

FEATURES

- Miniaturized structure, light weight
- Improved contact capacity
- Big gap type available for heavy motor load switching

TYPICAL AUTOMOTIVE APPLICATIONS

- Power antenna
- Power window
- Interval wiper
- Slide roof control
- Alarm/anti-theft system
- Automatic mirror adjustment
- Automatic head rest adjustment

CONTACT DATA

Form	1 Form A (H), 1 Form C (Z)	
Max. Switching Current	Make	60A
	Break	20A
Material	AgNi0.15, AgSnOInO	
Initial Contact Resistance	100 mΩ max. at 0.1A, 6VDC	
Max. Switching Voltage	16VDC	
Max. Continuous Current	35A, 10 min; 25A, 1 hr.	
Min. Load	0.1A, 12VDC	
Service Life	Mechanical	10 ⁷ ops.
	Electrical	10 ⁵ ops.

COIL DATA

Coil Voltage Code	Nominal Voltage (VDC)	Resistance (Ω) ±10%		Must Operate Voltage max. (VDC)	Must Release Voltage min. (VDC)
		Standard	Big Gap		
006	6	60	45	3.6	0.6
009	9	135	100	5.4	0.9
012	12	240	180	7.3	1.2
024	24	960	720	14.4	2.4

CHARACTERISTICS

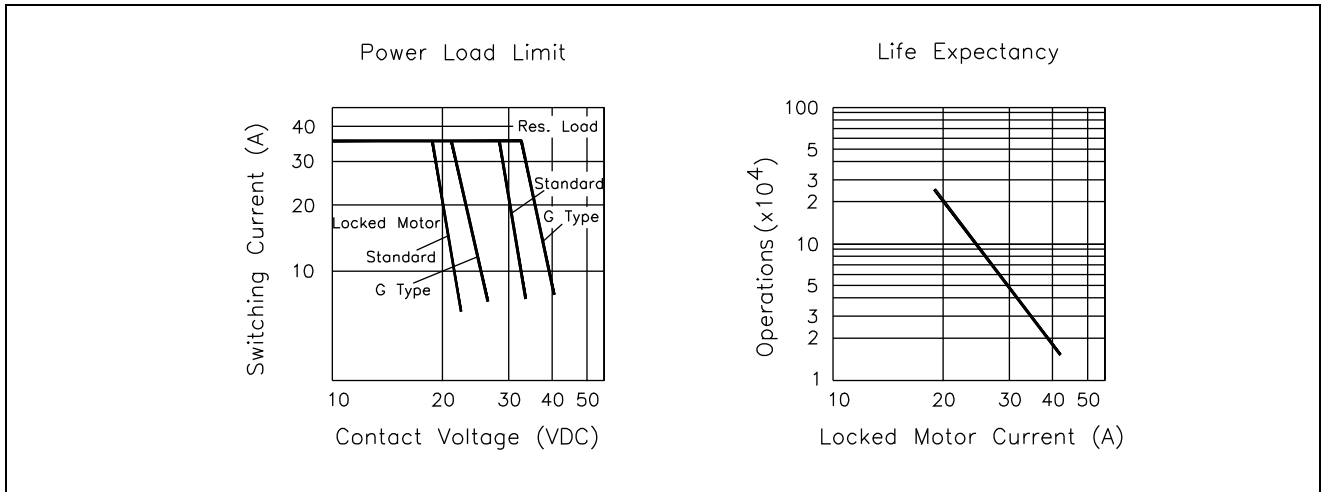
Operate Time	10 ms. typical
Release Time	5 ms. typical
Insulation Resistance	100 MΩ, at 500 VDC, 50%RH
Dielectric Strength	500 Vrms, 1 min.
Shock Resistance	10 g, 11ms.
Vibration Resistance	DA 1.5 mm, 10 - 55 Hz
Drop Resistance	1 M height drop on concrete
Power Consumption	Standard: 0.6W; Big Gap: 0.8W
Ambient Temperature	-30°C to 85°C operating; -40°C to 100°C storage
Weight	6 g, approx.

