

QF10 - Series Earth Leakages

The QF10 is an Earth Leakage Device with an un-switched neutral fitted on to a single 18 mm wide unit. It has an additional 50 mm long neutral cable and fits on DIN, CBI Mini Rail and can be surface mounted.



QF10
Dual (DIN & CBI Mini Rail) Mount

Features

- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- AS/NZS 3111 and AS/NZS 3190 compliant
- Ratings 6 to 40 A
- Earth Leakage sensitivity 30 mA
- Single pole with unswitched neutral earth leakage protection
- Additional neutral wire
- Compact 18 mm width
- Precision tripping characteristics
- Trip indication with mid-trip position
- Reset immediately after overload
- Shell design permits easier installation onto busbar
- 45 mm front escutcheon

Applications

- Residential and commercial applications requiring high sensitivity earth leakage protection from electrical shock and fire hazards
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment
- Mobile power generation equipment
- Railway signalling and infrastructure

Approvals



QF10 - Series Earth Leakages

Technical Data

Product Type	QF10
Approvals	AS/NZS 3111, AS/NZS 3190
Number of Poles	(1+N) in 18 mm width
Standard Ampere Ratings	6, 10, 16, 20, 25, 32, 40 A
Sensitivity	30 mA
Rated Voltage	110 - 240 V
Rated Interrupting	6 kA

Product Type	QF10
Operating Temperature Range	-40 °C to +85 °C
Mounting Options	Dual (DIN & CBI Mini rail), surface mount
Time Delay Curves	1, 2, 3
Endurance	1500 electrical operations (AS/NZS 3111, AS/NZS 3190)
Dielectric Strength	1480 V (single pole) / 1830 V (multi pole), 50 Hz for one minute after testing
Weight	240 g per pole (unpacked)
Humidity	35 to 85% relative
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	16 G (IEC 600068-2-27)
Vibration	2 G (IEC 600068-2-27) (sinusoidal wave)
Flammability	I3 - Ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

Earth Leakage	Wire Size mm ² (IEC)	Torque (IEC)	Comments
1+N	0.75 - 35 mm ²	2.5 Nm	Pozidriv #2 Combi head

