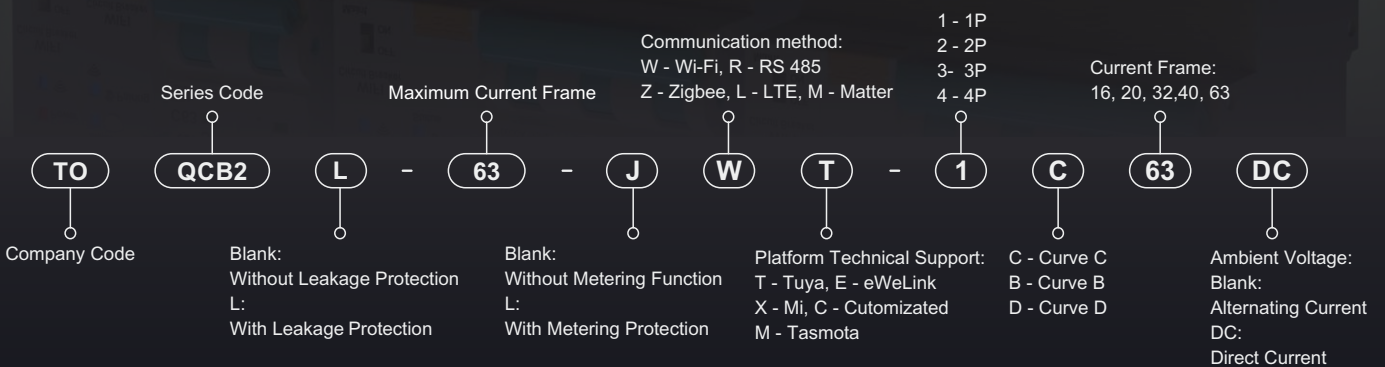


# Smart Circuit Breaker TOQCB2L Series



# Smart Circuit Breaker **TOQCB2L Series**

Tongou envisions a future of smart electricity consumption, ensuring safety, efficiency, and seamless integration with intelligent automation systems through advanced electrical protection, leakage protection, efficient energy management, and streamlined power maintenance.



**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**

## I TOQCB2L-63 2P

### ⚡ Over-current Protection

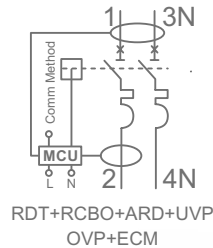
Threshold Setting: 1 - 63A
Default: 63A
Status Setting: Off/Alarm/Trip
Electronic Component Response Time: 3s

