Altech Corp. **Four Source for Automation & Control Components**

Lines of Miniature Circuit Breakers



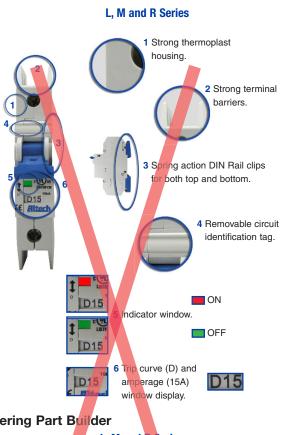






In today's very competitive marketplace you need reliability, so you need to use circuit breakers that are high quality and technically correct for your application. Altech is a US leader in DIN rail mounted breakers with ratings up to 63A. Only Altech offers DIN rail mounted breakers that meet UL489, UL508 or UL1077 approvals with a short circuit interrupt capacity of up to 10kA.

Overview of Physical Attributes of Our Lines



ON Indicator window. OFF 6 Trip curve (D) and amperage (15A) window display. Ordering Part Builder L, M and R Series EXAMPLE DC 1 CU 2.5 L ... Series UL 489 = L / UL 508 = M / UL 1077 = R ... Current Rating 0.3 - 63A ... Trip Curve (Series dependent; Z is special order) B, C, D, G, Z ... No. of Poles 1, 2, 3, 4 ... Current Type

DC = DC / Blank = AC

UL (AC), DL (DC), V-EA and UR Series 1 Hinged terminal cover design allows easy access to terminal screws with a broad range of screwdrivers! 2 Individual Part Number is ABL DSURS shown on each circuit breaker and is legible when installed in 3D25UL the panel. 3 A clear-hinged cover protects designated marking area. 4 DIN Clip can be released when necessary. 5 Flexible replaceable terminal barriers reduce the possibility of breakage if accidentally dropped! **Unique Standard Dual Connection Terminals** A Box terminal for solid conductors or flexible conductors with or without cable lug. B Screw terminal for forked cable lug. C Screw terminal for ring tongue connection.

UL (AC), DL (DC), V-EA and UR Series

-- Series

L. Current Rating

0.3 - 63A

L. Trip Curve*

B, C, D, E, G, Z

UL 489 AC = UL / UL 489 DC = DL UL 508 = UM / UL 1077 = UR

L.. No. of Poles 1, 2, 3, 4

* Trip curves available depend on circuit breaker series.

Miniature Molded Case Circuit Breakers

L Series, AC or DC UL489





UL (AC), DL (DC) Series UL489





Current/ Voltage Rating

AC Version (one device - dual voltage ratings) DC Version	0.2-63A/ 240V AC, 0.2-32A/ 480Y/277VA 0.2-63A/ 125/ 250V DC
Poles	1, 2, 3 (4 poles available upon request.)
Trip Characteristics	C, D; AC and DC; (Z special order only)
Interrupting Capacity	10kA
Calibration Temperature	40°C (104°F)
Ambient Temperature	-25°C to 60°C (-13°F to 140°F)
Storage Temperature	-25°C to 75°C (-13°F to 167°F)
Terminal Size Acceptability and Terminal Torque	14-3 AWG: 17.7 lb-in. (2.0 Nm) 18-16 AWG: 25 lb-in.(2.8 Nm)
Electrical Life	6,000 switching cycles ON/ OFF
Mechanical Life	10,000 switching cycles ON/ OFF
Terminal Protection Degree	IP20 at front
Mounting Orientation	In any plane
Accessories	Auxiliary ContactShunt TripNeutral PoleUndervoltage Trip

- Front Mounting Kit with hardware
- Lock-out Adapter

0.3 - 63A/ 240V AC. 0.3-32A/ 480Y/277V AC

0.3 - 63A/ 125/ 250V DC

1, 2, 3 (4 poles available upon request.)

C, D; AC and DC

10kA

40°C (104°F)

-25°C to 55°C (-13°F to 131°F)

-40°C to 70°C (-40°F to 158°F)

Top: 18-3 AWG; Bottom: 18-2 AWG

2.0 Nm (17.7lb.in.)(min)/2.5Nm (22.2lb.in)(max)

6,000 switching cycles ON/ OFF

10,000 switching cycles ON/ OFF

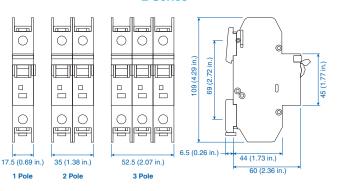
IP20

In any plane

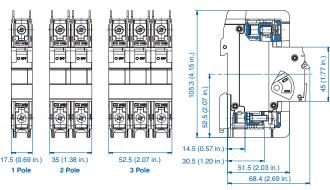
- · Auxiliary Contact, Alarm Switch
- · Shunt Trip
- · Neutral Pole
- · Lock-out Adapter
- · Touch Protection Caps
- · Cooling Spacer
- · Mounting Screw 34mm

Dimensions

L Series



UL (AC), DL (DC) Series



NOTES

When a busbar is used, mixing and matching between the two series is not possible. The terminal positons are different in the Z direction (front to back).

UI FOO UL/DL series terminal barriers might interfere with the front panel (door) when the breaker is front panel mounted. The position of the DIN rail/mounting bracket might have to be adjusted. (This series will NOT fit in an AK or EK Spelsberg enclosure!)



