



# Heavy Duty Relay

## GH SERIES

The GH Family of heavy duty power relays can be used for motor starting, operating solenoids, lighting, and other high current applications. Also in many heavy industrial and commercial requirements including direct current switching.

### SPECIFICATIONS

#### GENERAL

- Series:
  - GH: Surface Mounting
- Auxiliary Switch: Available in all voltages with form 2C contacts only. Optional: add suffix **S** to end of part number
- Magnetic Blowout. Available in most voltages with form 2C and 1X only. Optional: add suffix **M** to end of part number
- Life:
  - Electrical, approximately 600,000 operations
  - Mechanical, approximately 1,000,000 operations
- Temperature range:
  - Operating: -45°C to +50°C
  - Storage: -45°C to +130°C
- UL Listed and certified

#### COIL

- Voltage:
  - 6 to 480 VAC, 50/60 HZ
  - 6 to 600 VDC
- Power:
  - AC: 10 Volt amperes
  - DC: 2 W
- Pick-up voltage:
  - AC: 85% of nominal voltage
  - DC: 80% of nominal voltage
- Duty: Continuous
- Resistance: 186,000 ohms max. (see Coil Data Table)

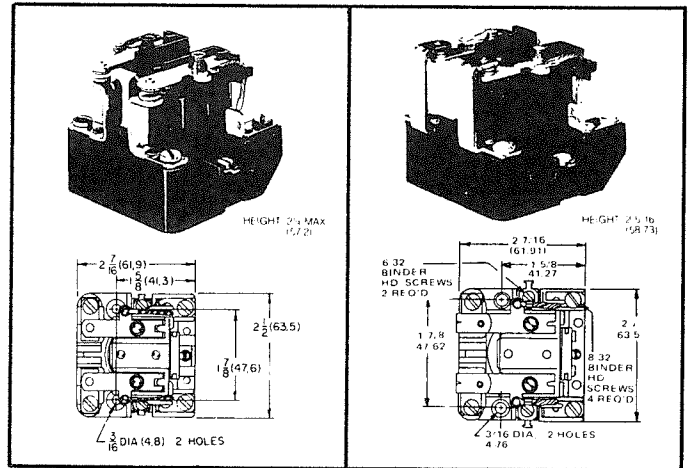
#### CONTACTS

- Arrangements:
 

a. SPDT = FORM 1C	b. DPDT = Form 2C
c. SPST—NC—DB = Form 1Y	d. SPST—No—DM = Form 1X
e. DPST—NO = Form 2A	f. DPST—NC = Form 2B
- Material: Silver Alloy Gold Flash
- Rating:
  - 30 amps Resistance at 300 VAC
  - 50 amps—2HP with Box terminal. Available in Form 1X and 1Y only. Optional: (add suffix F to end of part Number)
- Time:
  - Operate: 40 ms approximately
  - Release: 32 ms approximately

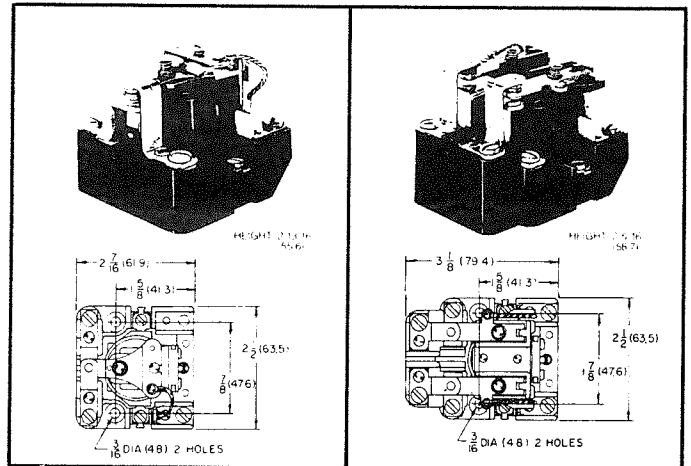
#### PHYSICAL

- Base: Molded Thermosetting
- Dimensions: See Diagrams
- Terminals: Binder head screws, Size 6-32 for coil and 8-32 for contacts
- Weight: Approximately 10oz



