Smart Circuit Breaker
TOQCB2 Series

Company Code		Maximum Current Frame		Communication method: W - Wi-Fi, R - RS 485 Z - Zigbee, L - LTE, M - Matter			1 - 1P 2 - 2P 3- 3P 4 - 4P	Current Frame: 16, 20, 32,40, 63, 80		
TO	QCB2	-	80	-	J	W	T	-	1	C	63	DC
	Series Code				Blank: Without Metering Function L: With Metering Function		Platform Technical Support: T - Tuya, E - eWeLink X - Mi, C - Cutomizated M - Tasmota			C - Curve C B - Curve B D - Curve D		Ambient Voltage: Blank: Alternating Current DC: Direct Current

The future mode of electricity usage will feature efficient energy management, enhanced safety with integrated electrical protection functions, remote monitoring of electricity data, more convenient and rapid power maintenance, and integrated application with intelligent auto mation systems.

Remote Control

Voice Control

Time Mode

Circuit Proterction

Electricity Consumption

Real-Time Power / Current / Voltage

Temperature Protection

Oeperation Log

DIN Rail Installation

Maintenance Mode

TOQCB2-80 1P

Over-current Protection

Threshold Setting: 1 - 63A

Defualt: 63A

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

Over-voltage Protection

Threshold Setting: 245V - 295A

Defualt: 280V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

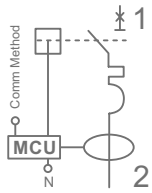
Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s



