

# Miniature PCB / QC Heavy Duty Power Relay



#### FEATURES

- Improved HG4138 relay by magnetic arc blowout Up to 45A switching capacity PCB + QC termination •
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- TYPICAL APPLICATIONS
- Power supply device ٠
- Industrial control .
- Medical equipment

# CONTACT RATING

Farma	1 Form A (1H)	1 Form B (1D)	1 Form C (1Z)		
Form			NO	NC	
Resistive	45A, 240VAC 45A, 28VDC	15A, 240VAC 15A, 28VDC	30A, 240VAC 30A, 28VDC	15A, 240VAC 15A, 28VDC	

#### **UL/CSA RATING**

Load Type	Voltage	1 Form A (1H)	1 Farma D (1D)	1 Form C (1Z)	
			1 Form B (1D)	NO	NC
General Purpose	240VAC	45A	20A	30A	15A
Resistive	240VAC 28VDC	45A 30A	20A 15A	30A 30A	15A 15A
Motor	240VAC 120VAC	3HP 1.5HP	0.75HP 0.375HP	2HP 1.5HP	0.75HP 0.375HP
LRA/FLA	240VAC 120VAC	120A/45A 147A/33A	45A/15A	75A/30A	30A/10.5A
Tungsten	120VAC	TV8	TV4	TV8	TV4
Ballast	277VAC	15A	4.5A	15A	4.5A
Pilot Lamp	125 - 250VAC	700VA			

#### CONTACT DATA

Material		AgCdO, AgSnOlnO
Initial Contact Resistar	ice	50 mΩ, max. at 0.1A, 6VDC
Service Life	Mechanical	10 <sup>7</sup> ops.
	Electrical	1.5 x 10 <sup>4</sup> ops.

COIL DATA

Coil Voltage Code	Nominal Voltage (VDC)	Resistance $(\Omega) \pm 10\%$	Must Operate Voltage max. (VDC)	Must Release Voltage min. (VDC)
005	5	27	3.75	0.5
006	6	40	4.50	0.6
009	9	97	6.75	0.9
012	12	155	9.00	1.2
024	24	660	18.00	2.4
048	48	2560	36.00	4.8
110	110	10330	82.50	11.0

# CHARACTERISTICS

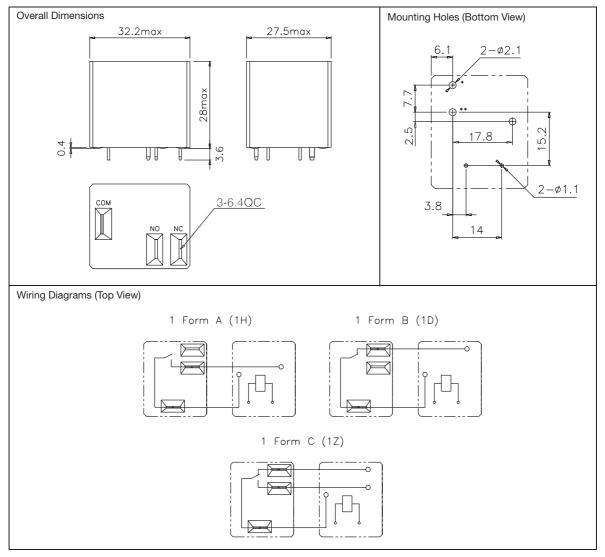
Operate Time	15 ms. typical	
Release Time	10 ms. typical	
Insulation Resistance	1000 MΩ, at 500VDC, 50%RH	
Dielectric Strength	1500 Vrms, 1 min. between open contacts 1500 Vrms, 1 min. between coil and contacts	
Shock Resistance	10 g, 11ms, functional; 100 g, destructive	
Vibration Resistance	DA 1.5mm, 10 - 55 Hz,	
Power Consumption	1W, approx.	
Ambient Temperature	-55°C to 85°C operating	
Weight	32 g, approx.	

# HG4138L

### ORDERING DESIGNATION

Example: HG4138L / 012 - 1Z	0	1	F
Model			
Coil Voltage Code			
Contact Form 1H: 1 Form A; 1D: 1 Form B; 1Z: 1 Form C			
Mounting Version 0: PCB			
Version 1: Sealed; 2: Dust Cover		-	
Thermal Class Nil: UL Class B; F: UL Class F			-

OVERALL DIMENSIONS, MOUNTING HOLES AND WIRING DIAGRAMS (mm)



# NOTES

- 1. All parameters, unless otherwise specified, are measured at ambient temperature 23°C.
- 2. In mounting holes drawing the \* holes is not needed for 1 Form A, the \*\* hole is not needed for 1 Form B.
- 3. To exert optimum electrical life, please remove the tape of sealed version after cleaning process.
- 4. Custom-made services available with operational quantity. Please let us know your special requirements.
- 5. Specifications subject to change without prior notice.