



Always with our customers

www.hynux.com

WORLD LEADER IN CONTROL & MEASUREMENT



























THYRISTOR POWER REGULATOR

Slim type thyristor power regulator



HANYOUNG nux

3-phase power regulator

Model		TPR-3N		TPR-3P						TPR-3M		TPR-3SL						TPR-3SL-EP																				
																																						
Functions	35	50	60	70	100	70	100	150	200	250	320	500	600	25	45	040L	055L	040H	055H	070L	070H	090L	090H	130L	160L	130H	160H	40H-EP	55H-EP	70H-EP	90H-EP	130H-EP	160H-EP					
	Function	Soft start / Soft up, down	•			•					•											•																
Over heat alarm		•			•					•					•						•																	
Over current alarm		•			•					•					•						•																	
Slope setting		•			•					•											•																	
Load break alarm															•						•																	
Output indication															•						•																	
Power failure alarm		•			•						•										•																	
SCR short alarm														•						•																		
Control type	Phase control	•			•					•										•																		
	Fixed cycle control	•			•					•				Option						•																		
	Cycle control													Option						•																		
	ON / OFF control	•			•					•										•																		
Power supply voltage	220 V a.c.	•			•					•																												
	380 V a.c.	•			•					•										•																		
	440 V a.c.	•			•					•										•																		
	100 - 240 V a.c.													•		•				•					•	•												
	100 - 440 V a.c.																			•																		
380 - 440 V a.c.																			•																			
Power frequency	50/60 Hz	•			•					•				•																								
Rated current	25 A													25 A																								
	35 A	35 A																																				
	40 A															40 A		40 A																				
	45 A														45 A																							
	50 A		50 A																																			
	55 A																																					
	60 A			60 A																																		
	70 A				70 A		70 A																															
	90 A																																					
	100 A					100 A		100 A																														
	110 A																																					
	130 A																																					
	150 A																																					
160 A																																						
200 A																																						
250 A																																						
320 A																																						
500 A																																						
600 A																																						
Control input	4 - 20 mA	•			•					•				•						•																		
	1 - 5 V d.c.	•			•					•				•						•																		
	ON / OFF control	•			•					•				•						•																		
	External resistance (10KΩ)	•			•					•				•						•																		
Cooling method	Natural cooling	•												•						•																		
	Force cooling		•	•	•					•				•						•																		



TPR-2M

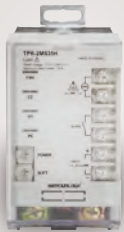
Single phase power regulator

25A 35A



■ Feature

- 47(Width) mm Ultra compact slim size
- Various control methods are realized according to the load
- Various protection functions (Heater break, Overcurrent, Overheating heat sink, Short circuit of SCR etc.)
- Improved safety by separation of power supply of circuit and power supply of load (Application of Free Voltage)
- Soft start (60 sec) / Soft up, Soft down (15 sec)



■ Specification

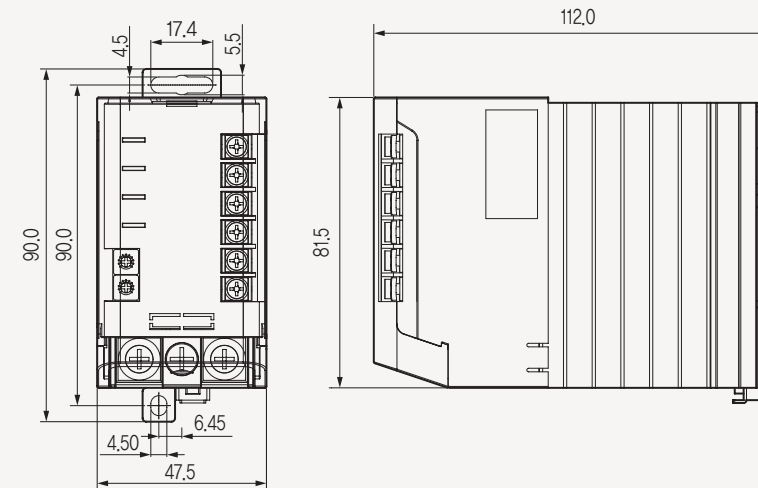
Model	Economical type		Advanced type	
	Low voltage		Low voltage	High voltage
	TPR-2ME25L	TPR-2ME35L	TPR-2MS25L	TPR-2MS35L
Load Voltage	100 – 240 V a.c.		100 – 440 V a.c.	
Circuit input power	100 – 240 V a.c. 3 W		24 V d.c. 1 W	
Power frequency	50 / 60 Hz (Dual usage)			
Rated current	25 A / 35 A			
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω) (Basic packages)	4 – 20 mA d.c. (Impedance : 100 Ω) (Option)	
	Voltage input	1 – 5 V d.c. (Basic packages)	1 – 5 V d.c. (Option)	
	Contact input	ON/OFF (Basic packages)	ON/OFF (Option)	
	External V.R	External V.R (10 kΩ) Simultaneous use of current and voltage input is not supported	-	
Control method	Phase control (Basic), Variable Cycle control (Option)			
Movement type	Soft start (60 sec) / Soft up, Soft down (15 sec) / Adjust start time by SOFT V.R			
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input) / Output limitation control by Power V.R			
Alarm function	Current error(CE)	-	O (Relay contact output)	
	Over temperature(OT)	-		
	Power error / Heater break(PE)	-		
	SCR short (PE)	-		
Display method (LED)	Output	FIRE : Flicker speed directly proportional to output		
	Power	Light on when power connect to circuit	-	
	Alarm	-	CE (CURRENT ERROR) : Light on in case of more than 45A load	
-		OT (OVER TEMP) : Light on when Heat sink temperature is above 85 °C		
		PE (POWER ERROR) : Power error, Heater break		
Cooling method	Natural cooling			
Weight	approx. 322 g			

