MAXWELL Product Catalog

ISO9001:2008 CE









- TEMPERATURE CONTROLLER
- **ROTARY ENCODER**

SOLID STATE RELAY

• TEMPERATURE SENSOR

- PROXIMITY SENSOR
- CAPACITIVE SENSOR

Single Phase Solid State Relay

MS-1DA Series MS-1AA Series DC to AC type AC to AC type

Sensors

Sensors/Capacitive

Relay/Rotary Encoder/Proximity

State

Controller/Solid

A wide range of models with 10 to 120A output currents Maximum load capacity is 660VAC

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Protective cover for greater safety
- AC and DC input versions available
- Fast response and robust
- Zero cross function
- No noise during the operation
- Chassis mount
- Built-in RC snubber





Ordering Information(DC Control AC Type)

$\frac{\text{MS-1DA}}{1} \stackrel{\square}{=} \frac{\square}{3}$

1:Basic Model Nmae

MS-1DA: Maxwell 1 phase SSR(O to AC type)

2:Rated Load Voltage

480VAC 48:

66: 660VAC

3:Rated Load Current

10: 10A

25: 25A

40A 40:

60: 60A

80: 80A

▲ MS-1DA4825: single phase DC to AC SSR(25A load 480VAC) 100A 100:

120: 120A

Ordering Information(AC Control AC Type)



1:Basic Model Nmae

MS-1AA: Maxwell 1 phase SSR(AC to AC type)

2:Rated Load Voltage

48: 480VAC

660VAC 66:

3:Rated Load Current

10: 10A

25: 25A

40: 40A

60: 60A

80: 80A

100: 100A

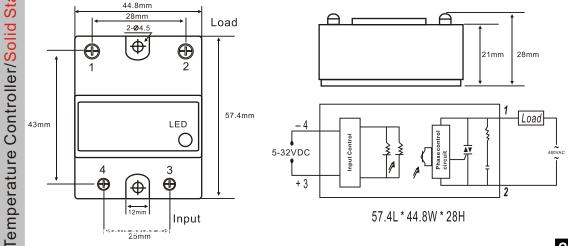
120: 120A ▲MS-1AA4840:single phase AC to AC SSR(40A load 480VAC)

Specifications(DC to AC type)

480V/660V			
5-32VDC			
3-15mA DC			
≤1.5V			
≤8mA			
≤10mS			
2500V AC			
100MΩ/500VDC			
-30°C~+75°C			
Chassis mount			
LED			
0.1KG			

Specifications(AC to AC type)

Load Voltage	480V/660V			
Control Voltage	90~280VAC			
Control Current	3-12mA DC			
On Voltage Drop	≤1.5V			
Off-leakage Current	≤8mA			
On-off Time	≤10mS			
Dielectric Strength	2500V AC			
Insulation Resistance	100MΩ/500VDC			
Ambient Temperature	-30°C~+75°C			
Mounting	Chassis mount			
Indicator	LED			
Weight	0.1KG			



Single Phase Solid State Relay

MS-DD Series

A Wide Range of models with 10 to 120A Output currents and Up to 480VDC output Voltages

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Protective cover for greater safety
- DC input and DC output
- Fast response and robust
- No noise during the operation
- Chassis mount
- Mosfet output





DC to DC type

Sensors

Sensors/Capacitive

Relay/Rotary Encoder/Proximity

Ordering Information(60V DC Load type)

MS-DD		
1	2	3

1:Basic Model Name

MS-DD: Maxwell 1 phase SSR(DC to DC type)

2:Rated Load Voltage

60: 60VDC

3:Rated Load Current

10: 10A 25: 25A

40: 40A

60: 60A 80: 80A

80: 80A 100: 100A

120: 100A 120: 120A ▲ MS-DD6010: DC to DC SSR(10A load 60VDC)

Ordering Information(110V/220V/480V DC Load type)



1:Basic Model Name

MS-DD: Maxwell 1 phase SSR(DC to DC type)

