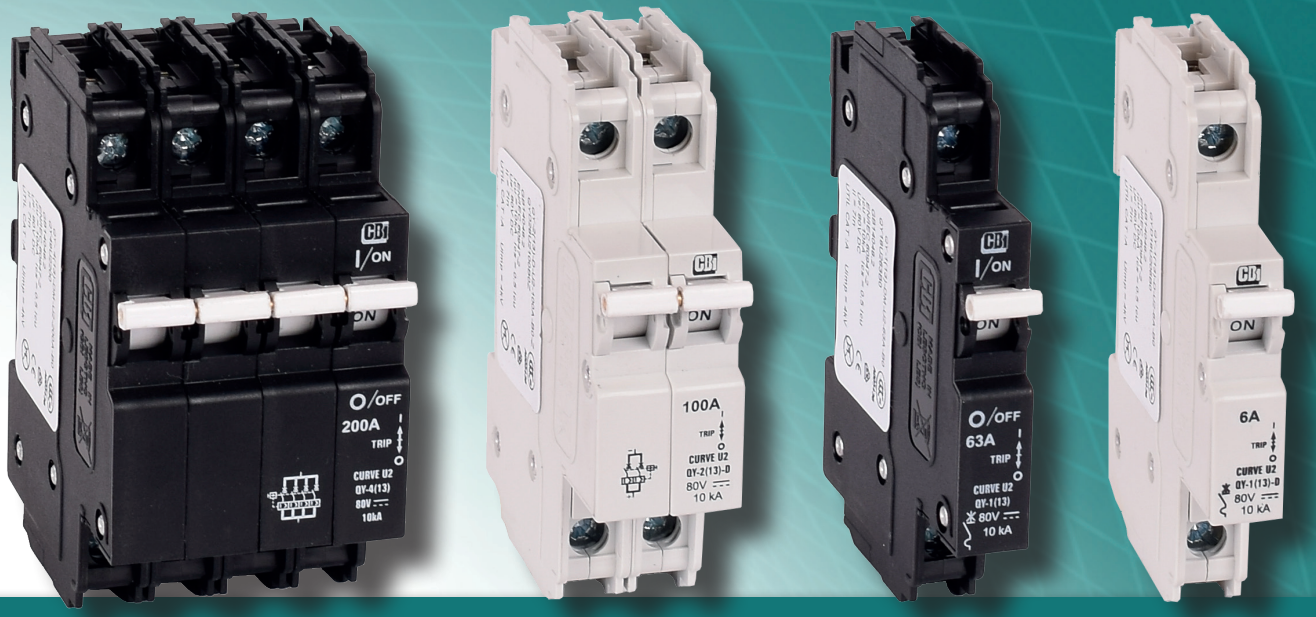


QY-Series Standard DC Range

Very compact Hydraulic-Magnetic Circuit Breakers for space-saving distributions and various forms of device protection. The QY Standard DC Range consists of modular DC breakers in a rated current range of 1-200A with a 10kA breaking capacity. The QY-frame circuit breakers are IEC, UL and CCC approved. For ratings or configurations not covered in the list, please contact us.

Features

- DC Circuit Breaker
- Hydraulic-Magnetic Technology
- 100% Rating Capability Independent of Ambient Temperature
- Up to Two Poles (Four Poles Parallel)
- VDE, CE and CCC approved
- UL Listed (UL 489A)
- Ratings up to 200A
- Optional Auxiliary / Trip Alarm Switch
- Wide Range of Time Delays and Operating Currents
- Precision Tripping
- Ultra Compact – 13mm Width Module
- Trip Indication with Mid-Trip Handle
- Reset Immediately After Overload

Applications

- DC branch circuit protection
- Telecommunication equipment
- UPS equipment
- Alternative energy equipment
- Battery protection & switching
- Telecommunication DC power distribution

