

QA17 - Series Earth Leakages

The QA17 type earth leakage device is available with or without overload protection as a circuit breaker and as a switch. The overload version has the suffix A and the version without overload has the suffix C.



QA17A
Dual (DIN & CBI Mini rail) mount



QA17C
Dual (DIN & CBI Mini rail) mount

Features

- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- VC 8035 compliant
- VDE and CE certified
- Ratings 5 A to 63 A
- Earth leakage sensitivity 30 mA, **Type A**
- Single pole plus switched neutral earth leakage protection
- Switch versions fitted with short circuit protection
- Available in various currents ratings
- Precision tripping characteristics
- Compact 26 mm wide module
- Trip indication with mid-trip position
- Can be switched on immediately after tripping
- Suitable to use for electrical isolation
- Designed for easier installation onto busbar

Auxiliary Switch, Trip Alarm & Combination: Features

- Factory fitted
- Attached to right hand side of the circuit breaker
- Compact 6.5 mm width
- Auxiliary switch
- Auxiliary switch + trip alarm
- Trip alarm
- AC and DC voltages
- UL 489 unlisted (auxiliary switch: 6 A 240 Vac, 0.5 A 110 Vdc)
- IEC 60947-5-1 approved (Auxiliary Switch: 6 A 240 Vac, 0.5 A 110 Vdc; trip alarm: 6 A 240 Vac, 0.5 A 110 Vdc)

VC 8035

Applications

- Residential and commercial applications requiring high sensitivity earth leakage protection from electrical shock and fire hazards
- Earth leakage protection (DIN / EN 60947-2, Annexure B, Annexure L))
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment

Optional Accessories

- Handle lock - QFAP001
- Surface mounting clips - SAAX000
- Busbar - 2121380
- Escutcheon blank - SFEB000
- Safety blank - SAEB000



(DIN / EN 60947-2)

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

QA17 - Series Earth Leakages

Technical Data

Product Type	QA17A	QA17C
Approvals	VC 8035	
Number of Poles	2 (1+N)	2 (1+N)
Standard Ampere Ratings	5 to 63 A	40 and 63 A
Sensitivity	30 mA	30 mA
Rated Voltage	230 Vac	230 Vac
Rated S/C Withstand Capacity (Icw)	-	2.5 kA / 50 ms
Ultimate S/C Breaking Capacity (Icu)	2.5 kA	-

Product Type	QA17A	QA17C
Approvals	DIN / EN 60947-2	
Number of Poles	2 (1+N)	2 (1+N)
Standard Ampere Ratings	5 to 63 A	40 and 63 A
Sensitivity	30 mA	30 mA
Rated Voltage	240 Vac	240 Vac
Rated Conditional S/C Current (Icc)	-	3 kA
Ultimate S/C Breaking Capacity (Icu)	3 kA	-

Verify approvals for specific ratings in accordance with the relevant test certificates.

Auxiliary Module	
Auxiliary Switch	DIN and CBI mini rail mounted
Trip Alarm	CBI mini rail mount only
Auxiliary Switch + Trip Alarm	CBI mini rail mount only

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Technical Data

Product Type	QA17
Ambient Operating Temperature	-40 °C to +85 °C
Mounting Options	Dual mounting (DIN & mini) with accessories
Time Delay Curves	2 (A version only)
Endurance	10000 operations - 1500 electrical (IEC 60947-2 Clause 7.2.4.4)*
Dielectric Strength	1480 V (single pole) / 1830 V (multi pole), 50 Hz for one minute after testing
Rated Impulse Withstand Voltage	4 kV (IEC 60947-2 Clause 8.3.3.2)
Weight	262 g - QA17C, 265 g - QA17A (unpacked)
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	10 G (IEC 60068-2-27)
Vibration	1.5 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.

* Refer to the standard for details

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

QA17 - Series Earth Leakages

Long Code

Example Code: Q-A-17-A--DM-2-63A-30mA-240V----

Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Requirement	Q Frame	Type A	1 pole + N	Overload	No auxiliary switch or additional pole	Dual mount	Medium delay curve 2	Current rating 63 A	Sensitivity 30 mA	Voltage 240 Vac	No special termination	Future use	Customer specific
Long Code	Q	A	17	A	-	DM	2	63A	30 mA	240 V	-	-	-

