QF(26)LR - Series Miniature Circuit Breakers

1 pole
Dual (DIN & mini rail) mount

2 pole
Dual (DIN & mini rail) mount

3 + N
Dual (DIN & mini rail) mount

Features

- AC circuit breaker
- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- One, two, three pole, 1+N and 3+N (VDE)
- VC 8036 and CE compliant
- CCC approved
- Ratings 5 to 63 A (subject to certification)
- Precision tripping characteristics
- Trip indication with mid-trip position
- Can be switched on immediately after tripping
- Dual (DIN & mini rail) mount, 57 mm front escutcheon (Black)
- Suitable to use for electrical isolation
- Box terminals suitable for cables up to 50 mm^2

Applications

- AC branch circuit protection (DIN / EN 60947-2)
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment
- Mobile power generation equipment
- Railway signalling equipment
- Residential equipment
- Industrial equipment

Optional Accessories

- Handle lock - QFAP001
- Surface mounting clips - 2096001
- Busbar - 2121043
- Escutcheon blank - SFEB000
- Safety blank - SAEB000

(GB 14048.2/3)

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

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Technical Data

Product Type	Circuit Breaker				
Approvals	VC 8036 (SANS 556-1, SANS IEC 60947-2)				
Number of Poles	1	2 (1+N)	2	3	4 (3+N)
Operating Voltages	240 Vac		415 Vac		
Minimum Current Rating	5 A				
Maximum Current Rating	63 A				
Ultimate S/C Breaking Capacity (Icu)	5 kA				
Short Circuit Breaking Capacity (Ics)	2.5 kA				

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Number of Poles	1	2 (1+N)	2	3	4 (3+N)
Operating Voltages	240 Vac		415 Vac		
Minimum Current Rating	5 A				
Maximum Current Rating	63 A				
Rated Withstand Current Capacity (Icw)	6 kA				
Rated Interrupting Current Capacity (Ics)	3 kA				
Ultimate S/C Breaking Capacity (Icu)	6 kA				

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

Product Type	QF(26)LR
Operating Temperature Range	-40 °C to +85 °C
Mounting Options	Dual (DIN & mini rail) mount, surface mount
Time Delay Curves	1, 2, 3, 9
Endurance	10000 operations - 1500 electrical at rated current and voltage (IEC 60947-2 Clause 7.2.4.2)
Dielectric Strength	1480 V (single pole) / 1830 V (multi pole), 50 Hz for one minute after testing
Rated Impulse Withstand	6 kV (IEC 60947-2 Clause 8.3.3.2)
Weight	200 g per pole (unpacked)
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	16 G (IEC 60068-2-27)
Vibration	2 G (IEC 60068-2-6) Sinusoidale 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.

Breaker QF	Wire Size (IEC)	Torque (IEC)	Comments
Main Terminal	2.5 mm² - 25 mm²	4 Nm	Pozidriv #2 Combi head

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Long Code

Example Code: QF----3(26)-DM-2-63A-----

Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Requirement	QF Frame	Switch / neutral	N/A	No of poles	Module width	Dual mount	Medium delay curve	Current rating	Future use	Shunt trip	Future use	Future use	Customer specific
Long Code	**QF**	**-**	**-**	**3**	**(26)**	**DM**	**2**	**63A**	**-**	**-**	**-**	**-**	**-**

Ordering Information

Group 1: Frame Type	**Code**	**Description**	**Comments**	
	QF	Miniature circuit breaker	26 mm wide	
Group 2: Switch/Neutral	**Code**	**Description**	**Comments**	
	-	Not applicable		
	S	Switch	Green handle	
	N	Neutral	Green handle	
Group 3: Auxiliary	**Code**	**Description**	**Comments**	
	-	Not applicable		
Group 4: No of Poles	**Code**	**Description**	**Comments**	
	1	Single pole		
	2	Double pole	2 pole or 1+N	
	3	Triple pole		
	4	Four pole	4 pole or 3+N	
Group 5: Module Width	**Code**	**Description**	**Comments**	
	(26)	26 mm module width	26 mm per pole	
Group 6: Mounting	**Code**	**Description**	**Comments**	
	DM	Dual (DIN & mini rail) mount	Dual mount supplied in black body only - 57 mm front escutcheon	
Group 7: Time Delays	**Code**	**Description**	**Instantaneous Trip Point (x In)**	**Comments**
	1	Long time delay, high instantaneous trip	10 – 20	Orange handle
	2	Medium time delay	5 – 10	White handle
	3	Short time delay	3 – 5	White handle
	9	Long time delay	7 – 12	White handle
Group 8: Current Ratings	**Code / Description**		**Comments**	
	5 - 63 A			
Group 9:	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	
Group 10: Shunt Trip	**Code**	**Description**	**Comments**	
	-	Not applicable	Use this code if no shunt trip is used	
Group 11:	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	
Group 12:	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	
Group 13: Customer Specific	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	