TECHNICAL DATA

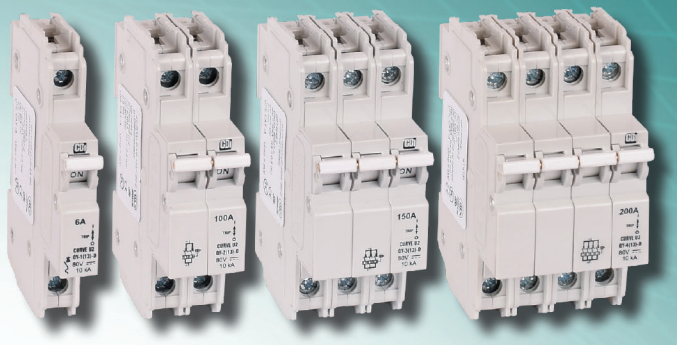
Product Type	Circuit Breaker
Approvals	UL 489A, IEC / EN 60947-2, VDE, CE, CCC
Number of Poles	1, 2, 3 (parallel), 4p (parallel)
Operating Voltages	80VDC
Minimum Current Rating	1A
Maximum Current Rating	200A
Interrupting Capacity	10kA
Mounting Options	-40° C to +85° C
Tripping Curves	Medium time delay U2

Optional Features - contact Emcomp

- Auxiliary Switch
- Auxiliary Switch + Trip Alarm
- Trip Alarm
- Handle Lock
- Surface Mounting Clips
- Busbars, cables and accessories
- 57mm Escutcheon Blank
- Higher DC voltages: 125 VDC and 250 VDC
- Specialized characteristics: Instantaneous to Long time delay

Auxillary Switch, Trip Alarm & Combo: Features - contact Emcomp

- 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)
- EC 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



DIN Range, 1 module Grey, 45mm front escutcheon	
Item No	Rated Current
QYD18U201B0	1A
QYD18U202B0	2A
QYD18U203B0	3A
QYD18U204B0	4A
QYD18U206B0	6A
QYD18U210B0	10A
QYD18U216B0	16A
QYD18U220B0	20A
QYD18U225B0	25A
QYD18U232B0	32A
QYD18U240B0	40A
QYD18U250B0	50A
QYD18U260B0	60A
QYD18U263B0	63A

DIN Range, 1 module Black, 57mm front escutcheon	
Item No	Rated Current
QY18U201B0	1A
QY18U202B0	2A
QY18U203B0	3A
QY18U204B0	4A
QY18U206B0	6A
QY18U210B0	10A
QY18U216B0	16A
QY18U220B0	20A
QY18U225B0	25A
QY18U232B0	32A
QY18U240B0	40A
QY18U250B0	50A
QY18U260B0	60A
QY18U263B0	63A

DIN Range, 2 modules Grey, 45mm front escutcheon	
Item No	Rated Current
QYD28U2080B0Z	80A
QYD28U2100B0Z	100A

DIN Range, 2 modules Black, 57mm front escutcheon	
Item No	Rated Current
QY28U2080B0Z	80A
QY28U2100B0Z	100A

DIN Range, 3 modules Grey, 45mm front escutcheon	
Item No	Rated Current
QYD38U2125B0Z	125A
QYD38U2150B0Z	150A

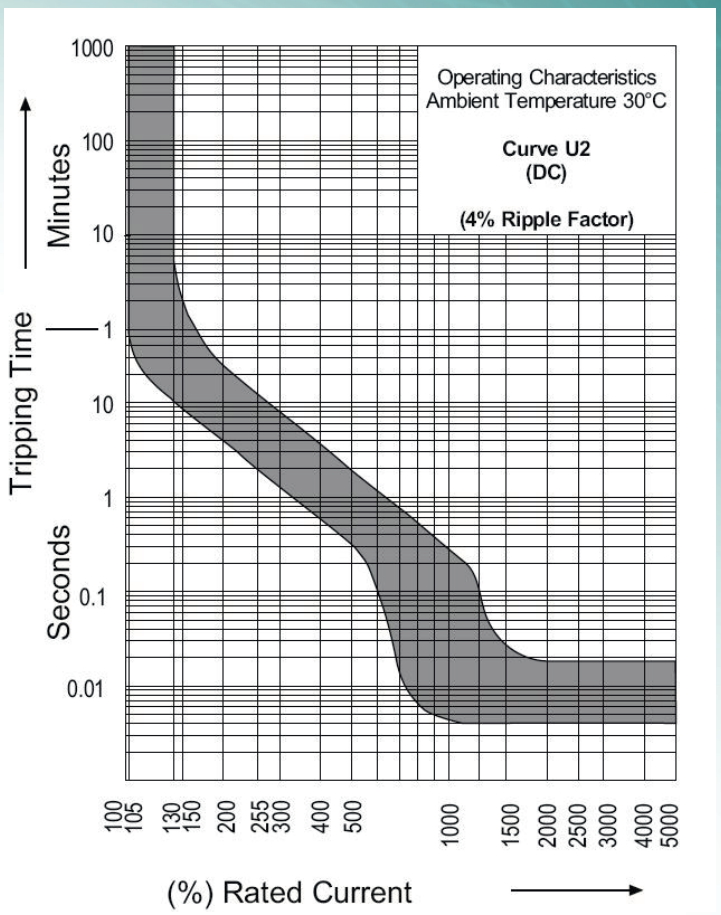
DIN Range, 3 modules Black, 57mm front escutcheon	
Item No	Rated Current
QY38U2125B0Z	125A
QY38U2150B0Z	150A