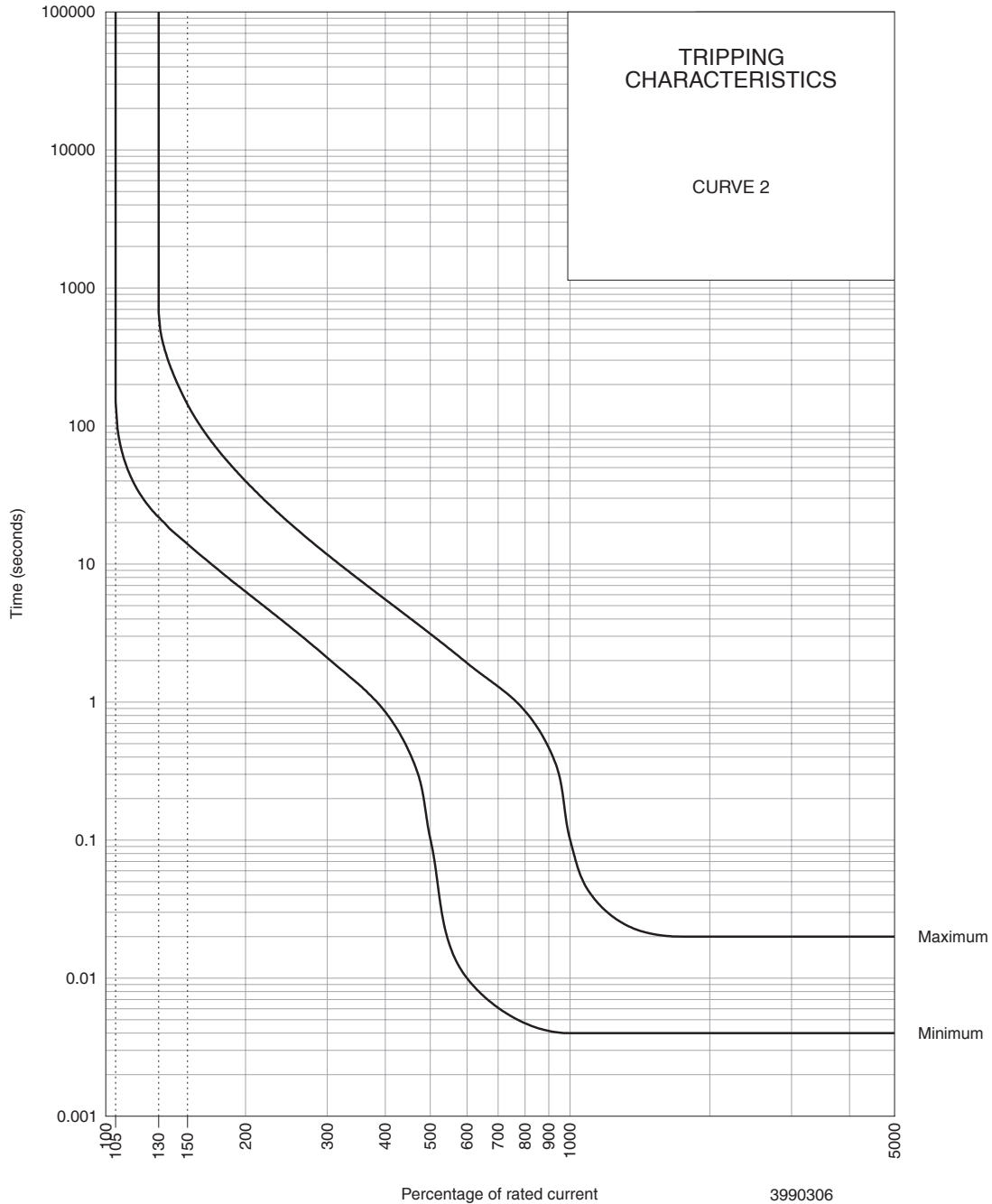
Ordering Information

Group	Code	Description	Instantaneous Trip Point (x In)	Comments
Group 1: Frame Type	Q	26 mm wide earth leakage		
Group 2: Product Type	A	240 Vac		2.5 kA (VC 8035) / 3 kA (DIN / EN 60947-2)
Group 3: No of Poles	17	Single pole plus switched neutral (1+N)		QA17
Group 4: E-L Type	A	Overload		White and green handle
	C	Switch disconnecter		Green handles
Group 5: Auxiliary / Additional Pole	-	Not applicable		Use this code if no auxiliary used
	A	Auxiliary switch (1 x aux switch in 1 module)		6.5 mm module fitted on right-hand side
	T	Trip alarm (1 x trip alarm in 1 module)		6.5 mm module fitted on right-hand side
	AT	Auxiliary switch + trip alarm (in 1 module)		6.5 mm module fitted on right-hand side
Group 6: Mounting	DM	Dual (DIN & Mini rail) mount		Dual mount supplied in black body only - 57 mm escutcheon
Group 7: Time Delays	-	Not applicable	-	Time delay not applicable for the switch
	2	Medium time delay	5 – 10	
Group 8: Current Ratings	Code / Description		Comments	
	5, 10, 15, 16, 20, 25, 30, 32, 40, 50, 60, 63 A		QA17A Ratings available vary depending on certification * Other ratings are available as special orders. Check availability.	
		40, 63 A	QA17C Ratings available vary depending on certification * Other ratings are available as special orders. Check availability.	
Group 9: Sensitivity	30 mA	30 mA		Standard
Group 10: Voltage	230 V	230 Vac		VC 8035
	240 V	240 Vac		
Group 11: Special Termination	-	-		Box terminals (standard)
	S	Rear connected stud		Factory fitted
Group 12:	-	For future use (-)		
Group 13: Customer Specific	-	Not applicable		For future use