■ Suffix code

Model	Code	Information
TPR-2M	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Slim type 1- phase power regulator
Type	E	Economical type 25 A 100 – 24 V a.c. only
	S	Advanced type
Rated current	25	25 A
	35	35 A
Power supply voltage	L	100 – 240 V a.c.
	H	100 – 440 V a.c. (Only for advanced type)
Control input (For Advanced type only)	C	4 – 20 mA d.c.
	V	1 – 5 V d.c.
	O	ON/OFF

※ Please supply power separately for circuit input (100 – 240 V a.c. for low voltage, 24 V d.c. for high voltage)

■ Appearance

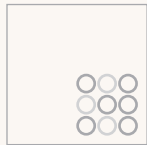




TPR-2SE

Single phase power regulator

25A 40A



■ Feature

- 47(Width) mm Ultra slim size
- Improved safety by separation of power supply of circuit and power supply of load (Application of Free Voltage)
- Various control methods available depending on loads
- Alarm output is divided into caution and warning
- Various protection functions (Short circuit of partial heater, Overcurrent, Overheating heat sink, Short circuit of SCR etc.)

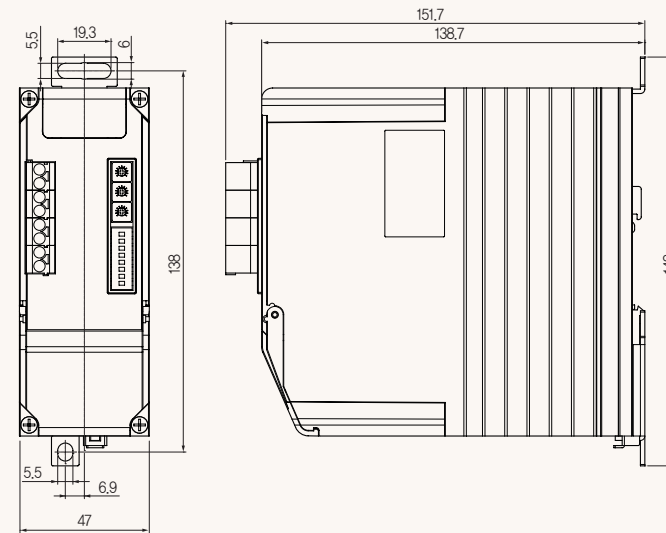
■ Specification

Model	Low	TPR-2SE025L	TPR-2SE040L
	High	TPR-2SE025H	TPR-2SE040H
Power supply voltage	Low	100 – 240 V a.c.	
	High	100 – 440 V a.c.	
Circuit input power		100 – 240 V a.c. 6 W	
Power frequency		50 Hz / 60 Hz (Dual usage)	
Rated current (40°C Standard)		25 A	40 A
Fuse installation		None	
Applying load		Resistive load	
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω)	
	Voltage input	1 – 5 V d.c.	
	Contact input	ON/OFF	
	External V.R	External volume (10 kΩ)	
Control method		Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control	
Movement type		Soft start / Soft up, down	
Output voltage		More than 98 % of the power supply voltage (In case of maximum current input)	
Cooling method		Natural cooling	
Display method		Display by LED	
Insulation resistance		Min 100 MΩ (Base on 500 V d.c. mega)	
Output control range		0 ~ 100 %	
Dielectric strength		3,000 V a.c. 50/60 Hz for 1 min	
Line noise		Noise by noise simulator (3,000 V)	
Ambient temperature		0 ~ 40 °C (Without condensation)	
Ambient Humidity		30 ~ 85 % RH	
Storage temperature		-25 °C ~ 70 °C	
Weight		1,388 g	

■ Suffix code

Model	Code	Information
TPR-2SE	<input type="checkbox"/> <input type="checkbox"/>	Slim type 1- phase power regulator
Rated current	025	25 A
	040	40 A
Power supply voltage	L	100 – 240 V a.c. (Low)
	H	100 – 440 V a.c. (High)

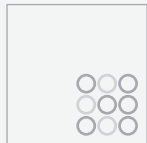
■ Appearance





TPR-2SL Single phase power regulator

40A 55A 70A 90A 110A 130A 160A 200A CE



■ Feature

- 60(Width) mm (40 A, 55 A, 70 A),
85(Width) mm (90 A, 110 A, 130 A, 160 A, 200 A)
Ultra slim size
- Improved safety by separation of power supply of circuit
and power supply of load (Application of Free Voltage)
- Various control methods available depending on loads
- 2-kind alarm for detailed monitoring (caution/warning)
- Various protection functions (Short circuit of partial heater,
Overcurrent, Overheating of heat sink, Short circuit of SCR etc.)

