

QA36 - Series Earth Leakages



QA36A
Dual (DIN & mini rail) mount



QA36C
Dual (DIN & mini rail) mount

Features

- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- VC 8035 compliant
- IEC 60947-2 compliant
- Ratings 6 A to 63 A
- Earth Leakage sensitivity 30 mA, **Type A**
- Three pole plus switched neutral earth leakage protection
- Precision tripping characteristics
- Trip indication with mid-trip position
- Can be switched on immediately after tripping
- Suitable to use for electrical isolation
- Shell designed for easier installation onto busbar
- 57 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

Approvals

VC 8035

CE **UK**
(EN/IEC 60947-2) **CA**

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

QA36 - Series Earth Leakages

Technical Data

Product Type	QA36A	QA36C
Approvals	VC 8035	
Number of Poles	3 + N	3 + N
Standard Ampere Ratings	6 A to 63 A	40 A, 63 A
Sensitivity	30 mA	
Equipment Type Rated Voltage	415 Vac	
Ultimate S/C breaking Capacity (Icu)	2.5 kA	-
Rated S/C Withstand Capacity (Icw)	-	2.5 kA

Product Type	QA36A	QA36C
Approvals	IEC 60947-2	
Number of Poles	3 + N	3 + N
Standard Ampere Ratings	6 A to 63 A	40 A, 63 A
Sensitivity	30 mA	
Equipment Type Rated Voltage	415 Vac	
Ultimate S/C breaking Capacity (Icu)	3 kA	-
Rated Conditional S/C Current (Icc)	-	3 kA

Product Type	QA36
Operating Temperature Range	-40°C to +85°C
Mounting Options	Dual (DIN & mini rail) mount
Time Delay Curves	2 (A version only)
Endurance	10 000 operations - 1 500 electrical operations
Dielectric Strength	1 000 V (single pole), 50 Hz for one minute after testing
Weight	570 g per pole (unpacked)
Altitude	Certification tests done at altitude ≈ 2 000 metres. Will operate at higher altitudes.
Shock	10 G (IEC 60068-2-27)
Vibration	1.5 G (IEC 60068-2-6) (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Flammability	I3 - Ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28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 (IEC)	Torque (IEC)	Comments
Main Terminal	0.75 mm ² - 35 mm ²	2.5 Nm	Pozidriv #2 Combi head

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Long Code

Example Code: Q-A-36-A---DM-2-63A-30mA-240V----

Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Requirement	Q frame	Type F	1 + pole+N	Overload	No Auxiliary or additional pole	Dual Mount	Medium delay curve 2	Current rating 63 A	Sensitivity 30 mA	Voltage 240 Vac	Future use	Future use	Future use
Long Code	Q	A	36	A	-	DM	2	63 A	30 mA	400 V	-	-	-