For options not listed, please contact CBI

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Time Delay Curves

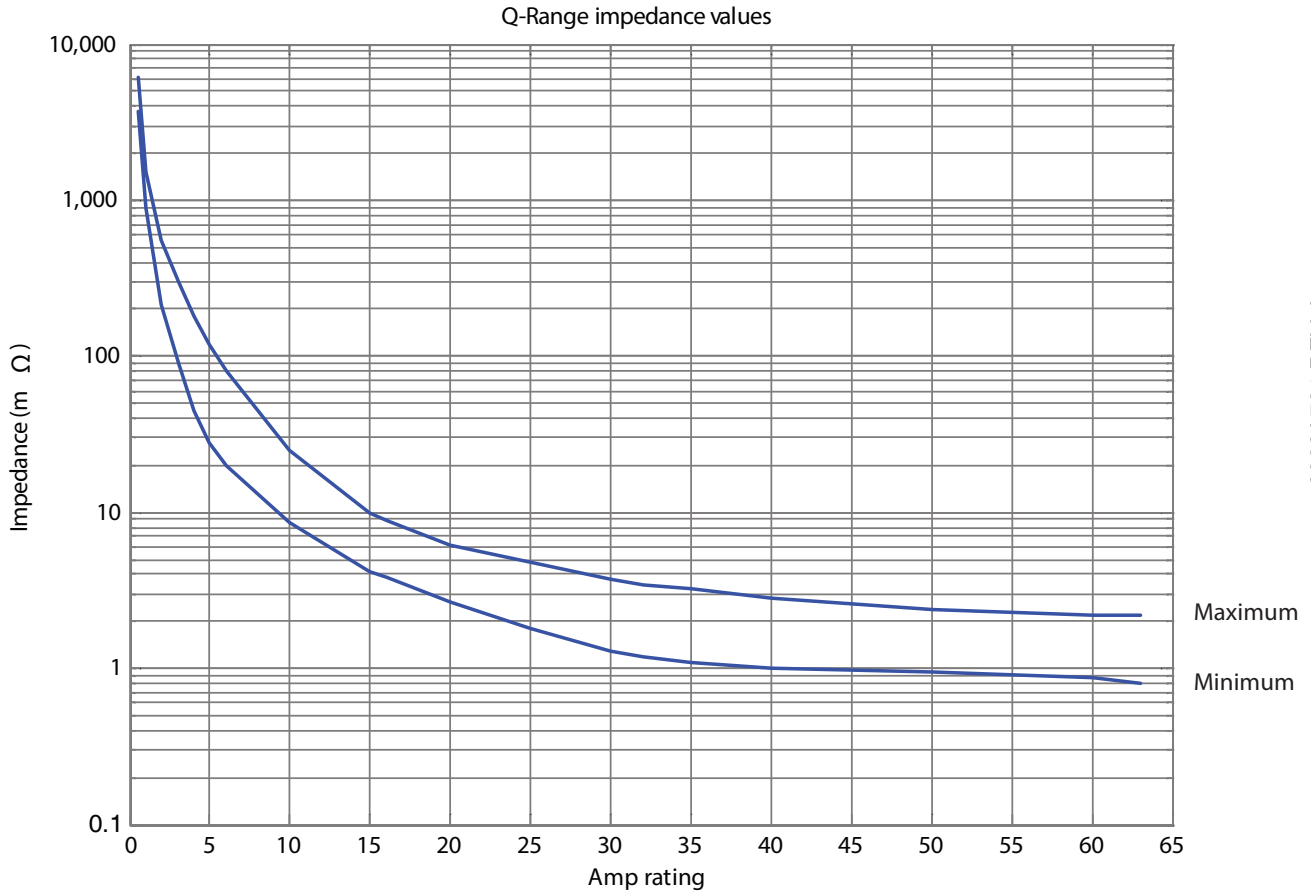


PERCENTAGE OF RATED CURRENT	105%	130%	145%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	22	15.4	14	6.3	2.1	0.85	0.1	0.001	0.006	0.005	0.041	0.004	0.004
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	660	180	144	40	12	5.5	3	1.92	1.3	0.86	0.47	0.1	0.02