■ Specification

Model	Low	TPR-2SL040L	TPR-2SL055L	TPR-2SL070L	TPR-2SL090L	TPR-2SL110L	TPR-2SL130L	TPR-2SL160L	TPR-2SL200L
	High	TPR-2SL040H	TPR-2SL055H	TPR-2SL070H	TPR-2SL090H	TPR-2SL110H	TPR-2SL130H	TPR-2SL160H	TPR-2SL200H
Power supply voltage	Low	100 – 240 V a.c.							
	High	380 – 440 V a.c.							
Circuit input power	100 – 240 V a.c.				100 – 240 V a.c.				
	6 W		16 W		20 W				
Power frequency	50 Hz / 60 Hz (Dual usage)								
Rated current (40°C Standard)	40 A	55 A	70 A	90 A	110 A	130 A	160 A	200 A	
Fuse installation	None (selectable option)				Built-in fast acting fuse				
Applying load	Resistive load								
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω)							
	Voltage input	1 – 5 V d.c. (Option : 0 – 10 V d.c.)							
	Contact input	ON/OFF							
	External V.R	External volume (10 kΩ)							
Control method	Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control								
Movement type	Soft start / Soft up, down								
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input)								
Cooling method	Natural cooling	Forced cooling	Natural cooling	Forced cooling					
Display method	Display by LED								
Insulation resistance	Min 100 MΩ (Base on 500 V d.c. mega)								
Output control range	0 ~ 100 %								
Dielectric strength	3,000 V a.c. 50/60 Hz for 1 min								
Line noise	Noise by noise simulator (3,000 V)								
Ambient temperature	20 ~ 80 °C (Without condensation)								
Ambient Humidity	30 ~ 85 % RH								
Storage temperature	-25 °C ~ 70 °C								
Weight	1,388 g	1,478 g	2,820 g	3,100 g					

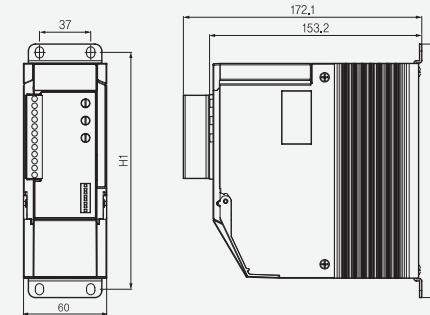
■ Suffix code

※ Circuit and FAN need 100 – 240 V AC voltage power separately.

Model	Code	Information	
TPR-2SL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Slim type 1-phase power regulator	
Rated current	040	40 A	
	055	55 A	
	070	70 A	
	090	90 A	
	110	110 A	
	130	130 A	
	160	160 A	
Power supply voltage	L	100 – 240 V a.c. (Low)	
	H	380 – 440 V a.c. (High)	
	Options	C	RS485
		F	Built-in fuse type (For option 50 / 55 / 70 A)

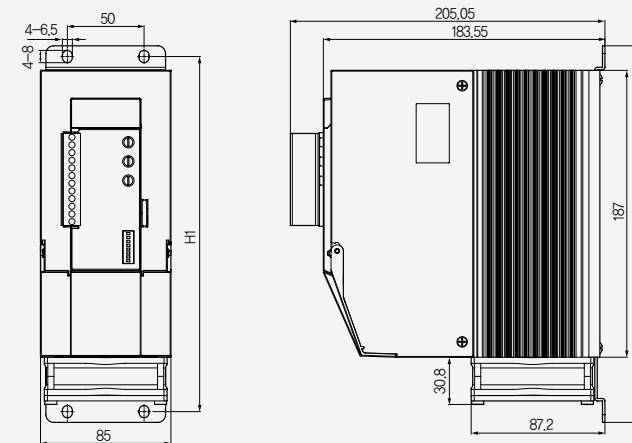
■ Appearance

- 40 A / 55 A / 70 A



	H1	H2
40A / 55A	171 mm	183 mm
70 (Cooling fan included)	191 mm	203 mm

- 90 A / 110 A / 130 A / 160 A / 200 A



	H1	H2
90 (Cooling fan excluded)	205 mm	219 mm
110A/130A/160A/200A	231.5 mm	245.5 mm



TPR-3M 3-phase power regulator

25A 45A CE



Feature

- 110(Width) mm Ultra slim size 3-phase power regulator
- Separated power supply reduces noise
Stable insulation design minimizes fire and exposing hazard
- 4LED display for operation status and alarm status
- Various protection functions and alarm (Power failure, Overcurrent, Overheating heat sink, Imbalance of load element short circuit)

■ Specification

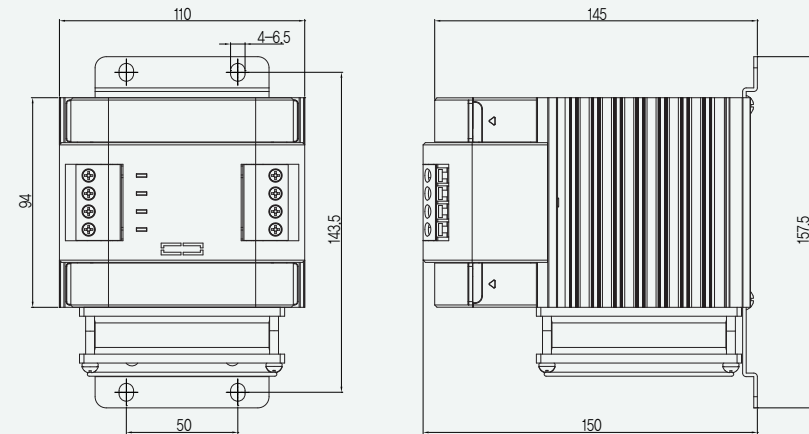
Model	TPR-3M25L	TPR-3M45L
Power supply voltage	100 – 240 V a.c.	
Circuit input power	24 V d.c. 8 W	
Power frequency	50 / 60 Hz	
Rated current	25 A	45 A
Applying load	Resistive load	
Control Input	4 – 20 mA d.c. (Impedance : 100 Ω)	
Control method	Phase control (Fixed Cycle control, Variable Cycle control Option)	
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input)	
Cooling method	Forced cooling (24 V d.c. FAN)	
Display method	4 LED display status and alarm status	
Insulation resistance	Min 100 MΩ (Base on 500 V d.c. mega)	
Dielectric strength	2,500 V a.c. 50 / 60 Hz for 1 min	
Line noise	Noise by noise simulator (2,000 V)	
Storage temperature	-30 ~ 90 °C	
Ambient temperature	-20 ~ 80 °C (Without condensation)	
Ambient Humidity	45 ~ 85 % R.H.	
Weight	1,756 g	

■ Suffix code

Model	Code	Information
TPR-3M	<input type="checkbox"/> : <input type="checkbox"/> : <input type="checkbox"/>	Mini 3-phase power regulator
Rated current	25	25 A
	45	45 A
Power supply voltage	L	100 – 240 V a.c. (Low)
Option	IS	Power isolation for multi series connection

※ IS type support connection in series up to 5 units with 1 temperature controller or power supply(SMPS.)
The general type requires a 1 to 1 connection to the temperature controller with a 24 V d.c. partial power circuit as a non-isolated type.