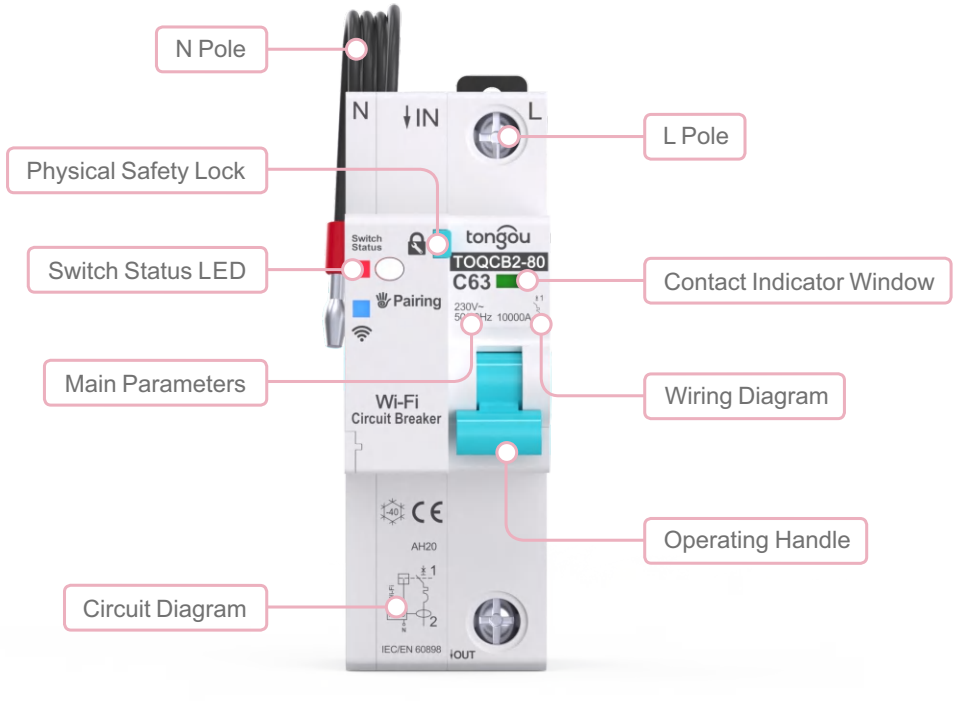
RDT+MCB+ARD+UVP
OVP+ECM

LED Indicator

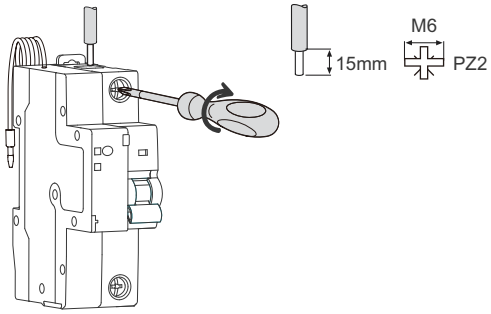
- The switch Status LED steady blue, indicating that circuit breaker is disconnected.
- The switch Status LED steady red, indicating that circuit breaker is closed.
- The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
- The network LED flashing red quickly indicates 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		TOQCB2-80-JW	TOQCB2-80-JZ	TOQCB2-80-JR	TOQCB2-80-JL	TOQCB2-80-JM
Standards		IEC/EN 60947, IEC/EN 60898, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description		1P				
Operating Rated Voltage	Ue (V)	AC 145V - 230V				
Frequency	Hz	50/60Hz				
Current Frame	In (A)	16, 20, 32, 40, 63, 80				
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		TOQCB2-80-JW TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n				
			TOQCB2-80-JZ Zigbee (2.400~2.483GHz) IEEE 802.15.4			
				TOQCB2-80-JR Modbus-RTU		
					TOQCB2-80-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	
						TOQCB2-80-JM TCP/UDP: Matter
Energy Comsumption 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				

TOQCB2-80 1P

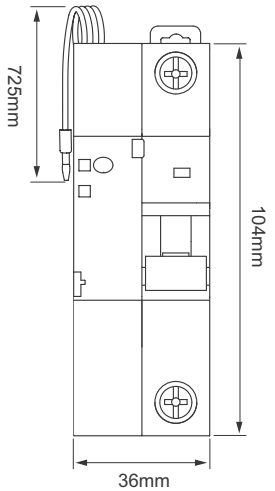


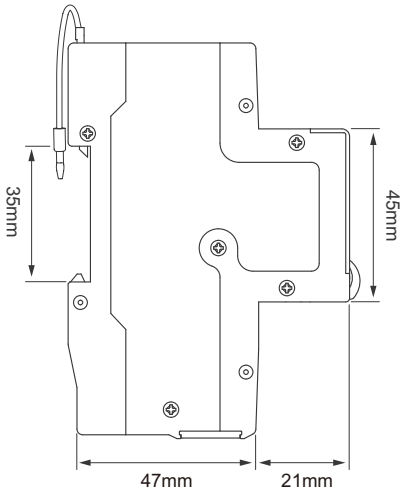
Connection

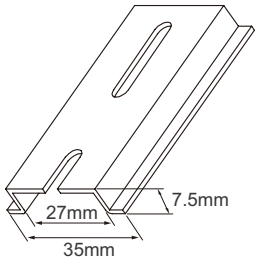


Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 80A	2.5 N.m	1 - 25mm²	1 - 16mm²

Dimensions (mm)







TOQCB2-80 2P

Over-current Protection

Threshold Setting: 1 - 63A

Defualt: 63A

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

Over-voltage Protection

Threshold Setting: 245V - 295A

Defualt: 280V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

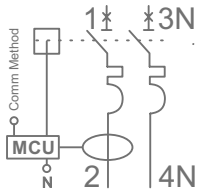
Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s