2:Rated Load Voltage

110: 110VDC 220: 220VDC 480: 480VDC

3:Rated Load Current

10: 10A 25: 25A 40: 40A 60: 60A 80: 80A 100: 100A 120: 120A

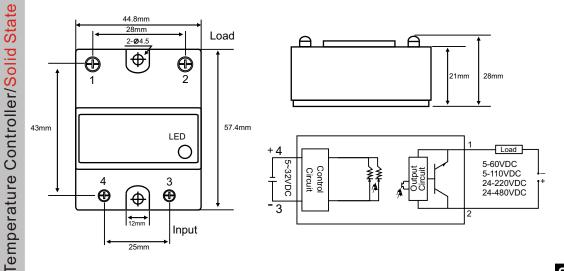
▲ MS-DD11010: DC to DC SSR(10A load 110VDC)

Specifications(60VDC Load type)

Load Voltage	60VDC			
Control Voltage	5-32V DC			
Control Current	5-50mA DC			
On Voltage Drop	≤1.5V			
Off-leakage Current	≤2mA			
On-off Time	≤10mS			
Dielectric Strength	2000V AC			
Insulation Resistance	500M /500VDC			
Ambient Temperature	-30 °C~+75 °C			
Mounting	Chassis Mount			
Indicator	LED			
Weight	0.1KG			

Specifications(110/240/480VDC Load type)

Load Voltage	110VDC / 220VDC / 480VDC			
Control Voltage	5-32V DC			
Control Current	5-25mA DC			
On Voltage Drop	≤2.3V			
Off-leakage Current	≤2mA			
On-off Time	≤10mS			
Dielectric Strength	2000V AC			
Insulation Resistance	500M /500VDC			
Ambient Temperature	-30 °C~+75 °C			
Mounting	Chassis Mount			
Indicator	LED			
Weight	0.1KG			



Three Phase Solid State Relay

MS-3DA Series MS-3AA Series DC to AC type AC to AC type

Sensors/Capacitive

Encoder/Proximity

A Wide Range of models with 10 to 200A Output currents Up to 1200VAC output Voltages

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Protective cover for greater safety
- Built-in RC Snubber
- Fast response and robust
- Zero cross function
- No noise during the operation
- Chassis mount



Ordering Information(DC control AC type)



1:Basic Model Name

MS-3DA: Maxwell 3 phase SSR(DC to AC type)

2:Rated Load Voltage

- 380VAC 38: 48: 480VAC 660VAC 66: 1200VAC 120:
- 3:Rated Load Current

10: 10A 25: 25A 40: 40A 60: 60A

80: A08 100: 100A

120: 120A

150: 150A 200: 200A

▲ MS-3DA3825: Three phase DC to AC SSR(25A load 380VAC)

Ordering Information(AC control AC type)



1:Basic Model Name

MS-3AA: Maxwell 3 phase SSR(AC to AC type)

2:Rated Load Voltage

38: 380VAC 480VAC 48:

660VAC

1200VAC 120:

3:Rated Load Current

10: 10A

25: 25A

40: 40A 60: 60A

A08 80: 100:

100A 120: 120A

200A

150: 150A

200:

▲ MS-3AA3825: Three phase AC to AC SSR(25A load 380VAC)

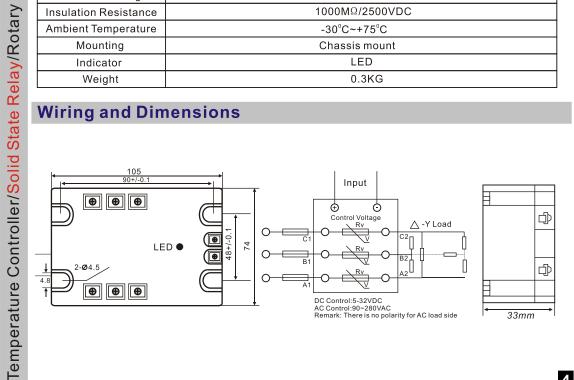
Sensors

Load Voltage	380V / 480V / 660V / 1200V			
Control Voltage	5-32VDC			
Control Current	10-68mA			
On Voltage Drop	≤1.8V			
Off-leakage Current	≤10mA			
On-off Time	≤10mS			
Dielectric Strength	2500V AC			
Insulation Resistance	1000MΩ/2500VDC			
Ambient Temperature	-30°C~+75°C			
Mounting	Chassis mount			
Indicator	LED			
Weight	0.3KG			

Specifications(AC to AC)