* 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.

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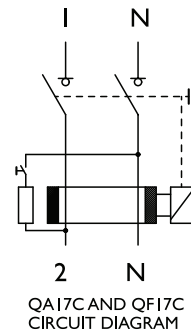
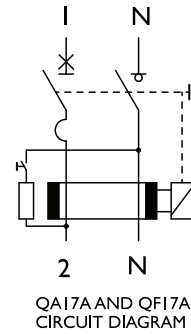
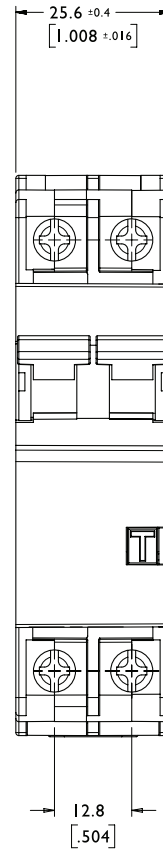
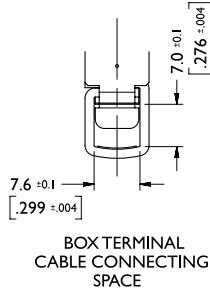
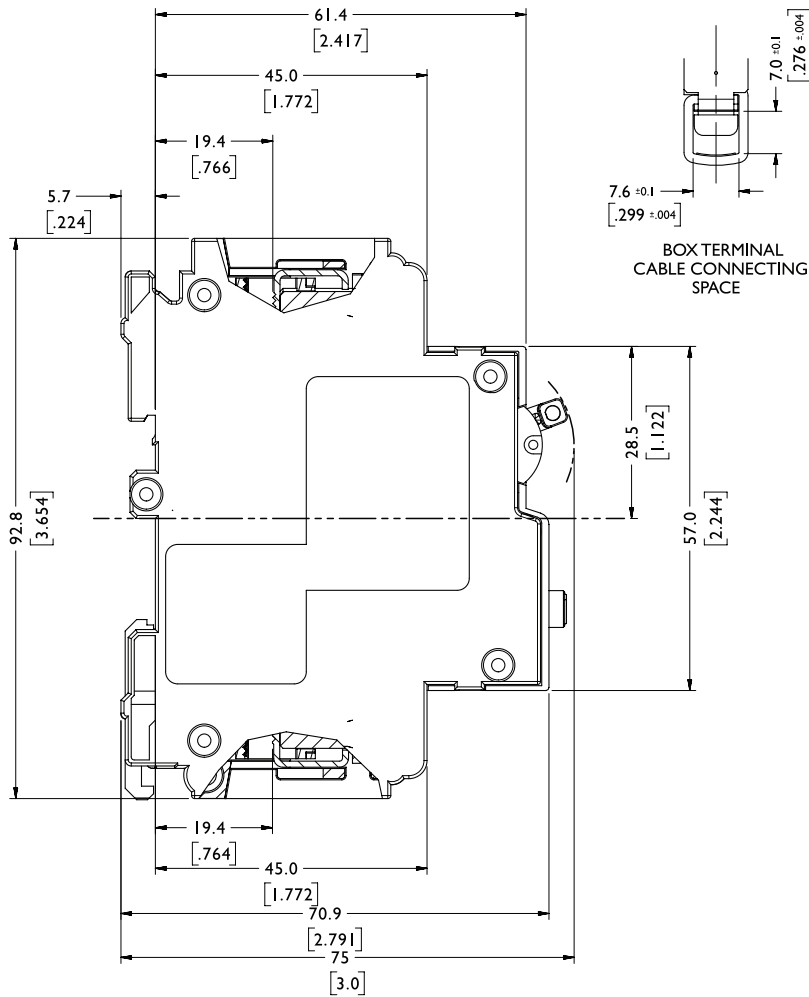
Internal Impedance vs Current Rating