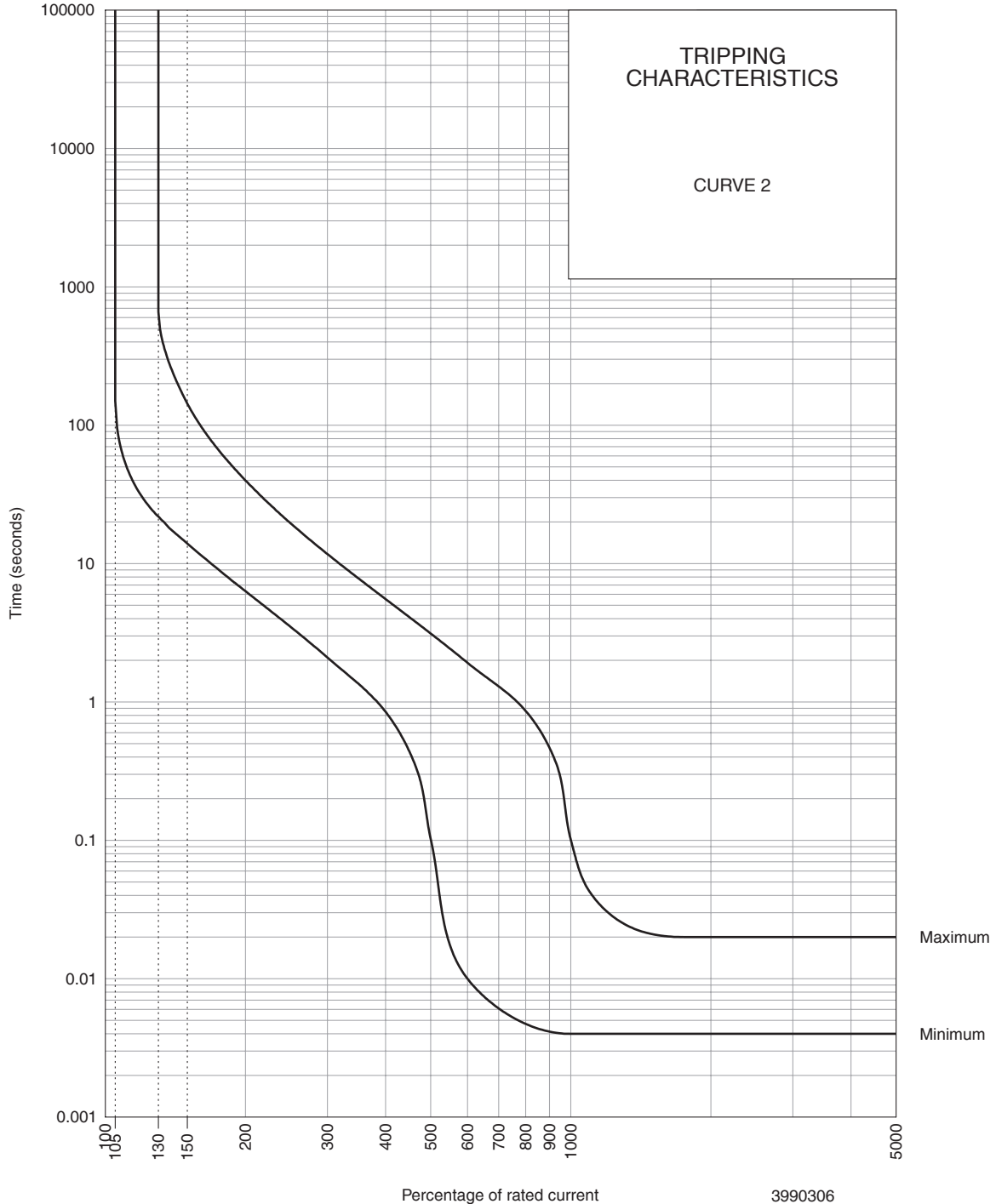
Ordering Information

Group 1: Frame Type	Code	Description	Comments	
	Q	Earth Leakage		
Group 2: Product Type	Code	Description	Comments	
	A	415 Vac		
Group 3: No of Poles	Code	Description	Comments	
	36	Three pole plus switched neutral (3+N)	36 mm wide	
Group 4: E-L Type	Code	Description	Comments	
	A	Overload	White and green handle	
	C	Switch disconnecter	Green handle	
Group 5: Auxiliary / Additional Pole	Code	Description	Comments	
	-	Not applicable		
Group 6: Mounting	Code	Description	Comments	
	DM	Dual (DIN & mini rail) mount	Dual mount supplied in black shell only - 57 mm escutcheon	
Group 7: Time Delays	Code	Description	Instantaneous Trip Point (x In)	Comments
	-	Not applicable	-	Time delay not applicable for the switch
	2	Medium time delay	5 – 10	
	3	Short time delay	3 – 5	
Group 8: Current Ratings	Code	Description	Comments	
		6 A to 63 A	QA36A	
		40 A, 63 A	QA36C	
Group 9: Sensitivity	Code	Description	Comments	
	30 mA	30 mA	Standard	
Group 10: Voltage	Code	Description	Comments	
	415 V	415 Vac		
Group 11 Future Use	Code	Description	Comments	
	-	Not applicable	For future use	
Group 12 Future Use	Code	Description	Comments	
	-	Not applicable	For future use	
Group 13 Future Use	Code	Description	Comments	
	-	Not applicable	For future use	

