

QA17 - Series Earth Leakages

The QA17 type earth leakage device is available as a circuit breaker and as a switch. As a circuit breaker it has the suffix A attached to it QA17A and as a switch it has the suffix C attached to it QA17C.



QA17A
Dual Mount



QA17C
Dual 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 listed (auxiliary switch: 6 A 250 Vac, 0.5 A 80 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)

Applications

- Residential and commercial applications requiring high sensitivity earth leakage protection from electrical shock and fire hazards
- Earth leakage protection (IEC / EN 60947-2)
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment
- Mobile power generation equipment
- Railway signalling equipment
- Industrial equipment

Optional Accessories

- Rear studs (factory fitted)
- Handle lock - QFAP001
- Surface mounting clips - SAAX000
- Busbar - 2121380
- Escutcheon blank - SFEB000
- Safety blank - SAEB000

VC 8035



(IEC / EN 60947-2)



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

QA17-SERIES-DAT
REV. B
SEPTEMBER 2021
1907031

Data Sheet
Page 1 of 8

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 V	230 V
Rated S/C Withstand Capacity (Icw)	-	2.5 kA / 50 ms
Short Circuit Breaking Capacity (Ics)	-	-
Ultimate S/C Breaking Capacity (Icu)	2.5 kA	-

Product Type	QA17A	QA17C
Approvals	IEC / EN 60947-2, CE	
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 V	240 V
Rated S/C Withstand Capacity (Icw)	-	-
Short Circuit Breaking Capacity (Ics)	1.5 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