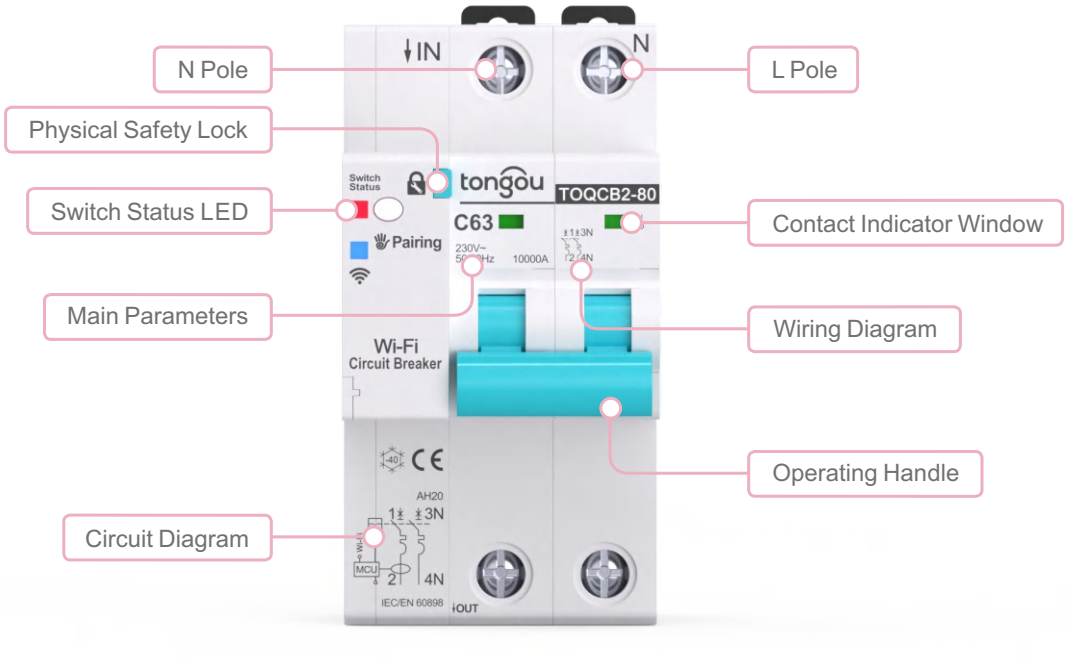
RDT+MCB+ARD+UVP
OVP+ECM

LED Indicator

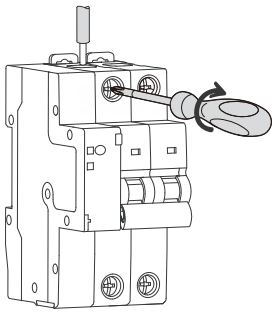
- The switch Status LED steady blue, indicating that circuit breaker is disconnected.
- The switch Status LED steady red, indicating that circuit breaker is closed.
- The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
- The network LED flashing red quickly indicates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

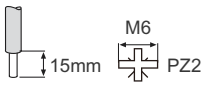
PRODUCT MODEL		TOQCB2-80-JW	TOQCB2-80-JZ	TOQCB2-80-JR	TOQCB2-80-JL	TOQCB2-80-JM
Standards		IEC/EN 60947, IEC/EN 60898, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description		2P				
Operating Rated Voltage	Ue (V)	AC 145V - 230V				
Frequency	Hz	50/60Hz				
Current Frame	In (A)	16, 20, 32, 40, 63, 80				
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		TOQCB2-80-JW TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n				
			TOQCB2-80-JZ Zigbee (2.400~2.483GHz) IEEE 802.15.4			
				TOQCB2-80-JR Modbus-RTU		
					TOQCB2-80-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	
						TOQCB2-80-JM TCP/UDP: Matter
Energy Comsumption 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				

TOQCB2-80 2P



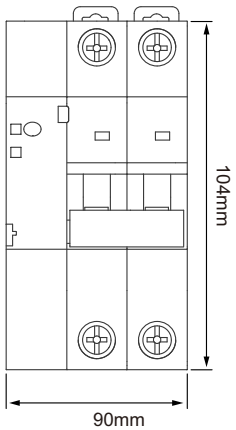
Connection

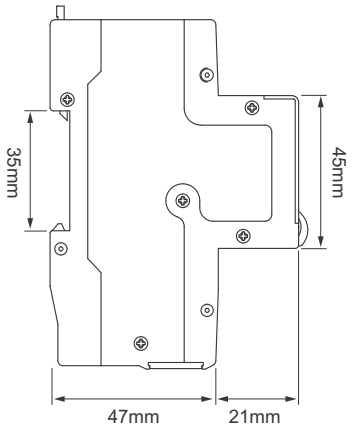


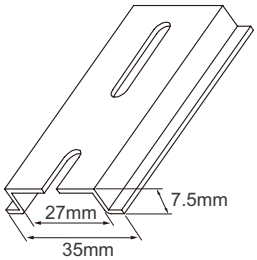


Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 80A	2.5 N.m	1 - 25mm²	1 - 16mm²