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Ordering Information

Example Code: **Q-F-10-A--DM-2-40A-30mA-240V**

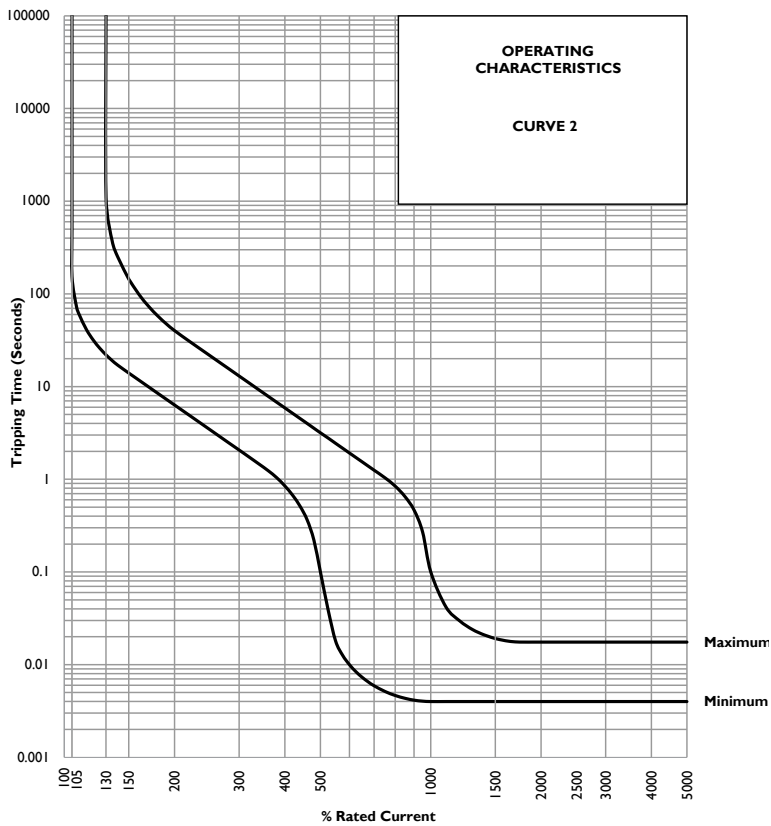
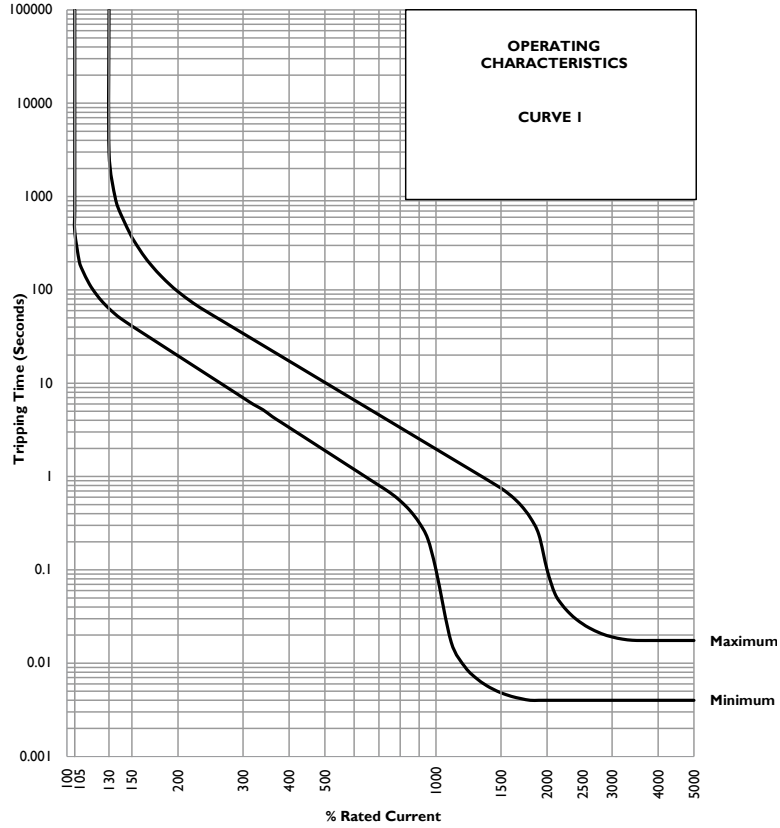
Group	1	2	3	4	5	6	7	8	9	10
Requirement	Q Frame	Type F	1 pole + N	Overload	No auxiliary switch	Dual Mount	Medium delay curve 2	Current rating 40 A	Sensitivity 30 mA	Voltage 240 V AC
Long Code	Q	F	10	A	-	DM	2	40A	30mA	240V

Group	Code	Description	Comments
Group 1: Frame Type	Q	18 Mm wide earth leakage	
Group 2: Product Type	F	240 V AC, 6 kA	
Group 3: No of Poles	10	Single pole plus switched neutral (1+N) in 18 mm	QF10
Group 4: E-L Type	A	Overload (auto tripping)	
Group 5: Auxiliary / Additional Pole	-	Not applicable	Use this code if no auxiliary used
Group 6: Mounting	D	Dual Mount	Dual Mount supplied in grey body only - 45 mm Escutcheon
Group 7: Time Delays	1	Long time delay	
	2	Medium time delay	
	3	Short time delay	
Group 8: Current Ratings	Code / Description		Comments
	6, 10, 16, 20, 25, 32, 40 A		QF10 Ratings available vary depending on certification * Other ratings are available as special orders. Check availability.
Group 9: Sensitivity	30mA	30 mA	Standard
Group 10: Voltage	Code / Description		Comments
	110V	110 V AC	
	240V	240 V AC	