DIN Range, 4 modules Grey, 45mm front escutcheon	
Item No	Rated Current
QYD49U2200B0Z	200A

DIN Range, 4 modules Black, 57mm front escutcheon	
Item No	Rated Current
QY49U2200	200A

Busbars and related accessories can be supplied—contact us for more information

Medium Time Delay Curve-U2



Percentage of rated current

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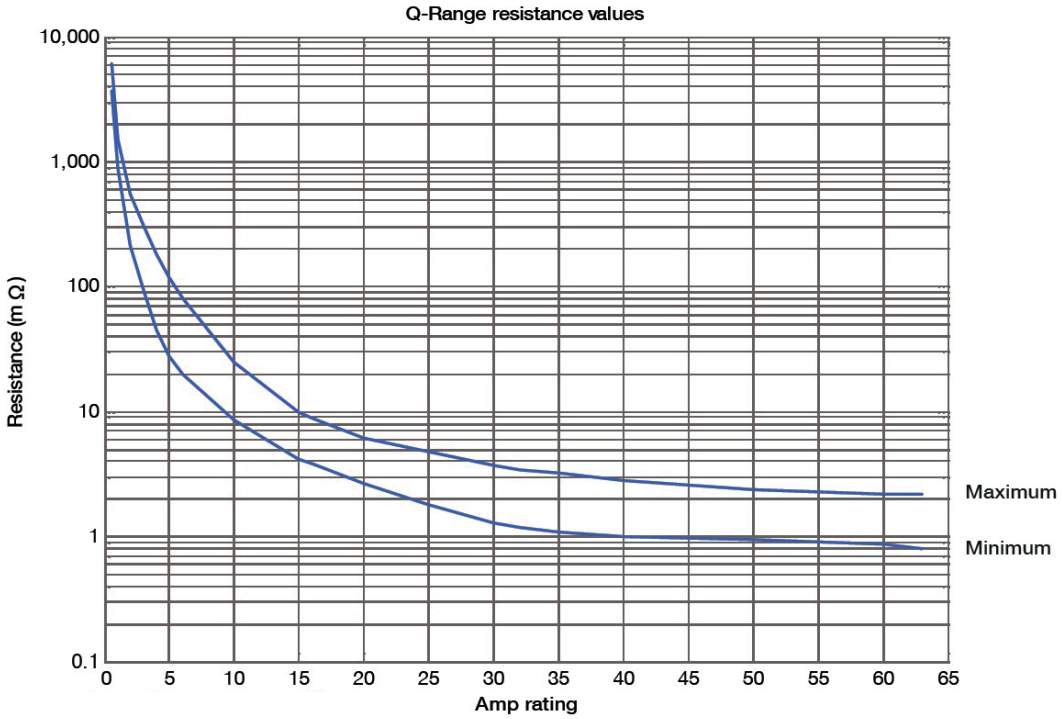
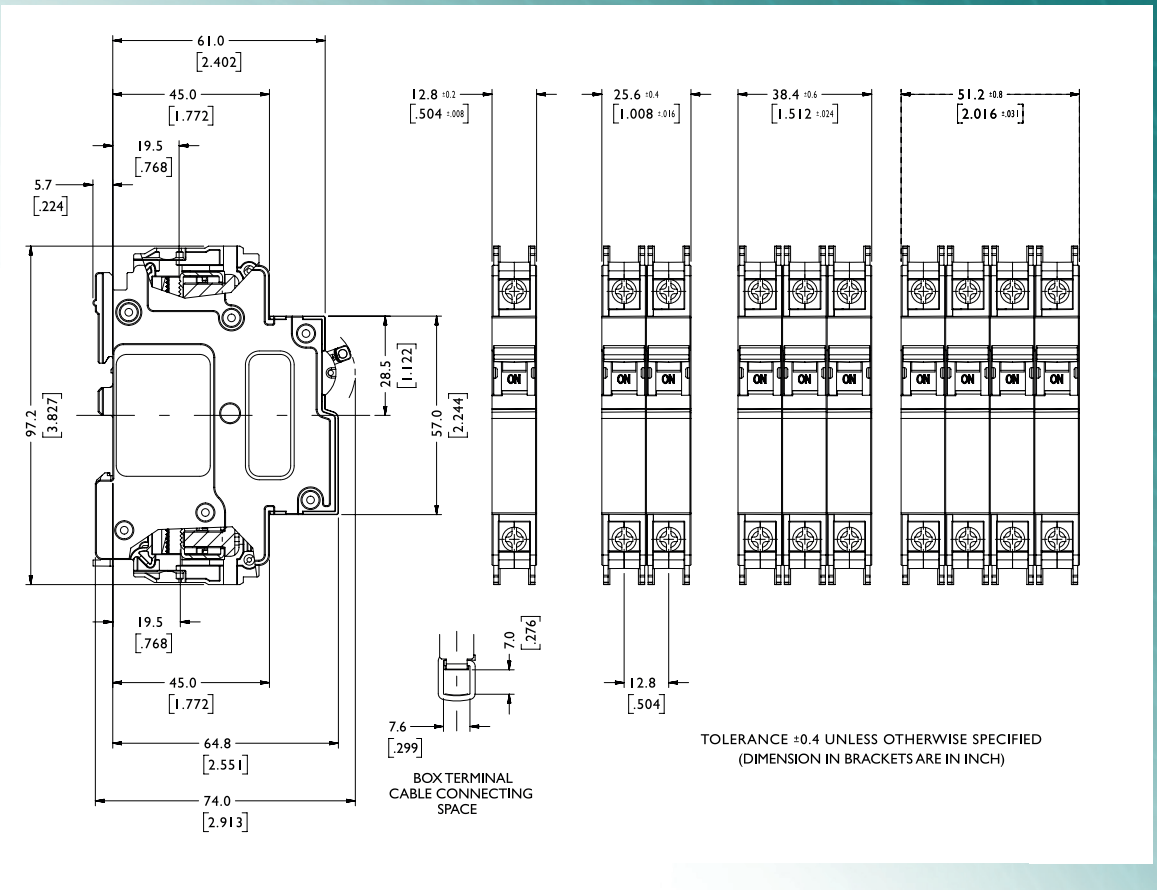
REV K