For options not listed, please contact CBI

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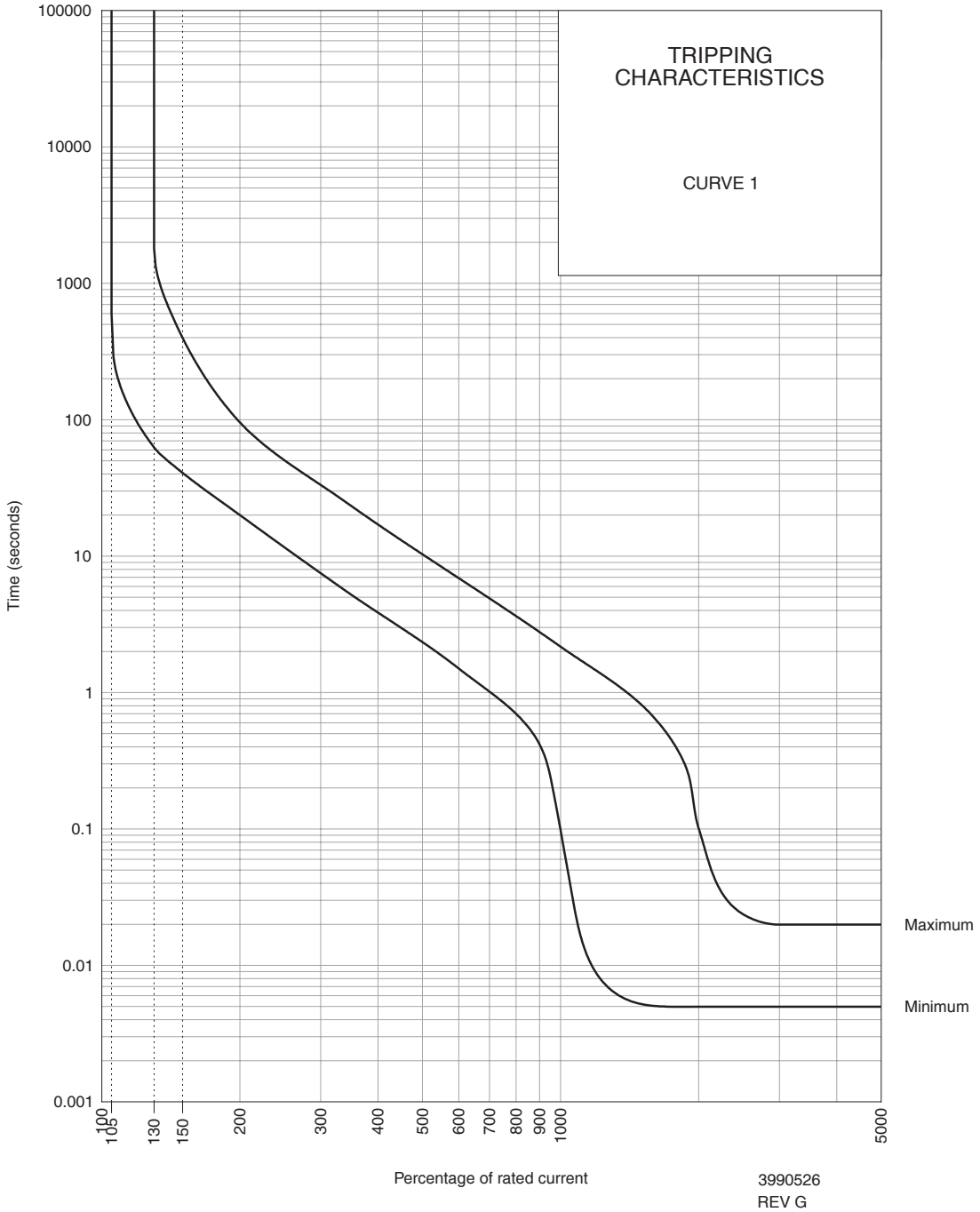
Time Delay Curve