Specifications(DC to AC)

Load Voltage	380V / 480V / 660V / 1200V			
Control Voltage	90~280VAC			
Control Current	≤12mA			
On Voltage Drop	≤1.8V			
Off-leakage Current	≤10mA			
On-off Time	≤10mS			
Dielectric Strength	2500V AC			
Insulation Resistance	1000MΩ/2500VDC			
Ambient Temperature	-30°C~+75°C			
Mounting	Chassis mount			
Indicator	LED			
Weight	0.3KG			



Single Phase Power Regulator

MS-1VD Series MS-1VR Series Analog input Potentiometer Control

A Wide Range of models with 10 to 120Amps 220VAC load or 380VAC load Analog input/Potentiometer input

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Protective cover for greater safety
- Resistance input or Voltage input
- Fast response and robust
- No noise during the operation
- Chassis mount



Ordering Information(Resistance input)



1:Basic Model Name

MS-1VR: Maxwell Voltage Regulator, potentiometer control

- 2:Rated Load Voltage
- 38: 380VAC Load
- 3:Rated Load Current

10: 10A 25: 25A 40A 40: 60: 60A 80: 80A

100: 100A 120: 120A

Ordering Information(Analog input)



1:Basic Model Name

MS-1VD: Maxwell Voltage Regulator analog input

2:Rated Load Voltage

22: 220VAC Load 38: 380VAC Load

3:Rated Load Current 10: 10A 25: 25A 40: 40A 60: 60A 80: 80A 100A 100: 120: 120A

4:Input Signal B: 0-10VDC C: 4-20mA

Sensors

Sensors/Capacitive

Encoder/Proximity



Specifications(Analog Input type)

Specifications(Potentiometer input)

Load Voltage

Control Current

On Voltage Drop

Off-leakage Current

Dielectric Strength

Insulation Resistance

Ambient Temperature

Mounting

Indicator

Weight

On-off Time

Control

Load Voltage	220VAC / 380VAC			
Control Voltage	4-20mA/0-10VDC			
Control Current	DC 4-20mA/0-10VDC			
On Voltage Drop	≤1.5V			
Off-leakage Current	≤2mA			
On-off Time	≤10mS			
Dielectric Strength	2000V AC			
Insulation Resistance	500M□/500VDC			
Ambient Temperature	-30Ĉ~+75C°			
Mounting	Chassis mount			
Indicator	LED			
Weight	0.1kg			

380VAC

N/A

≤1.5V

≤2mA

N/A

2500V AC

100M /500VDC

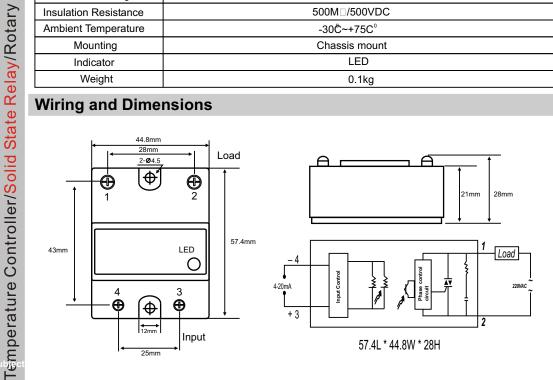
Chassis mount

LED

0.1kg

-30℃~+75C°

0-470K\(\pi\)(220VAC) 0-560K\(\pi\)(380VAC)



Single Phase High Precision Power Regulator

MS-1VD--P Series

High precision Works with multiple inputs Sensors

Sensors/Capacitive

Encoder/Proximity

State Relay/Rotary

Temperature Controller/Solid

A Wide Range of models with 10 to 400Amps 220VAC load or 380VAC load Analog input(0-10VDC,4-20mA,0-5VDC)

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Good precision, support multiple inputs
- Built-in buffer, to protect SCR against surge amps
- Input section and output section isolated
- No noise during the operation
- Chassis mount



