

Thyristor Power Regulator

TPR-2M Slim type 1-phase power regulator

Specification

Model	Economical type		Advanced type	
	Low voltage		Low voltage	High voltage
	TPR-2ME25L	TPR-2ME35L	TPR-2MS25L	TPR-2MS35L
Appearance				
W X H X D (mm)	47,5 X 90 X 112			
Function	<ul style="list-style-type: none"> • Soft start/Soft up/Soft down • Over heat alarm 		<ul style="list-style-type: none"> • Soft start/Soft up/Soft down • Over heat alarm • Over current alarm • Slope setting • Output indication • Power failure alarm • SCR short alarm 	
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 VR	External VR (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 VR			
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input) / Output limitation control by Power VR			
Alarm function	-	O (Relay contact output) : Current error(CE), 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 45 A 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
		Economical Type(E) supports all input options.

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

Thyristor Power Regulator

TPR-2N 1-phase thyristor power regulator

Specification

MODEL	TPR-2N□□□	TPR-2N□□□	
Appearance			Temperature Controller
W X H X D	92 X 100.2 X 131.6	115.2 X 194.7 X 123.6	Recorder
Function	<ul style="list-style-type: none"> • Soft Start / Soft Down • Slope setting 	<ul style="list-style-type: none"> • Soft start • Overheated alarm (O.T) • Alarm output • Slope setting • Output limit setting • Overcurrent detection (O.C) • Load break detection (L.L) 	Digital Counter Timer
Power supply voltage	110 V a.c. / 220 V a.c. / 380 V a.c.	110 V a.c. / 220 V a.c. / 380 V a.c. / 440 V a.c.	Analog Timer
Operating Frequency	50 / 60 Hz (Dual usage)		Panel Meter
Rated Current	25 A, 35 A	50 A, 70 A	Multi Pulse Meter
Protection Circuit	Protected by fast acting fuse (external attachment)		Proximity Sensor
Applied Load	Resistive Load/ Inductive Load		Photo Sensor
Control Input	Input Current : 4 – 20 mA d.c, Input Voltage : 1 – 5 V d.c, Input Contact Point : ON – OFF, External VR (10 kΩ)	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 VR : External volume (10 kΩ)	Rotary Encoder
Control Method	Phase control, Cycle control, ON/OFF control (selected by dip switch)		Thyristor Power Regulator
Movement type	Soft start / Soft down (Time : 0 ~ 50 sec)	Soft start / Soft down	Solid State Relay
Output Adjusting Range	Above 95 % input voltage (when putting maximum of input voltage)		Power Supply
Cooling Method	Natural Cooling	50 A(Natural cooling), 70 A (Forced cooling)	Control Switch
Indicator Function	LED lighting for output status		Push Button / Main Switch
Insulation Resistance	100 MΩ min (500 V d.c, mega standard)		Cam Switch / Limit Switch
Output Range	0 ~ 100 %		Micro / Hoist Switch
Dielectric Strength	2,000 V a.c. at 50/60 Hz for 1 minute		Foot / Mono Lever Switch
Line Noise	Noise by noise simulator (pulse width 1 : ±2 KV)		Signal Light
Ambient temperature	0 ~ 50 °C (Without condensation)		Terminal Block / Power Buzzer / Fuse Holder / Control Box
Ambient Humidity	30 ~ 85 % RH		
Storage Temperature	-25 ~ 70 °C		
Weight	Approx. 960 g	Approx 2,000 g	

Suffix code (25 A / 35 A)

※ Control Method : Phase control (factory default)

Model	Code	Information
TPR – 2N	□ □ □	1-phase power regulator
Power supply voltage	110 □	110 V a.c. 50/60 Hz (Dual usage)
	220 □	220 V a.c. 50/60 Hz (Dual usage)
	380 □	380 V a.c. 50/60 Hz (Dual usage)
Rated current	25	25 A
	35	35 A

Suffix code (50A / 70A)