For options not listed, please contact CBI

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Time Delay Curves



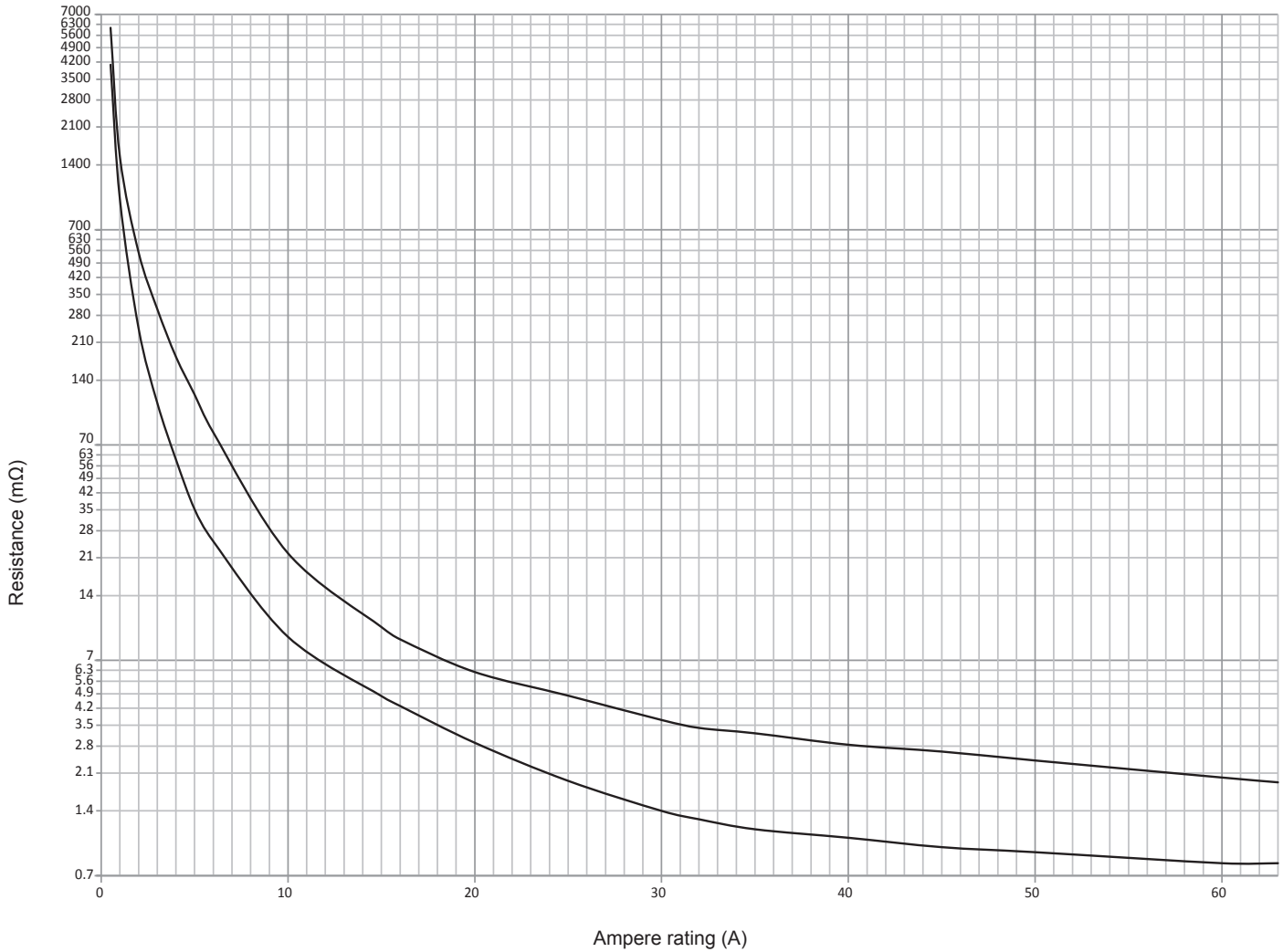
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 REV H

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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Resistance Curve