ORDERING DESIGNATION

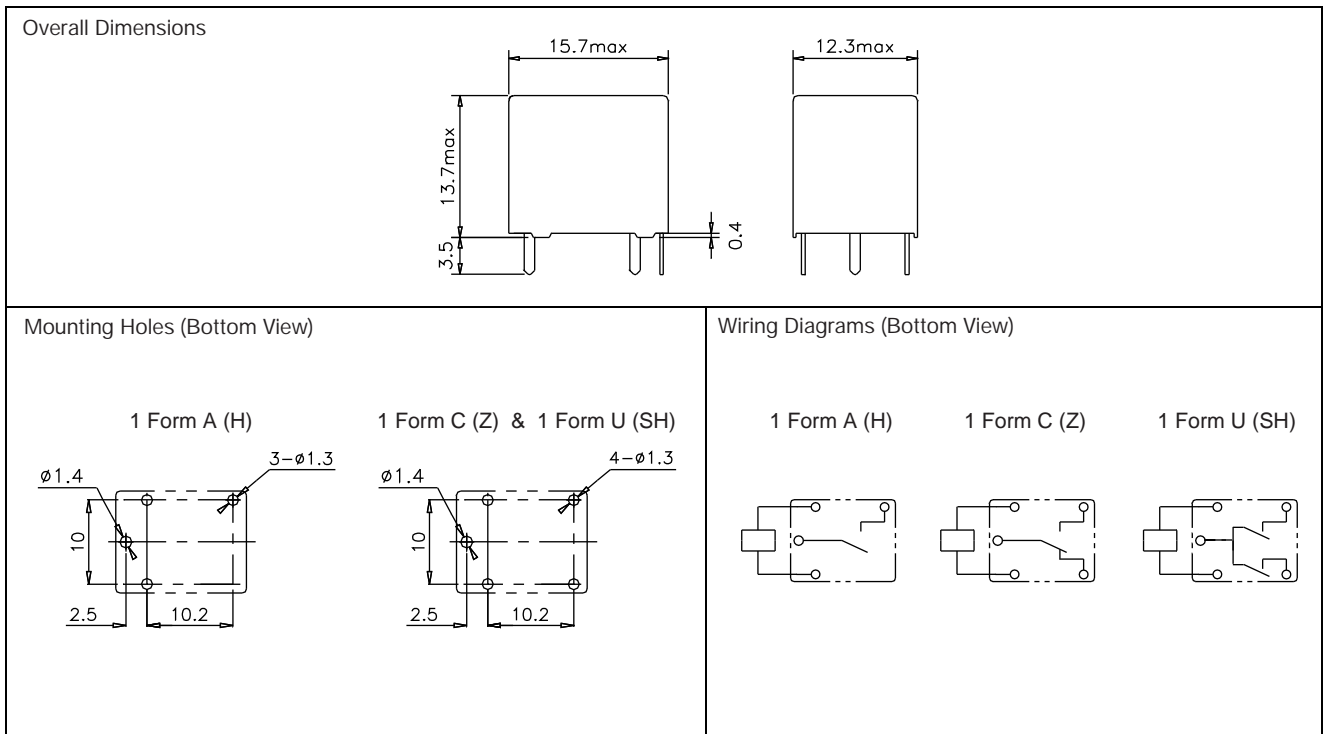
Example:	HG4181 /	012 -	H	1	C	G
Model						
Coil Voltage Code						
Contact Form						
H: 1 Form A; D: 1 Form B; Z: 1 Form C; SH: 1 Form U						
Version						
1: Sealed; 2: Dust Cover						
Contact Material						
Nil: AgNi10; A: AgNi0.15; C: AgCdO; S: AgSnOInO						
Contact Gap						
Nil: Standard; G*: Big Gap						

Note: Big contact gap is not available for 1 Form U (SH)

REFERENCE CURVES



OVERALL DIMENSIONS, MOUNTING HOLES AND WIRING DIAGRAMS (mm)



NOTES

1. All parameters, unless otherwise specified, are measured at ambient temperature 23°C.
2. Maximum make current refers to inrush current of motor load.
3. Electrical life obtained at motor load of locked rotor at 20A, 14VDC with operating frequency of 6 ops/min.
4. Custom-made services available with operational quantity. Please let us know your special requirements.
5. Specifications subject to change without prior notice.

Willow Technologies Limited
 Shawlands Court
 Newchapel Road
 Lingfield, Surrey
 England, RH7 6BL
 Tel: +44 (0) 1342 835234
 Fax: +44 (0) 1342 834306
<http://www.willow.co.uk>
 email: sales@willow.co.uk