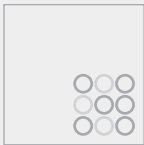
■ Appearance





TPR-3SL 3-phase power regulator

40A 55A 70A 90A 130A 160A CE



■ Feature

- 110(Width) mm (40 A, 55 A, 70 A)
173(Width) mm (90 A, 130 A, 160 A)
The slimmest type among 3-phase thyristor power regulators under the same rating
- Optimal heat sink design for extreme durability
- Improved safety by separation of power supply of circuit and power supply of load
- Various alarm functions (Short circuit of heater, Imbalance of load, Overheating heat sink, Overcurrent etc.)

■ Specification

Model	Low	TPR-3SL040L	TPR-3SL055L	TPR-3SL070L	TPR-3SL090L	TPR-3SL130L	TPR-3SL160L
	High	TPR-3SL040H	TPR-3SL055H	TPR-3SL070H	TPR-3SL090H	TPR-3SL130H	TPR-3SL160H
Power supply voltage	Low	100 – 240 V a.c.					
	High	380 – 440 V a.c.					
Circuit input power		100 – 240 V a.c. 18 W			100 – 240 V a.c. 20 W		
Power frequency		50 Hz / 60 Hz (Dual usage)					
Rated current		40 A, 55 A, 70 A, 90 A, 130 A, 160 A					
Applying load		Resistive load					
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω)					
	Voltage input	1 – 5 V d.c.					
	Contact input	ON / OFF					
	External V,R	External volume (10 KΩ)					
Control method		Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control					
Movement type		Soft start / Soft up, down					
Output voltage		More than 98 % of the power supply voltage (In case of maximum current input)					
Cooling method		Natural cooling (40 A, 55 A), Forced cooling (70 A, 90 A, 130 A, 160 A)					
Display method		Display by LED					
Insulation resistance		Min 100 MΩ (Base on 500 V d.c. mega)					
Output control range		0 ~ 100 %					
Dielectric strength		3,000 V a.c. 50/60 Hz for 1 min					
Line noise		Noise by noise simulator (2,500 V)					
Ambient temperature		0 ~ 40 °C (Without condensation)					
Ambient Humidity		30 ~ 85 % RH					
Storage temperature		-25 °C ~ 70 °C					
Weight		4,044 g	4,324 g	9,100 g	9,194 g		

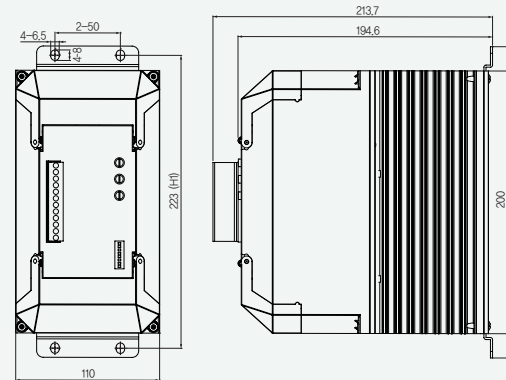
■ Suffix code

Model	Code	Information
TPR-3SL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Slim type 3-phase power regulator
Rated current	040	40 A
	055	55 A
	070	70 A
	090	90 A
	130	130 A
	160	160 A
Power supply voltage	L	100 – 240 V a.c. (Low)
	H	380 – 440 V a.c. (High)
Option	-	Fuse built-in
	N	No fuse

※ Circuit and FAN need 100 – 240 V a.c. voltage power separately.

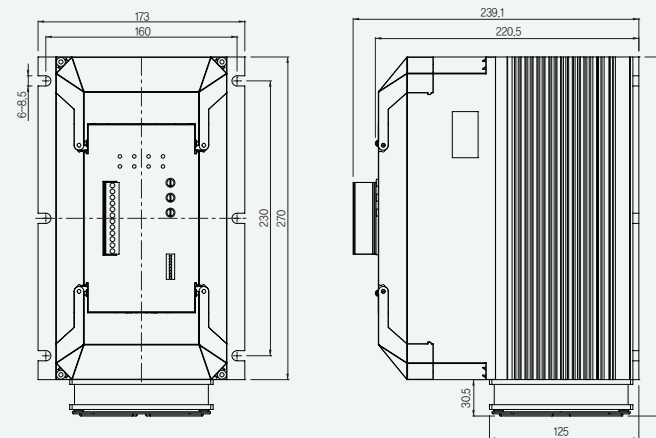
■ Appearance

- 40 A / 55 A / 70 A



	H1	H2
70A (With cooling fan)	249.5 mm	263.5 mm

- 90 A / 130 A / 160 A





TPR-3SL-EP

Single phase X 3 power regulator

40A 55A 70A 90A 130A 160A CE

Feature

- Up to 3 individual phase controls available only with the space for one device
- RS-485 communication for monitoring output current and alarm status
- Single-phase, 3-phase load input power available
- Various protection functions
(Detection of fuse short, Partial heater break, Heater break, Overheating heat sink, Overcurrent, Element short circuit)