Dimensions (mm)







TOQCB2-80 3P

Over-current Protection

Threshold Setting: 1 - 63A

Defualt: 63A

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

Over-voltage Protection

Threshold Setting: 245V - 295A

Defualt: 280V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

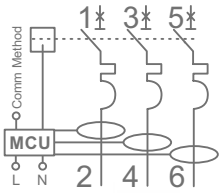
Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s



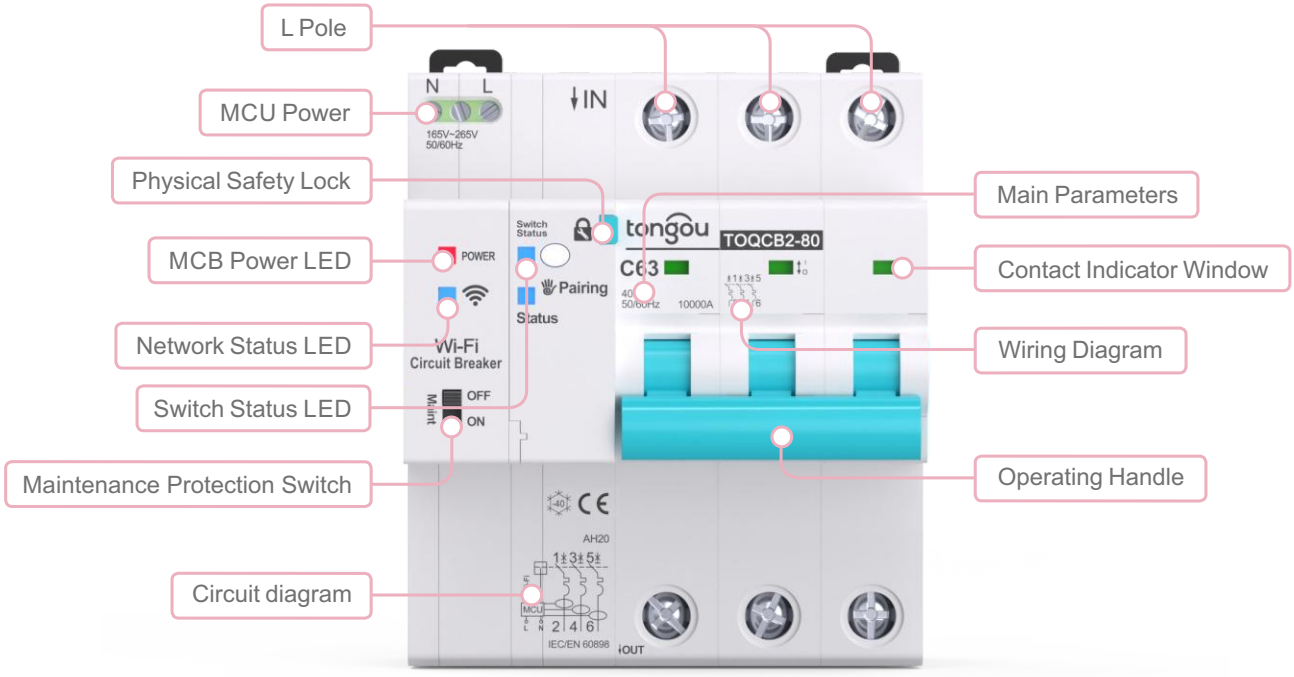
RDT+MCB+ARD+UVP
OVP+ECM

LED Indicator

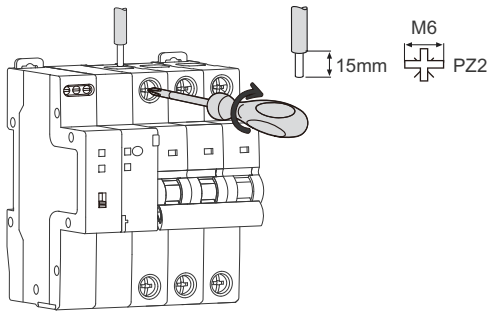
- The switch Status LED steady blue, indicating that circuit breaker is disconnected.
- The switch Status LED steady red, indicating that circuit breaker is closed.
- The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
- The network LED flashing red quickly indicates 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		TOQCB2-80-JW	TOQCB2-80-JZ	TOQCB2-80-JR	TOQCB2-80-JL	TOQCB2-80-JM
Standards		IEC/EN 60947, IEC/EN 60898, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description		3P				
MCU Power Rated Operational Voltage	Ue (V)	AC 380V - 415V				