### +⚡ 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

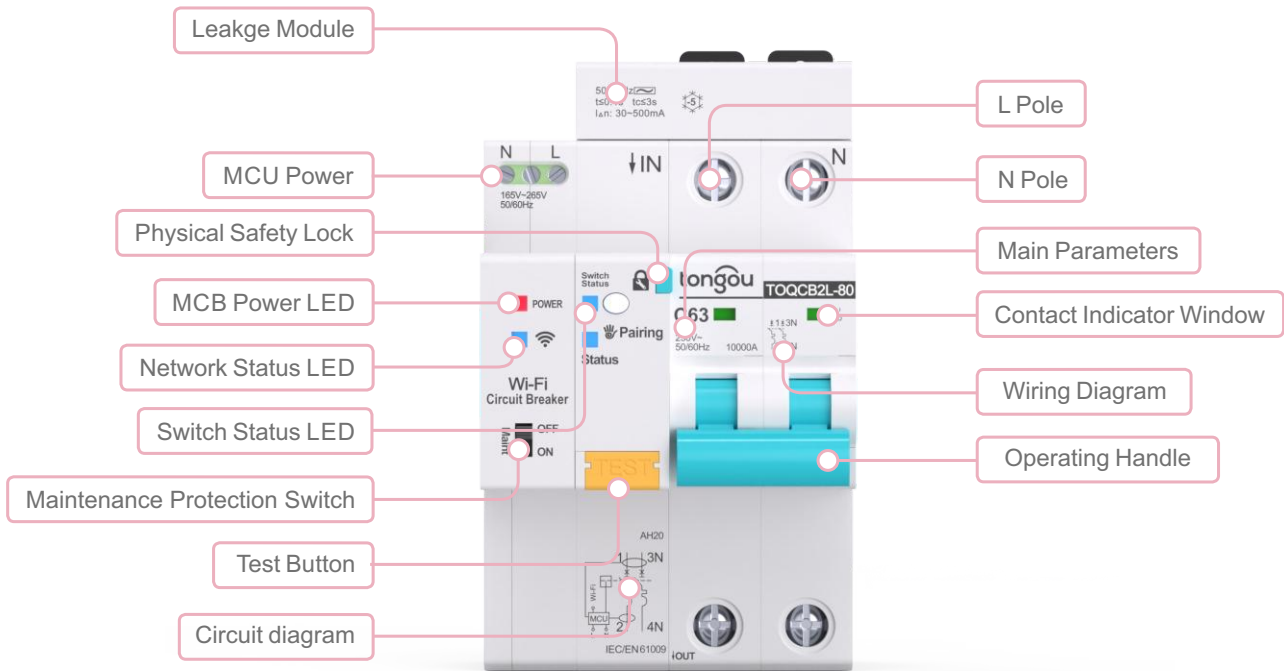


### LED Indicator

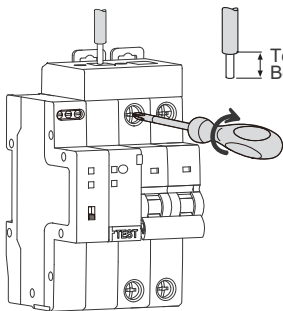
-  The switch Status LED steady blue, indicating that circuit breaker is disconnected.
-  The switch Status LED steady red, indicating that circuit breaker is closed.
-  The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
-  The network LED flashing red quickly indicates that circuit breaker is in pairing mode.
-  The network LED flashing blue slowly indicates that the circuit breaker is in the connected mode.

PRODUCT MODEL	TOQCB2L-63-JW	TOQCB2L-63-JZ	TOQCB2L-63-JR	TOQCB2L-63-JL	TOQCB2L-63-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	Ue (V) AC 145V - 230V				
Phase Line Operational Voltage	Ue (V) AC 230V				
Frequency	Hz 50/60Hz				
Current Frame	In (A) 16, 20, 32, 40, 63				
Rated Residual Operating Current	Idn (mA) 30, 100, 300, 500				
Residual Current Type	AC, A				
Curve Code	B, C, D				
Rated Insulation Voltage	Ui (V) AC 500V				
Rated Ultimate Short-circuit Breaking Capacity	Icu (kA) 10kA				
Short Circuit Protection	acc. to IEC/EN 60947-2, IEC/EN 60898-1				
Operational Safety	Physical Safety Lock, which prevents the device from being closed once engaged				
Communication Protocol	TOQCB2L-63-JW	TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n			
	TOQCB2L-63-JZ	Zigbee (2.400~2.483GHz) IEEE 802.15.4			
	TOQCB2L-63-JR	Modbus-RTU			
	TOQCB2L-63-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/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800			
	TOQCB2L-63-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, Phase Angle, 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, Auto-reclosing, Remote Control, Voice Control				
Mounting Support	DIN Rail 35mm				