QA17 - Series Earth Leakages

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	-	-	-

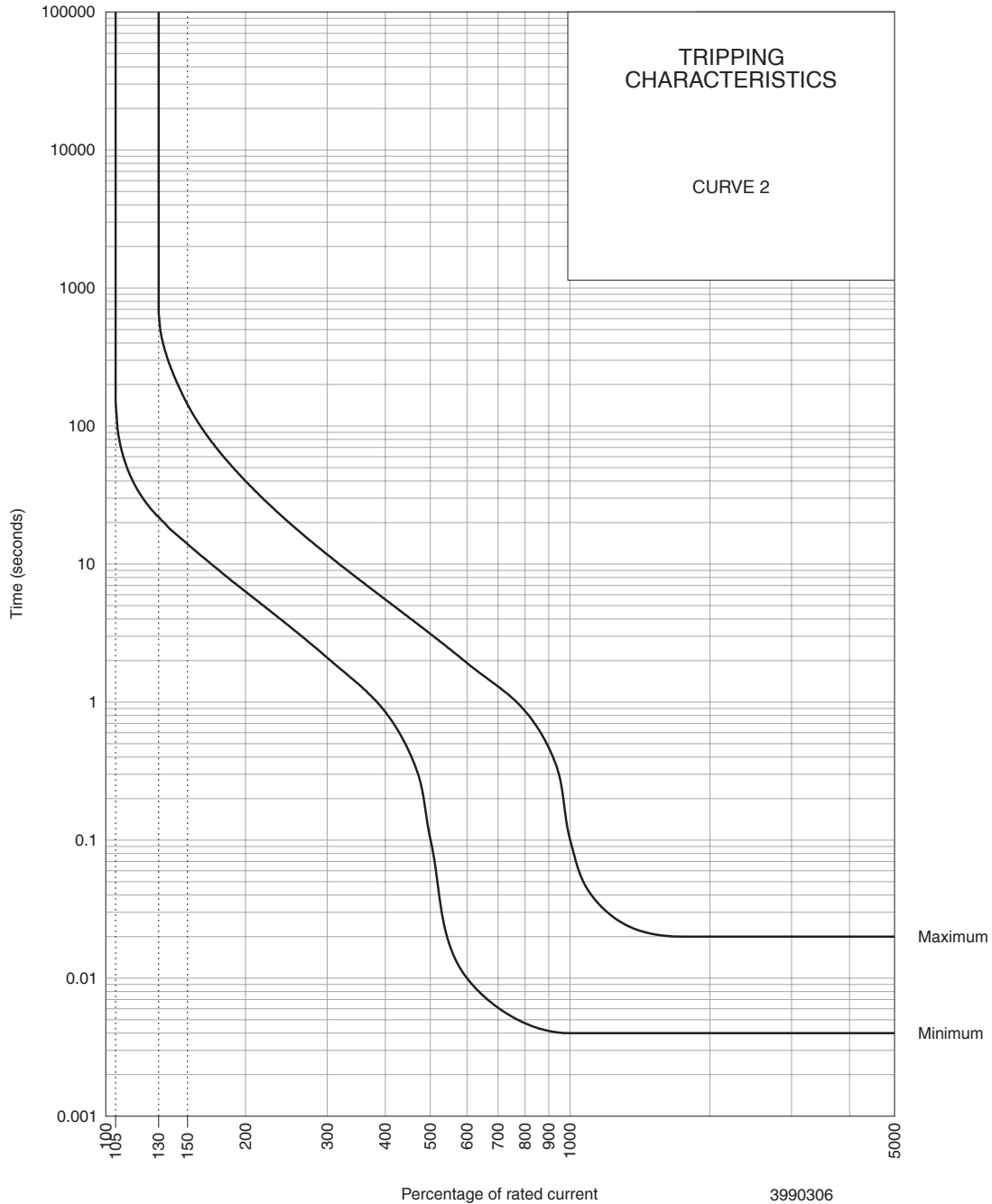
Ordering Information

Group	Code	Description	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 (IEC / 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 mount	Dual mount supplied in black body only - 57 mm escutcheon
Group 7: Time Delays	-	Not applicable	Switch Green handle
	2	Medium time delay	5 – 10 White & Green handle
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.
Group 9: Sensitivity	Code / Description		Comments
	30 mA		Standard
Group 10: Voltage	Code / Description		Comments
	240 V		
Group 11: Special Termination	Code / Description		Comments
	-		Box terminals (standard)
Group 12:	Code / Description		Comments
	S		Rear connected stud (factory fitted) Factory fitted. Front mount
Group 13: Customer Specific	Code / Description		Comments
	-		For future use (-) For future use