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, 80				
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		TOQCB2-80-JW TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n				
			TOQCB2-80-JZ Zigbee (2.400~2.483GHz) IEEE 802.15.4			
				TOQCB2-80-JR Modbus-RTU		
					TOQCB2-80-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	
						TOQCB2-80-JM TCP/UDP: Matter
Energy Comsumption 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				

TOQCB2-80 3P

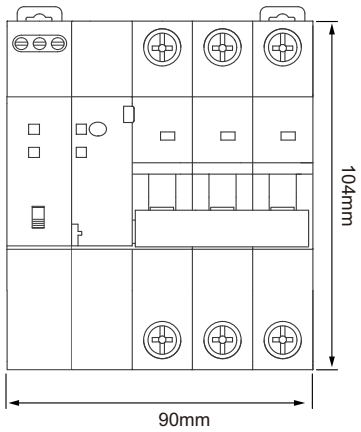


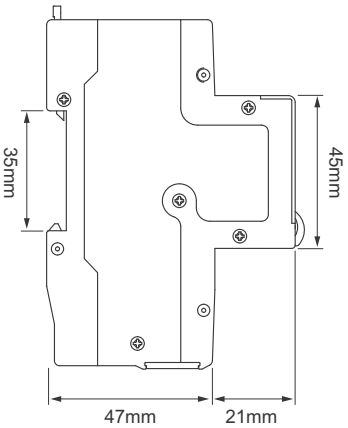
Connection

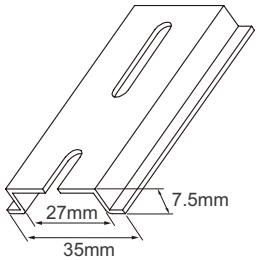


Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 80A	2.5 N.m	1 - 25mm²	1 - 16mm²

Dimensions (mm)







TOQCB2-80 4P

Over-current Protection

Threshold Setting: 1 - 63A

Defualt: 63A

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

Over-voltage Protection

Threshold Setting: 245V - 295A

Defualt: 280V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s

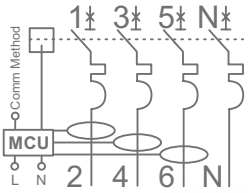
Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s



