

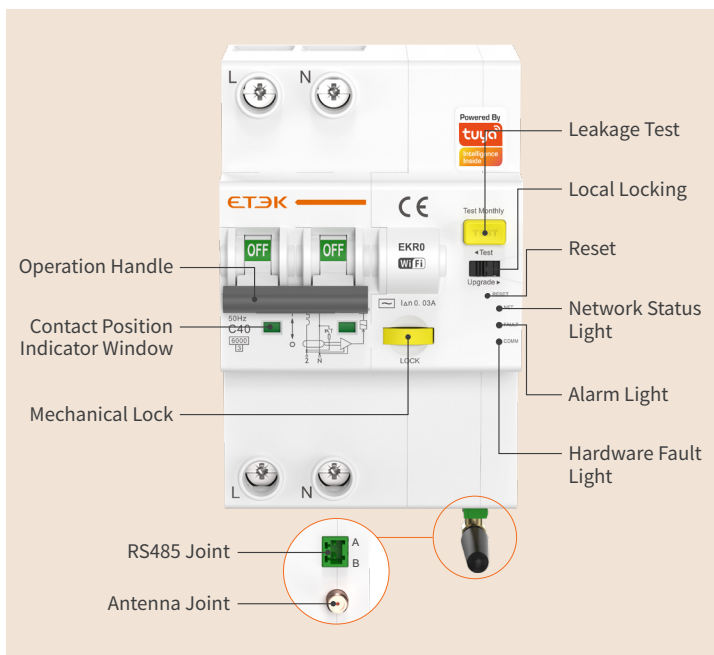
EKRO Series

Smart RCBO

ETEK®



Overview



EKRO Smart RCBO combines the functions of traditional circuit breakers with modern electronic technology to provide overload, short circuit, and leakage protection for circuits rated at 63A. It also supports remote control through the Tuya App or RS485 communication platform, allowing monitoring and adjustment of various electrical parameters. The EKRO Smart RCBO has been widely used in smart building power management, industrial power monitoring, and energy efficiency optimization.

Features

Traditional Protection

- Overload protection
- Short-circuit protection
- Leakage protection (residual current)

Advanced Functions

- Remote opening and closing control
- Timing tasks (power on/off scheduling)
- Real-time switch status monitoring
- Electricity metering (only 1P&2P)

Mechanical Padlock

When the mechanical lock is pulled out, the switch enters a locked state, preventing the switch from being turned on. To restore the device, press down the mechanical lock.

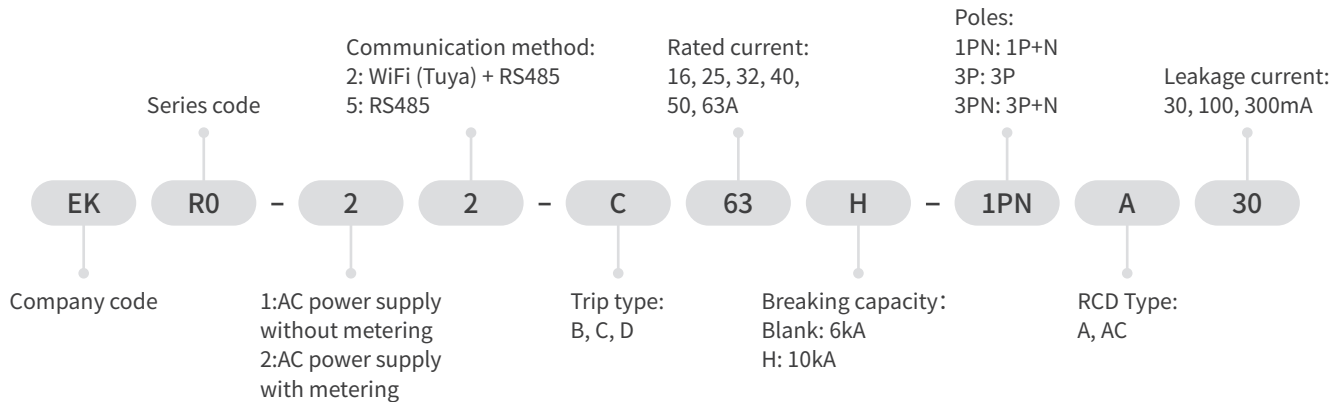
Smart Capabilities

- Remote control through Tuya APP or RS485 platform
- Wi-Fi, RS485 communication options
- Supported Apps: Tuya, Smart Life

Automatic, Manual Mode

- Automatic mode allow remote control (Tuya APP, RS485).
- Manual Mode, only supports local manual operation

Instruction of Type Code



Technical Parameter

Standard	IEC/EN 61009-1
Type of protection (electric leakage)	A, AC
Poles	1P+N, 3P, 3P+N, N line with disconnected
Standby power consumption	< 5W
Status indicator	LED
Operating voltage	230/ 240V (1P+N), 400/415V (3P,3P+N)
Rated frequency	50/60Hz
Rated operating current	16, 25, 32, 40, 50, 63A
Rated sensitivity currents I _{Δn}	10,30,100,300mA
Rated current off-time under I _{Δn}	≤ 0.1S
Rated residual making and breaking capacity I _{Δm}	500A (I _n ≤ 50A), 10I _n (I _n >50A)
Rated breaking capacity	6kA, 10kA
Energy Limiting Class	3
Rated impulse withstand voltage(1.2/50) U _{imp}	4kV
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Trip curve	B: (3-5) x I _n , C: (5-10) x I _n , D: (10-20) x I _n
Trip time	≤ 0.1S
Electrical life	4000 Cycles
Mechanical life	10000 Cycles
Communication method	WiFi (Tuya), 2.4GHz; RS485, Baud rate: 2400/ 4800/ 9600 (default)
Operational safety	Mechanical padlock, Ensure safety during onsite maintenance
Monitoring physical data	Real-time voltage, Real-time current, Real-time power, Temperature, Switch state, Device operating status
Function description	Overload protection, Short circuit protection, Leakage protection, Over-temperature protection, Multiple timing, Remote control, Electricity metering

Characteristic set up	Over/under voltage action time, Over/under voltage value, Overcurrent value, Voltage imbalance value, Over power value, Phase loss value, Overtemperature value
Protection degree	IP20
Ambient temperature	-25°C to +55°C (Current capacity is significantly reduced at 70°C)
Storage temperature	-25°C to +70°C
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. conductor cross-sections for cable	25mm ²
Altitude	≤ 2000m
Mounting	Mounting on 35mm DIN rail
Connection	From top

Dimensions and Wiring Diagram

