

TPR-2

Single phase thyristor power regulator

- Economical price
- Set the max output voltage by setting the slope
- Control input (4-20mA DC, 1-5V, DC contact input)
- Current limitation (C/L) and over current detection (min 70A)



Suffix code

Model	Code					Information
TPR-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thyristor Power Regulator
Phase	2					Single phase
Control type		P				Phase control, ON/OFF control
Power supply voltage	220					Select among 110, 220, 380 and 440 V
Rated current	25					25 A (Only with the power supply voltage 110 V, 220 V AC)
	35					35, 50 A
	100					100, 150, 200 A
Control input				M		4 - 20 mA DC (1 - 5 V DC)
Applying load					R	Load resistance

※ Cautious) single phase 25A can select only power voltage 110 or 220 V AC

Specification

Input

Model	TPR-2P□25MR	TPR-2P□□MR	TPR-2P□□MR
appearance			
(mm)	89(W) X 130.4(H) X 63.5(D)	127.8(W) X 190.6(H) X 116.5(D)	165(W) X 305(H) X 170(D)
Function	Slope setting(Power ADJ)		<ul style="list-style-type: none"> • Current limitation (C/L) • Over current detection(O.C) • Slope setting • Soft start & Down & Soft down
Control method	Phase control, ON / OFF control		
Phase	Single phase		
Rated current	25 (A)	35, 50 (A)	100, 150, 200 (A)
Power supply voltage	110, 220 V AC	110, 220, 380, 440 V AC	
Power frequency	50, 60 Hz	50, 60 Hz	
Min load	0.5 A	0.5 A	
Control element	Triac	SCR	SCR
Control input	4 - 20 mA DC (1 - 5 V DC)		
Manual volume	B 10kΩ (handle and scale)		
SIBA	no	no	built in
Alarm output	no	no	1a (250 V AC 3 A)

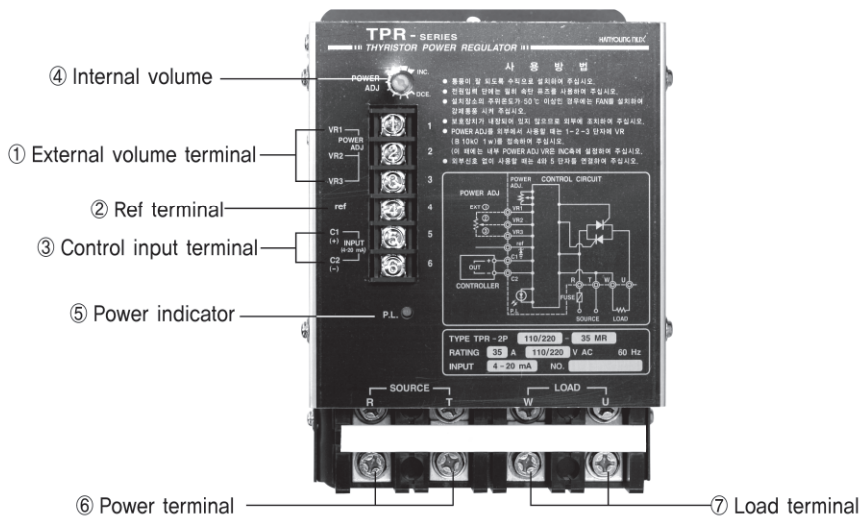
Thyristor Power Regulator

Environment specification

Cooling method	Natural cooling(25 A)	Natural cooling(35, 50 A)	Forced cooling(100, 150, 200 A)
Ambient temperature	0 ~ 50 °C (Refer to the load current characteristic)		
Ambient humidity	35 ~ 85 % RH. (no condensation allowed)		
Storage temperature	-25 ~ 70 °C		
Weight (g)	Approx 960	Approx 2,000	Approx 5,800