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	63	45	41	20	7.5	3.8	2.3	1.5	1.01	0.7	0.42	0.1	0.005
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	1800	503	400	96	34	17	10.3	6.8	4.9	3.6	2.8	2.2	0.1

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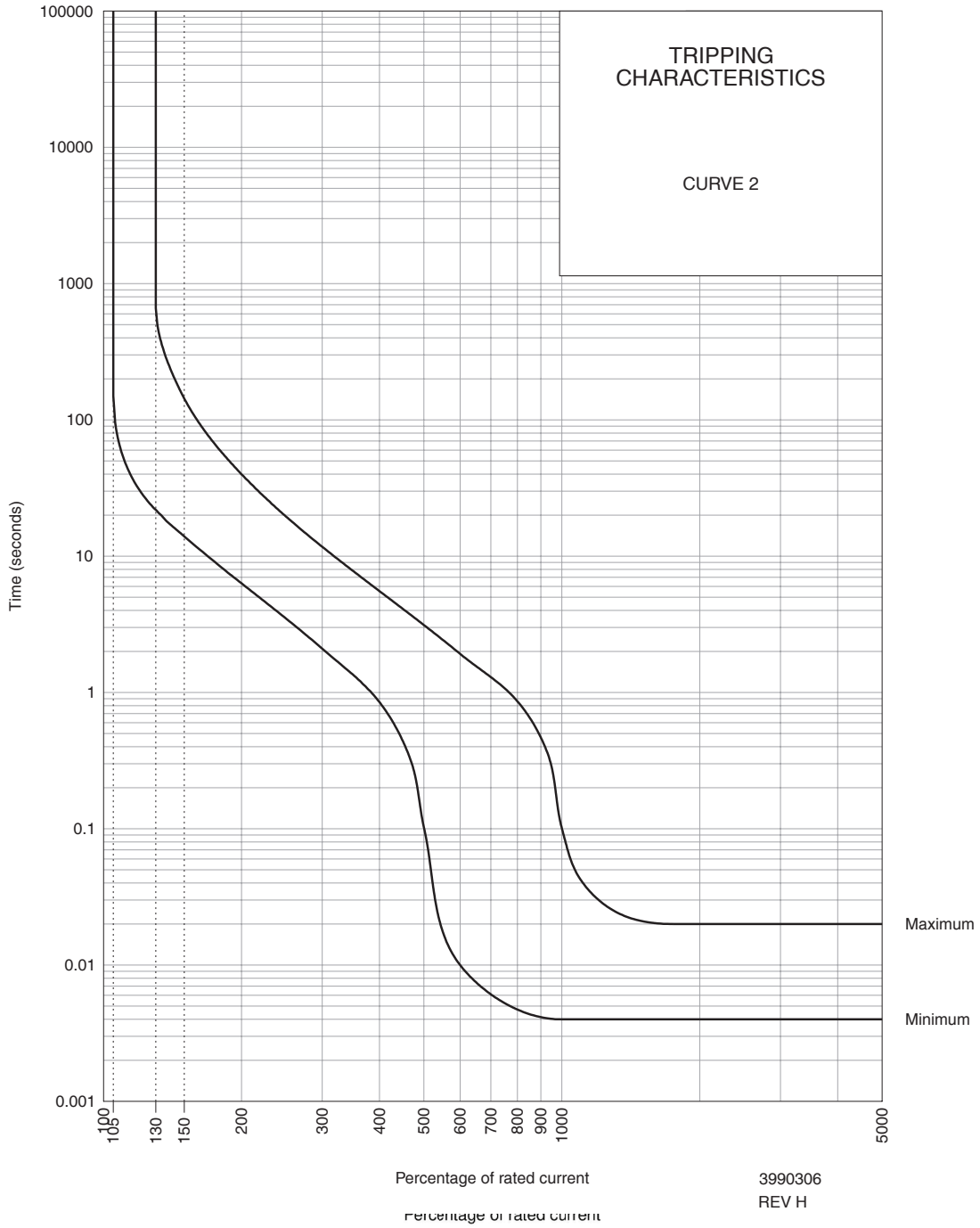
Time Delay Curve



