



# General Purpose Relay

## GQ SERIES

This very versatile and rugged MASTERELAY series GQ can be used on a variety of loads and applications ranging from logic circuits to the controls of solenoids, small motors and contactors. The GQ relay has a wide range of applications such as vending machines, copiers, machine tools, elevators, conveyors, packaging equipment, amusement games, communication systems, control panels and many others.

### SPECIFICATIONS

#### GENERAL

- Series:
  - GQ: Plug-in mounting
  - GQF: Tapped core mounting
  - GQM: Stud mounting
  - GQP: P.C. mounting
  - GQS: Surface mounting
- Indicator light: Available in all voltages (optional)
- Test button for manual circuit checking (optional)
- Life:
  - Electrical, approximately 200,000 operations
  - Mechanical, approximately 10,000,000 operations
- Temperature range:
  - Operating:  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
  - Storage:  $-50^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$
- UL listed and CSA approved

#### COIL

- Voltage:
  - 6 to 240 VAC, 50/60 HZ
  - 6 to 110 VDC
- Power:
  - AC: DPDT 2 volt amps, TPDT 2.7 volt amps
  - DC: 1.2W
- Pick-up voltage
  - AC: 85% of nominal voltage
  - DC: 75% of nominal voltage
- Duty: Continuous
- Resistance: 10,000 ohms max. (see Coil Data Table)

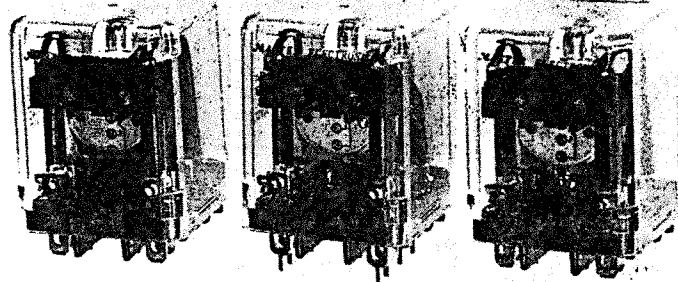
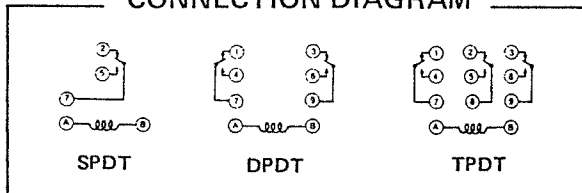
#### CONTACTS

- Arrangement: SPDT, DPDT and TPDT
- Material: Gold flashed silver
- Rating:
  - 10 amps at 30 VDC or 240 VAC resistive
  - 1/3 HP at 120 VAC, 1/2 HP at 240 VAC
- Time:
  - Operate: 25 ms approximately
  - Release: 22 ms approximately

#### PHYSICAL

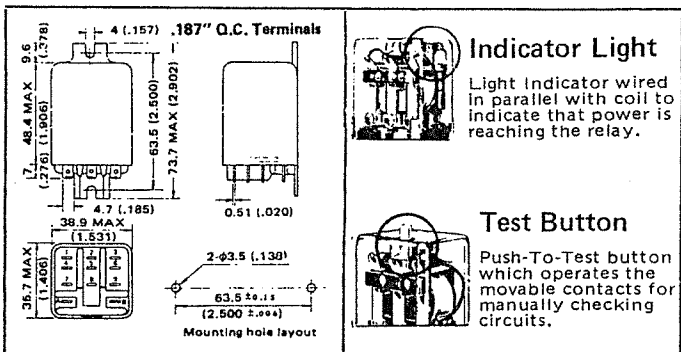
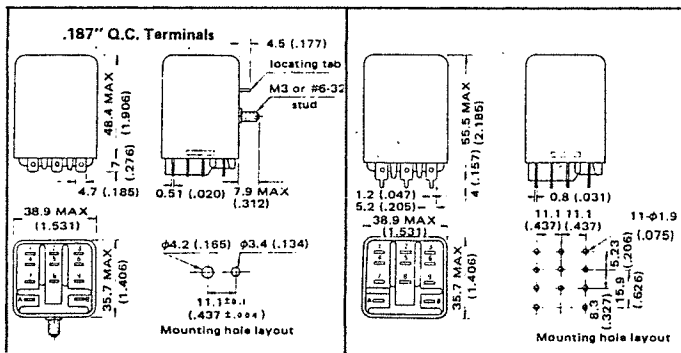
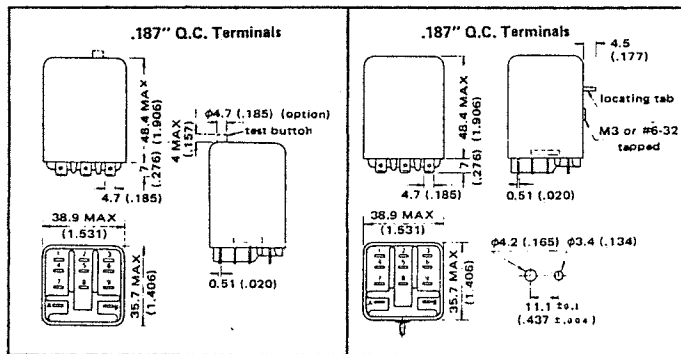
- Dimensions: 1.9 x 1.5 x 1.4
- Enclosure: Transparent, heat-resistant, high-impact cover
- Weight: Approximately 3 oz.