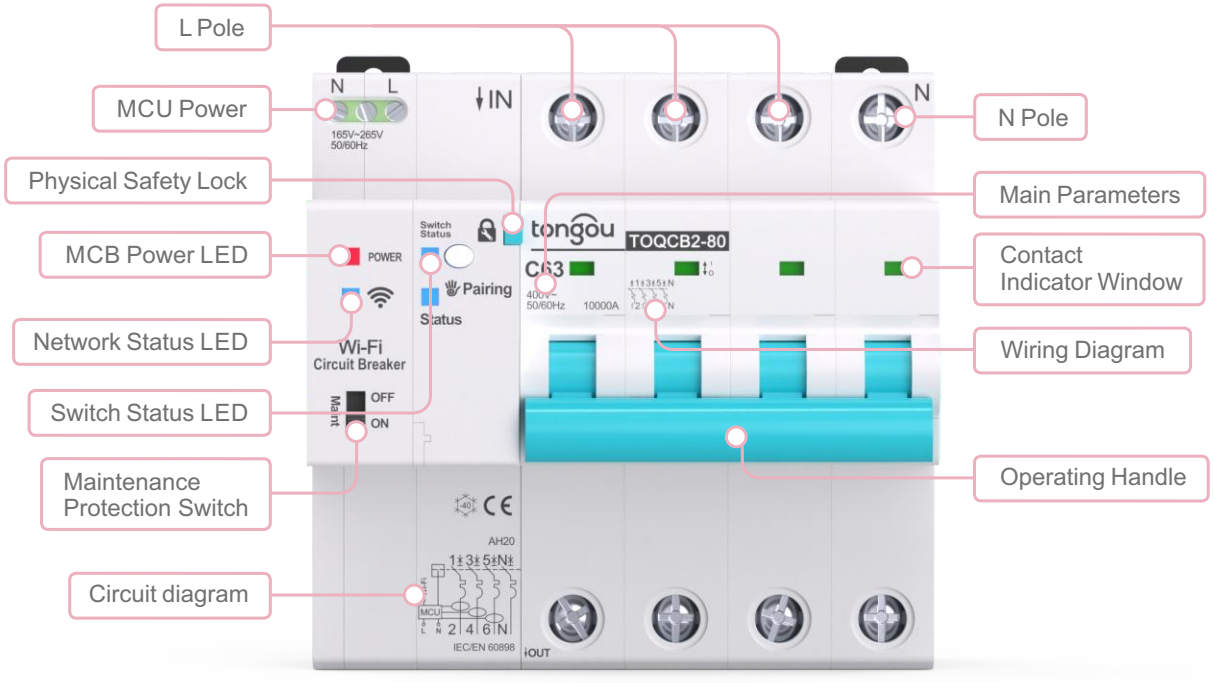
RDT+MCB+ARD+UVP
OVP+ECM

LED Indicator

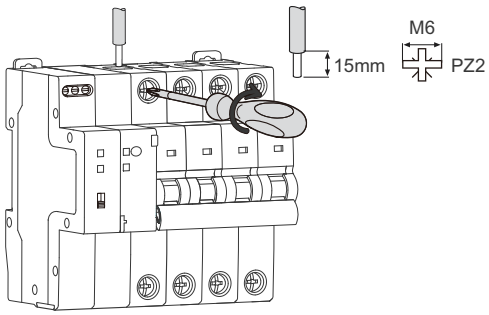
- The switch Status LED steady blue, indicating that circuit breaker is disconnected.
- The switch Status LED steady red, indicating that circuit breaker is closed.
- The network LED flashing red slowly indicates that circuit breaker is in off-grid mode.
- The network LED flashing red quickly indicates 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		TOQCB2-80-JW	TOQCB2-80-JZ	TOQCB2-80-JR	TOQCB2-80-JL	TOQCB2-80-JM
Standards		IEC/EN 60947, IEC/EN 60898, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000				
Poles Description		4P				
MCU Power Rated Operational Voltage	Ue (V)	AC 380V - 415V				
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, 80				
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		TOQCB2-80-JW TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n				
			TOQCB2-80-JZ Zigbee (2.400~2.483GHz) IEEE 802.15.4			
				TOQCB2-80-JR Modbus-RTU		
					TOQCB2-80-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	
						TOQCB2-80-JM TCP/UDP: Matter
Energy Comsumption 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				

TOQCB2-80 4P



Connection



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
1 - 80A	2.5 N.m	1 - 25mm²	1 - 16mm²

Dimensions (mm)