Ordering Information



1:Basic Model Name

MS-1VD: Maxwell Voltage Regulator

2:Rated Load Voltage

22: 220VA 38: 380VA

3:Rated Load Current

10A 10: 25: 25A 40A 40: 60: 60A 80A 80: 100: 100A 120: 120A 200: 200A 300: 300A 400: 400A

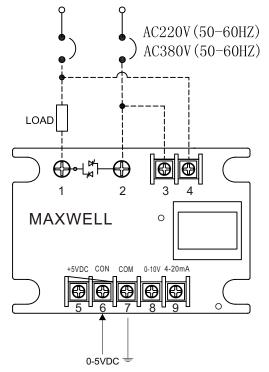
4:Version Code

P: For P series voltage regulator

Specifications

Load Voltage	220VAC / 380VAC			
Control	0-10VDC Rated(1.8VDC -9.8VDC)			
Control	0-5VDC Rated(0.8VDC -4.6VDC)			
Control	4-20mA DC Rated(5.5mA -19mA)			
Dielectric Strength	2500V AC			
Insulation Resistance	100M /500VDC			
Ambient Temperature	-30℃~+75C°			
Mounting	Chassis mount			
Indicator	LED			
Weight	0.38kg			

Connection Diagram



Voltage between 1 and 2 must have the same phase as voltage between 3 and 4

Remark: Terminal 7 for "COM". negative for input signal
Terminal 8 for 0-10VDC input, positive terminals
Terminal 9 for 4-20mA input, positive terminal
Terminal 6 for 0-5VDC input, positive terminal
Terminal 5 is +5VDC aux power, power source for potentiometer manual control

Caution and Warnings

- 1. Appropriate heatsink must be used together with the unit
- 2.All terminals must be fasten tightly otherwise heat will accumulated on terminals
- 3.Cooling fans must be included when amps larger than 20amps and ambient temp higher 40C.
- 4. Voltage between load(terminal 1 and 2) must have the same phase as voltage between terminal 3 and 4.
- 5. Always make sure a correct wiring to enable a appropriate control

Three Phase Power Regulator

MS3-VD Series

Basic Type **Analog Control** Sensors

- Linear phase-shift control, excellent stability, high precision
- Modularized design, safer and reliable
- Small size, easy to install and wiring
- Vacuum welding technology, good quality and robust.
- Rated voltage: Three phase 380VAC(four wires)
- Rated voltage for cooling fans: 220VAC
- Rated amps: 10A/25A/40A/60A/80A/100A/120A
- Frequency: 50/60HZ
- Control signal: 4-20mA, 0-5VDC, 0-10VDC.
- Ambient temperature: Maximum temperature 47C Maximum humidity 90%RH



Ordering Information

MS3 -	-		
1	2	3	4

Ms3

VD: Linear Control

0-5VDC input 3:Rated Load Voltage B: C:

1:Basic Model Name

Maxwell Three Phase Power Regulator

380VAC 38

4:Rated Load Current

10A 25: 25A 40: 40A 60: 40A 80: 80A 100: 100A 120: 120A

5:Control Signal

0-10VDC input 4-20mA input

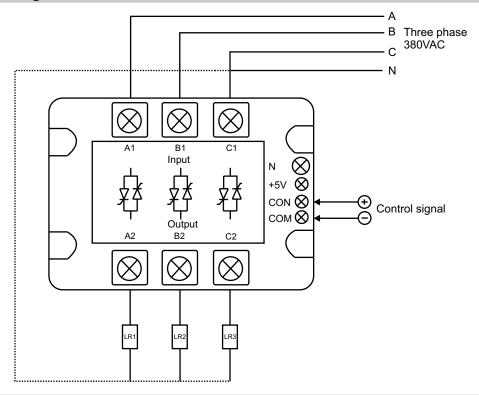
▲ MS3-VD3825A: Three phase power regulator 25A with control signal as 0-5VDC

Specifications

2:Control Type

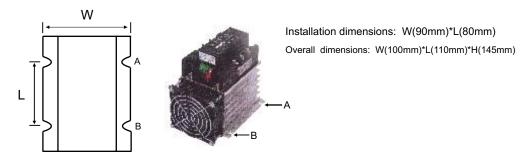
Rated voltage	380VAC			
Rated current	10A/25A/40A/60A/80A/100A/120A			
Operation frequency				
	50/60HZ			
Output mode	Phase output			
	4-20mA			
Control signal	0-5VDC			
	0-10VDC			
Ambient	Maximum temperature 47C/Maximum humidity 90%RH			
Cooling fans	220VAC			