#### CONNECTION DIAGRAM



GQ      GQP      GQS

#### OUTLINE DIMENSIONS



### EXAMPLE PART NUMBER

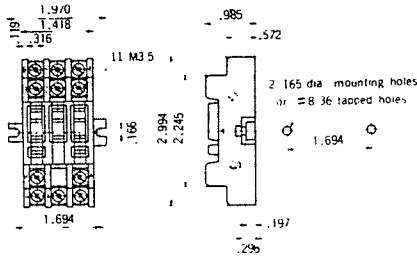
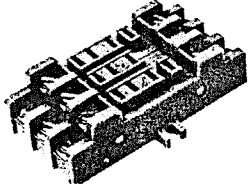
- 1) Series + contacts + voltage + options if required, = part #.
- 2) GQ-DPDT-120A describes GQ relay, DPDT, 120A input voltage.
- 3) GQ-DPDT-120AN, same as above with an indicator light.
- 4) GQP-TPDT-24D-T describes P.C. board mount, TPDT, 24 VDC input voltage with push to test button.
- 5) GQS-DPDT-120A describes surface mount, DPDT, 120VAC input voltage.

### COIL DATA TABLE

Voltage	AC COIL				DC COIL		
	Resistance		Nominal Current in mA		Voltage	Resist.	Nominal Current in mA
	SPDT DPDT	TPDT	SPDT DPDT	TPDT			
6 VAC	5.5	4.5	336	460	6VDC	32	188
12 VAC	21	18	168	230	12VDC	120	100
24 VAC	85	72	84	115	24VDC	470	51
48 VAC	330	280	42	57	48VDC	1,800	27
120 VAC	2250	1700	18	24	110VDC	10,000	11
240 VAC	9110	7200	9	12			

### SOCKETS

#### PART NO. N-13E



SPDT, DPDT, TPDT

#### N-12C

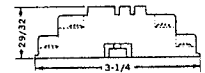
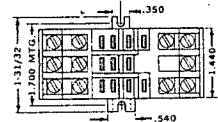


SPDT, DPDT

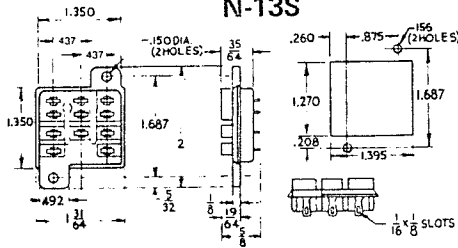
#### N-13C



SPDT, DPDT, TPDT

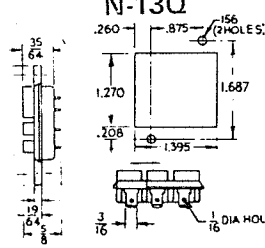


#### N-13S

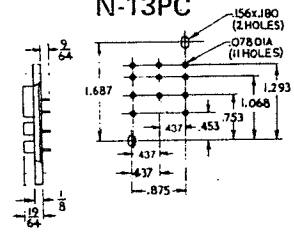


SPDT, DPDT, TPDT

#### N-13Q



#### N-13PC



### RELAY PRICING INFORMATION

PART NUMBER	1-24	25-49	50-99	100-499	250-499	500
GQ-SPDT-6, 12, 24D GQ-SPDT-48, 110D GQ-SPDT-6, 12, 24A GQ-SPDT-48, 120A GQ-SPDT-240A						
GQ-DPDT-6, 12, 24D GQ-DPDT-48, 110D GQ-DPDT-6, 12, 24A GQ-DPDT-48, 120A GQ-DPDT-240A						
GQ-TPDT-6, 12, 24D GQ-TPDT-48, 110D GQ-TPDT-6, 12, 24A GQ-TPDT-48, 120A GQ-TPDT-240A						

- 1) INDICATOR LAMP: Add suffix N to the end of Part Number. Price adder \$1.50 in any quantity.
- 2) TEST BUTTON: Add suffix T to the end of Part Number. Price adder \$ .50 in any quantity.
- 3) GQP and GQS Series. Price adder \$ .30 in any quantity.
- 4) GQF and GQM Series. Price adder \$ .40 in any quantity.

### SOCKET PRICING INFORMATION

Part No.	1-24	25-49	50-99	100-249	250-499	Part No.	1-24	25-49	50-99	100-249	250-499
N-12C N-13C N-13E											

**MEC MASTER ELECTRONIC CONTROLS**  
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