



QL - Series Miniature Circuit Breakers

Features

- AC Circuit Breaker
- Hydraulic-Magnetic Technology
- 100% Rating Capability Independent of Ambient Temperature
- Up to Three Poles
- CSA, VDE, CE and CCC approved
- UL Listed (UL 489)
- Ratings up to 25A
- Optional Auxiliary / Trip Alarm Switch - Factory Fitted
- Wide Range of Time Delays and Operating Currents
- Precision Tripping
- Current Limiting Capabilities
- Ultra Compact – 13mm Width Module
- Trip Indication with Mid-Trip Handle
- Reset Immediately After Overload

Applications

- UPS Equipment
- Mobile Power-Generation Equipment
- Power Conditioning Equipment
- Alternative Energy Equipment
- Lighting Control
- AC Branch Circuit Installations



Technical Data

Product Type	Circuit Breaker	Circuit Breaker
Approvals	UL 489 / CSA	IEC / EN 60947-2, VDE, CE, CCC
Number of Poles	1, 2, 3	1, 1+N, 2, 3, 3+N
Operating Voltages	120/240VAC, 240VAC	240/415VAC
Current Ratings	0.1 - 25A	0.1 - 25A
Interrupting Capacity	10kA 120/240VAC, 5kA 240VAC	6kA
Operating Temperature Range	-40°C to +65°C	
Mounting Options	DIN Rail, Dual Mounting (DIN & Mini), Surface mounting clip	
Tripping Curves	1, 3, 9, KM, OP	

Breaker QL	Wire Size UL	Wire Size mm²	Torque	Comments
1-3 Poles	2 - AWG	35mm²	28 in-lb	Pozi driv #2 Screw head
	14-10 – AWG	2.5 - 4mm²	20 in-lb	
	16 – AWG	1.5mm²		
	18 – AWG	0.75mm²		