For options not listed, please contact CBI

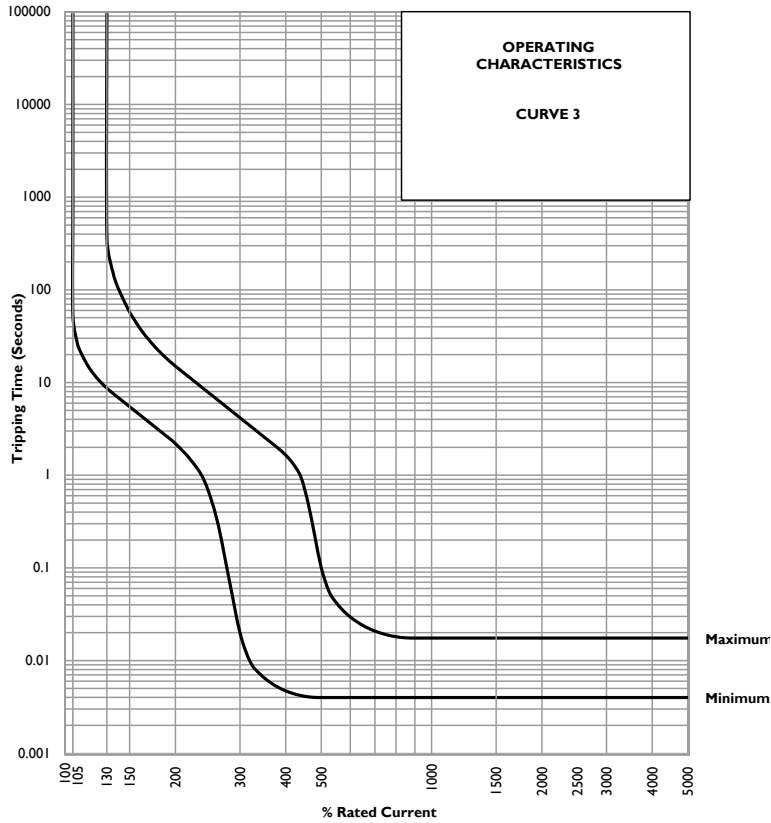
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Time Delay Curves



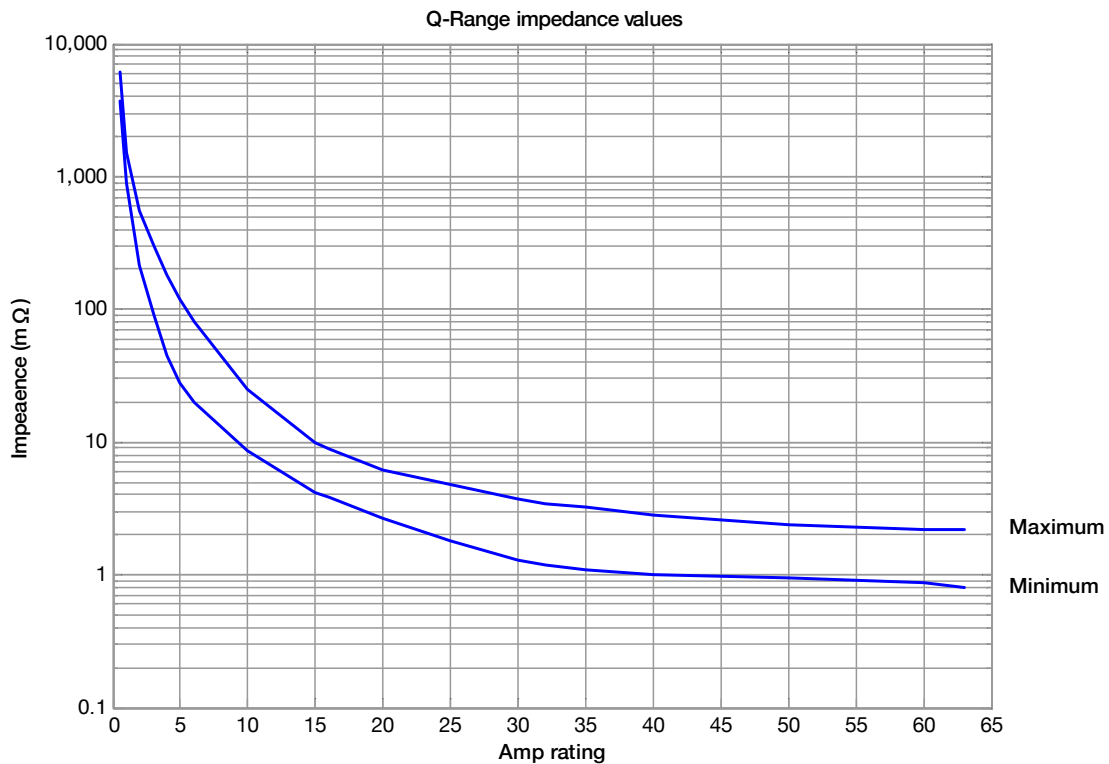
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Time Delay Curves