TOQCB2L-63 2P

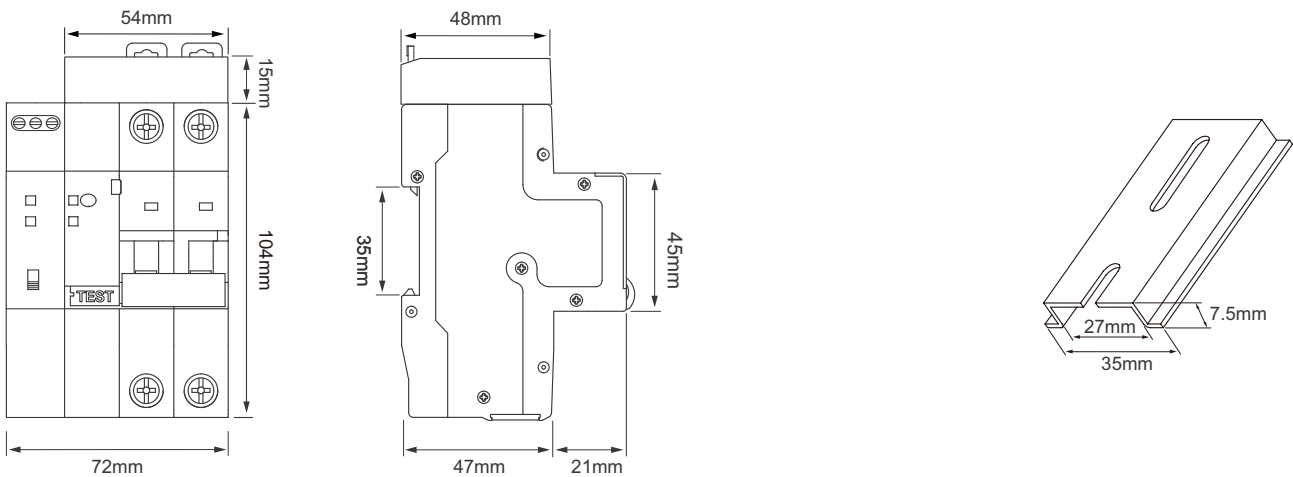


Connection



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 40A	2.5 N.m	1 - 10mm <sup>2</sup>	1 - 6mm <sup>2</sup>
50 - 63A	2.5 N.m	16 - 25mm <sup>2</sup>	1 - 16mm <sup>2</sup>

Dimensions (mm)



## TOQCB2L-63 3P

### Over-current Protection

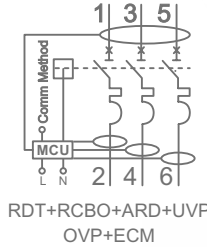
Threshold Setting: 1 - 63A  
 Default: 63A  
 Status Setting: Off/Alarm/Trip  
 Electronic Component Response Time: 3s