QL-Series Miniature Circuit Breakers

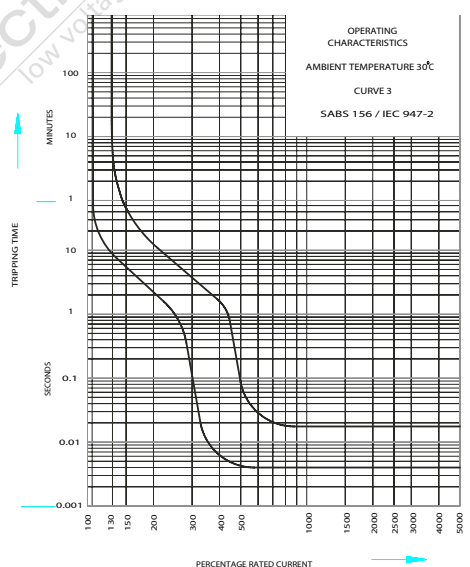
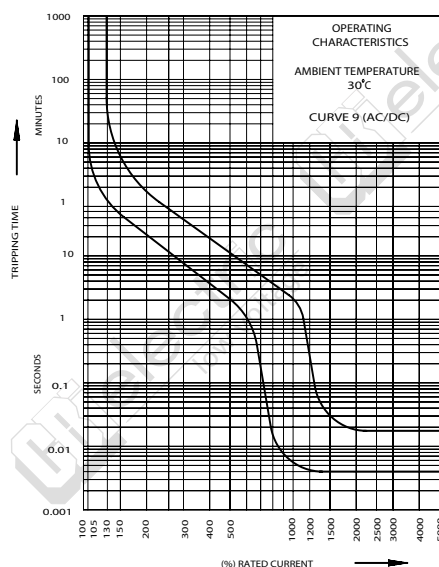
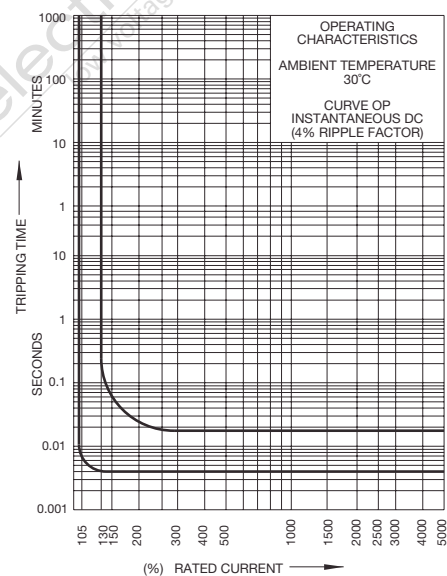
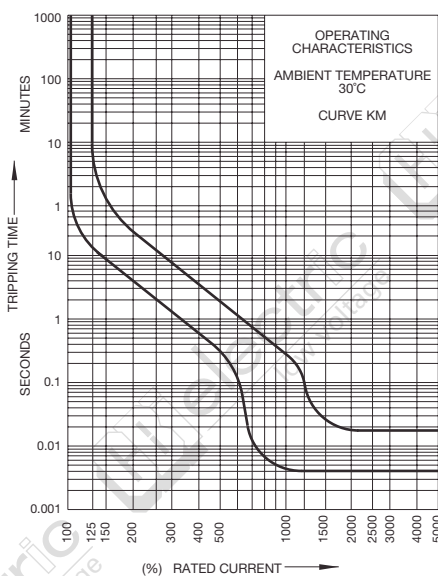
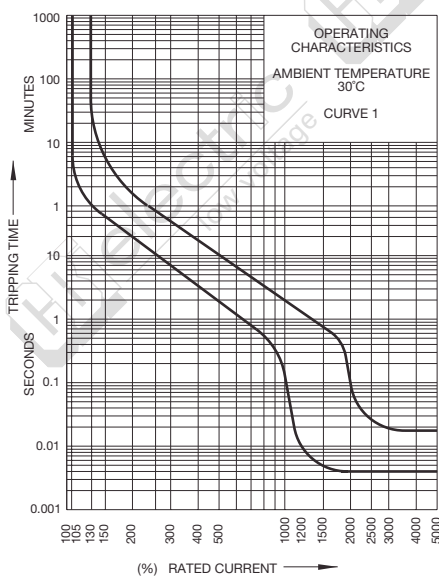
Optional Accessories

- Auxiliary Switch
- Auxiliary Switch + Trip Alarm
- Trip Alarm
- Handle Lock
- Surface Mounting Clips
- Busbar
- 57mm Escutcheon Blank

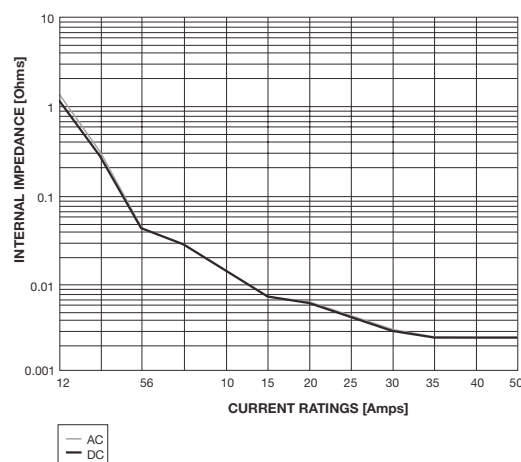
Auxiliary Switch, Trip Alarm & Combo: Features

- AC and DC Voltages
- UL 489 Listed (Auxiliary switch: 6A 250V AC, 0.5A 80V DC; Trip alarm: 5A 250V AC, 0.5A 125V DC)
- IEC 60947-5-1 Approved (Auxiliary switch: 6A 250V AC, 0.5A 80V DC; Trip alarm: 5A 250V AC, 0.5A 125V DC)
- Factory Fitted
- Attached to Right Hand Side of Circuit Breaker
- Compact 6.5mm Width
- Available in Dual and DIN Rail Mounting