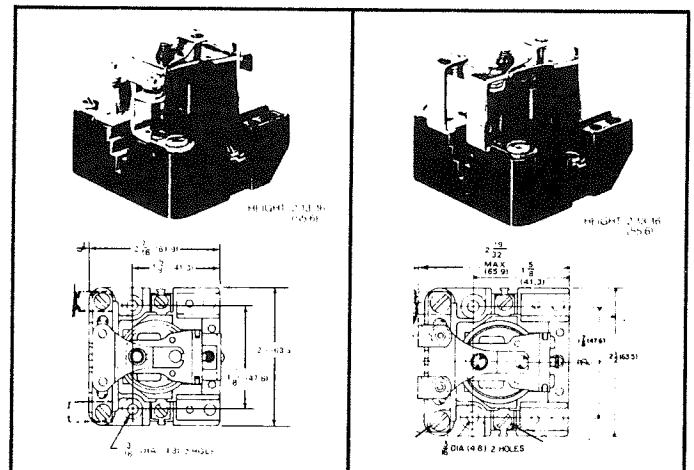
FORM 2A

FORM 2B



FORM 1C

FORM 2C



FORM 1X

FORM 1Y

**EXAMPLE PART NUMBER**

- 1) Series + Contact Form + Voltage + Options(s) = Part Number.
- 2) GH-2C-120A, Describes GH Relay, DPDT, 120VAC Input Voltage.
- 3) GH-2A-110D, Describes GH Relay, DPST-NO, 110VDC Input Voltage.
- 4) GH-1X-120A, Describes GH Relay SPST-NO-DM, 120 AC Input Voltage.
- 5) GH-1X-120AF, Describes same as #4, with 50 amp Contacts.

**CONTACT FORM CHART**

DESIGN	FORM
DPST-NO	2A
DPST-NC	2B
SPDT	1C
DPDT	2C
SPST-NO-DM	1X
SPST-NC-DB	1Y

**COIL DATA TABLE**

VOLTS	NOMINAL POWER	VOLTS	OHMS	NOMINAL POWER
6VAC	10VA	6VDC	18	2W
12VAC	10VA	12VDC	70	2W
24VAC	10VA	24VDC	290	2W
48VAC	10VA	110VDC	6000	2W
120VAC	10VA	220VDC	24000	2W
240VAC	10VA	440VDC	96000	2W
480VAC	10VA	600VDC	186000	2W

**OPTIONAL ACCESSORIES**

**50 AMP CONTACTS:**

50 Amp contacts available in form 1X, 1Y only excluding the following voltages: 48 & 480AC, 440 & 600DC. Add suffix **F** to end of part number. Price adder \$4.50.

Optional Box Terminal additions (2) on contact terminals accommodates wire size 14 thru 6 awg.

19/32 max. (on box terminal types only)

50 amp box terminals accept No. 14 thru No. 6 AWG. wire

8-32 BIND. HD. MACH. SCR. (2) ON CONTACT TERMINALS ACCOMMODATES WIRE SIZED UP TO 10 AWG

6-32 BIND. HD. MACH. SCR. ON COIL TERMINALS ACCOMMODATES WIRE SIZED UP TO 14 AWG

**MAGNETIC BLOWOUT:**

It will quench a DC arc which is generated when the contacts open, available in form 2C, 1X only excluding the following voltages, 480AC, 440 & 600DC. Add suffix **M** to end of part number. Price adder \$4.25.

3 1/8 (79.4) 5/8 (41.3) 2 1/2 (63.5) 1 1/4 (47.6) 3/16 DIA (4.8) 2 HOLES

**AUXILIARY SWITCH:**

When relay contacts transfer the auxiliary switch transfers. Rated at 10 amps @ 120 or 240 AC, resistive load; 1/4 HP at 120 or 240 AC, motor load; 1/2 amp at 110 DC or 1/4 amp at 240 DC resistive load; Add suffix **S** to end of part number, Price adder \$12.00.

4 1/2 MAX (112.7) 1 1/2 (38.1) 1 1/2 (47.6) 2 1/2 (63.5) 3/8 DIA (9.5) 2 HOLES 3 1/8 (79.4)

**RELAY PRICING INFORMATION**

PART NUMBER	1	25	50	100	250	PART NUMBER	1	25	50	100	250
GH-2A-6, 12A						GH-2B-6, 12, 48A					
GH-2A-24, 120A						GH-2B-24, 120A					
GH-2A-240A						GH-2B-240, 480A*					
GH-2A-6D						GH-2B-6, 12, 24D					
GH-2A-12, 24D						GH-2B-48, 110D					
GH-2A-110D						GH-2B-220D					
GH-2A-220D						GH-2B-440, 600D*					
GH-1C-6, 12A						GH-2C-6, 12A					
GH-1C-24, 120A						GH-2C-24, 120A					
GH-1C-240A						GH-2C-240, 480A*					
GH-1C-6, 12, 24D						GH-2C-6, 12, 24D					
GH-1C-110D						GH-2C-110D					
GH-1C-220D						GH-2C-220D					
GH-1X-6, 12A						GH-1Y-6, 12A					
GH-1X-24, 120A						GH-1Y-24, 120A					
GH-1X-240A						GH-1Y-240A					
GH-1X-6D						GH-1Y-6D					
GH-1X-12, 24D						GH-1Y-12, 24D					
GH-1X-110D						GH-1Y-110D					
GH-1X-220D						GH-1Y-220D					

\*PRICE ADDER: ADD \$9.50 EACH IN ANY QUANTITY FOR 480 VAC AND 600 VDC

**MEC MASTER ELECTRONIC CONTROLS**

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