Manual Motor Controllers "Suitable as Motor Disconnect"

M Series UL508



UM (V-EA) Series UL508



Current/ Voltage Rating

Garrona voltago mating	
AC Version DC Rating	0.5-63A / 480Y/ 277V AC
Poles	1, 2, 3 (4 poles available upon request.)
Trip Characteristics	B, C, D, G
Short Circuit Withstand Rating (UL/CSA - Ratings)	0.5-6A (RC): 10kA with no back-up fuse 8-63A (RC): 10kA with Ulisted Class J back-up fuse: 5kA with no back-up fuse
Calibration Temperature	30°C (86°F)
Ambient Temperature	-25°C to 60°C (-13°C to 140°F)
Storage Temperature	-25°C to 75°C (-13°C to 167°F)
Terminal Size Acceptability and Terminal Torque	14-3 AWG: 17.7 (b ₁ in. (2.0 Nm) 18-16 AWG: 25 (b-in. (2.8 Nm)
Terminal Protection Degree	IP20
Mounting Orientation	In any plane
Horsepower Ratings	see catalog
Accessories	 Auxiliary Contact Shunt Trip Neutral Pole Lock-out Adapter

0.3-60A/ 480Y/ 277V AC

0.3-25A: 1 pole - 42V DC; 2 Pole - 80V DC 30-60A: 1 pole - 24V DC; 2 Pole - 60V DC

1, 2, 3 (4 poles available upon request.)

B, C, D, E, G, Z

0.3-60A (RC): 10kA with UL-listed RK5 back-up fuse or MCCB

40°C (104°F)

-25°C to 55°C (-13°F to 131°F)

-40°C to 70°C (-40°F to 158°F)

Top: 18-3 AWG; Bottom: 18-2 AWG

2.0 Nm (17.7 lb.in.)(min) / 2.5Nm (22.2 lb.in)(max)

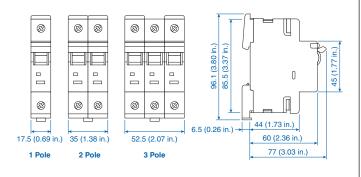
In any plane

see catalog

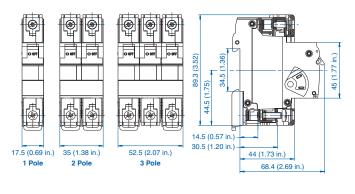
- · Auxiliary Contact, Alarm Switch
- · Shunt Trip
- · Neutral Pole
- · Lock-out Adapter
- Touch Protection Caps
- · Cooling Spacer
- · Mounting Screw 34mm

Dimensions

M Series



UM (V-EA) Series



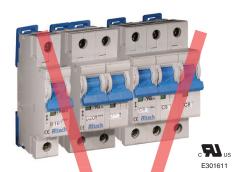
NOTE When a busbar is used, mixing and matching between the two series is not possible. The terminal positons are different in the Z direction (front to back)

· Front Mounting Kit with hardware



UPTO

R Series UL1077



UR Series UL1077



Current/	Voltage	Rating
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Ourient Voltage Hatting	
AC Version	0.5-63A / 480Y/ 277V AC
Poles	1, 2, 3 (4 poles available upon request.)
Trip Characteristics	B, C, D
Short Circuit Withstand Rating	0.5-6A (RC): 10kA with no back-up fuse 8-63A (RC): 10kA with UL-listed Class J back-up fuse; 5kA with no back-up fuse
Calibration Temperature	30°C (86°F)
Ambient Temperature	-25°C to 60°C (-13° to 140°F)
Storage Temperature	-25°C to 75°C (-13° to 167°F)
Terminal Size Acceptability and Torque	14-3 AWG: 17.5 lb-in. (2.0 Nm) 18-16 AWG / 25 lb-in.(2.8 Nm)
Electrical Life	6,000 switching scycles ON/ OFF
Mechanical Life	10,000 cycles ON/ OFF
Terminal Protection Degree	IP20 at front
Mounting Orientation	In any plane
Accessories	Auxiliary Contact Shunt Trip Neutral Pole Lock-out Adapter

0.5-63A / 480Y/ 277V AC

1, 2, 3 (4 poles available upon request.)

B, C, D

0.3-60A (RC): 10kA with UL-listed RK5 back-up fuse or MCCB

30°C (86°F)

-25°C to +55°C (-13°F to 131°F)

-40°C to +70°C (-40°F to 158°F)

Top: 18-3 AWG; Bottom: 18-2 AWG

2.0 Nm (17.7 lb.in.)(min) / 2.5Nm (22.2 lb.in)(max)

6,000 switching cycles ON/ OFF

10,000 switching cycles ON/ OFF

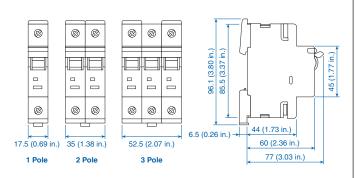
IP20

In any plane

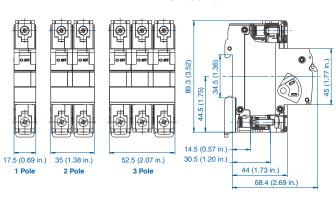
- · Auxiliary Contact, Alarm Switch
- Shunt Trip
- Neutral Pole
- · Lock-out Adapter
- Touch Protection Caps
- · Cooling Spacer
- · Mounting Screw 34mm

Dimensions

R Series



UR Series



UPION NOTE When a busbar is used, mixing and matching between the two series is not possible. The terminal positons are different in the Z direction (front to back)