Standard Time Delay Curves



Internal Impedance vs Current Rating



QL-Series Miniature Circuit Breakers

Example Code: QL-1(13)-DM-KM-20A

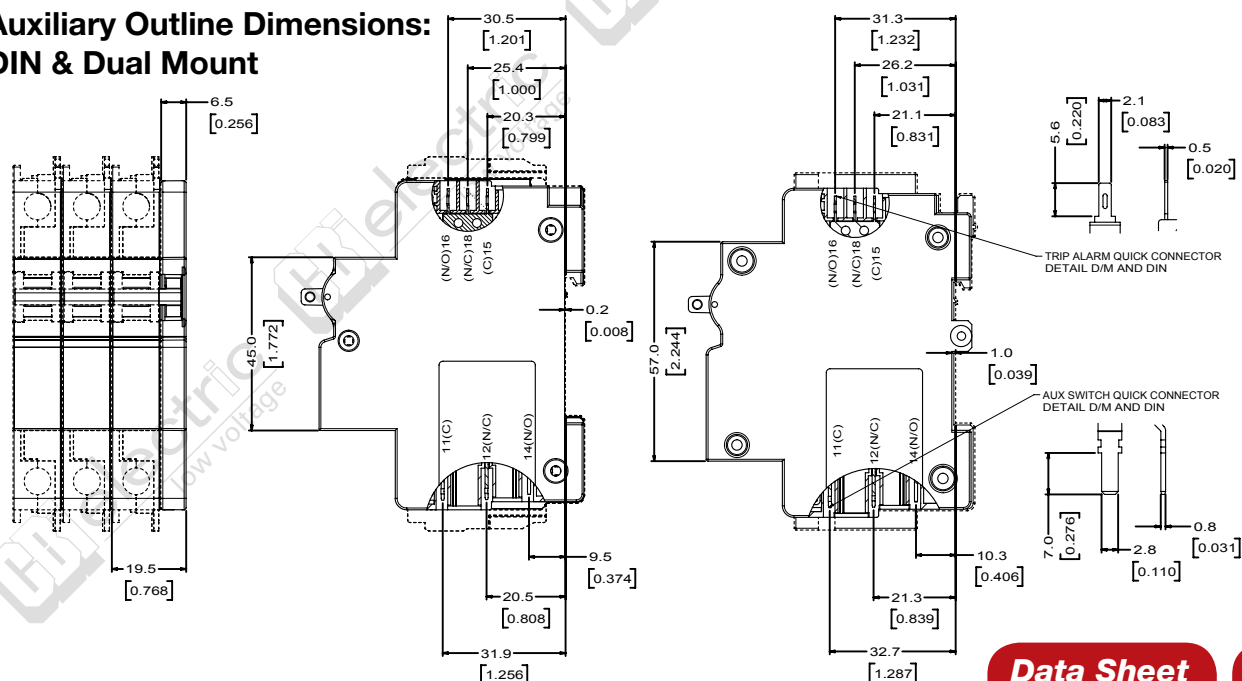
Group	1	2	3	4	5	6	7	8
Requirement	QL Frame	Switch/Neutral	No Auxiliary	Single Pole	13mm	Dual Mount	Medium Delay	20A
Long Code	QL			1	(13)	DM	KM	20A

Long Code

Group 1: Frame Type	Code	Description	Comments	
	QL	13mm width miniature circuit breaker	UL 489, IEC / EN 60947-2, VDE, CE, CCC	
Group 2: Switch/Neutral	Code	Description	Comments	
	N	Neutral	2p (1p+N) or 4p (3p+N)	
	S	Switch		
		Leave blank if group is not applicable		
Group 3: Auxiliary Switch	Code	Description	Comments	
	A	Auxiliary switch	Leave blank if not applicable.	
	T	Trip alarm		
	AT	Auxiliary switch + trip alarm combo		
Group 4: Number of Poles	Code	Description	Comments	
	1	Single pole		
	2	Double pole		
	3	Triple pole		
Group 5: Module Width	Code	Description	Comments	
	(13)	13mm module width	13mm per pole	
Group 6: Mounting	Code	Description	Comments	
	D	DIN rail mount	45mm Escutcheon, Grey body	
	DM	Dual mount	57mm Escutcheon, Black body	
Group 7: Time Delays	Code	Description	Instantaneous Trip Point (x In)	Comments
	1	Long, high instantaneous trip	10 - 20	Orange handle
	9	Long	7 - 12	White handle
	KM	Medium	6 – 12	White handle
	OP	Instantaneous	None	White handle
	3	Short	3 – 5	
Group 8: Current Ratings	Code	Description	Comments	
	0.1A	0.1A	Examples only. Any rating possible, from 0.1 – 25A.	
	01A	1A		
	1.5A	1.5A		
	5A	5A		
	10A	10A		
	25A	25A		

