# Heavy Duty Power Relay

- 30 Amp heavy duty power relay.
- Class F coil insulation system for 155°C (311°F) total temperature.
- Coil molded in DuPont Rynite® for environmental protection.
- Rugged construction rivets terminals to base.



## Ordering Information

To Order: Select part number and add the desired coil voltage rating (e.g. MGN1C-AC24).

Base size	Contact form	Model		
Short	SPDT	MGN1C		
	SPST-NO	MGN1A		
	SPST-NO-DM	MGN1X MGN1AM (See note) MGN1B		
	SPST-NO			
	SPST-NC			
	DPST-NO	MGN2A		
Long	DPDT	MGN2C		
	DPDT	MGN2CM (See note)		
Mg series dust cover (optional)		MGCOV		

Note: Magnetic blow-out version.

## Specifications \_\_\_\_\_

#### **■ CONTACT DATA**

Materials	All versions 5/16" diameter Ag-Alloy
Contact UL ratings	30 amp or 1-1/2 hp @ 120 or 240 VAC, 2 hp @ 240 VAC, 3600w @ 120 or 240 VAC (ballast), 30 amp @ 240 VAC, 100,000 cycle (resistive), 20 amp @ 600 VAC, 30 amp @ 28 VDC
UL recognized file number	E41643

## **■ COIL DATA**

## AC

Nominal voltage	Resistance in Ohms ±10%	Nominal coil power	Coil voltages	Coil treatment	Insulation resistance	Pick up voltage at 25°C (77°F)
6 VAC	.85	9.5 VA	Up to 600 volts/60 Hz	Molded Rynite <sup>®</sup> Std. Class F	100 megohms min.	85% or less of nominal
12 VAC	2.85					
24 VAC	11.5					
120 VAC	295					
240 VAC	1170					
480 VAC	4860					

## DC

Nominal voltage	Resistance in Ohms ±10%	Nominal coil power	Coil voltages	Coil treatment	Insulation resistance	Pick up voltage at 25°C (77°F)
6 VDC	18	2 W	Up to 125	Molded Rynite®	100 megohms	75% or less
12 VDC	72		volts	Std. Class F	min.	of nominal
24 VDC	290					
48 VDC	1150					
110 VDC	6050					

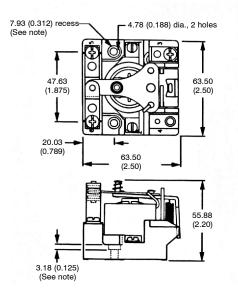
## **■ CHARACTERISTICS**

Operate time		Approximately 30 ms			
Release time		Approximately 30 ms			
Operating ambient temperature		AC: -45° to 80°C (-49° to 176°F) @ 30 amps			
		DC: -45° to 115°C (-49° to 239°F) @ 30 amps			
Coil temperature rise		25°C ambient-continuous duty AC: 70°C (158°F) approx. @ 60 Hz (use at 50 Hz will cause slight increase in coil rise) DC: 35°C (95°F) approx.			
Life expectancy	Electrical at rated load	100,000 operations (minimum)			
	Mechanical	1,000,000 operations			
· ·		2200 VRMS, 60 Hz between contacts 2200 VRMS, 60 Hz between other elements			
Terminals		Screw type			
Weight		Short base version: approx 227 g (8 oz)			
		Long base version: approx. 283 g (10 oz)			

## **Dimensions**

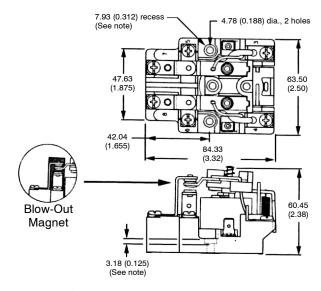
Unit: mm (inch)

## **■** MGN (SHORT BASE)



Note: Recess for screw mounting on units with 300-600 VAC coils

## **■ MGN (LONG BASE)**



Note: Recess for screw mounting on units with 300-600 VAC coils

## ■ MG SERIES DUST COVER (OPTIONAL)



Sealed knock-out holes for standard conduit fittings. Relay mounts on pre-drilled base. Constructed of Aluminum. Snap-action cover release.

127W x 76.2H x 101.6D mm (5W x 3H x 4D in)

## **Omron Electronic Components, LLC**

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Products:

Including: Including without limitation

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  - Delivery and shipping dates are estimates only; and
  - Seller will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
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- Amendment: These Terms constitute the entire agreement between Buyer and Seller relating to the Products, and no provision may be changed or waived unless in writing signed by the parties.
- Severability: If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision.

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