

# Heavy Duty Power Relay MGN

- 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	<b>MGN1C</b>
	SPST-NO	<b>MGN1A</b>
	SPST-NO-DM	<b>MGN1X</b>
	SPST-NO	<b>MGN1AM</b> (See note)
	SPST-NC	<b>MGN1B</b>
	DPST-NO	<b>MGN2A</b>
Long	DPDT	<b>MGN2C</b>
	DPDT	<b>MGN2CM</b> (See note)
Mg series dust cover (optional)		<b>MGCOV</b>

**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® 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 volts	Molded Rynite® Std. Class F	100 megohms min.	75% or less of nominal
12 VDC	72					
24 VDC	290					
48 VDC	1150					
110 VDC	6050					

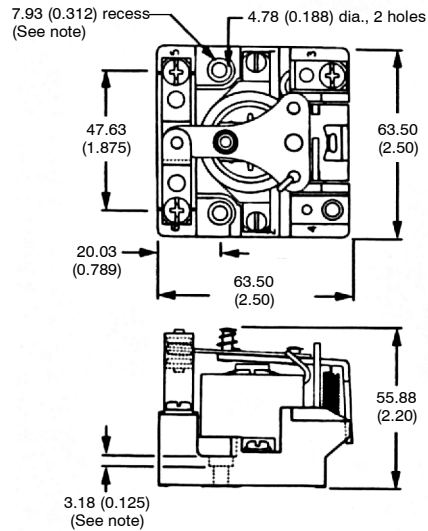
■ CHARACTERISTICS

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
Dielectric strength		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

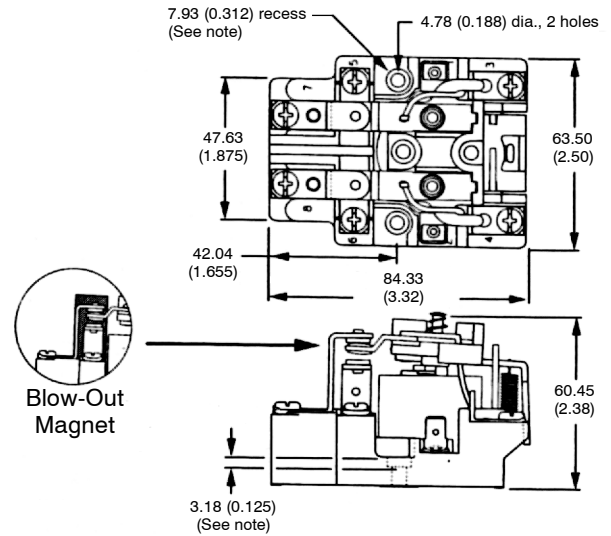
Unit: mm (inch)

## ■ MGN (SHORT BASE)



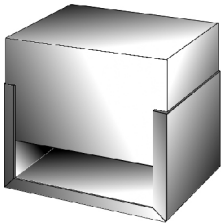
**Note:** Recess for screw mounting on units with 300-600 VAC coils

## ■ 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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  - Seller:** Omron Electronic Components LLC and its subsidiaries
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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.
- Claims:** Any claim by Buyer against Seller for shortage or damage to the Products occurring before delivery to the carrier must be presented in detail in writing to Seller within 30 days of receipt of shipment.

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  - Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
  - Systems, machines, and equipment that could present a risk to life or property.
- Prohibited Use:** NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
  - Motorized Vehicle Application:** USE OF ANY PRODUCT/S FOR A MOTORIZED VEHICLE APPLICATION MUST BE EXPRESSLY STATED IN THE SPECIFICATION BY SELLER.
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**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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