# **Smart Circuit Breaker TOQCB2 Series**



Communication method:

Z - Zigbee, L - LTE, M - Matter

φ

 $(\mathbf{W})$ 

W - Wi-Fi, R - RS 485

 $\overline{\mathbf{J}})$ 

Without Metering Function

With Metering Function

Maximum Current Frame

80

Blank:

2 - 2P

3- 3P

4 - 4P

9

**(1**)

Platform Technical Support:

T - Tuya, E - eWeLink

X - Mi, C - Cutomizated

M - Tasmota

 $(\mathbf{C})$ 

C - Curve C

B - Curve B

D - Curve D

Current Frame:

16, 20, 32,40, 63, 80

**63** 

Company Code

(TO)

QCB2

Series Code

(DC)

Ambient Voltage:

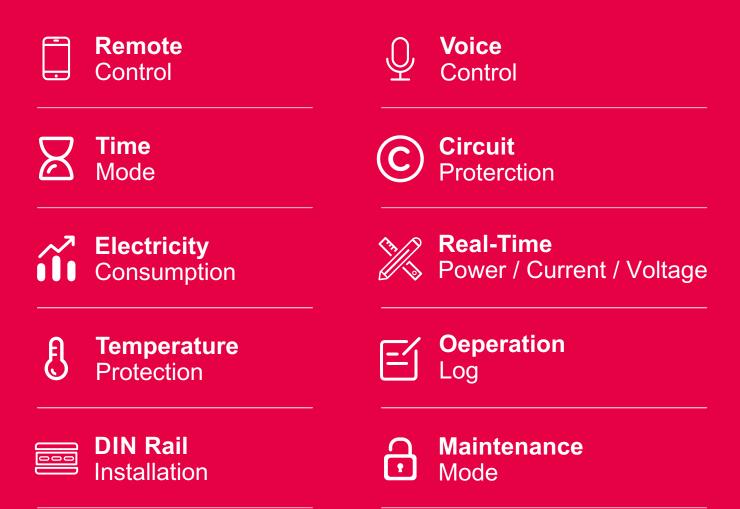
**Alternating Current** 

Blank:

DC: Direct Current

# **Smart Circuit Breaker TOQCB2 Series**

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.







### I 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

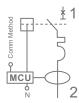
#### - Under-voltage Protection

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.

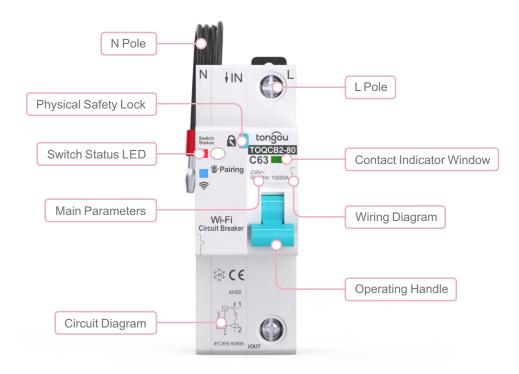
The network LED flashing red quickly indicates that circuit breaker is in pairing mode.

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					

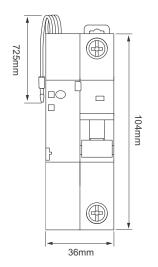


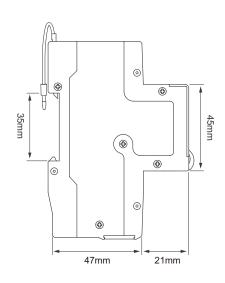


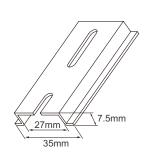
# TOQCB2-80 1P















## I 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

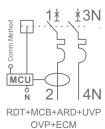
#### - Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s