### 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

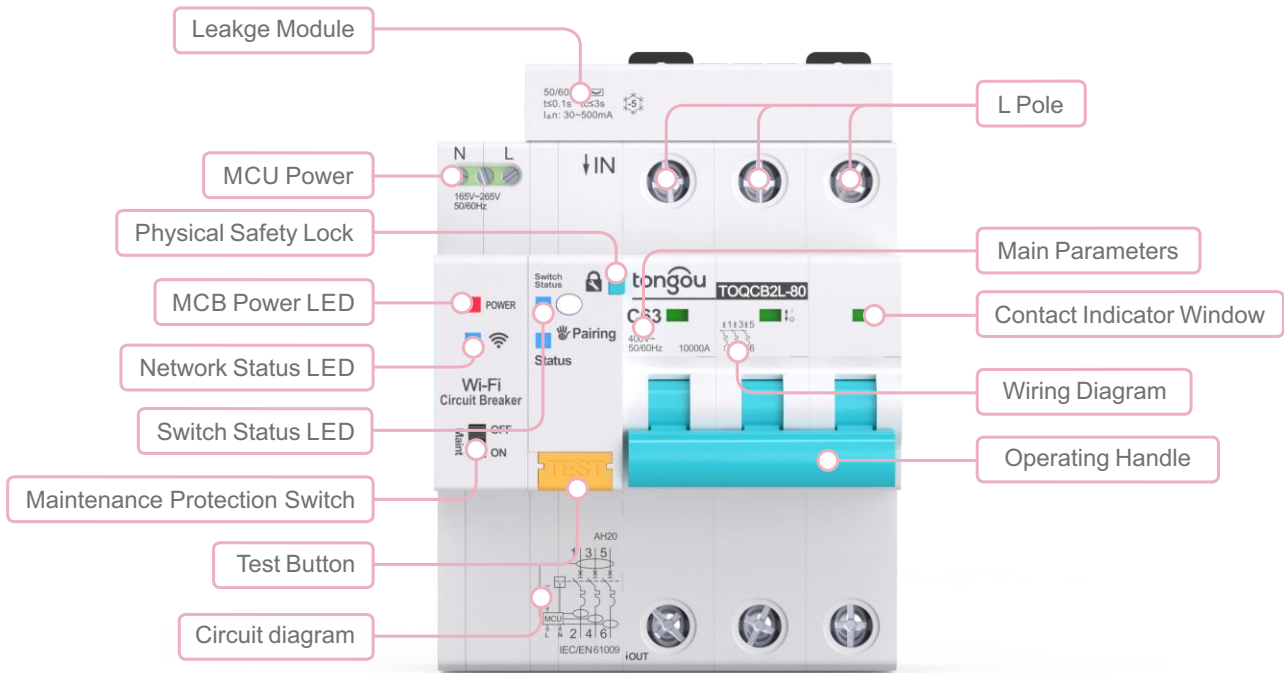


### LED Indicator

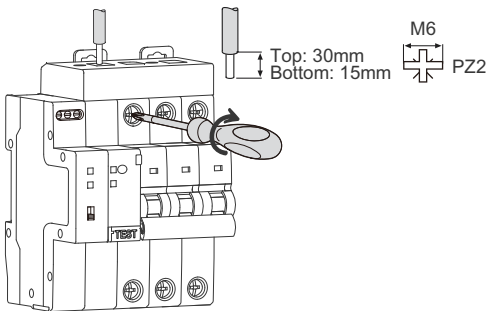
- The switch Status LED steady blue, indicating that circuit breaker is disconnected.
- The switch Status LED steady red, indicating that circuit breaker is closed.
- The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
- The network LED flashing red quickly indicates that circuit breaker is in pairing mode.
- The network LED flashing blue slowly indicates that the circuit breaker is in the connected mode.

PRODUCT MODEL	TOQCB2L-63-JW	TOQCB2L-63-JZ	TOQCB2L-63-JR	TOQCB2L-63-JL	TOQCB2L-63-JM
Standards	IEC/EN 61009, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description	3P				
MCU Power Rated Operational Voltage U <sub>e</sub> (V)	AC 145V - 230V				
Phase Line Operational Voltage U <sub>e</sub> (V)	AC 230V (L1-N, L2-N, L3-N)				
Frequency Hz	50/60Hz				
Current Frame I <sub>n</sub> (A)	16, 20, 32, 40, 63				
Rated Residual Operating Current I <sub>Δn</sub> (mA)	30, 100, 300, 500				
Residual Current Type	AC, A				
Curve Code	B, C, D				
Rated Insulation Voltage U <sub>i</sub> (V)	AC 500V				
Rated Ultimate Short-circuit Breaking Capacity I <sub>cu</sub> (kA)	10kA				
Short Circuit Protection	acc. to IEC/EN 60947-2, IEC/EN 60898-1				
Operational Safety	Physical Safety Lock, which prevents the device from being closed once engaged				
Communication Protocol	TOQCB2L-63-JW	TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n			
	TOQCB2L-63-JZ	Zigbee (2.400~2.483GHz) IEEE 802.15.4			
	TOQCB2L-63-JR	Modbus-RTU			
	TOQCB2L-63-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/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800			
	TOQCB2L-63-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, Phase Angle, 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, Auto-reclosing, Remote Control, Voice Control				
Mounting Support	DIN Rail 35mm				