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	13	9.9	9.1	4.4	1.5	0.6	0.1	0.01	0.007	0.006	0.005	0.005	0.005
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	270	92.3	75.5	20	6.3	3	1.6	1	0.65	0.43	0.28	0.1	0.02

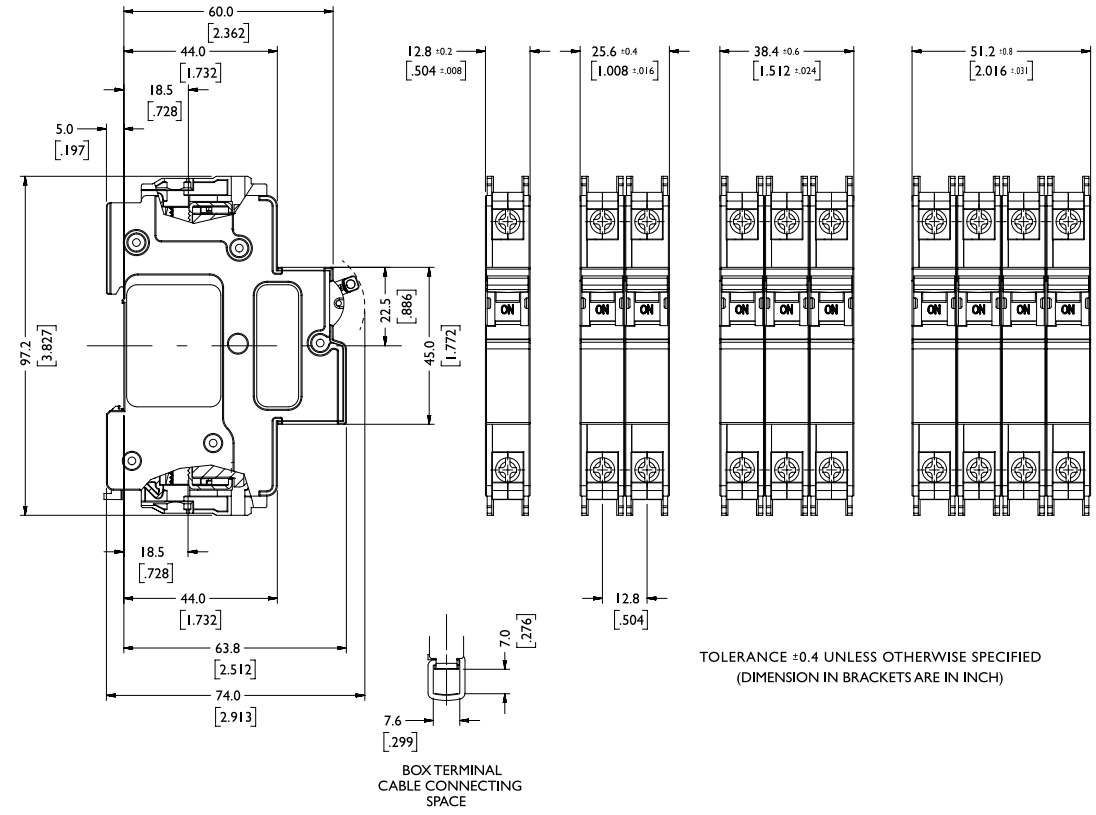
Internal Impedance vs Current Rating



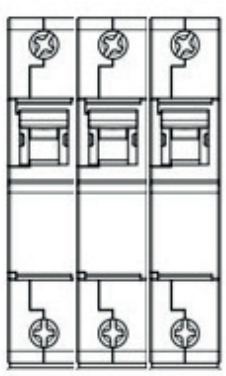
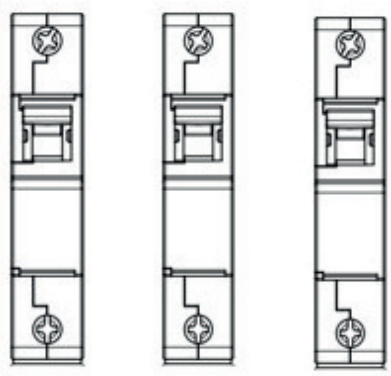
Outline Dimensions: Dual Mount



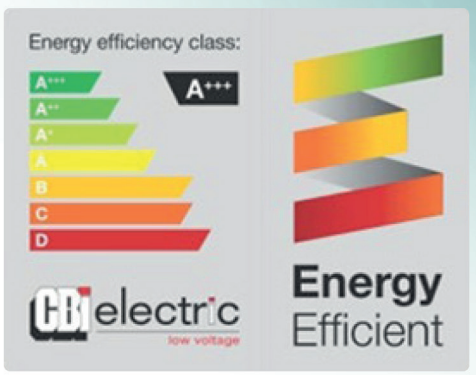
Outline Dimensions: DIN Mount



Thermal-Magnetic vs Hydraulic-Magnetic

	Thermal with no spacing	Thermal with spacing	Hydraulic-Magnetic with no spacing
			
Nominal current	16A	16A	16A
Operating at 30° C	10.8A	11.9A	16A
Operating at 45° C	9.6A	10.6A	16A

Due to the Hydraulic-Magnetic technology the MCB will keep rated current regardless of the ambient temperature. No de-rating needed.

Advantages

- Not sensitive to ambient temperatures
- Always keep rated current regardless of temperature, classified from -40° to 85° C
- Dedicated AC and DC products with correct approvals
- Immediate re-set after tripping –no cooling down period
- World wide approval profile
- Possibility to customize products
- Energy efficient alternative –45% lower internal resistance