#### 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.

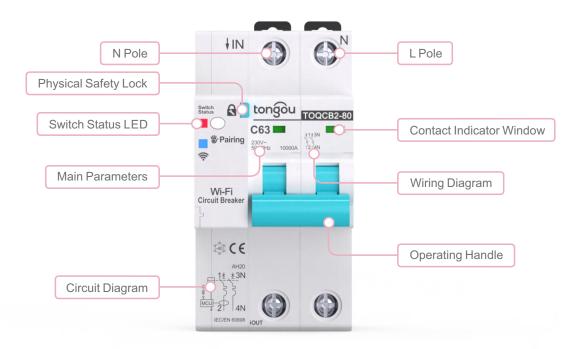
The network LED flashing red quickly indicates that circuit breaker is in pairing mode.

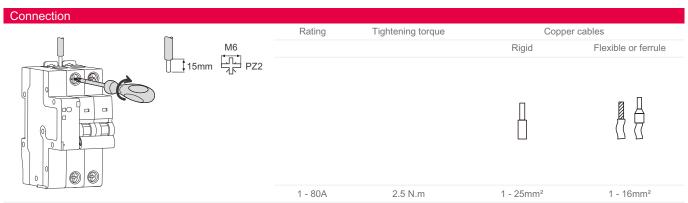
PRODUCT MODEL		TOQCB2-80-JW	TOQCB2-80-JZ	TOQCB2-80-JR	TOQCB2-80-JL	TOQCB2-80-JM		
Standards		IEC/EN 60947, IEC/EN 60898, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000						
Poles Description		2P						
Operating Rated Voltage	Ue (V)	AC 145V - 230V						
Frequency	Hz	50/60Hz						
Current Frame	In (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						

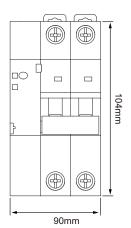


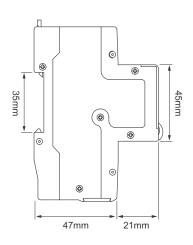


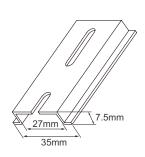
# TOQCB2-80 2P















# I 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

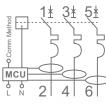
#### - Under-voltage Protection

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.

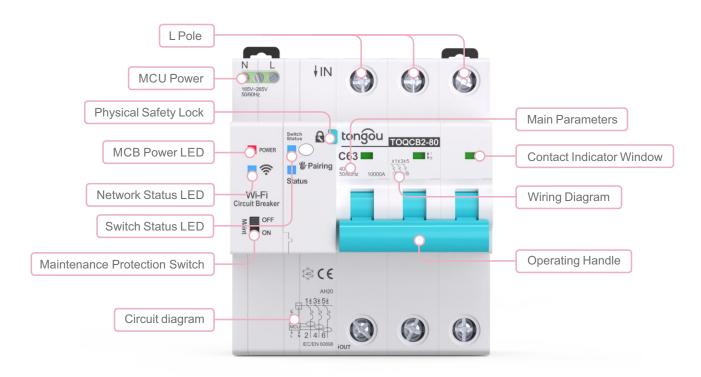
The network LED flashing red quickly indicates that circuit breaker is in pairing mode.

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	e 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 Consum (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					

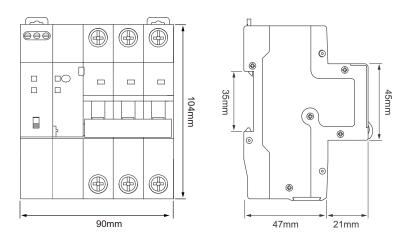


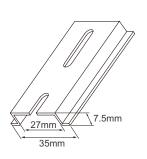


# TOQCB2-80 3P













## I 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

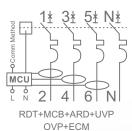
#### -₱ Under-voltage Protection

Threshold Setting: 145V - 220A

Defualt: 165V

Status Setting: Off/Alarm/Trip

Electronic Component Response Time: 3s





#### 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.

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: B3/438/39/40/41 (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 Consumpt (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

