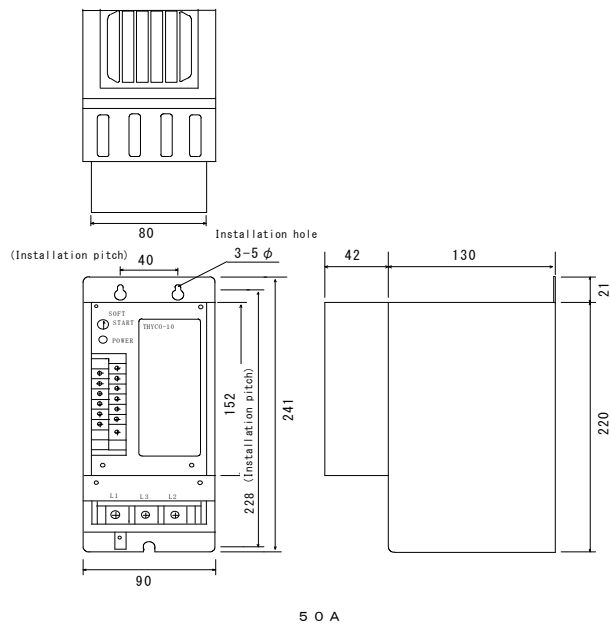
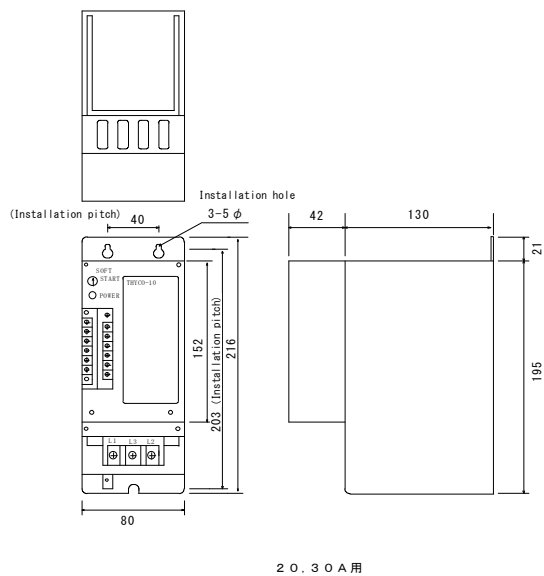
Forest Co., Ltd.

Specification	
Number of aspects	Single phase
Maximum load current	AC 20A,30A,50A,70A,100A,150A,200A
Minimum load current	0.3A
Power supply voltage	AC 100V,110V,200V,220V,380V,400V,440V(AC120V,240V can be produced)
Power supply frequency	50/60Hz(It is possible to change with an external terminal)
Permissible power supply voltage change	Within $\pm 10\%$
Control method	Phase control method
Application load	Linearity (R:Resistance) load or inductivity(L) load(side control) of the first transformer)
Input signal	DC1-5V(input impedance:10k Ω) DC4-20mA(input impedance:150 Ω)
Range of output control	0-98% of the first side power supply voltage
Cooling method	Natural cooling(AC20A,30A,50A,70A) Compulsion cooling by wind(AC100A,150A,200A)
Standard function	Soft start(changeability type of 1-10sec)
Permissible voltage change	Within $\pm 10\%$ of ratings value
Category temperature range	0-40°C
Operating humidity limits	90%RH or less(No do be dewy)
Environment	Causticity gas and dust and vibration,etc
Installation method	Vertical installation
Power consumption	2.2VA or less(20A,30A,50A,70A),10.8VA or less(100A),13.8VA or less(150A,200A)
Insulation resistance	500V DC 50M Ω or more between main circuit terminal and case
Withstand voltage	1500V AC 1minute between main circuit terminal and case
Weight	20A:1.9kg,30A:2.1kg,50A:2.7kg,70A:4.2kg,100A:5.0kg,150A:7.4kg,200A:7.4kg



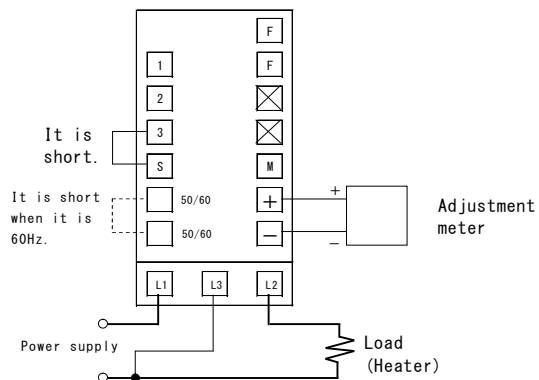
Dimensional Outline Drawings

FPG-1 Externals dimensional drawing



The example of external connection

FPG-1 Chart of external connecting wires



Specification	Specification code					
		☐	☐	☐	☐	☐
Control scheme	Phase control system	FPG-				
Power-supply voltage	AC100V,110V(Specify either)		11			
	AC200V,220V(Specify either)		12			
	AC380V		13			
	AC400V,440V(Specify either)		14			
Current rating	20A			02		
	30A			03		
	50A			05		
	70A			07		
	100A			10		
	150A			15		
	200A			20		
Application load	Linearity(R:Resistance)load			R		
	Inductivty(L)load			L		
Input signal	DC4~20mA			A		
	DC1~5V			C		
Option	Manual switch and automatic operation/inclination setting					1
	Fuse disconnection warning(Only type with fast-blow fuse)					4
	H-L control					5
	With a fast-blow fuse					F
	Non-standard voltage(AC240V,460V,480V)					T

Business line

Automatic temperature control meter

Various temperature detection edges

Direct-current ampere-hour meter

Direct-current ampere-hour meter by microcomputer control

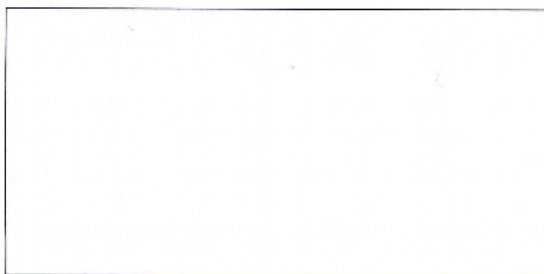
Thyristor power controller

Heater disconnection alarm

In addition, electronic application apparatus



ISO9001
Q3223



Forest Co., Ltd.

Head Office

Shimouma 4-14-15, Setagaya-ku, Tokyo 154-0002, Japan

Telephone : +81 3 3421 5141

Fax : +81 3 3421 5145

Yamanashi Fuji Plant

Shibokusa, Oshino-mura, Minami-Tsuru, Yamanashi

401-0511, Japan

Telephone : +81 555 84 2503

Fax : +81 555 84 3157

homepage <http://www.forest-ele.co.jp/>

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.