■ Specification

Model	TPR-3SL040H-EP	TPR-3SL055H-EP	TPR-3SL070H-EP	TPR-3SL090H-EP	TPR-3SL130H-EP	TPR-3SL160H-EP
Power supply voltage	100 – 440 V a.c.					
Circuit input power	100 – 240 V a.c. 18 W					
Power frequency	50/60 Hz (Dual usage)					
Rated current	40 A	55 A	70 A	90 A	130 A	160 A
Applying load	Resistive load					
Current input	4 – 20 mA d.c. (Impedance : 100 Ω)					
Control method	Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control					
Movement type	Soft start / Soft up, down					
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input)					
Cooling method	Forced cooling					
Display method	Display by LED					
Insulation resistance	Min 100 MΩ (Base on 500 V d.c. mega)					
Output control range	0 ~ 100 %					
Dielectric strength	3,000 V a.c. 50/60 Hz for 1 min					
Line noise	Noise by noise simulator (2,500 V)					
Ambient temperature	0 ~ 40 °C (Without condensation)					
Ambient Humidity	30 ~ 85 % RH					
Storage temperature	-25 °C ~ 70 °C					
Weight	4,324 g		9,194 g		9,288 g	

■ Suffix code

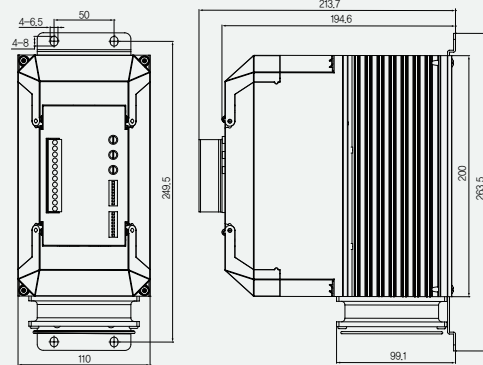
Model	Code	Information
TPR-3SL	<input type="checkbox"/> <input type="checkbox"/> -EP	1-phase X 3 power regulator
Rated current	040	40 A
	055	55 A
	070	70 A
	090	90 A
	130	130 A
Power supply voltage	160	160 A
	H	100 – 440 V a.c.

※ Circuit and FAN need 100 – 240 V a.c. voltage power separately.

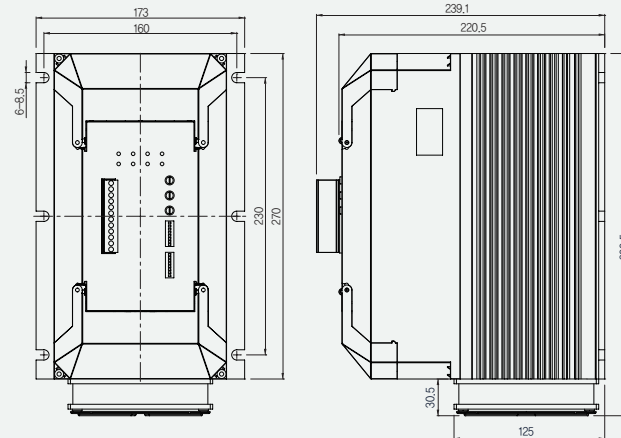
※ 130 A and 160 A products need 24 V d.c. power separately for FAN (Only for TPR-3SL EP models)

■ Appearance

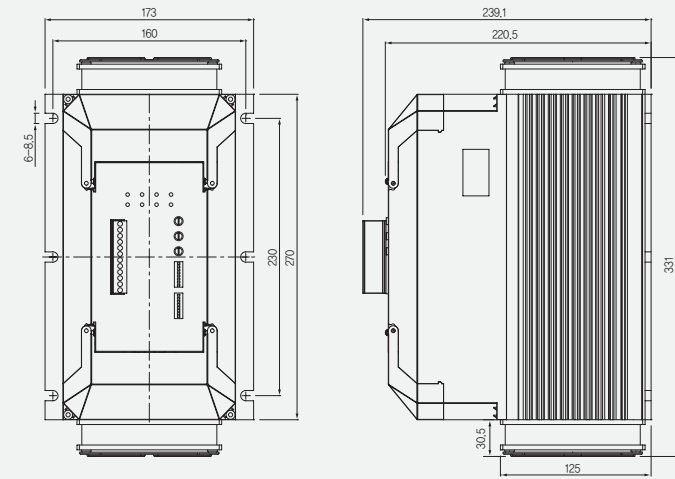
● 40 A / 55 A / 70 A



● 90 A



● 130 A / 160 A





TPR-2N Single phase power regulator

25A 35A 50A 70A



Feature

- Various input signals
- Compact, simple installation
- Selection of Phase control, cycle control, ON / OFF control by dip switch



■ Specification

- TPR-2N (25 A / 35 A)

Power supply voltage	110 V a.c. / 220 V a.c. / 380 V a.c.
Operating Frequency	50 / 60 Hz (Dual usage)
Rated Current	25 A, 35 A
Protection Circuit	Protected by fast acting fuse (external attachment)
Applied Load	Resistive Load/ Inductive Load
Control Input	Input Current : 4 – 20 mA d.c. , Input Voltage : 1 – 5 V d.c. Input Contact Point : ON – OFF, External V. R (10 kΩ)
Control Method	Phase control, Cycle control, ON/OFF control (selected by dip switch)
Movement type	Soft start / Soft down (Time : 0 ~ 50 sec)
Output Adjusting Range	Above 95 % input voltage (when putting maximum of input voltage)
Cooling Method	Natural Cooling
Indicator Function	LED lighting for output status
Insulation Resistance	100 MΩ min (500 V d.c. mega standard)
Output Range	0 ~ 100 %
Dielectric Strength	2000 V a.c. at 50/60 Hz for 1 minute
Line Noise	Noise by noise simulator (pulse width 1 μs : ±2 kV)
Ambient temperature	0 ~ 50 °C (Without condensation)
Ambient Humidity	30 ~ 85 % R.H.
Storage Temperature	-25 ~ 70 °C
Weight	Approx. 960 g