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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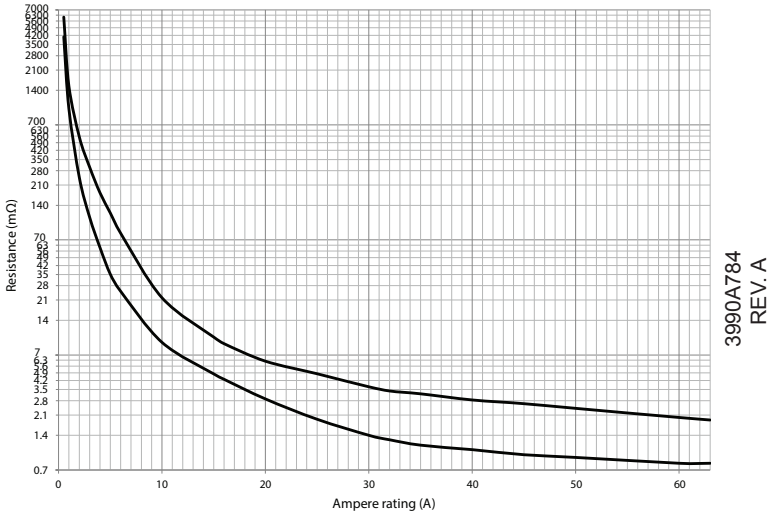
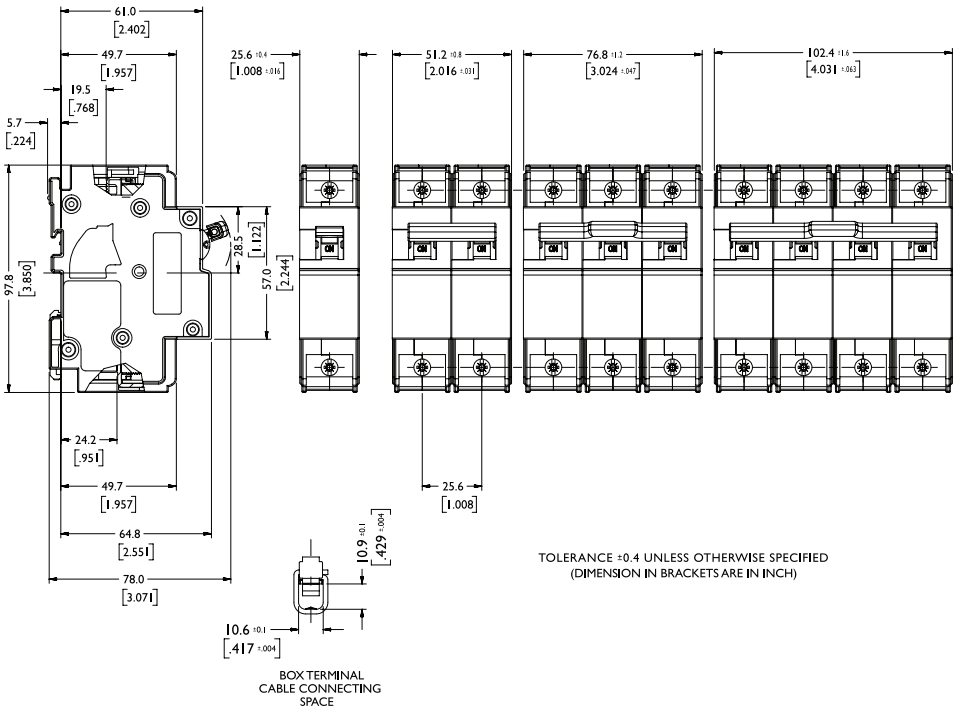
Internal Impedance vs Current Rating



Ampere 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

Outline Dimensions: Dual (DIN & mini rail) mount



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