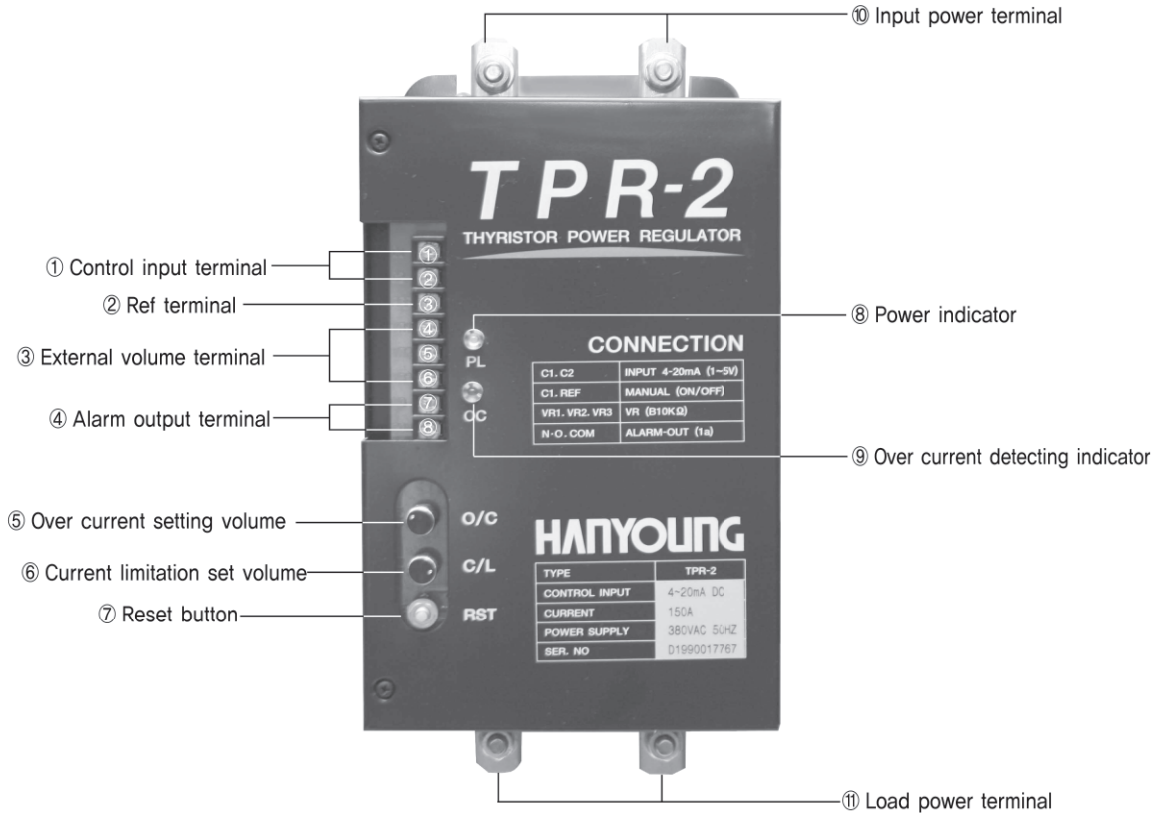
Name of each part

- TPR-2P□25MR / TPR-2P□□MR (35 A, 50 A)



list	name	terminal number	Information
1	External volume terminal (Power ADJ)	①-②-③	External setting volume terminal (applied as output limit when controlling it by the 4-20mA input signal)
			Applied as manual setting volume when there is no control input signal (4-20mA)*. Connect to the Ref terminal and C1 (+) terminal
2	Ref terminal	④	When controlling it by the ON/OFF contact, wire the controlling contact signal in between terminal ④ and ⑤.
3	C1 (+) input terminal	⑤	Controlling input signal (4-20mA DC) terminal
	C2 (-) input terminal	⑥	
4	Internal volume (Power ADJ)	-	Slope setting by the internal volume Set as maximum (INDC) when using the external volume
5	Power Indicator (P.L)	-	L,ON when input power is supplied in
6	Power terminal	R - T	Supply in the power supply voltage
7	Load terminal	U - W	Connect the load

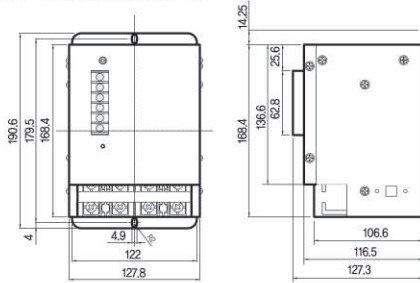
- TPR-2P□□MR (100 A, 150 A, 200 A)