Model	Code	Information
TPR – 2N	□ □ □	1-phase power regulator
Power supply voltage	110 □	110 V a.c. 50/60 Hz (Dual usage)
	220 □	220 V a.c. 50/60 Hz (Dual usage)
	380 □	380 V a.c. 50/60 Hz (Dual usage)
	440 □	440 V a.c. 50/60 Hz (Dual usage)
Rated current	50	50 A
	70	70 A

Thyristor Power Regulator

TPR-2SL Slim type 1-phase power regulator

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
Appearance	CE		CE		CE		CE		
Function	<ul style="list-style-type: none"> Ultra Slim type (60 mm) Improve reliability by separating circuit power and load power (Apply a wide range of power supply circuit) Realized various control methods according to the variety of load. Alarm output is divided as caution and warning. Various protection functions for partial heater break, overcurrent, overheated heat sink, SCR short-circuit 								
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 / 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 VR	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 ~ 70 °C								
Weight	1,388 g		1,478 g		2,820 g		3,100 g		

Suffix code

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
	200	200 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)

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

Thyristor Power Regulator

TPR-2SE Slim type 1-phase power regulator

Specification

Model	Low	TPR-2SE025L	TPR-2SE040L	
	High	TPR-2SE025H	TPR-2SE040H	
Appearance				Temperature Controller
W X H X D	47 X 138 X 151.7			Recorder
Function	<ul style="list-style-type: none"> • Soft start/Soft up/Soft down, • Over heat alarm, • Over current alarm, • Slope setting • Load break alarm, • Output indication, • Power failure alarm, • SCR short alarm 			Digital Counter Timer
Power supply voltage	Low	100 – 240 V a.c.		Analog Timer
	High	100 – 440 V a.c.		Panel Meter
Circuit input power	100 – 240 V a.c. 6 W			Multi Pulse Meter
Power frequency	50 / 60 Hz (Dual usage)			Proximity Sensor
Rated current (40 °C Standard)	25 A		40 A	Photo Sensor
Fuse installation	None			Rotary Encoder
Applying load	Resistive load			Thyristor Power Regulator
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω)		Solid State Relay
	Voltage input	1 – 5 V d.c.		Power Supply
	Contact input	ON/OFF		Control Switch
	External VR	External volume (10 kΩ)		Push Button / Main Switch
Control method	Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control			Cam Switch / Limit Switch
Movement type	Soft start / Soft up, down			Micro / Hoist Switch
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input)			Foot / Mono Lever Switch
Cooling method	Natural cooling			Signal Light
Display method	Display by LED			Terminal Block / Power Buzzer / Fuse Holder / Control Box
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 ~ 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)

Thyristor Power Regulator

TPR-3M Mini 3-phase power regulator

Specification

Model	TPR-3M25L	TPR-3M45L
Appearance	 	
W X H X D	110 X 157.5 X 150	
Function	• Over heat alarm, • Over current alarm, • Load break alarm, • Output indication, • SCR short alarm	
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 % RH	
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.