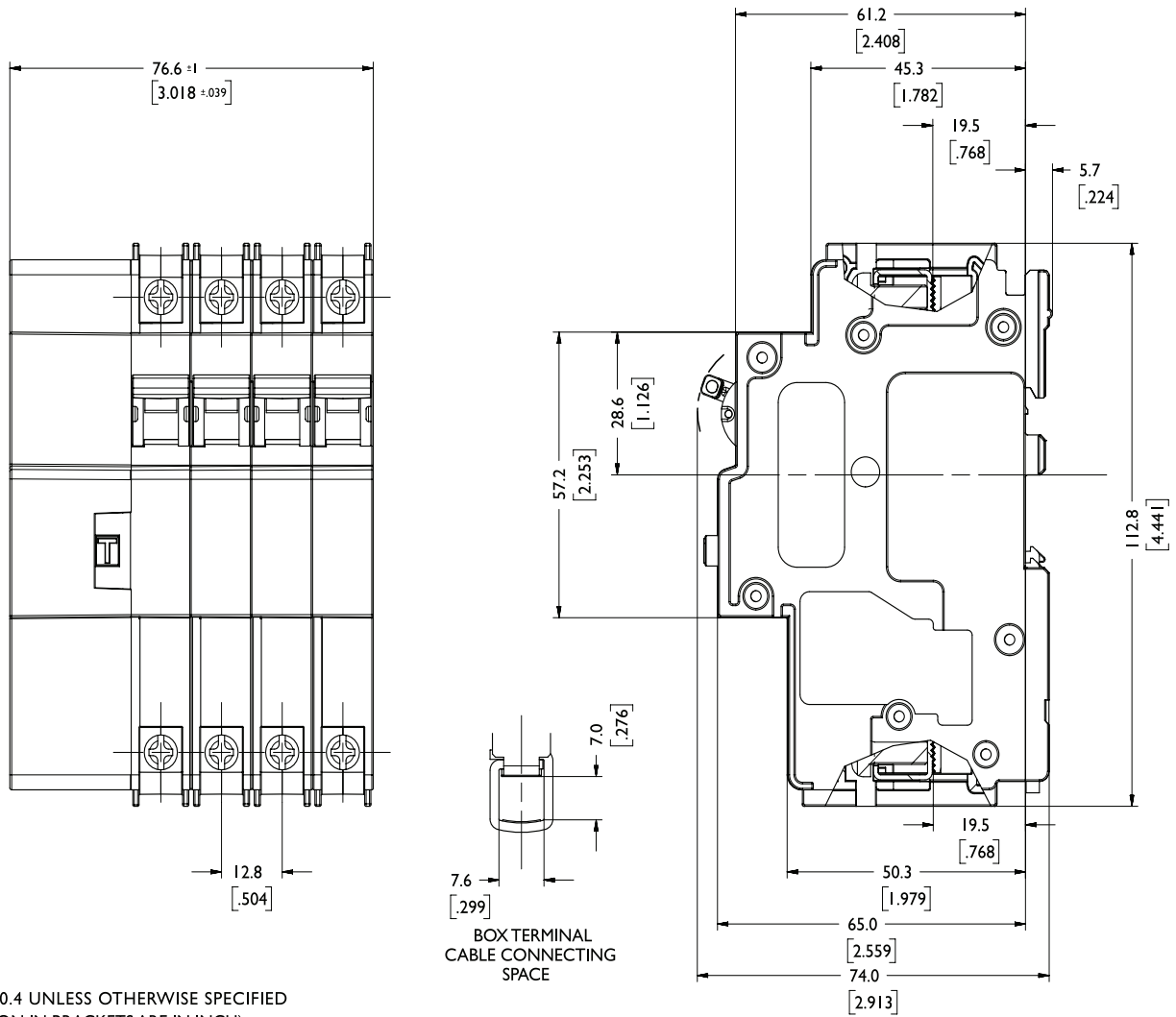


3990A784 REV A

Amp RATING	0.5	1	2	5	6	10	15	20	25	30	32	40	50	60	63
MINIMUM (mΩ)	4085	970	244	35	25	9.0	4.8	2.9	1.9	1.4	1.3	1.1	0.9	0.8	0.8
MAXIMUM (mΩ)	6065	1527	550	120	80	22	10	6.2	4.8	3.7	3.4	2.8	2.4	2.0	1.9

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Outline Dimensions: Dual (DIN & Mini Rail) Mount



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

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