


# Thyristor Power Regulator

## TPR-3N 3 phases thyristor controller

### Specification

MODEL	TPR-3N□35MR	TPR-3N□50MR	TPR-3N□60MR
Appearance			
W X H X D (mm)	195 X 266 X 150		
Rated current	35 A	50 A	60 A
Function	<ul style="list-style-type: none"> <li>• Power failure and fuse break (L,E) alarm output</li> <li>• Overcurrent detection alarm output</li> <li>• Current limit setting</li> <li>• Manual setting (slope setting)</li> </ul>		
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 a.c.		
Power frequency	50 Hz or 60 Hz (Dual usage)		
Output voltage	More than 95% of the input voltage (with the max current input)		
Controlling element	SCR		
Control input	4 – 20 mA ※ 0 – 5 V d.c., 1 – 5 V d.c., 0 – 10 V d.c.		
External volume	External volume (B10 KΩ)		
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		
Insulation resistance	min 20 MΩ, 500 V d.c. (between input terminal and power terminal)		
Dielectric strength	For 1 minute at 2,000 V a.c. 50/60 Hz		
Cooling method	Natural cooling	Forced cooling	
Ambient temperature	0 ~ 50 °C (Refer to the ambient temperature characteristic)		
Ambient humidity	35 ~ 85 % RH (No condensation allowed)		
Storage temperature	-25 ~ 70 °C		
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

Temperature Controller  
Recorder  
Digital Counter  
Timer  
Analog Timer  
Panel Meter  
Multi Pulse Meter  
Proximity Sensor  
Photo Sensor  
Rotary Encoder  
Thyristor Power Regulator  
Solid State Relay  
Power Supply  
Control Switch  
Push Button / Main Switch  
Cam Switch / Limit Switch  
Micro / Hoist Switch  
Foot / Mono Lever Switch  
Signal Light  
Terminal Block / Power Buzzer / Fuse Holder / Control Box

# 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"> <li>• Power failure and fuse break (L,E) alarm output</li> <li>• Overcurrent detection alarm output</li> <li>• Current limit setting</li> <li>• Soft start down</li> <li>• Manual setting (slope setting)</li> </ul>							
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 kW)							
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		
W X H X D (mm)	169 X 361 X 180	
Function	<ul style="list-style-type: none"> <li>• LED display function • input signal selection • Operation mode selection (resistive load, inductive load)</li> <li>• Overcurrent alarm output (OC) • Power failure and fuse break alarm output</li> <li>• Load break alarm (LL) • Alarm output</li> <li>• LED ON when heat sink is overheated (OT) (thermal start fixed to 85 °C)</li> </ul>	
Number of phase	Three phase	
Rated current	70 A, 100 A	
Control method	Phase control, ON/OFF control	
Applying load	Resistive load, inductive load	
Power supply voltage	(220, 380, 440 V) a.c. 50/60 Hz(dual usage)	
Output voltage range	More than 95 % of the input voltage (min load more than 0.5A)	
Input signa	4 – 20 mA d.c., 0 – 5, 1 – 5, 0 – 10 V d.c. contact input, manual setting	
Output setting range	<ul style="list-style-type: none"> <li>• Slope setting : 50 % (when inductive load is selected) • Output Limit : 0 ~ 100 %</li> <li>• Manual setting : 0 ~ 100 % (selected by the external B 10 KΩ volume or parameter)</li> </ul>	
Movement method	• Soft Up / Soft Down (setting : 0 ~ 50 sec)	
Alarm output	<ul style="list-style-type: none"> <li>• Overcurrent alarm (OC) • Power failure and fuse break alarm • Load break (LL)alarm • Overheated heat sink</li> <li>• Relay contact output (1a contact) • 250 V a.c., 10 A max. (resistive load)</li> </ul>	
Insulation resistance	Min 100 MΩ, 500 V d.c.	
Dielectric strength	2,000 V, for 1 min	
Cooling method	Forced cooling by the FAN	
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

Temperature Controller  
Recorder  
Digital Counter  
Timer  
Analog Timer  
Panel Meter  
Multi Pulse Meter  
Proximity Sensor  
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