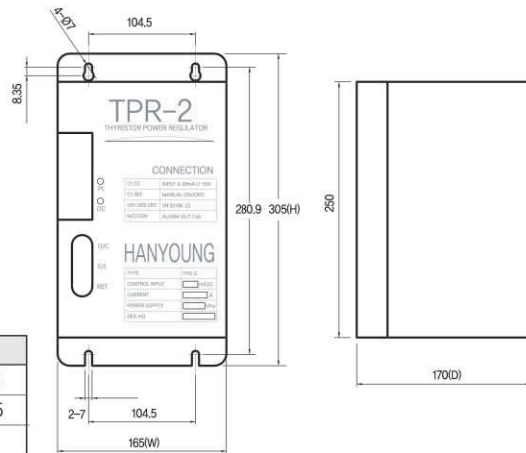
List	Name	Terminal number	Information
1	C1(+) input terminal	①	Controlling input signal (4-20mA DC) terminal
	C2(-) input terminal	②	
2	Ref terminal	③	When controlling it by the ON/OFF contact, wire the controlling contact signal in between terminal ③ and ①.
3	External setting volume (manual setting volume)	④-⑤-⑥	External setting volume terminal (applied as output limit when controlling it by the 4-20mA input signal) Applied as manual setting volume when there is no control input signal (4-20mA) *. Connect to the Ref terminal and C1 (+) terminal
4	Alarm output terminal	⑦-⑧	Alarm output contact (1a contact)
5	Over current set volume (O.C)	-	Set the current value that users want to limit (default value: max)
6	Current limitation set value (C/L)	-	It limits the load current not to exceed the set current. (Default value: max)
7	Reset button	-	Stop the alarm output by the over current detection and return to the control state
8	Power indicator (P.L)	-	L.ON when input power is supplied in
9	Over current detecting indicator (O/C)	-	L.ON when alarm output becomes ON (alarm output becomes ON when over current detecting function is operated)
10	Input power terminal	R - T	Supply in the power supply voltage (Source)
11	Load power terminal	U - W	Connect the load (Load)

Thyristor Power Regulator

Dimension



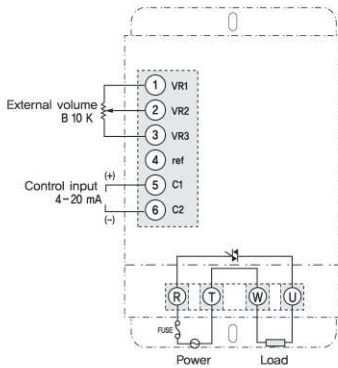
Capacity	Rate	W	H	D
25 A		89	130.4	63.5
35 A, 50 A		127.8	190.6	116.5
100 A, 150 A, 200 A		165	305	170



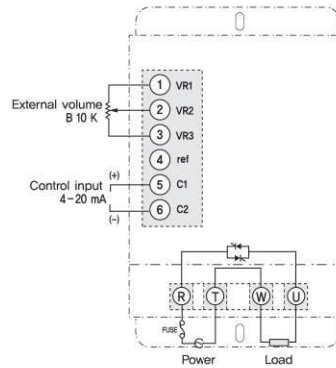
Connection diagram

※ When performing the ON/OFF control due to the contact signal input, connect the contact for controlling between the ref terminal and input signal C1 (+) terminal

■ TPR-2 (25 A)

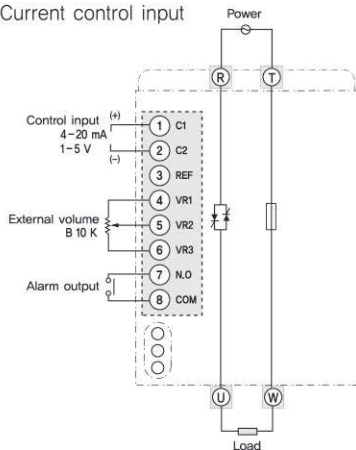


■ TPR-2 (35 A, 50 A)

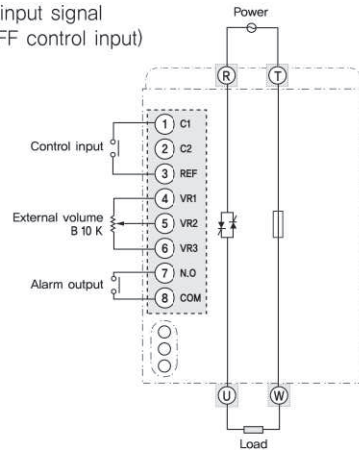


■ TPR-2 (100 A, 150 A, 200 A)

• Current control input



• Relay input signal (ON/OFF control input)



※ When not attaching the external volume, please short the VR2 terminal and VR3 terminal