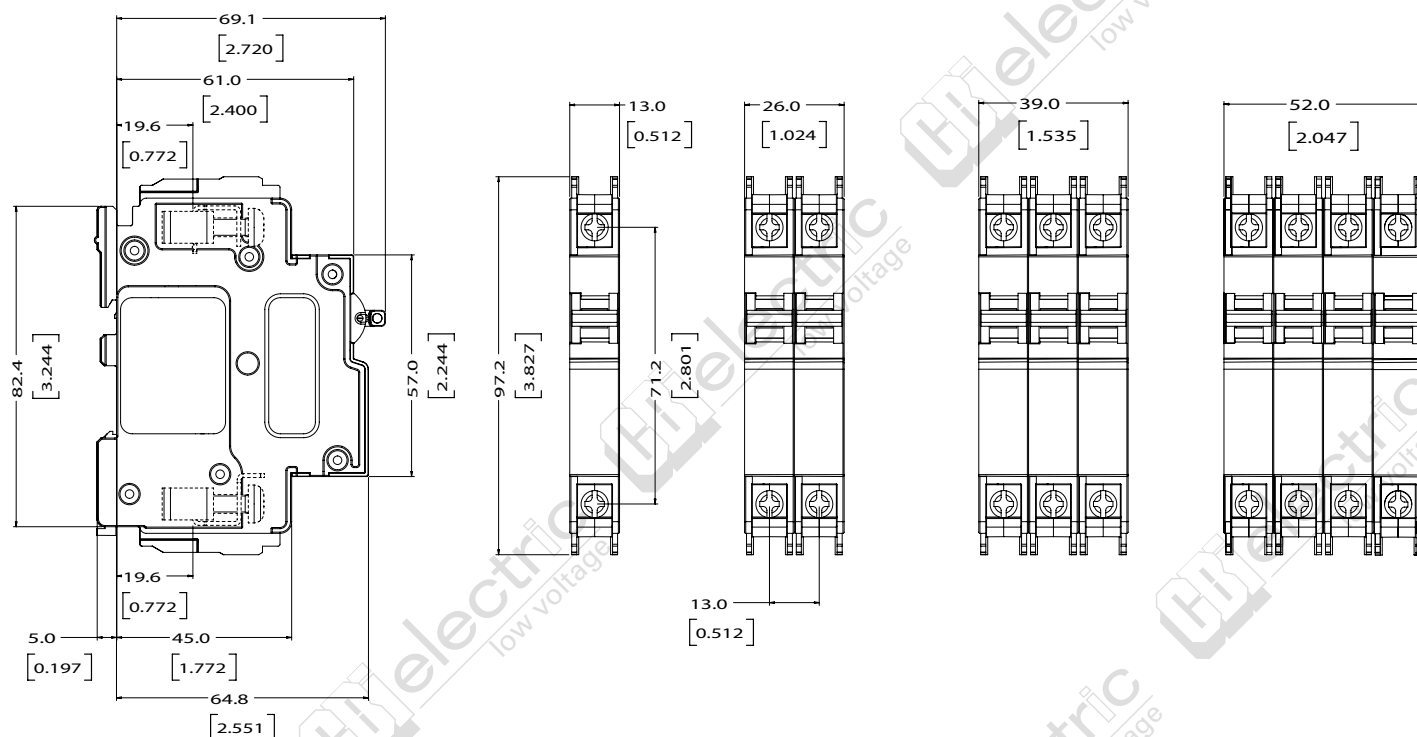
For options not listed, please contact CBI for assistance