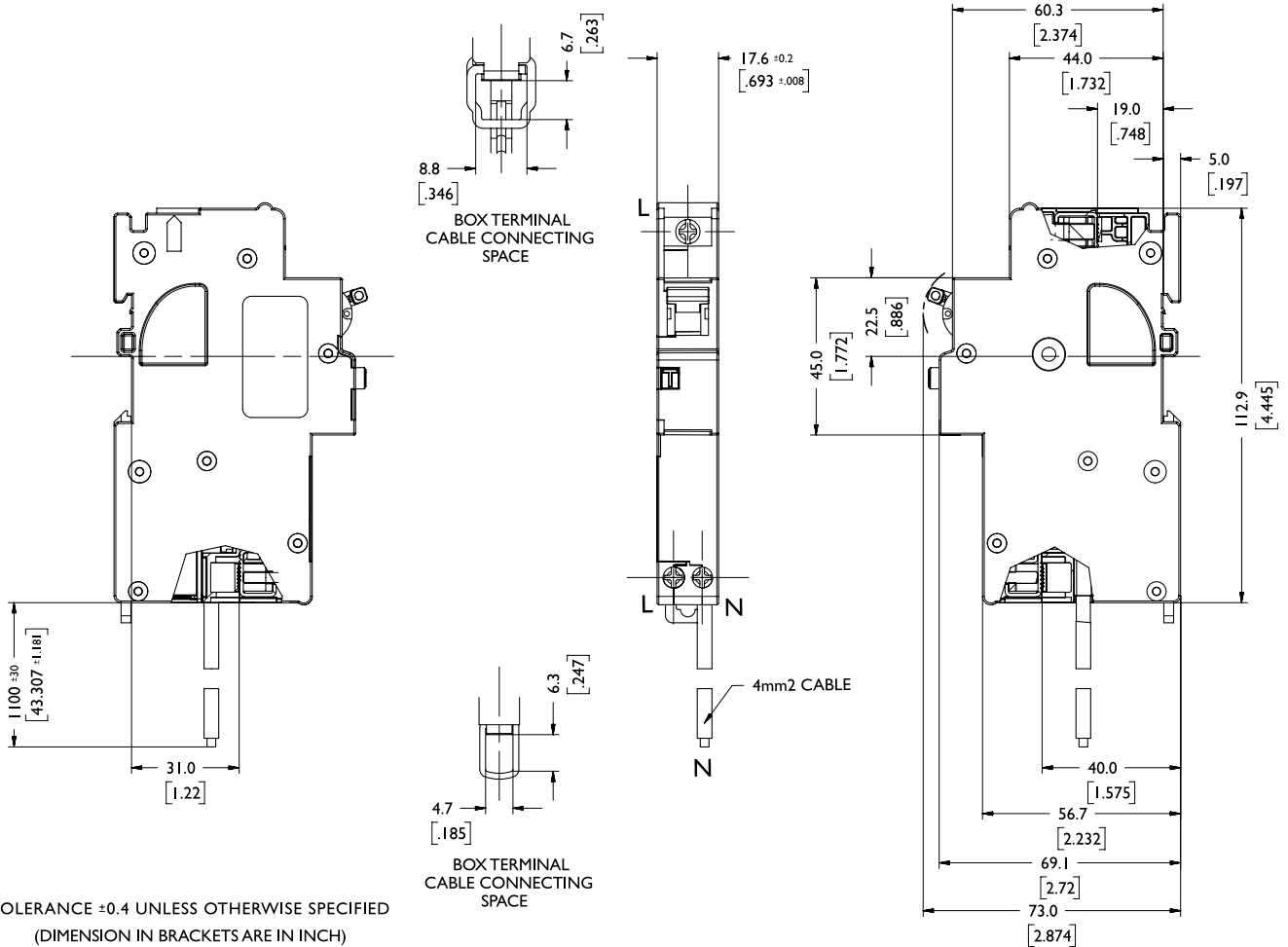
* The published time delay curves are generated at 30°C ambient temperature with the Circuit Breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

Internal Impedance vs Current Rating



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Outline Dimensions: Surface Mount



TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

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