Thyristor Power Regulator

TPR-3SL Slim type 3-phase power regulator

Specification

Model	Low	TPR-3SL040L	TPR-3SL055L	TPR-3SL070L	TPR-3SL090L	TPR-3SL130L	TPR-3SL160L	Temperature Controller
	High	TPR-3SL040H	TPR-3SL055H	TPR-3SL070H	TPR-3SL090H	TPR-3SL130H	TPR-3SL160H	
Appearance	CE		CE		CE			Recorder
								Digital Counter Timer
Function		<ul style="list-style-type: none"> • Soft start / Soft up, down • Over heat alarm • Over current alarm • Slope setting • Load break alarm • Output indication • Power failure alarm • SCR short alarm 						Analog Timer
Power supply voltage	Low	100 – 240 V a.c.						Panel Meter
	High	380 – 440 V a.c.						
Circuit input power		100 – 240 V a.c. 18 W			100 – 240 V a.c. 20 W			Multi Pulse Meter
Power frequency		50 / 60 Hz (Dual usage)						
Rated current		40 A, 55 A, 70 A, 90 A, 130 A, 160 A						Proximity Sensor
Applying load		Resistive load						
Control Input	Current input	4 – 20 mA d.c. (Impedance : 100 Ω)						Photo Sensor
	Voltage input	1 – 5 V d.c.						
	Contact input	ON / OFF						
	External VR	External volume (10 KΩ)						
Control method		Phase control, Fixed Cycle control, Variable Cycle control, ON/OFF control						Rotary Encoder
Movement type		Soft start / Soft up, down						
Output voltage		More than 98 % of the power supply voltage (In case of maximum current input)						Thyristor Power Regulator
Cooling method		Natural cooling (40 A, 55 A), Forced cooling (70 A, 90 A, 130 A, 160 A)						
Display method		Display by LED						Solid State Relay
Insulation resistance		Min 100 MΩ (Base on 500 V d.c. mega)						
Output control range		0 ~ 100 %						Power Supply
Dielectric strength		3,000 V a.c. 50/60 Hz for 1 min						
Line noise		Noise by noise simulator (2,500 V)						Control Switch
Ambient temperature		0 ~ 40 °C (Without condensation)						
Ambient Humidity		30 ~ 85 % RH						Push Button / Main Switch
Storage temperature		-25 ~ 70 °C						
Weight		4,044 g	4,324 g	9,100 g	9,194 g			Cam Switch / Limit Switch

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	Micro / Hoist Switch
	055	55 A	
	070	70 A	
	090	90 A	
	130	130 A	
	160	160 A	Foot / Mono Lever Switch
Power supply voltage	L	100 – 240 V a.c. (Low)	Signal Light
	H	380 – 440 V a.c. (High)	
Option	-	Fuse built-in	Terminal Block / Power Buzzer / Fuse Holder / Control Box
	N	No fuse	

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

Thyristor Power Regulator

TPR-3SL-EP 1-phase X 3 power regulator

Specification

Model	TPR-3SL040H-EP	TPR-3SL055H-EP	TPR-3SL070H-EP	TPR-3SL090H-EP	TPR-3SL130H-EP	TPR-3SL160H-EP
Appearance						
Function	<ul style="list-style-type: none"> • Soft start / Soft up, down • Over heat alarm • Over current alarm • Slope setting • Load break alarm • Output indication • Power failure alarm • SCR short alarm 					
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 ~ 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
	160	160 A
Power supply voltage	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)

Thyristor Power Regulator

TPR-3N 3 phases thyristor controller

Specification

MODEL	TPR-3N□35MR	TPR-3N□50MR	TPR-3N□60MR	
Appearance				Temperature Controller
W X H X D (mm)	195 X 266 X 150			Recorder
Rated current	35 A	50 A	60 A	Digital Counter Timer
Function	<ul style="list-style-type: none"> • Power failure and fuse break (L,E) alarm output • Overcurrent detection alarm output • Current limit setting • Manual setting (slope setting) 			Analog Timer
Display method	Output displayed by the LED			Panel Meter
Control method	Phase control, ON/OFF control			Multi Pulse Meter
Applying load	Resistive load/Inductance load			Proximity Sensor
Power supply voltage	220, 380, 440 V a.c.			Photo Sensor
Power frequency	50 Hz or 60 Hz (Dual usage)			Rotary Encoder
Output voltage	More than 95% of the input voltage (with the max current input)			Thyristor Power Regulator
Controlling element	SCR			Solid State Relay
Control input	4 - 20 mA ※ 0 - 5 V d.c., 1 - 5 V d.c., 0 - 10 V d.c.			Relay
External volume	External volume (B10 K.Ω)			Power Supply
Alarm output	Power failure and fuse break (L,E) alarm output, Overcurrent detection alarm output, Relay contact output(1a contact), 5 A 250 V a.c. max			Control Switch
Insulation resistance	min 20 MΩ, 500 V d.c. (between input terminal and power terminal)			Push Button / Main Switch
Dielectric strength	For 1 minute at 2,000 V a.c. 50/60 Hz			Cam Switch / Limit Switch
Cooling method	Natural cooling	Forced cooling		Micro / Hoist Switch
Ambient temperature	0 ~ 50 °C (Refer to the ambient temperature characteristic)			Foot / Mono Lever Switch
Ambient humidity	35 ~ 85 % RH (No condensation allowed)			Signal Light
Storage temperature	-25 ~ 70 °C			Terminal Block / Power Buzzer / Fuse Holder / Control Box
Weight	Approx 5,350 g			