For options not listed, please contact CBI

QA17 - Series Earth Leakages

Time Delay Curves

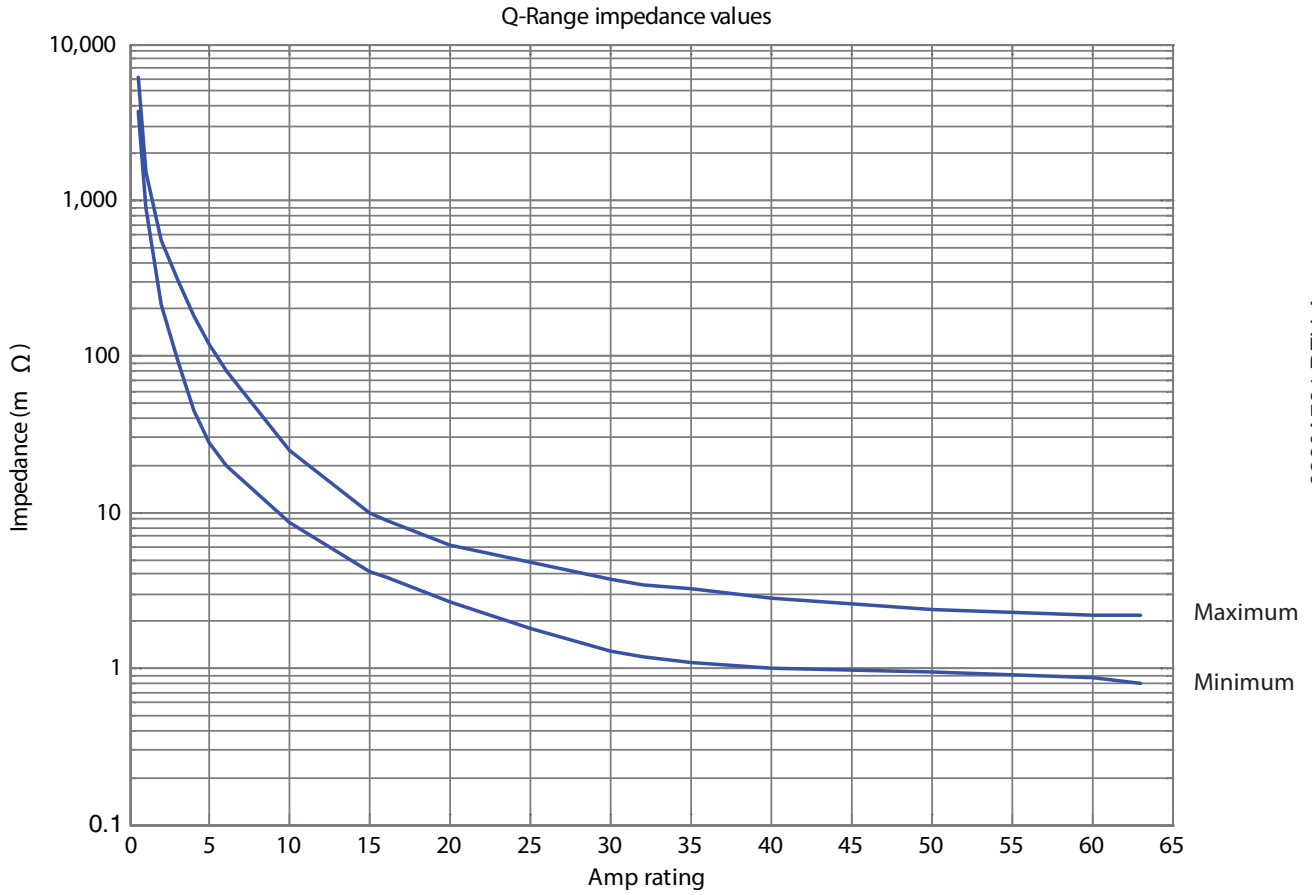


PERCENTAGE OF RATED CURRENT	105%	130%	145%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	22	15.4	14	6.3	2.1	0.85	0.1	0.001	0.006	0.005	0.041	0.004	0.004
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	660	180	144	40	12	5.5	3	1.92	1.3	0.86	0.47	0.1	0.02

* 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.