Wiring Diagram



Dimensions

Temperature



Warning and Precautions(very important)

- 1:The main circuit adopts three-phase four wire input without requirement for phase sequence
- 2:SCR with high amps of current flow through, be sure to tighten the terminal (A1 B1 C1 and A2 B2 C2) at its maximum extend, otherwise SCR might be damaged by heat generated around the terminals.
- 3:When Y connection used for load, the center of Y should be connected with zero line, otherwise, relative equilibrium of the three phase is required
- 4:When load greater than 15KW, Heatsink is a must for the SCR, and heat conducting silicon grease should be applied between chassis of SCR and the heatsink, and cooling fan is a must for the heatsink
- 5:Make sure to use semi-conductive fast fuse for overload protection
- 6:Make sure to pick proper heatsinks when load more than 15KW

Three Phase Power Regulator

HMS3-VD Series

Advanced Type Linear Control Sensors

Sensors/Capacitive

State Relay/Rotary Encoder/Proximity

Controller/Solid

Temperature

- Linear phase-shift control, excellent stability, high precision, compact design
- Modularized design, safer and reliable
- Over temperature protection(Maximum temp is 70 C)
- Built-in fast fuse protection
- LED Indicator
- Adjustable minimum and maximum output
- Rated voltage: Three phase 380VAC(four wires),maximum 800VAC
- Rated voltage for cooling fans: 220VAC
- Rated Amps: 10A/25A/40A/60A/80A/100A/120A/150A/200A/250A/300A
- Frequency: 50/60HZ
- Control signal: 4-20mA, 0-5VDC, 0-10VDC.
- Ambient temperature: Maximum temperature 47C Maximum humidity 90%RH



Ordering Information

HMS3 -	—		
1	2	3	4

Section 1:Basic Model Name

HMS3: Maxwell Three Phase Power Regulator

All in one advanced type

Section 2:Control Type

VD: Linear Control

Section 3:Rated Load Voltage

38: 380VAC

Section 4:Rated Load Current

IV.	IUA
25 :	25A
40 :	40A
60 :	40A
80:	80A
100:	100A
120 :	120A
150 :	150A
200:	200A
250 :	250A
300 :	300A

104

Section 5:Control Signal

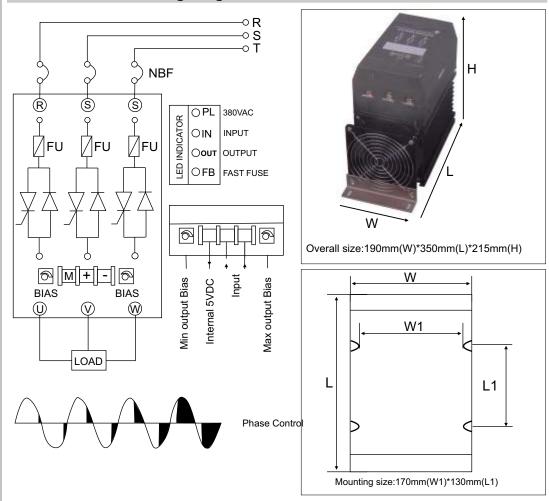
A: 0-5VDC input
B: 0-10VDC input
C: 4-20mA input

▲ HMS3-VD38250C: Three phase power regulator 250A with control signal as 4-20mAVDC

Specifications

Rated voltage	380VAC	
Rated current	10A/25A/40A/60A/80A/100A/120A/150A/200A/250A/300A	
Operation frequency	50/60HZ	
Output mode	Phase output	
	4-20mA	
Control signal	0-5VDC	
	0-10VDC	
Ambient	Maximum temperature 47C/Maximum humidity 90%RH	
Cooling fans	220VAC	

Dimensions and Wiring Diagram



Add-On Features

- Maximum and minimum output adjustable
- LED indicator
- Over temperature protection
- Built-in fast fuse protection
- Compact design

Warning and Precautions(very important)

- 1:The main circuit adopts three-phase four wire input without requirement for phase sequence
- 2:SCR is a product with big current, please keep in mind that terminals(R,S,T) and (U,V,W) shall not be locked too tight, or SCR will be burned by terminal heating.
- 3:When Y connection used for load, the center of Y should be connected with zero line, otherwise, relative equilibrium of the three phase is required
- 4:When the temperature of radiator exceed 70C, the module will stop working automatically, and the only power indicating LED is light on at the moment.