**I TOQCB2L-63 3P**

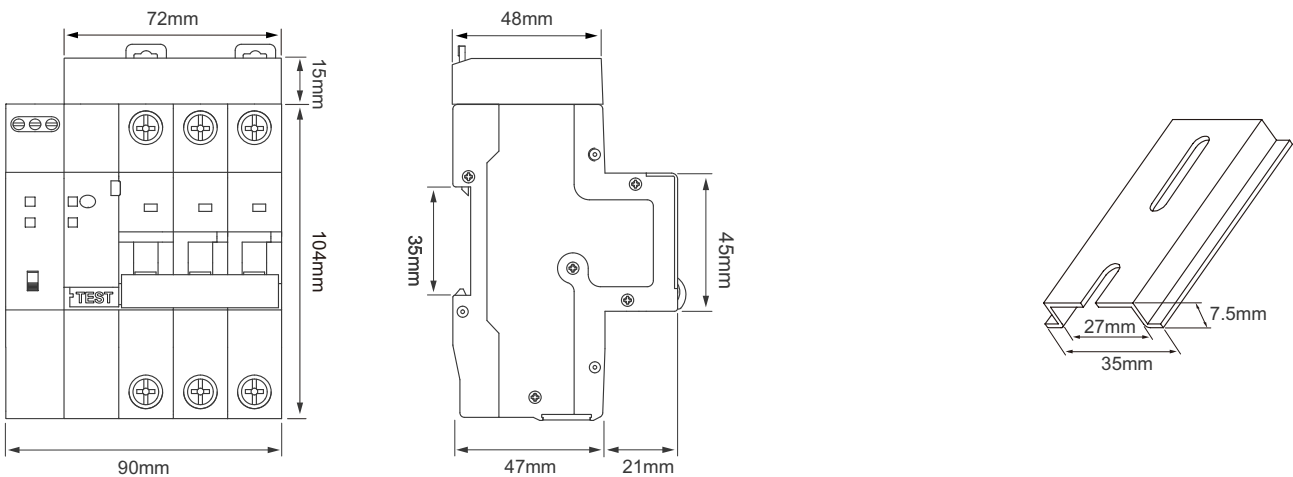


**Connection**



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 40A	2.5 N.m	1 - 10mm <sup>2</sup>	1 - 6mm <sup>2</sup>
50 - 63A	2.5 N.m	16 - 25mm <sup>2</sup>	1 - 16mm <sup>2</sup>

**Dimensions (mm)**



## TOQCB2L-63 4P

### Over-current Protection

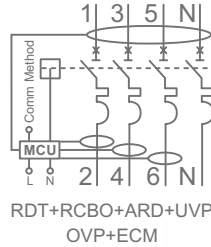
Threshold Setting: 1 - 63A  
 Default: 63A  
 Status Setting: Off/Alarm/Trip  
 Electronic Component Response Time: 3s