Auxiliary Outline Dimensions: DIN & Dual Mount

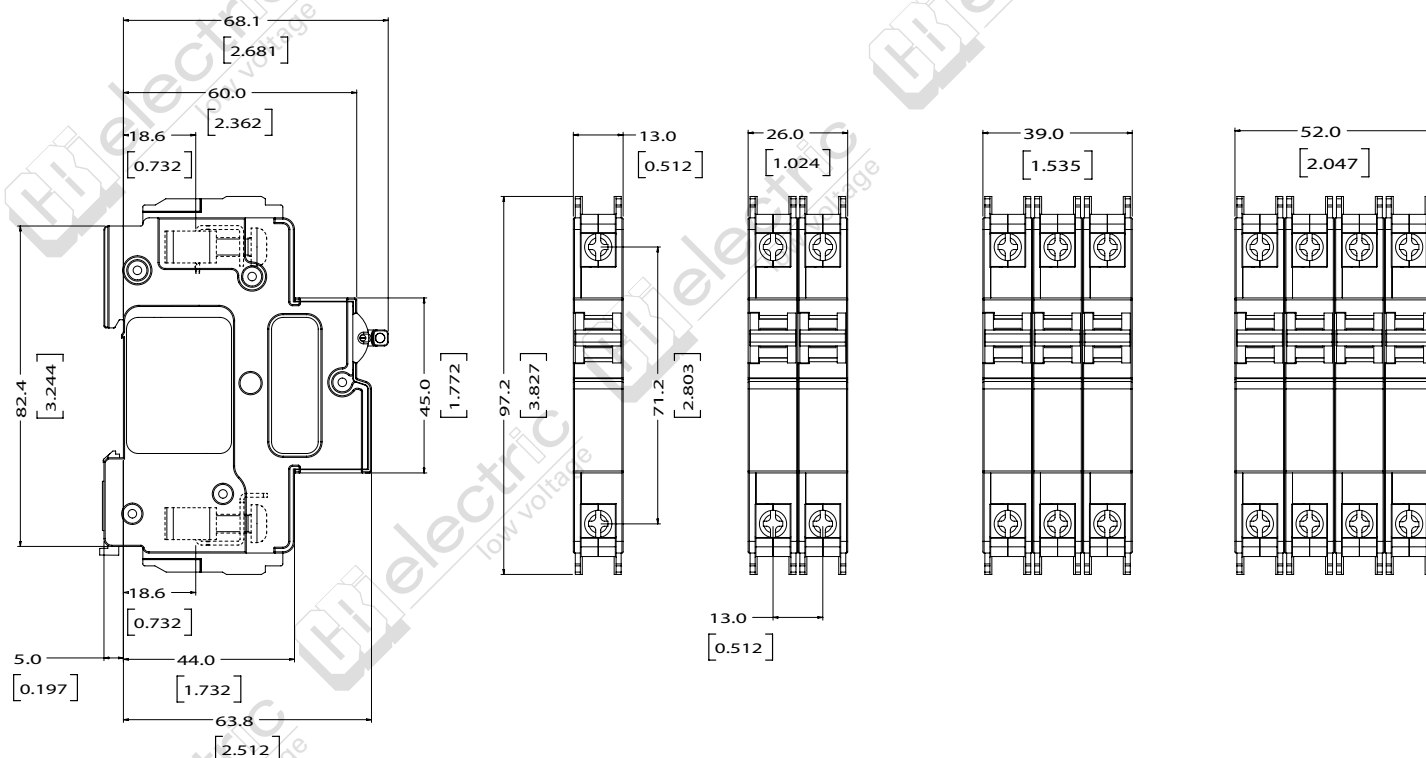


QL-Series Miniature Circuit Breakers

Outline Dimensions: Dual Mount



Outline Dimensions: DIN Mount



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