

The QF10 is an Earth Leakage Device with overload protection (RCBO) in a single 18 mm wide unit. It has an additional 1000 mm long neutral cable and fits on DIN and CBI mini rail.



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 A to 40 A
- · Earth Leakage sensitivity 30 mA
- Single pole with unswitched neutral
- Supplied with a neutral cable
- Compact 18 mm width
- Precision tripping characteristics
- Trip indication with mid-trip position
- Can be switched on immediately after tripping
- Design permits easier installation onto busbar (single line terminal with neutral cable)
- · 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** 





Hydraulic-Magnetic Circuit Breakers 100% rated, unaffected by ambient temperature



## **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, Type A	
Rated Voltage	240 V	
Rated Interrupting	6 kA	

Product Type	QF10			
Ambient Temperature Range	-40 °C to +85 °C			
<b>Mounting Options</b>	Dual (DIN & CBI Mini rail)			
Time Delay Curves	2, 9			
Endurance	1500 electrical operations (AS/NZS 3111, AS/NZS 3190)			
Dielectric Strength	1480 V (single pole), 50 Hz for one minute after testing			
Weight	240 g per pole (unpacked)			
Altitude	Certification tests done at altitude ≈ 2000 metres.			
Shock	16 G (IEC 600068-2-27)			
Vibration	1 G (IEC 600068-2-27) (sinusoidal wave)			
Flammability	l3 - Ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28			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.			

Terminals	Wire Size mm² (IEC)	Torque (IEC)	Comments
Line (L)	0.75 - 25 mm²	2.5 Nm	Pozidriv #2 Combi head
Load (L+N)	0.75 - 16 mm²	1.2 Nm	Pozidriv #2 Combi head
Line (N)	4 mm² (6 A - 32 A) 6 mm² (40 A)	N/A	Fly leads



## **Long Code**

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 Vac
Long Code	Q	F	10	Α	-	DM	2	40A	30mA	240V

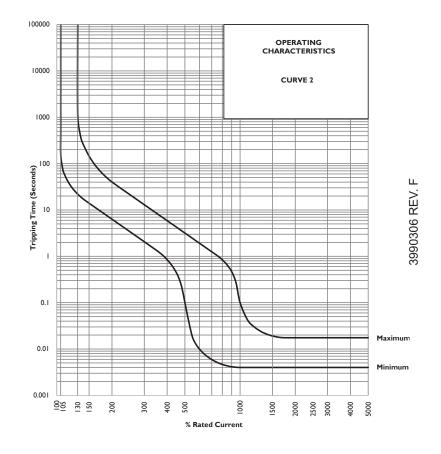
## **Ordering Information**

Group 1:	Code	Description	Comments
Frame Type	Q	18 mm wide earth leakage	
Group 2:	Code	Description	Comments
Product Type	F	Unswitched, 240 Vac, 6 kA	
Group 3:	Code	Description	Comments
No of Poles	10	Single pole plus unswitched neutral (1+N) in 18 mm	QF10
Group 4:	Code	Description	Comments
E-L Type	Α	Overload protection	
Group 5:	Code	Description	Comments
Auxiliary / Additional Pole	-	Not applicable	
Group 6:	Code	Description	Comments
Mounting	D	Dual Mount	Dual Mount supplied in grey body only - 45 mm Escutcheon
Group 7:	Code	Description	
Time Delays	2	Medium time delay	
	9	Long time delay	
Group 8:		Code / Description	Comments
Current Ratings		6, 10, 16, 20, 25, 32, 40 A	QF10
Group 9:	Code	Description	Comments
Sensitivity	30mA	30 mA	Standard
Group 10:	Code	Description	Comments
Voltage	240 V	240 Vac	

For options not listed, please contact CBI

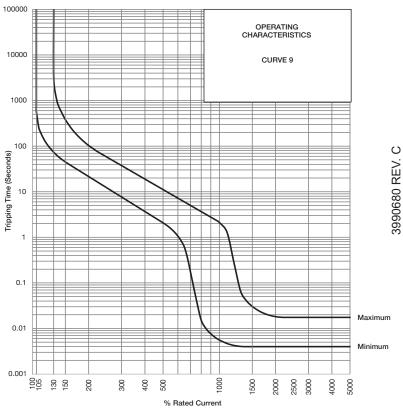


## **Time Delay Curve**



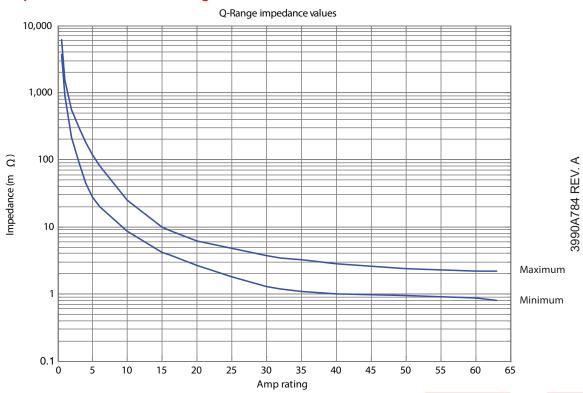


## **Time Delay Curve**



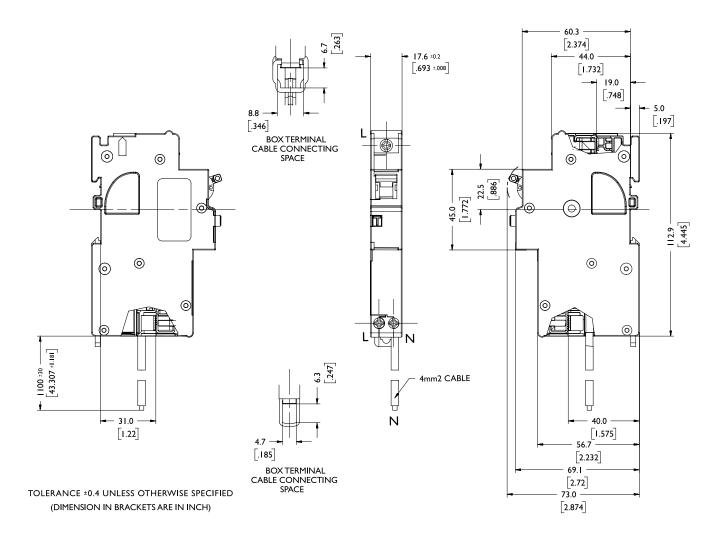
The published time delay curves are generated at 30°C ambient temperature with the circuit breaker mounted in the up-right position. The "must hold", "must trip" and "instantaneous trip" current values are not affected by temperature, although delay time for the other operating current values may have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

## **Internal Impedance vs Current Rating**





**Outline Dimensions: Rail Mount** 



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> **Data Sheet** Page 6 of 6

**QF10-SERIES-DAT** REV. A **MARCH 2020** 

1907029

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