3990A784 REV. A

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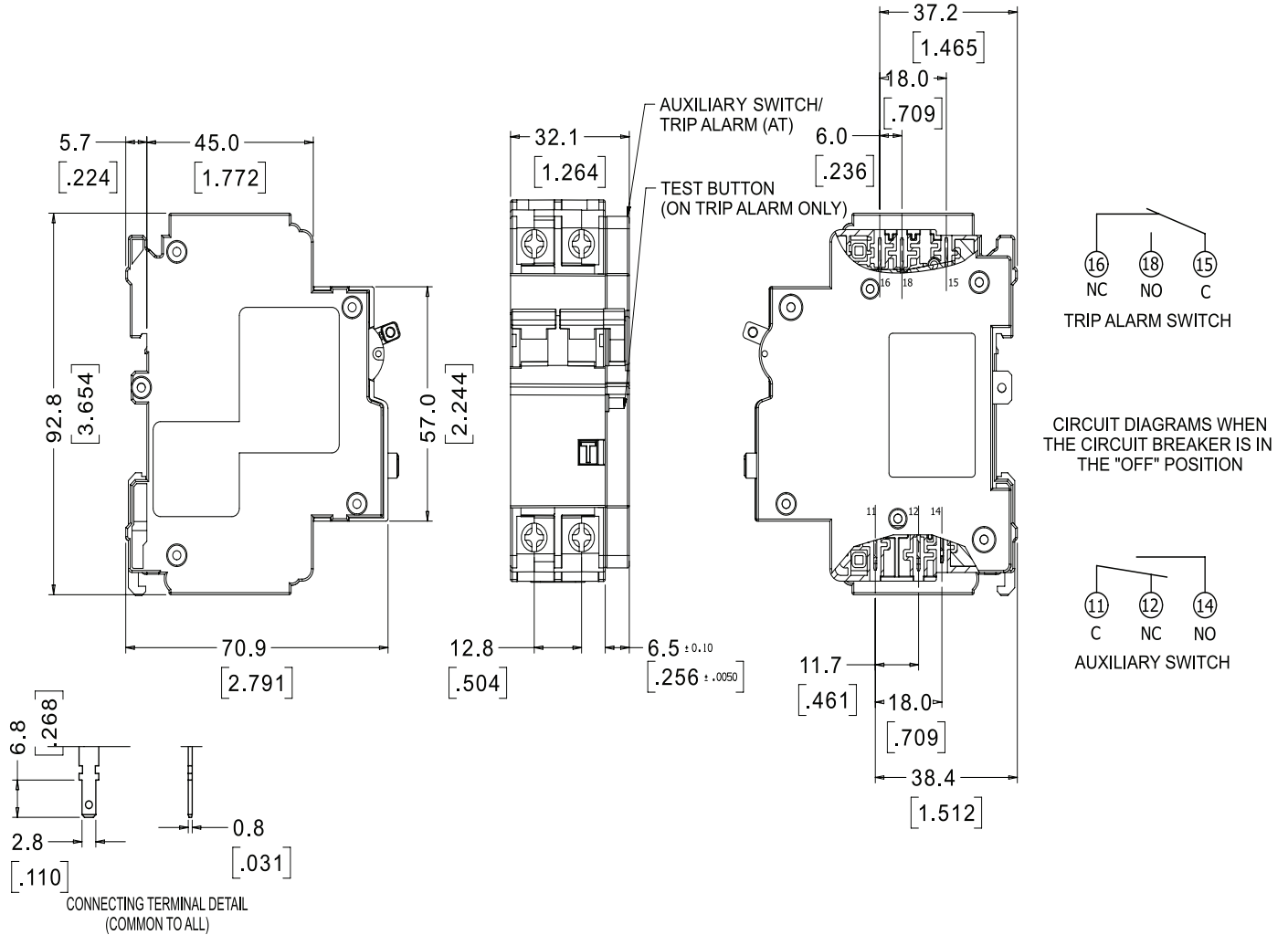
Outline Dimensions: Dual Mount



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

QA17 - Series Earth Leakages

Outline Dimensions: Dual Mount and Auxiliary Switch



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

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