

VMR SERIES MOTOR REVERSING SSR



Features

Motor reversing Solid State Relays for 3-phase industrial motors up to 7 KW.

- Operational voltage: Up to 530VAC rms
- High performance /low cost circuit design.
- Built-in interlock function
- AC or DC control voltage
- LED indication for direction
- Insulation: Reed relay or opt coupler [input-output]2500VAC rms
- Control voltage range:10~30 Vdc or 115 Vac
- This series with Dual SCR Power Hybrid technology provide highly efficient thermal management for greatly increased cyclic life.

Ordering Options

VMR	50	48	T	D
VMR Series	Motor Load Power	Rated Operational Voltage	Switched phase	Control Voltage
Motor Reversing Solid State Relay	10: 1kW 30: 3kW 50: 5kW 70: 7kW	48: 480VAC 53: 530VAC	D:Two leg models T:Three leg models	D: 10-30VDC A: 115VAC

Product Selection

Control Voltage	Output Voltage	Load Power			
		1kW	3kW	5kW	7kW
10 to 30VDC	480VAC	VMR1048DD	VMR3048DD	VMR5048DD	VMR7048DD
10 to 30VDC	480VAC	VMR1048TD	VMR3048TD	VMR5048TD	VMR7048TD
115VAC	480VAC	VMR1048DA	VMR3048DA	VMR5048DA	VMR7048DA
115VAC	480VAC	VMR1048TA	VMR3048TA	VMR5048TA	VMR7048TA
10 to 30VDC	530VAC	VMR1053DD	VMR3053DD	VMR5053DD	VMR7053DD
10 to 30VDC	530VAC	VMR1053TD	VMR3053TD	VMR5053TD	VMR7053TD
115VAC	530VAC	VMR1053DA	VMR3053DA	VMR5053TD	VMR7053DA
115VAC	530VAC	VMR1053TA	VMR3053TA	VMR5053TA	VMR7053DD

Input Specifications

Parameter-list	Specification Limits	
Input Parameter	DC	AC
Control Voltage Range	10-30VDC	115VAC
Input Current [Max.]	30mADC @=12V	35mAAC @=380V
Must Turn-on Voltage	8VDC	85VAC
Must Turn-off Voltage	4VDC	30VAC
Reverse Voltage [Max.]	30VDC	/

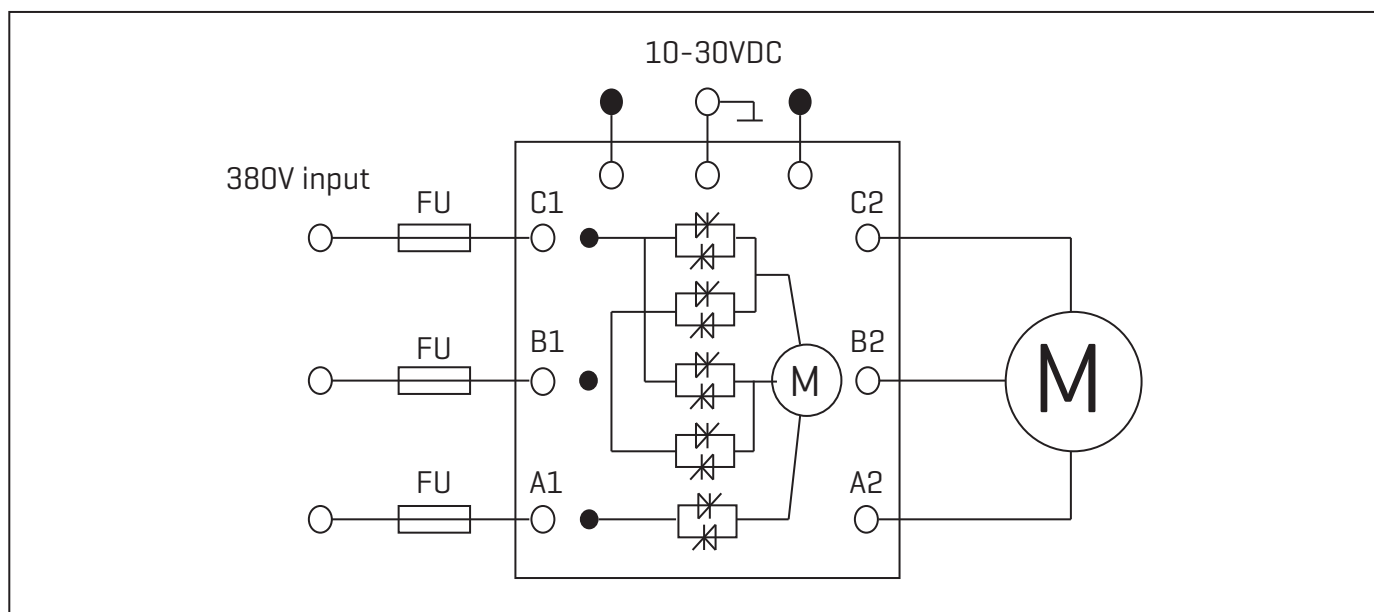
Output Specifications

Output Parameter	Units	Specification Limits			
Model No.: VMR	Amps	1kW	3kW	5kW	5kW
Load Current Range	Arms	3x25	3x40	3x60	3x80
Surge Current 20mSec [Max.]	Arms	250	500	600	1000
Load Voltage Range	Vrms	24 to 530			
Transient Overvoltage	Vpk	≥1200			
Frequency Range	Hz	47 to 63			
Off State dv/dt [Min.]	V/μsec	500			
Off State Leakage Current [Max.]	mArms	≤8			
On State Voltage Drop [Max.]	Vrms	1.8	1.8	1.6	1.6
Thermal Resistance, [Rthjc]	°C/W	0.25	0.22	0.22	0.17
Turn on Time [Max.]	Cycle	1/2			
Turn off Time [Max.]	Cycle	1/2			
Turn on Time [Max.] "A"	mSec	10			

General Specifications [Ta=25°C]

Description	1kW	3kW	5kW	7kW
Dielectric Strength, Input to Output [50/60 Hz]	2500Vrms			
Dielectric Strength, Input/Output to Base [50/60 Hz]	2500Vrms			
Minimum Insulation Resistance [@ 500 VDC]	10 ⁹ Ω			
Maximum Capacitance, Input/Output	0.8pF			
Ambient Operating Temperature Range	-30 to 80°C			
Ambient Storage Temperature Range	-30 to 100°C			
Humidity per IEC60068-2-78	95%			
LED Input Status Indicator	Red and Green			
Baseplate Material	Pure copper			
Weight	430g			

Connection Diagram



Dimensions