QA17 - Series Earth Leakages

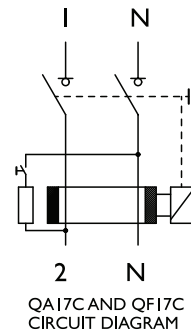
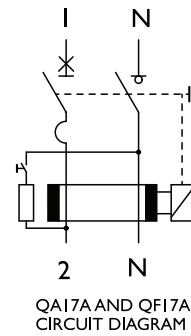
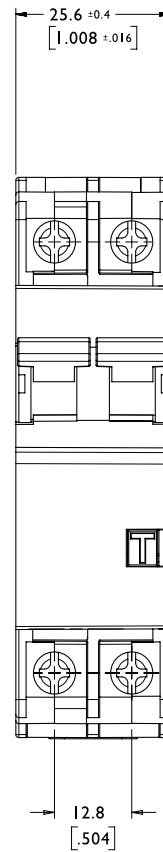
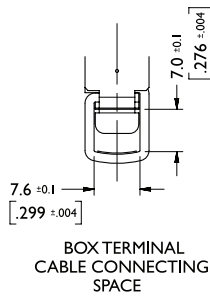
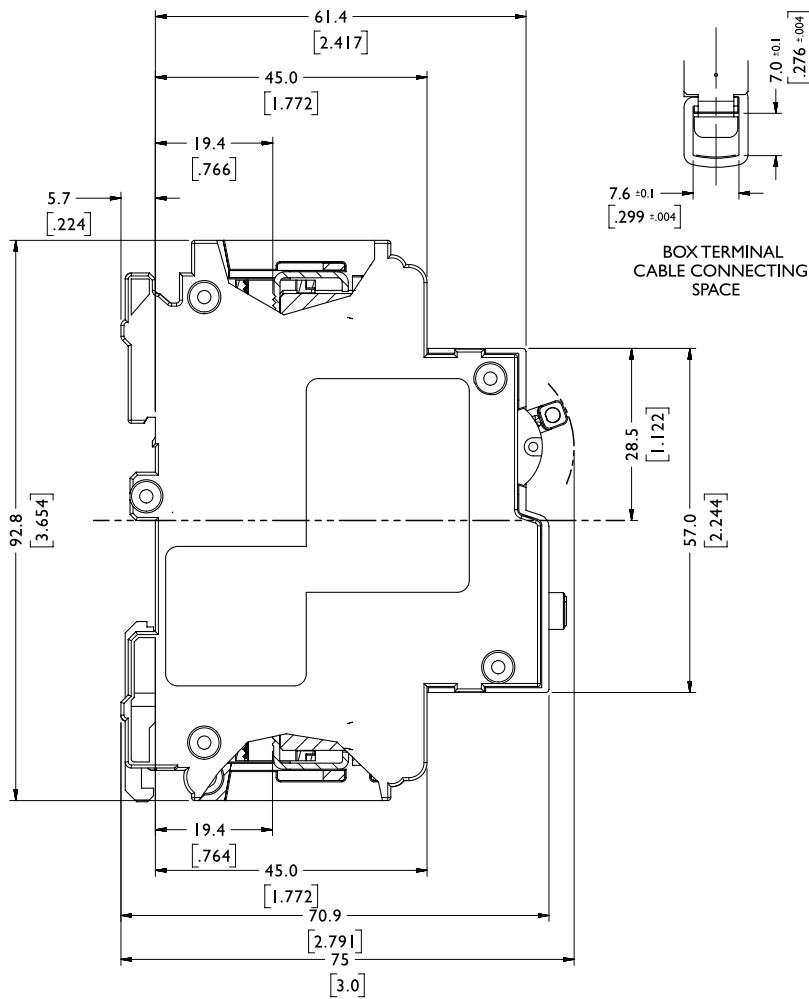
Internal Impedance vs Current Rating