- TPR-2N (50 A / 70 A)

Power supply voltage	110 V a.c. / 220 V a.c. / 380 V a.c. / 440 V a.c.	
Operating Frequency	50 / 60 Hz (Dual usage)	
Rated Current	50 A, 70 A	
Protection Circuit	Resistance load / inductive load (Select by conversion switch)	
Control Input	Current input	4 – 20 mA d.c.
	Voltage input	1 – 5 V d.c. / 0 – 10 V d.c. (Option)
	Contact input	ON / OFF
	External V.R	External volume (10 kΩ)
Control method	Phase control, Cycle control, ON/OFF control (switch selection)	
Starting method	Soft start / Soft down	
Output adjusting range	Above 95 % of input voltage (when applying max current input)	
Cooling method	50 A(Natural cooling), 70 A (Forced cooling)	
Indicating method	LED indication for output status	
Insulation Resistance	Min. 100 MΩ (500 V d.c. Mega standard)	
Output adjusting range	0 ~ 100 %	
Dielectric Strength	2000 V a.c. at 50/60 Hz for 1 minute	
Line noise	Noise by noise simulator (2 kV)	
Ambient temperature	0 ~ 50 °C (Without condensation)	
Ambient humidity	30 ~ 85 % RH	
Storage temperature	-25 ~ 70 °C	
Weight	Approx. 2 kg	

■ Suffix code

- TPR-2N (25 A / 35 A)

Model	Code	Description
TPR-2N	<input type="checkbox"/> <input type="checkbox"/>	1-phase power regulator
Power supply voltage	110	110 V a.c. 50/60 Hz
	220	220 V a.c. 50/60 Hz
	380	380 V a.c. 50/60 Hz
Rated current	25	25 A
	35	35 A

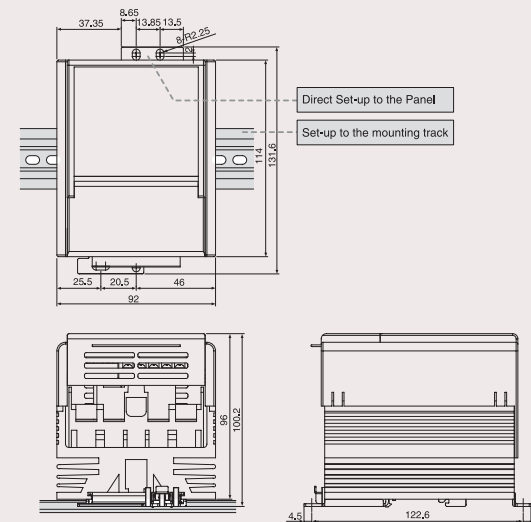
※ Control Method : Phase control (factory default)

- TPR-2N (50 A / 70 A)

Model	Code	Description
TPR-2N	<input type="checkbox"/> <input type="checkbox"/>	1-phase power regulator
Power supply voltage	110	110 V a.c.
	220	220 V a.c.
	380	380 V a.c.
	440	440 V a.c.
Rated current	50	50 A
	70	70 A

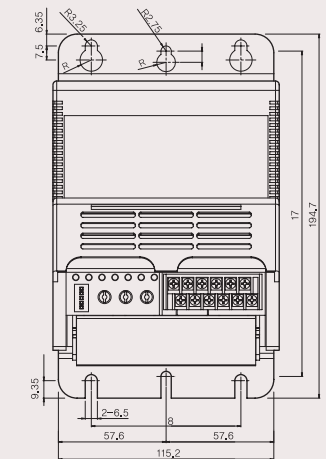
■ Appearance

- TPR-2N (25 A / 35 A)



	W	H	D
25 A, 35 A	92 mm	100 mm	131 mm

- TPR-2N (50 A / 70 A)



	W	H	D
50 A, 70 A	115.2 mm	194.7 mm	131 mm



TPR-3N 3-phase power regulator

35A 50A 60A 70A 100A



■ Feature

- Fast acting fuse built in
- Various protection function
(Overcurrent, power failure, fuse disconnection,
bad short circuit etc)
- Setting current limitation
- Soft start-Soft down



■ Specification

- TPR-3N (35 A / 50 A / 60 A)

Model	TPR-3N □ 35MR	TPR-3N □ 50MR	TPR-3N □ 60MR
Power supply voltage	220 V a.c. / 380 V a.c. / 440 V a.c.		
Applying frequency	50/60 Hz (Dual usage)		
Rated current	35 A	50 A	60 A
Protective circuit	Protection by built-in fuse		
Applying load	Resistive load/Inductance load		
Control input	Current Input	4 - 20 mA d.c.	
	Voltage Input	0 - 5 V d.c. / 1 - 5 V d.c. / 0 - 10 V d.c.	
	Contact Input	ON/OFF	
	External V.R	External volume (10 KΩ)	
Control type	Phase control, ON/OFF control, Cycle control		
Start type	Soft start / Soft down		
Output voltage	More than 95 % of the input voltage (with the max current input)		
Cooling type	Natural cooling (35 A), Forced cooling (50, 60 A)		
Display method	LED indication for output status		
Insulation resistance	min. 100 MΩ (500 V d.c. mega standard)		
Output adjustable range	0 ~ 100 %		
Dielectric strength	For 1 min, 2000 V a.c. 50/60 Hz		
Line noise	Noise (2 kv) by noise simulator		
Ambient temperature	0 ~ 40 °C (Without condensation)		
Ambient humidity	35 ~ 85 % R.H.		
Storage temperature	-25 ~ 70 °C		
Weight	Approx. 5 kg		

