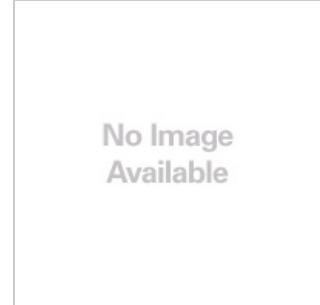


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General-purpose Basic Switch

Z-15GL42-B



Basic Model , Roller Leaf Spring ,
Screw Terminal

about this Product Family

- Ratings / Performance
- Mounting holes
- Type of terminal and form
- Terminals
- Applicable load diagram

As of June 27, 2011

Ratings

Actuator	Roller leaf spring (2.8 * 4.4 dia., Stainless steel roller)
Sensitivity	Standard sensitivity
Operation type	General type
Operating mechanism	Snap action
Switching mechanism	Self-reset type
Contact method	Single-Pole, Double-Throw type
Contact form	SPDT
Contact gap	0.5 mm
Output	Screw terminal (M4)
Load	General load
Rated current	15 A
Ratings (AC) Non-Inductive load	Rated voltage: 125 VAC, Resistive load: 15 A(NC) 15 A(NO), Lamp load: 3 A(NC) 1.5 A(NO) Rated voltage: 250 VAC, Resistive load: 15 A(NC) 15 A(NO), Lamp load: 2.5 A(NC) 1.25 A(NO) Rated voltage: 500 VAC, Resistive load: 10 A(NC) 10 A(NO), Lamp load: 1.5 A(NC) 0.75 A(NO)
Ratings (AC) Inductive load	Rated voltage: 125 VAC, Inductive load: 15 A(NC) 15 A(NO), Mtor load: 5 A(NC) 2.5 A(NO) Rated voltage: 250 VAC, Inductive load: 15 A(NC) 15 A(NO), Mtor load: 3 A(NC) 1.5 A(NO) Rated voltage: 500 VAC, Inductive load: 6 A(NC) 6 A(NO), Mtor load: 1.5 A(NC) 0.75 A(NO)
Ratings (DC) Non-Inductive load	Rated voltage: 8 VDC, Resistive load: 15 A(NC) 15 A(NO), Lamp load: 3 A(NC) 1.5 A(NO) Rated voltage: 14 VDC, Resistive load: 15 A(NC) 15 A(NO), Lamp load: 3 A(NC) 1.5 A(NO) Rated voltage: 30 VDC, Resistive load: 6 A(NC) 6 A(NO), Lamp load: 3 A(NC) 1.5 A(NO) Rated voltage: 125 VDC, Resistive load: 0.5 A(NC) 0.5 A(NO), Lamp load: 0.5 A(NC) 0.5 A(NO) Rated voltage: 250 VDC, Resistive load: 0.25 A(NC) 0.25 A(NO), Lamp load: 0.25 A(NC) 0.25 A(NO)
Ratings (DC) Inductive load	Rated voltage: 8 VDC, Inductive load: 15 A(NC) 15 A(NO), Mtor load: 5 A(NC) 2.5 A(NO) Rated voltage: 14 VDC, Inductive load: 10 A(NC) 10 A(NO), Mtor load: 5 A(NC) 2.5 A(NO) Rated voltage: 30 VDC, Inductive load: 5 A(NC) 5 A(NO), Mtor load: 5 A(NC) 2.5 A(NO) Rated voltage: 125 VDC, Inductive load: 0.05 A(NC) 0.05 A(NO), Mtor load: 0.05 A(NC) 0.05 A(NO) Rated voltage: 250 VDC, Inductive load: 0.03 A(NC) 0.03 A(NO), Mtor load: 0.03 A(NC) 0.03 A(NO)
Ratings explanation	Lamp load has an inrush current of 10 times the steady-state current. Inductive load has a power factor of 0.4 Mn. (AC) and a time constant of 7 ms Max. (DC). Mtor load has an inrush current of 6 times the steady-state current.
Inrush current	NC: 30 A NO: 15 A
Ambient temperature	Operating: -25 to +80 CEL Storage: -25 to 80 CEL (with no icing or condensation)
Ambient humidity	Operating: 35 to 85% RH Storage: 35 to 85% RH (with no icing or condensation)

Characteristics

Speed of permissible operation	0.04 mm/s to 1000 mm/s
Operating specification (Mechanically)	240 operations / 1 minute Max.
Operating specification (Electrically)	20 operations / 1 minute Max.
Contact resistance	15 mOhm Max. (Initial value) Measuring method is voltage drop method at 1 A, 6 to 8 VDC.
Insulation resistance	Between each terminal of the same polarities: 100 MOhm Mn. Between live-metallic part and ground: 100 MOhm Mn. Between each terminal and non-live-metallic part: 100 MOhm Mn. (at 500 VDC Megger)
Dielectric strength	Between each terminal of the same polarities: 1,000 VAC Between live-metallic part and ground: 2,000 VAC Between each terminal and non-live-metallic part: 2,000 VAC (50/60 Hz for 1 min)
Mechanical durability	10,000,000 operations Mn.
Electrical durability	500,000 operations Mn. (rating load)
Vibration resistance (Malfunction)	Vibration frequency range: 10 to 55 Hz, Double amplitude: 1.5 mm, Malfunction: 1 ms max. at the free position and the total travel position.
Shock resistance (Destruction)	1,000 m/s**2
Shock resistance (Malfunction)	Malfunction time is 1 ms Max. at the free position and the total travel position at 200 m/s**2.
Degree of protection	General type IEC60529 (JEM): IP00
Applicable standard (UL)	Standard No.: UL508 File No.: E41515
	Standard No. : CSAC22 2 No.55

Applicable standard (CSA)	Standard No.: CSA C22.2 No. 50 File No.: LR21642
Applicable standard (TUV)	Standard No.: EN61058-1 File No.: R9451585
Applicable standard (CCC (CQC))	Standard No.: GB14048.5
Applicable standard (EC Directive (Low Voltage Directive))	2006/95/EC
Mounting Method	Mounting with screw

Operating characteristics

Operating Force (OF)	Standard value 5.1 N Max.
Release Force (RF)	Standard value 0.98 N Min.
Pre-Travel (PT)	Reference value 3.5 mm Max.
Over-Travel (OT)	Standard value 2 mm Min.
Movement Differential (MD)	Standard value 0.5 mm Max.
Free Position (FP)	Standard value 24 mm Max.
Operating Position (OP)	Standard value 20.9 +/- 0.4 mm

As of June 27, 2011

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