3990A784 REV. A

QA17 - Series Earth Leakages

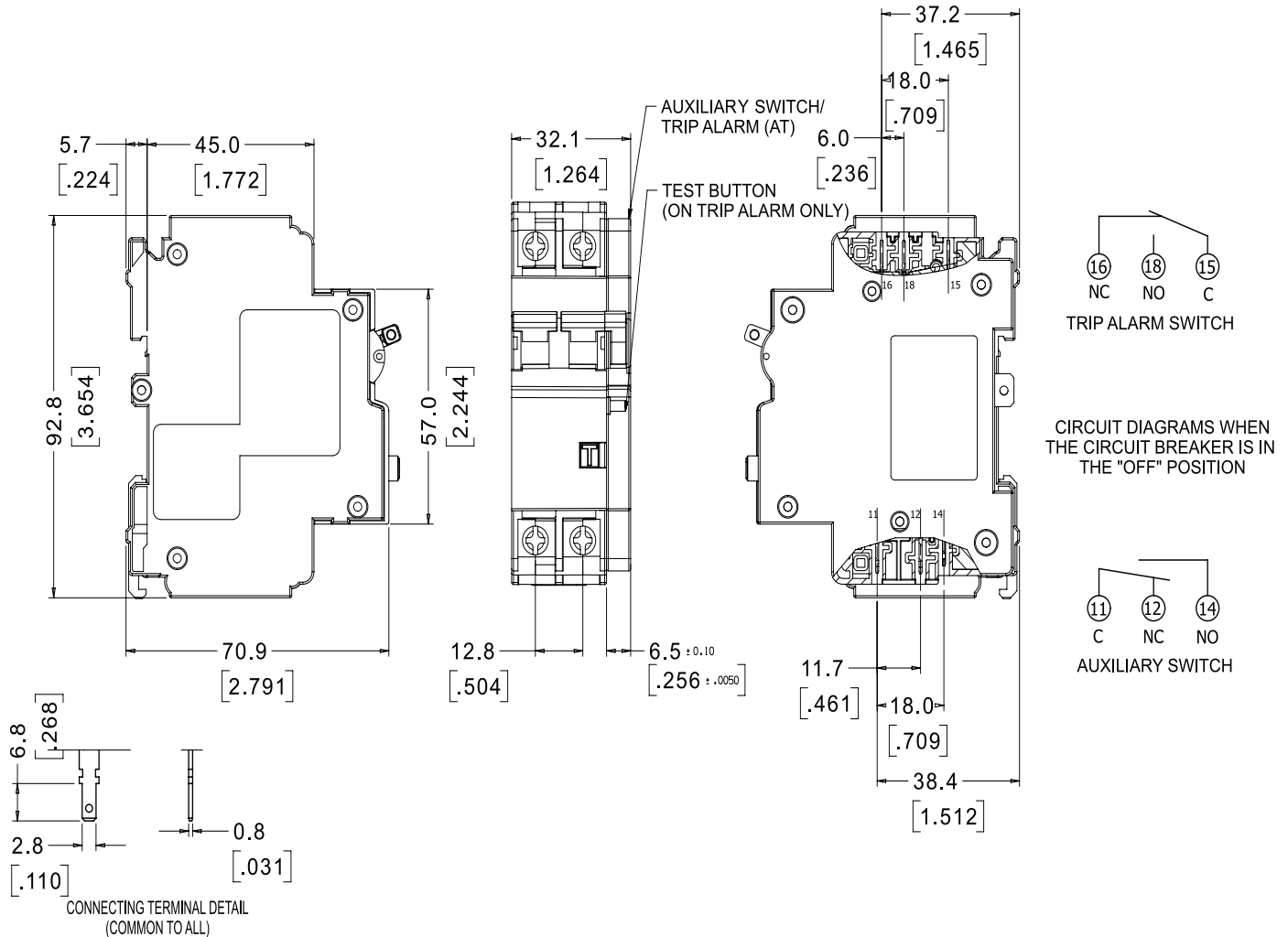
Outline Dimensions: Dual Mount



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)

Please review our Customer Terms and Conditions on www.cbi-lowvoltage.co.za

All rights reserved. Unless otherwise indicated, all materials on these pages are copyrighted by CBI (Pty) Ltd. No part of these pages, either text or image may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical or otherwise, for reasons other than personal use, is strictly prohibited without prior written permission. CBI (Pty) Ltd reserves the right to alter any details of this document without notice and while every effort is made to ensure the accuracy of the content, no warranty is given as to the accuracy of this document and no responsibility will be accepted for error or misinterpretation and any resulting loss.

AUSTRALIA

CBI-electric: Australia
27 Wedgewood Rd, Hallam
Victoria 3803 Australia
Tel: +61 3 8752 9300
Fax: +61 3 9796 5407
Email: sales@cbi-electric.com.au
Website: www.cbi-electric.com.au

SOUTH AFRICA

CBI-electric: low voltage
Tripswitch Drive Elandsfontein
Gauteng South Africa
Tel: +27 11 928 2000
Fax: +27 11 392 2354
Email: cbi@cbi-electric.com
internationalsales@cbi-electric.com
Website: www.cbi-lowvoltage.co.za

USA

CBI-electric: North America
35 E. Uwchlan Ave Suite 328
Exton PA 19341 USA
Tel: +1 610 524 9949
Fax: +1 610 524 9945
E-mail: info@cbibreakers.com
Website: www.cbibreakers.com