### 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

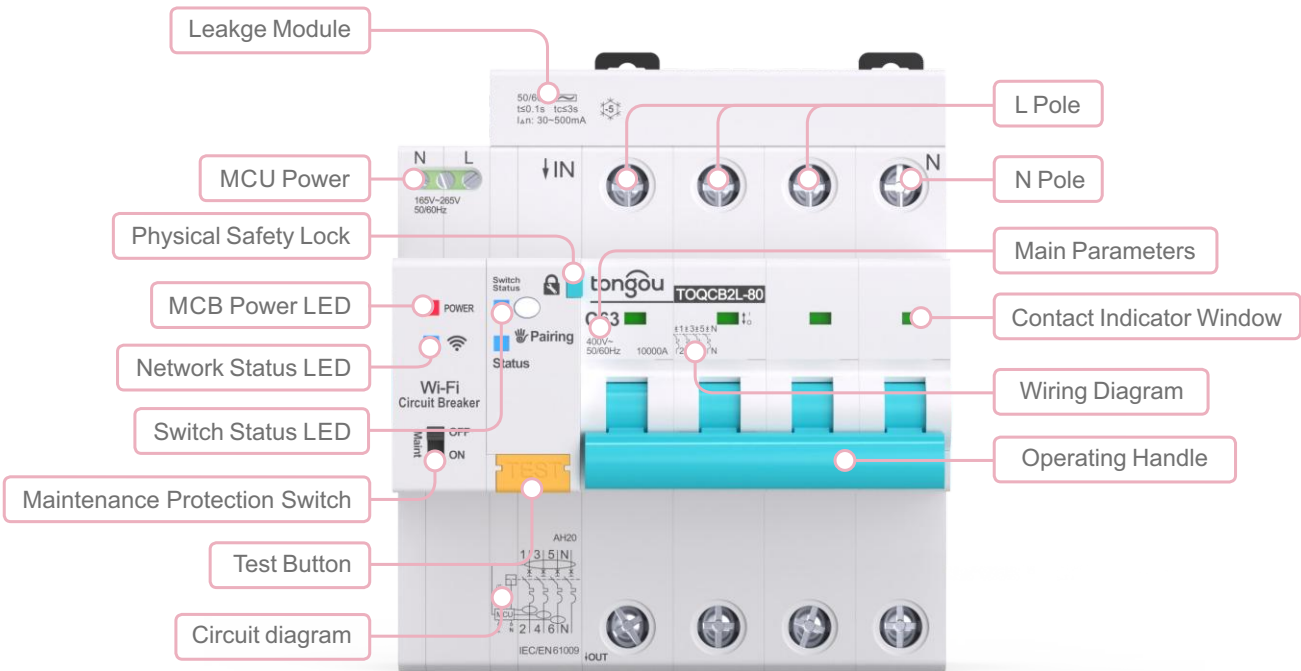


### LED Indicator

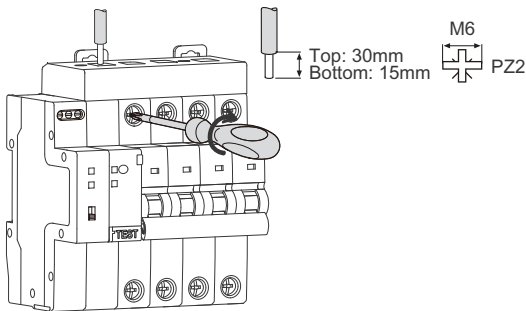
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Standards	IEC/EN 61009, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description	4P				
MCU Power Rated Operational Voltage Ue (V)	AC 145V - 230V				
Phase Line Operational Voltage Ue (V)	AC 230V (L1-N, L2-N, L3-N)				
Frequency Hz	50/60Hz				
Current Frame In (A)	16, 20, 32, 40, 63				
Rated Residual Operating Current Idn (mA)	30, 100, 300, 500				
Residual Current Type	AC, A				
Curve Code	B, C, D				
Rated Insulation Voltage Ui (V)	AC 500V				
Rated Ultimate Short-circuit Breaking Capacity Icu (kA)	10kA				
Short Circuit Protection	acc. to IEC/EN 60947-2, IEC/EN 60898-1				
Operational Safety	Physical Safety Lock, which prevents the device from being closed once engaged				
Communication Protocol	TOQCB2L-63-JW	TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n			
	TOQCB2L-63-JZ	Zigbee (2.400~2.483GHz) IEEE 802.15.4			
	TOQCB2L-63-JR	Modbus-RTU			
	TOQCB2L-63-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/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800			
	TOQCB2L-63-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, Phase Angle, 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, Auto-reclosing, Remote Control, Voice Control				
Mounting Support	DIN Rail 35mm				

**I TOQCB2L-63 4P**



**Connection**



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 40A	2.5 N.m	1 - 10mm <sup>2</sup>	1 - 6mm <sup>2</sup>
50 - 63A	2.5 N.m	16 - 25mm <sup>2</sup>	1 - 16mm <sup>2</sup>

**Dimensions (mm)**

