

- Switches
- Limit Switches
- General-purpose Vertical
- D4C
- D4CC
- WL, WLM
- HL-5000
- D4A-□N
- General-purpose Horizontal
- High-precision Switches
- Touch Switches
- Multi-pole Switches
- Limit Switch Connectors
- On-site Flexible Rod Switches

- Sensors
- Switches
- Safety Components
- Relays
- Control Components
- Automation Systems
- Motion & Drives
- In Addition

- Cautions

- Applications

- Item A to Z Index

Two-circuit Limit Switch/Long-life

Two-circuit Limit Switch

WLCA2-TS



Standard Load Type , Roller Lever (R38) , With Ground Terminal , 1/2-14NPT

▶Inquiry of WLCA2-TS

Products links

Find OMRON IA Products in your country

Get more support via Products links, such as manuals and CAD files.

Share

Similar items

- WLCA32-41
- WLCA32-41G
- WLCA32-41LD
- Item index of WL, WLM

- Ratings / Performance
- Mounting holes
- Circuits configuration

Ratings

Shape / Structure	General-purpose Limit switches
service life	General type
Operating mechanism	Snap action
Actuator	Roller lever 17.5 dia. * 7, Sintered stainless steel roller, 38 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: 10 A (NC) 10 A (NO), Motor load: 5 A (NC) 2.5 A (NO) Rated voltage: 250 VAC, Inductive load: 10 A (NC) 10 A (NO), Motor load: 3 A (NC) 1.5 A (NO) Rated voltage: 500 VAC, Inductive load: 3 A (NC) 3 A (NO), Motor load: 1.5 A (NC) 0.8 A (NO)
Ratings (DC): Non-Inductive load	Rated voltage: 8 VDC, Resistive load: 10 A (NC) 10 A (NO), Lamp load: 6 A (NC) 3 A (NO) Rated voltage: 14 VDC, Resistive load: 10 A (NC) 10 A (NO), Lamp load: 6 A (NC) 3 A (NO) Rated voltage: 30 VDC, Resistive load: 6 A (NC) 6 A (NO), Lamp load: 4 A (NC) 3 A (NO) Rated voltage: 125 VDC, Resistive load: 0.8 A (NC) 0.8 A (NO), Lamp load: 0.2 A (NC) 0.2 A (NO) Rated voltage: 250 VDC, Resistive load: 0.4 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
Protective circuit	Classification of protection against electric shock: Class I Short-circuit protective device: 10 A fuse type gI or gG (IEC269)
Conduit size	1/2-14NPT
Earth terminal	With ground terminal
Ambient temperature	Operating: -10 to 80 CEL (with no icing or condensation)
Ambient humidity	Operating: 35 to 95%RH (with no icing or condensation)

Characteristics

Permissible operating speed	1 mm/s to 1 m/s
Permissible operating frequency (Mechanically)	120 operations / 1 minute Max.
Permissible operating frequency (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 (50/60 Hz for 1 min)
Durability (Mechanically)	15,000,000 operations Min. (No load) (Temperature, Humidity conditions: 5 CEL to 35 CEL, 40 %RH to 70 %RH)
Durability (Electrically)	750,000 operations Min. (Resistive load 10 A at 125 VAC) (Temperature, Humidity conditions: 5 CEL to 35 CEL, 40 %RH to 70 %RH)
Pollution degree	3 (EN60947-5-1)
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/s2
Shock resistance (Malfunction)	Contact opening is 1 ms Max. at the free position and the total travel position at 300 m/s2.
Degree of protection	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 (TUV)	Standard No.: EN60947-5-1 File number: J50022353
Applicable standard (CCC(CQC))	Standard No.: GB14048.5 File number: 2004010305128675
Applicable standard (EC Directive (Low Voltage Directive))	2006/95/EC
Mounting specification	Front mounting, Back mounting

Operating characteristics

Operating Force (OF)	Standard value 13.34 N Max.
Release Force (RF)	Standard value 2.23 N Min.
Pre-Travel (PT)	Standard value 15 +/- 5 DEG
Over-Travel (OT)	Standard value 30 DEG Min.
Movement Differential (MD)	Standard value 12 DEG Max.

As of April 16, 2012