Suffix code

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

Thyristor Power Regulator

TPR-3 3 phase power regulator

Specification

Model	TPR-3P□70MR	TPR-3P□100MR	TPR-3P□150MR	TPR-3P□200MR	TPR-3P□250MR	TPR-3P□320MR	TPR-3P□500MR	TPR-3P□600MR
Appearance								
W X H X D (mm)	235×360×180		256×440×200			266×524×225	337×548×237	338×613×253
Function	<ul style="list-style-type: none"> • Power failure and fuse break (L,E) alarm output • Overcurrent detection alarm output • Current limit setting • Soft start down • Manual setting (slope setting) 							
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 VR	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 a.c, 50/60 Hz for 1 min							
Line noise	Noise by noise simulator (2 kV)							
Ambient temperature	0 ~ 40 °C (Without condensation)							
Ambient humidity	35 ~ 85 % RH							
Storage temperature	-25 ~ 70 °C							
Weight	11 kg		15 kg			22 kg	35 kg	40 kg

Suffix code

Model	Code	Description
TPR-3P	□ □	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

Thyristor Power Regulator

TPR-3N 3 phase power regulator

Specification

MODEL	TPR-3N□□□		
Appearance			Temperature Controller
			Recorder
W X H X D (mm)	169 X 361 X 180		Digital Counter Timer
	<ul style="list-style-type: none"> • LED display function • input signal selection • Operation mode selection (resistive load, inductive load) 		Analog Timer
Function	<ul style="list-style-type: none"> • Overcurrent alarm output (OC) • Power failure and fuse break alarm output • Load break alarm (LL) • Alarm output 		Panel Meter
	<ul style="list-style-type: none"> • LED ON when heat sink is overheated (OT) (thermal start fixed to 85 °C) 		Multi Pulse Meter
Number of phase	Three phase		Proximity Sensor
Rated current	70 A, 100 A		Photo Sensor
Control method	Phase control, ON/OFF control		Rotary Encoder
Applying load	Resistive load, inductive load		Thyristor Power Regulator
Power supply voltage	(220, 380, 440 V) a.c. 50/60 Hz(dual usage)		Solid State Relay
Output voltage range	More than 95 % of the input voltage (min load more than 0.5A)		Power Supply
Input signa	4 – 20 mA d.c., 0 – 5, 1 – 5, 0 – 10 V d.c. contact input, manual setting		Control Switch
Output setting range	<ul style="list-style-type: none"> • Slope setting : 50 % (when inductive load is selected) • Output Limit : 0 ~ 100 % • Manual setting : 0 ~ 100 % (selected by the external B 10 KΩ volume or parameter) 		Push Button / Main Switch
Movement method	<ul style="list-style-type: none"> • Soft Up / Soft Down (setting : 0 ~ 50 sec) 		Cam Switch / Limit Switch
Alarm output	<ul style="list-style-type: none"> • Overcurrent alarm (OC) • Power failure and fuse break alarm • Load break (LL)alarm • Overheated heat sink • Relay contact output (1a contact) • 250 V a.c., 10 A max. (resistive load) 		Micro / Hoist Switch
Insulation resistance	Min 100 M Ω , 500 V d.c.		Foot / Mono Lever Switch
Dielectric strength	2,000 V, for 1 min		Signal Light
Cooling method	Forced cooling by the FAN		Terminal Block / Power Buzzer / Fuse Holder / Control Box
Ambient temperature	0 ~ 50 °C		
Ambient humidity	35 ~ 85 % RH (no condensation allowed)		
Storage temperature	-25 ~ 70 °C		
Weight	Approx 5 kg (Included the weight of box)		

Suffix code

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