Three Phase Reversing Solid State Relay

MS-3M Series

A Wide Range of models with 10 to 120A Output currents Up to 660VAC output Voltages

- All models with the same universal standard size
- Operation indicator(red LED) enables monitoring operation
- Protective cover for greater safety
- Built-in RC Snubber
- Fast response and robust
- Zero cross function
- No noise during the operation
- Chassis mount



Ordering Information(480V Load Type)

MS-3M		
1	2	3

Section 1:Basic Model Name

MS-3M: Maxwell 3 Reversing SSR

Section 2:Rated Load Voltage

48 480VAC

Section 3:Rated Load Current

10:	10A
25 :	25A
40:	40A
60 :	60A
80:	80A
100:	100A

▲ MS-3M4825: Three phase reversing solid state relay

660V Load

MS-3M		
1	2	3

Section 1:Basic Model Name

MS-3M: Maxwell 3 Reversing SSR

Section 2:Rated Load Voltage

66 660VAC

Section 3:Rated Load Current

10:	10A
25:	25A
40:	40A
60:	60A
80:	80A
100:	100

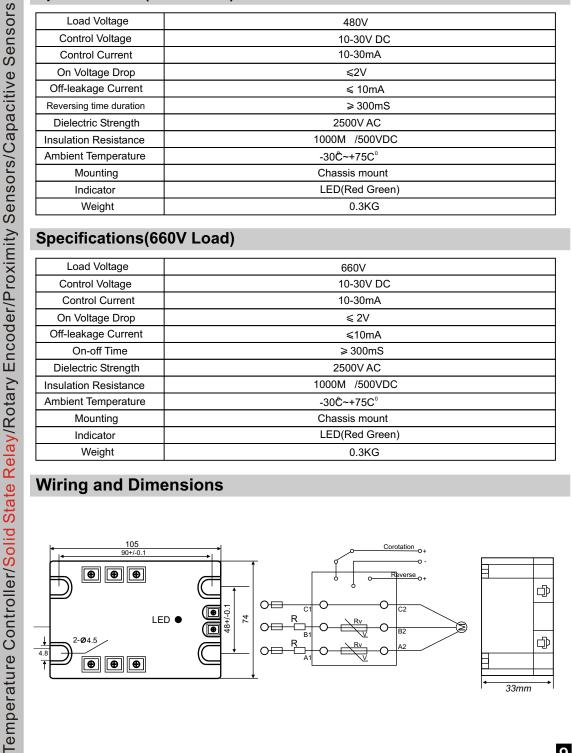
▲ MS-3M6625: Three phase reversing solid state relay

Specifications(480V Load)

Load Voltage	480V	
Control Voltage	10-30V DC	
Control Current	10-30mA	
On Voltage Drop	≤2V	
Off-leakage Current	≤ 10mA	
Reversing time duration	≥ 300mS	
Dielectric Strength	2500V AC	
Insulation Resistance	1000M /500VDC	
Ambient Temperature	-30℃~+75C°	
Mounting	Chassis mount	
Indicator	LED(Red Green)	
Weight	0.3KG	

Specifications(660V Load)

Load Voltage	660V	
Control Voltage	10-30V DC	
Control Current	10-30mA	
On Voltage Drop	≤ 2V	
Off-leakage Current	≤10mA	
On-off Time	≥ 300mS	
Dielectric Strength	2500V AC	
Insulation Resistance	1000M /500VDC	
Ambient Temperature	-30℃~+75C°	
Mounting	Chassis mount	
Indicator	LED(Red Green)	
Weight	0.3KG	



MaxWell

Accessories for SSR

Heatsinks for SSR,SCR. Cooling Fans for SSR

HeatSinks and Fans

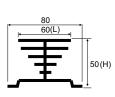
SSR and HeatSink Compatible checking list



