

protech

Inline RCD Circuit Breaker

QP2004

Operating Manual

Testing Polarity:

1. Plug the circuit breaker into the mains socket.
2. If the wiring is correct, three GREEN LEDs will illuminate and a continuous buzzer will sound.
3. There is only one correct combination. If the wiring is not correct, then one or more of the three LEDs will show red and the buzzer will pulse.
4. For further clarification, please refer to the *Status Combination Tables* in this guide.

Testing Earth Voltage:

1. Plug the circuit breaker into the mains socket.
2. If there is a polarity fault, the circuit breaker will detect it and a touchpad test will not be allowed.
3. If polarity is correct, three GREEN LED lights will shine and a touchpad test will be allowed.
4. Touch the touchpad with an index finger. If the earth voltage is greater than 50VAC, the three GREEN LED lights will change to RED, and the buzzer will pulse.
5. Please do not proceed with any further testing. Investigate the cause of the high earth voltage first.

Testing RCD:

1. Plug the circuit breaker into the mains socket.
2. If there is a polarity fault, the circuit breaker will detect it and an RCD test will not be allowed.
3. If polarity is correct, three GREEN LED lights will shine and an RCD test will be allowed.
4. Touch the RCD touchpad for more than one second to initiate the test. If the RCD trips within 300ms, power to the socket will be disconnected. All three LED lights and the buzzer will switch off.
5. Reset the RCD to energise the circuit. If the RCD doesn't trip within 300ms, LED light 1 and 2 will shine RED, and LED light 3 will shine GREEN. The buzzer will pulse.
6. If there is high earth resistance (which could cause a dangerous voltage rise above 50V) the circuit breaker will automatically abort the test. All three LED lights will shine RED. The buzzer will pulse.
7. After approximately 4 seconds the circuit breaker reset.
8. For more clarification, please refer to the *Status Combination Tables* in this guide.

Important Notes & Warnings:

1. Before use, always plug the circuit breaker into a known working/faultless socket first to verify the circuit breaker is working correctly.
2. Please check the testing unit itself for any signs of damage prior to use. Do not use it if you can identify, or suspect it has sustained damage.
3. If any of the three LED lights shine RED, unplug the circuit breaker immediately and check the installation wiring.
4. This circuit breaker must not be plugged into any socket for an extended period of more than five minutes.
5. Do not cover or obstruct the ventilation areas of the unit whilst the circuit breaker is in use.
6. The circuit breaker should be only be used in a vertical position.
7. Do not attempt to open any parts of this circuit breaker. Contact Electus Distribution if you have issues with this circuit breaker within the specified warranty period.

Status Combination Charts:

RCD Test

INDICATION	LED 1	LED 2	LED 3	BUZZER
Correct	Green	Green	Green	Continue
During Test	Green	Green	Green	OFF
After No Trip	Red	Red	Green	Pulse
After N-E>50v	Red	Red	Red	Pulse

Other Testing

PLUG PINS	STATUS	DISPLAY (LED 1 2 3)	BUZZER
N E L	Correct	GREEN GREEN GREEN	Continue
E N L	E/N Swap	GREEN GREEN GREEN	Continue
X E L	Missing N	RED GREEN GREEN	Pulse
X L E	Missing N	RED GREEN GREEN	Pulse
X N L	Missing N (detected N as E)	RED GREEN GREEN	Pulse
X L N	Missing N (detected N as E)	RED GREEN GREEN	Pulse
N X L	Missing E	GREEN RED GREEN	Pulse
L X N	Missing E	GREEN RED GREEN	Pulse
E X L	Missing E (detected E as N)	GREEN RED GREEN	Pulse
L X E	Missing E (detected E as N)	GREEN RED GREEN	Pulse
E L X	L Fault	GREEN GREEN RED	Pulse
L E X	L Fault	GREEN GREEN RED	Pulse
N L X	L Fault	GREEN GREEN RED	Pulse
L N X	L Fault	GREEN GREEN RED	Pulse
N L E	LE Reverse	RED RED GREEN	Pulse
E L N	LE Reverse	RED RED GREEN	Pulse
L E N	LN reverse	RED GREEN RED	Pulse
L N E	LN reverse	RED GREEN RED	Pulse

X = No Connection

Specifications:

RCD Test

Rated Current: 30mA +/-5% @230VAC 50Hz

Max Test Time: 300ms

NE Lockout: 50V +/-10% RMS

Earth Touch Voltage

Threshold: 50V +/-10% RMS for earth resistances less than 100k Ω

Response: 100ms

Distributed by:

Electus Distribution Pty. Ltd.

320 Victoria Rd, Rydalmere

NSW 2116 Australia

www.electusdistribution.com.au

Made in China