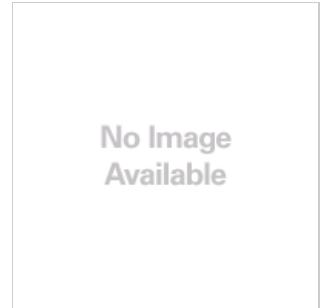


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Two-circuit Limit Switch/Long-life Two-circuit Limit Switch

WLGCA2-8TH



Standard Load Type , Roller Lever

about this Product Family

- Ratings / Performance
- Mounting holes
- Circuits configuration

As of November 20, 2014

Ratings

Shape / Structure	General-purpose Limit switches
Service life	General type
Operating mechanism	Snap action
Actuator	Roller lever (High accuracy, 17.5 dia. * 7, Sintered stainless steel roller, 63 R)
Frequency	50/60 Hz
Switching mechanism	Self-reset mechanism
Contact configuration	2-circuit double break type
Contact form	SPST-NO / SPST-NC
Load	General load
Ratings (AC): Non-Inductive load	Rated voltage: 125 VAC, Resistive load: 10 A (NC) 10 A (NO), Lamp load: 3 A (NC) 1.5 A (NO) Rated voltage: 250 VAC, Resistive load: 10 A (NC) 10 A (NO), Lamp load: 2 A (NC) 1 A (NO) Rated voltage: 500 VAC, Resistive load: 10 A (NC) 10 A (NO), Lamp load: 1.5 A (NC) 0.8 A (NO)
Ratings (AC): Inductive load	Rated voltage: 125 VAC, Inductive load: 10A (NC) 10A (NO), Motor load: 5A (NC) 2.5A (NO) Rated voltage: 250 VAC, Inductive load: 10A (NC) 10A (NO), Motor load: 3A (NC) 1.5A (NO) Rated voltage: 500 VAC, Inductive load: 3A (NC) 3A (NO), Motor load: 1.5A (NC) 0.8A (NO)
Ratings (DC): Non-Inductive load	Rated voltage: 8 VDC, Resistive load: A (NC) 10 A (NO), Lamp load: 6 A (NC) 3 A (NO) Rated voltage: 14 VDC, Resistive load: A (NC) 10 A (NO), Lamp load: 6 A (NC) 3 A (NO) Rated voltage: 30 VDC, Resistive load: A (NC) 6 A (NO), Lamp load: 4 A (NC) 3 A (NO) Rated voltage: 125 VDC, Resistive load: A (NC) 0.8 A (NO), Lamp load: 0.2 A (NC) 0.2 A (NO) Rated voltage: 250 VDC, Resistive load: A (NC) 0.4 A (NO), Lamp load: 0.1 A (NC) 0.1 A (NO)
Ratings (DC): Inductive load	Rated voltage: 8 VDC, Inductive load: 10 A (NC) 10 A (NO), Motor load : 6 A (NC) 6 A (NO) Rated voltage: 14 VDC, Inductive load: 10 A (NC) 10 A (NO), Motor load : 6 A (NC) 6 A (NO) Rated voltage: 30 VDC, Inductive load: 6 A (NC) 6 A (NO), Motor load : 4 A (NC) 4 A (NO) Rated voltage: 125 VDC, Inductive load: 0.8 A (NC) 0.8 A (NO), Motor load : 0.2 A (NC) 0.2 A (NO) Rated voltage: 250 VDC, Inductive load: 0.4 A (NC) 0.4 A (NO), Motor load : 0.1 A (NC) 0.1 A (NO)
Explanation	The above values indicate the steady-state current. Lamp load has an inrush current of 10 times the steady-state current. Inductive load has a power factor of 0.4 Min. (AC) and a time constant of 7 ms Max (DC). Motor load has an inrush current of 6 times the steady-state current.
Inrush current	NC: 30 A NO: 20 A
Conduit size	G1/2
Earth terminal	Without ground terminal
Ambient temperature	Operating: 5 to 120 ...
Ambient humidity	Operating: 35 to 95 % RH

Characteristics

Permissible operating speed	1 mm/s to 1 m/s
Permissible operating speed (Mechanically)	120 operations / 1 minute Max.
Permissible operating speed (Electrically)	30 operations / 1 minute Max.
Contact resistance	25 mOhm Max (Initial value) (Measuring method is contact resistance meter.)
Insulation resistance	Between each terminal of the same polarities: 100 MOhm Min. Between live-metallic part and ground: 100 MOhm Min. Between each terminal and non-live-metallic part: 100 MOhm Min. (at 500 VDC Megger)
Dielectric strength	Between each terminal of the same polarities: 1,000 VAC Between live-metallic part and ground: 2,200 VAC Between each terminal and non-live-metallic part: 2,200 VAC
Durability (Mechanically)	15,000,000 operations Mn. (No load) (Temperature, Humidity conditions: 5 CEL to 35 CEL, 40 %RH to 70 %RH)
Durability (Electrically)	750,000 operations Mn. (Resistive load 10 A at 125 VAC) (Temperature, Humidity conditions: 5 CEL to 35 CEL, 40 %RH to 70 %RH)
Vibration resistance (Malfunction)	Vibration frequency range: 10 to 55 Hz, Double amplitude: 1.5 mm, Contact opening: 1 ms Max. at the free position and the total travel position.
Shock resistance (Destruction)	1,000 m/s ²
Shock resistance (Malfunction)	Contact opening is 1 ms Max. at the free position and the total travel position at 300 m/s ² .
Degree of protection	Heat-resistant type IEC60529 (JEM): IP67 NEMA250: Type3, 4, 13
Applicable standard (UL)	Standard No.: UL508 File number: E76675
Applicable standard (CSA)	Standard No.: C22.2 NO.14 File number: LR45746
Applicable standard (CCC (CQC))	Standard No.: GB14048.5 File number: 2004010305128675

Mounting specification	Front mounting, Back mounting
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Operating characteristics

Operating Force (OF)	Standard value 8.04 N Max.
Release Force (RF)	Standard value 0.88 N Min.
Pre-Travel (PT)	Standard value 5 -0 DEG to 5 +2 DEG
Over-Travel (OT)	Standard value 40 DEG Min.
Movement Differential (MD)	Standard value 3 DEG Max

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