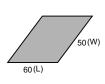
SIZE	Compatible SSR	Remark
60x50x50	10A/25A	Single Phase SSR
72x100x50	40A	Single Phase SSR
100x100x50	60A	Single Phase SSR
80x80x70	80A/100A/120A	Single Phase SSR
150x88x35	10A/25A	Three Phase SSR
110x80x80	40A	Three Phase SSR
150x80x80	60A	Three Phase SSR
110x125x135	80A	Three Phase SSR
150x125x135	100A/120A	Three Phase SSR
170x125x135	150A/200A	Three Phase SSR
	60x50x50 72x100x50 100x100x50 80x80x70 150x88x35 110x80x80 150x80x80 110x125x135 150x125x135	60x50x50 10A/25A 72x100x50 40A 100x100x50 60A 80x80x70 80A/100A/120A 150x88x35 10A/25A 110x80x80 40A 150x88x80 60A 110x125x135 80A 150x125x135 100A/120A

Ordering Information(For Single Phase SSR)





Unit:mm

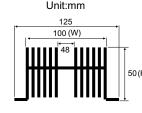


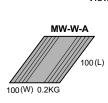
View from top

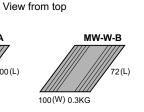
Unit Weight: 0.1KG

MW-I:Compatible with Single Phase SSR with load at 10A and 25A(60*50*50)

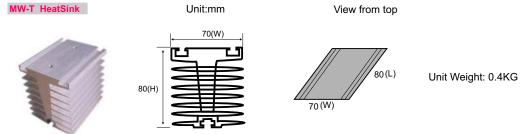








MW-W-A: Compatible with Single Phase SSR with load at 40A(72*100*50) MW-W-B: Compatible with Single Phase SSR with load at 60A(100*100*50)



Compatible SSR: Single Phase SSR with load at 80A/100A/120A.(80*70*80)

Ordering Information(For Three Phase SSR)

MW-L HeatSink

Sensors

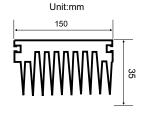
Sensors/Capacitive

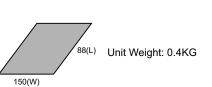
Encoder/Proximity

Relay/Rotary

Temperature Controller/Solid State







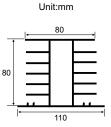
View from the top

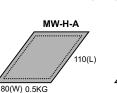
View from the top

Compatible SSR: Three Phase SSR with load at 10A/25A.(150*88*35)

MW-H-A HeatSink
MW-H-B HeatSink





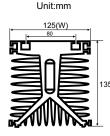




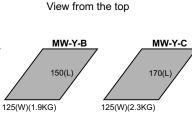
MW-H-A: Compatible with three phase SSR with load at 40A(110*80*80) MW-H-B: Compatible with three phase SSR with load at 60A(150*80*80)

MW-Y-A HeatSink MW-Y-B HeatSink MW-Y-C HeatSink





MW-Y-A 110(L) 125(W)(1.5KG) 12



MW-Y-A:Compatible with three phase SSR with load at 80A(110*125*135) MW-Y-B:Compatible with three phase SSR with load at 100A/120A(150*125*135) MW-Y-C:Compatible with three phase SSR with load at 150A/200A(170*125*135)

MF-1-B-8-110/220



MF-1-B-8- 110:Ball bearing Fans(110V) Size:80mm*80mm, with Metal Protector

MF-1-B-8- 220:Ball bearing Fans(220V)
Size:80mm*80mm, with Metal Protector

, and a

MF-1-B-12-110/220

MF-1-B-12- 110:Ball bearing Fans(110V)
Size:120mm*120mm, with Metal Protector

MF-1-B-12- 220:Ball bearing Fans(220V) Size:120mm*120mm, with Metal Protector

MF-1-S-8-110/220



MF-1-S-8- 110:Sleeve bearing Fans(110V) Size:80mm*80mm, with Metal Protector

MF-1-S-8- 220:Sleeve bearing Fans(220V) Size:80mm*80mm, with Metal Protector



MF-1-S-12-110/220

MF-1-S-12- 110:Sleeve bearing Fans(110V) Size:120mm*120mm, with Metal Protector

MF-1-S-12- 220:Sleeve bearing Fans(220V) Size:120mm*120mm, with Metal Protector

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In case we didn't get your e-mail, please send your inquiry to our alternative mail 1298322983@qq.com Thank you very much