TPR-3N

3 phases thyristor regulator

- Power failure and fuse break (LE) alarm output
- Over current detection (O/C) alarm output
- Current limitation (C/L) setting
- Fast acting fuse including

Suffix code

Model	Code					Information
TPR-3N	□	□	□	□	□	3-phases thyristor Regulator
Control type	P					Phase control, ON/OFF control
Power supply voltage		220				220, 380, 440 V AC (※ Voltage selectable)
Rated current			35			35, 50, 60 A (※ Capacity selectable)
Control input				M		4 – 20 ㎃ DC ※ 1 – 5 V DC
Applying load					R	Resistive load

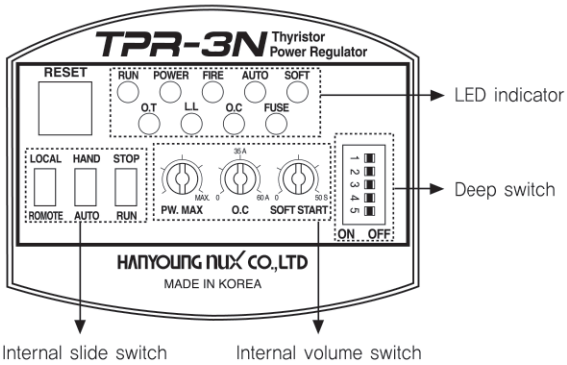
Specification

Model	TPR-3N□35	TPR-3N□50	TPR-3N□60
Rated current	35 A	50 A	60 A
Function	• Power failure and fuse break (L.E) alarm output • Over current detection alarm output • Current limitation setting • Manual setting (slope setting)		
Display method	Output displayed by the LED		
Control method	Phase control, ON/OFF control		
Applying load	Resistive load/Inductance load		
Power supply voltage	220, 380, 440 V AC		
Power frequency	50/60 ㎐ (Dual usage)		
Output voltage	More than 95 % of the input voltage (with the max current input)		
Controlling element	SCR		
Control input	4 – 20 ㎃ ※ 0 – 5 V DC, 1 – 5 V DC, 0 – 10 V DC,		
External volume	External volume (10 KΩ)		
Alarm output	Power failure and fuse break (L.E) alarm output, Over current detection alarm output, Relay contact output(1a contact), 5 A 250 V AC max, Over temp(O/T)		
Insulation resistance	Mimum 100 ㏁ (500V dc mega standard)		
Dielectric strength	For 1 minute at 2000 V AC 50/60 Hz		
Weight	Approx 5 kg		

Environment specification

Cooling method	Forced cooling
Ambient temperature	0 ~ 50 ℃ (Refer to the ambient temperature characteristic)
Ambient humidity	35 ~ 85 % RH (No condensation allowed)
Storage temperature	–25 ~ 70 ℃

Name of each part



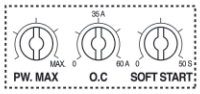
■ LED indication

- RUN : Always ON when operating (OFF when selecting STOP)
- POWER : ON when AC power is supplied in
- FIRE : ON when output is generated and becomes ON proportional to an amount of output (Continuously ON with 100% output)
- AUTO : ON when selecting the AUTO MODE
- SOFT : ON when using the SOFT START function
- OT : ON when heat-sink is over heated, alarm output, operation stops
- LL : ON when value less than the load break set value is generated and ON when load current is less than 1 A.
- OC : ON when value more than O.C set value is generated, alarm output, operation stops
- FUSE : ON when internal FUSE breaks, alarm output, operation stops

■ internal slide switch (SLIDE S/W)

- REMOTE : Use external volume (VR)
- AUTO : Use control input
- RUN : Always set at RUN when operating
- STOP : All function stop when selecting stop during operation
- LOCAL : Use internal volume (VR)
- HAND : Ignores the control input

■ internal volume (VR)

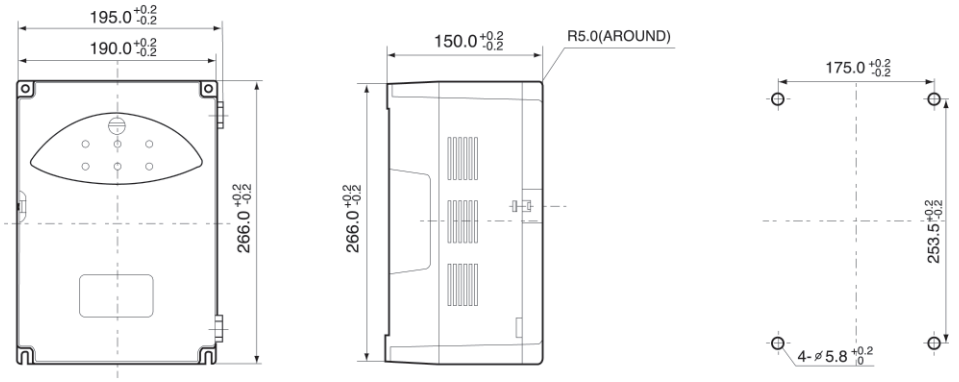


- Output voltage limitation (PW.MAX) • Over current protection (O.C) • Soft start

■ Deep switch (DIP S/W)

SW number	Function							
SW 1	■	4 – 20 ㎃	■	0 – 10 V	■	0 – 5 V	■	1 – 5 V
SW 2	■		■		■		■	
SW 3	■	Resistive load			■	Inductive load		
SW 4	■	NON	■	30 %	■	40 %	■	50 %
SW 5	■		■		■		■	

Dimension and panel cutout (unit: mm)

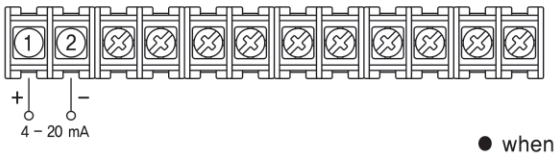


Connection diagram

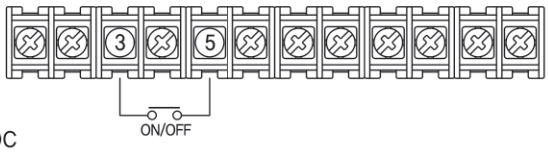
■ How to wire the input signal terminal

- Press the left side handle and open the cover

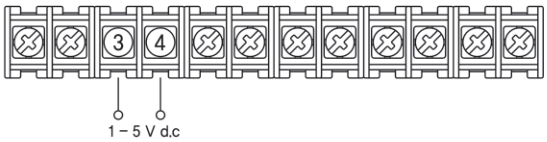
● when using 4 – 20 ㎃ DC



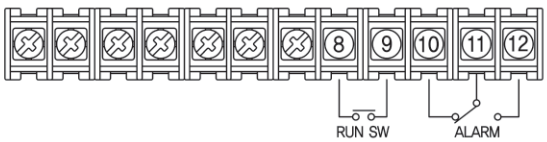
● when using ON/OFF



● when using 1 – 5 V, 0 – 5 V, 0 – 10 V DC



● when using RUN S/W, ALARM RELAY



● when using external manual volume