

Smart Circuit Breaker TOSMR1 Series



Company Code

TO

Maximum Current Frame

40

Communication method:

W - Wi-Fi, R - RS 485
Z - Zigbee, L - LTEM - Matter

C - Curve C
B - Curve B

Ambient Voltage:

Blank:
Alternating Current
DC:
Direct Current

SMR1

Series Code

J

Blank:
Without Metering Function
L:
With Metering Function

W

Platform Technical Support:
T - Tuya, E - eWeLink
X - Mi, C - Customized
M - Tasmota

T

C

40

Current Frame:
16, 20, 32, 40

DC

Smart Circuit Breaker TOSMR1 Series

TOSMR1 series upgrades your energy management, gracefully replacing traditional DPN RCBO product with a smart formfactor. This product range not only saves space but also integrates intelligent control and energy monitoring functions, offering comprehensive protection against leakage, over-voltage and under-voltage. Its advanced design ensures efficient and reliable electrical safety, regardless of space size or installation distance.



**Remote
Control**



**Voice
Control**



**Time
Mode**



**Circuit
Protection**



**Electricity
Consumption**



**Real-Time
Power / Current / Voltage**



**Temperature
Protection**



**Operation
Log**



**DIN Rail
Installation**



**Maintenance
Mode**



**Leakage
Protection**

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⚡ Over-current Protection

Threshold Setting:

TOSMR1-40: 20 - 40A Default: 40A

TOSMR1-20: 1 - 40A Default: 20A

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

+⚡ Over-voltage Protection

Threshold Setting: 245V - 295A

Default: 280V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

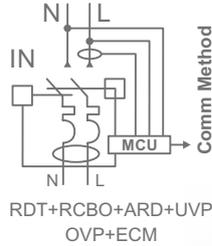
-⚡ Under-voltage Protection

Threshold Setting: 145V - 220A

Default: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

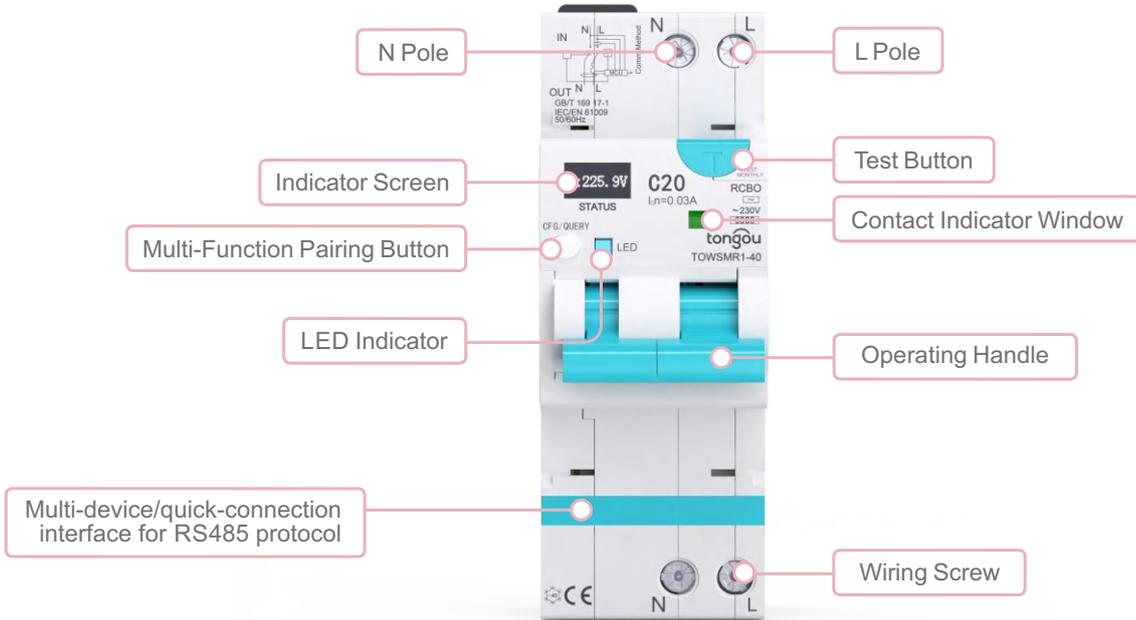


LED Indicator

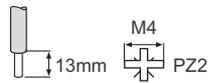
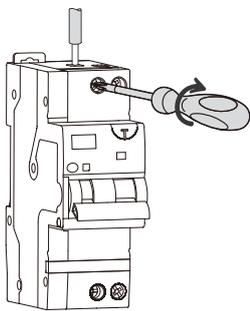
-  The LED indicator shows a steady blue light to indicate that the device is disconnected.
-  The LED indicator shows a steady red light to indicate that the device is connected.
-  The LED indicator shows red and blue lights alternately flashing slowly, indicating that the device is configured but not connected to the router.
-  The LED indicator shows red and blue lights alternately flashing quickly, indicating that the device has lost configuration.
-  The LED indicator shows red light flashing slowly to indicate the initial state.
-  The LED indicator shows red light flashing quickly to indicate the status of the network pairing.

PRODUCT MODEL	TOSMR1-40-JW	TOSMR1-40-JZ	TOSMR1-40-JR	TOSMR1-40-JL	TOSMR1-40-JM
Standards	IEC/EN 61009, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description	2P				
MCU Power Rated Operational Voltage U _e (V)	AC 145V - 230V				
Phase Line Operational Voltage U _e (V)	AC 230V				
Frequency Hz	50/60Hz				
Current Frame I _n (A)	16, 20, 32, 40				
Rated Residual Operating Current I _{Δn} (mA)	10, 30, 100				
Residual Current Type	AC, A				
Curve Code	B, C, D				
Rated Insulation Voltage U _i (V)	AC 500V				
Rated Ultimate Short-circuit Breaking Capacity I _{cu} (kA)	6kA				
Operational Safety	Physical Safety Lock, which prevents the device from being closed once engaged				
Communication Protocol	TOSMR1-40-JW	TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n			
	TOSMR1-40-JZ	Zigbee (2.400~2.483GHz) IEEE 802.15.4			
	TOSMR1-40-JR	Modbus-RTU			
	TOSMR1-40-JL	LTE Cat.1: LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/38/39/40/41 (2535~2655MHz) LTE-FDD: B1/B3/B5/B7/B8/B20/B28* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800			
	TOSMR1-40-JM	TCP/UDP: Matter			
Energy Consumption Measurement Accuracy	Class 1.0				
Monitoring Physical Data	Real-time Voltage, Real-time Current, Real-time Power (Forward/Reverse), Power Factor, Power Consumption (Forward/Reverse), Temperature, Switch State, Device Operating Status, Frequency				
Function Description	Multiple Timing, Over-voltage Protection, Under-voltage Protection, Over-current Protection, Over-Power Protection, Temperature protection, Short Circuit Protection, Earth Leakage Protection, Auto-reclosing, Remote Control, Voice Control				

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Connection



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 40A	1.8 N.m		
		1 - 10mm ²	1 - 6mm ²

Dimensions (mm)