- TPR-3N (70 A / 100 A)

Power supply voltage	220 V a.c. / 380 V a.c. / 440 V a.c.	
Applying Frequency	50 / 60 Hz(Dual usage)	
Rated Current	70 A / 100 A	
Protective circuit	Protection by built-in fuse	
Applying load	Resistance load / inductive load (Select by conversion switch)	
Control input	Current input	4 - 20 mA d.c.
	Voltage input	0 - 5 V d.c. / 1 - 5 V d.c. / 0 - 10 V d.c.
	Contact input	ON/OFF
	External V.R	External volume (10 KΩ)
Control type	Phase control, ON/OFF control (Switch selection), Cycle control	
Starting type	Soft start / Soft up / Soft down	
Output adjusting range	Above 95 % of input voltage (when applying max current input)	
Cooling method	Forced cooling	
Indicating method	LED indication for output status	
Insulation Resistance	Min. 100 MΩ (500 V d.c. Mega standard)	
Output adjusting range	0 ~ 100 %	
Dielectric Strength	For 1 min, 2000 V a.c. 50/60 Hz	
Line noise	Noise (2 kv) by the noise simulator	
Ambient temperature	0 ~ 50 °C (Without condensation)	
Ambient humidity	35 ~ 85 % R.H.	
Storage temperature	-25 ~ 70 °C	
Weight	Approx. 5 kg	

■ Suffix code

- TPR-3N (35 A / 50 A / 60 A)

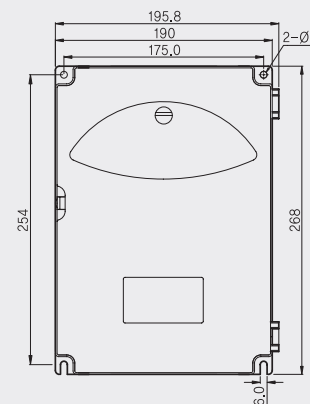
Model	Code	Description
TPR-3N	□ □	3-phase power regulator
Power supply voltage	220	220 V a.c.
	380	380 V a.c.
	440	440 V a.c.
Rated current	35	35 A
	50	50 A
	60	60 A

- TPR-3N (70 A / 100 A)

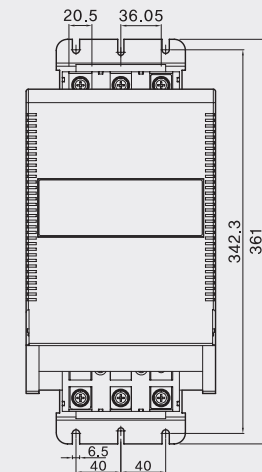
Model	Code	Description
TPR-3N	□ □	3-phase power regulator
Power supply voltage	220	220 V a.c.
	380	380 V a.c.
	440	440 V a.c.
Rated current	70	70 A
	100	100 A

■ Appearance

- TPR-3N (35 A / 50 A / 60 A)



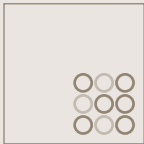
- TPR-3N (70 A / 100 A)





TPR-3P 3-phase power regulator

70A 100A 150A 200A 250A 320A 500A 600A



■ Feature

- Built-in fast acting fuse and setting current limitation
- Soft start / Soft down
- Over current warning alarm
- Power disconnection and fuse break alarm

■ Specification

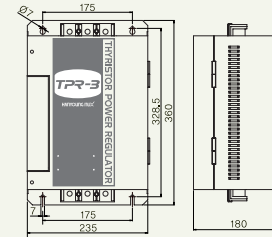
Model	TPR-3P							
Power supply voltage	220 V a.c. / 380 V a.c. / 440 V a.c.							
Applying frequency	50 Hz / 60 Hz(Dual usage)							
Rated current	70 A	100 A	150 A	200 A	250 A	320 A	500 A	600 A
Protective circuit	Fuse break alarm, Over current alarm, Overheating heat sink							
Applying load	Resistive load / Inductive load							
Control input	Current Input	4 - 20 mA d.c.						
	Voltage Input	0 - 5 V d.c. / 1 - 5 V d.c. / 0 - 10 V d.c.						
	Contact Input	ON/OFF						
	External V,R	External volume (10 KΩ)						
Control type	Phase control, ON/OFF control, Cycle control							
Start type	Soft start / Soft down							
Output voltage	More than 95 % of the power supply voltage (in case of maximum current input)							
Cooling type	Forced cooling (150 A ~ 600 A), Forced cooling (70 A, 100 A), Need separate power supply for FAN (320 A, 500 A and 600 A)							
Display method	Display by LED light							
Insulation resistance	Min 100 MΩ (Base on 500 V d.c. mega)							
Output adjustable range	0 ~ 100 %							
Dielectric strength	2,000 V AC 50/60 Hz for 1 min							
Line noise	Noise by noise simulator (2 kW)							
Ambient temperature	0 ~ 40 °C (Without condensation)							
Ambient humidity	35 ~ 85 % R.H.							
Storage temperature	-25 ~ 70 °C							
Weight	11 kg	15 kg	22 kg	35 kg	40 kg			

