OMRON

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	**MGN1C**
	SPST-NO	**MGN1A**
	SPST-NO-DM	**MGN1X**
	SPST-NO	**MGN1AM** (See note)
	SPST-NC	**MGN1B**
	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® 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					

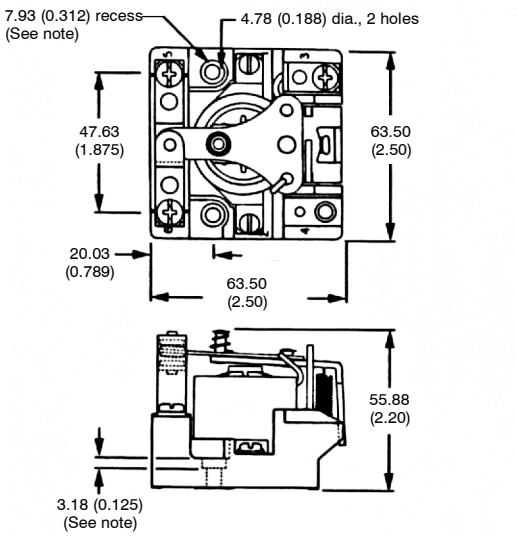
■ CHARACTERISTICS

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

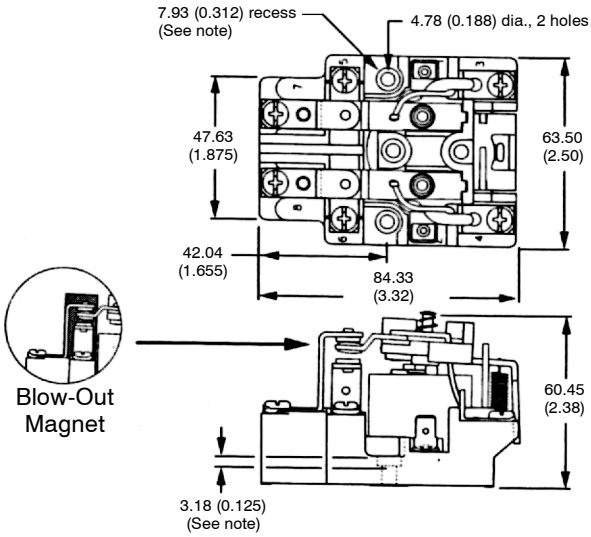
Unit: mm (inch)

■ MGN (SHORT BASE)



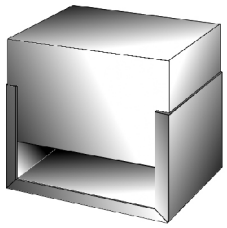
Note: Recess for screw mounting on units with 300-600 VAC coils

■ 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)