■ Suffix code

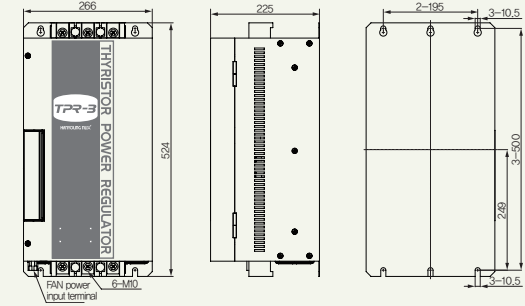
Model	Code	Description
TPR-3P	<input type="checkbox"/> <input type="checkbox"/>	3-phase power regulator
Power supply voltage	220	220 V a.c.
	380/440	380 V a.c. / 440 V a.c.
Rated current	70	70 A
	100	100 A
	150	150 A
	200	200 A
	250	250 A
	320	320 A
	500	500 A
600	600 A	

■ Appearance

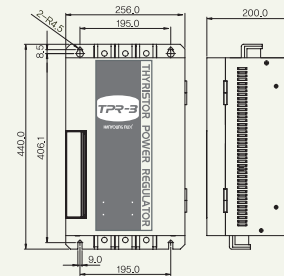
● 70 A / 100 A



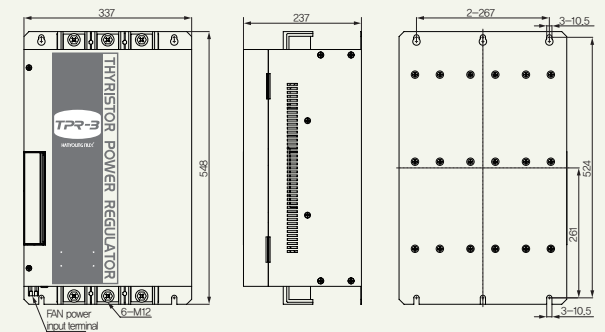
● 320 A



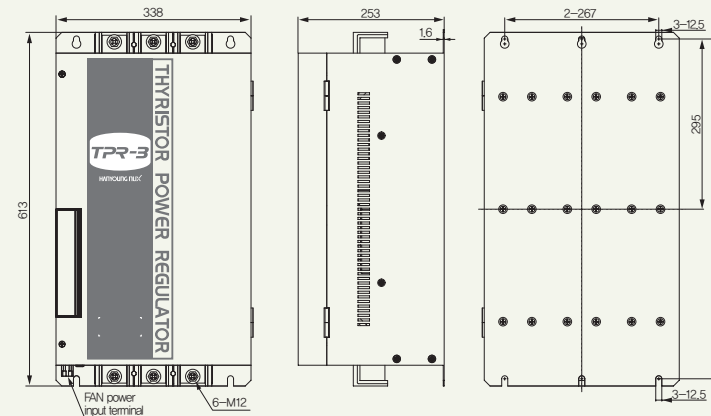
● 150 A / 200 A / 250 A



● 500 A



● 600 A



Programmable temperature & humidity controller



CE

TH510 / TD510

- High-Definition Screen (5.7" 640 x 480 TFT-LCD)
- Easy to configure due to use of touch panel
- Maximum 100 patterns (Maximum 2,000 segments)
- Digital input: Maximum 32 contacts, Digital output : Maximum 32 contacts
- Remote observation function by using Smartphone
- 3 languages are available (Korean, English, and Chinese)
- Digital recording function
- Communication function (RS422/485)



Input output module

Graphic recorder



Digital screen



Trend screen



Bar graph screen



GR200

- Touch panel 5.7" 640 x 480 TFT-LCD
- Universal input (Thermocouple, RTD, VDC)
- 80M byte internal memory and support SD/SDHC memory card
- RS 485/422 communication (Modbus, PC-link)
- Remote monitoring by smart phone
- Size : 145(W) x 145(H) x 173.5(D)

Digital temperature controller



CE

(HX4)

HX series

- Multi-input (Thermocouple 12 types, RTD 2 types, DC voltage 2 types)
- Heating control / Cooling control / Simultaneous heating · cooling control
- Multi-output (Relay, SSR, Current output)
- Set value (SV) selection by contact input (D.I)
- Retransmission output (4 - 20 mA)
- Fast sampling cycle 62.5 ms
- Installation depth 63 mm
- Heater break alarm
- Communication (RS485 / RS422)

Digital temperature controller



CE

ML series

- 76,800 bps communication speed
- 50 ms sampling cycle (4 channels)
- 4-channel relay / voltage / current output
- 8 Event outputs
- Maximum 31 unit connections
- Stop / Monitor / Operation mode
- Ramp function
- Heating or Cooling single control (ML-D4)
- Heating / Cooling simultaneous control (ML-D2H)
- LBA : Loop break alarm (ML-D4)
- LBA / HBA(Heater break alarm) (ML-D2H)

World Leader in Control & Measurement



MAIN PRODUCTS

Temperature controller / Recorder / Counter / Timer / Panelmeter / Multi pulse meter / Proximity sensor / Photo sensor / Rotary encoder / Thyristor power regulator / Solid state relay / Power supply / Control switch / Combination display light / Power switch / Main switch / Cam switch / Limit switch / Micro switch / Hoist switch / Foot switch / Mono lever switch / Sign tower / Turn light / Buzzer / Terminal block / Fuse holder / Controlling box / Cable connector



Control switch

Control instrument

Photo sensor / Proximity sensor

Thyristor power Regulator

Sign tower / Signal light

General type thyristor power regulator



HANYOUNG NUX CO.,LTD

28, Gilpa-ro 71 beon-gil, Nam-gu, Incheon, Korea

Tel : +82-32-876-4697 Fax : +82-32-876-4696 E-mail : overseas@hynux.com

The information contained in this catalogue may change without prior notice for upgrade purposes.