



## LDM1-Series: 19" or 23" One Rack Unit

*The LDM1-Series One Rack Unit (1RU) saves valuable real estate on a rack, while offering ease of installation and service.*

To help conserve valuable cabinet space, Carling Technologies introduces a new, advanced 1RU DC Power Distribution Unit (PDU) for the telecom industry. This new PDU is designed to fit industry standard 19" rack systems. This 1RU is listed to UL/CUL 1801 and designed to EN60950.

The Carling circuit breakers installed in the 1RU are the miniature M-Series hydraulic-magnetic breakers — the smallest breaker on the market that is UL489A listed up to 80 VDC. In addition, these breakers are plug in style to allow for hot "swappable" and front access, and are rated to 25 amps per pole.

Even as a "condensed" panel, this new 1RU exceeds the tough demands of today's applications while still offering safety, reliability and performance.

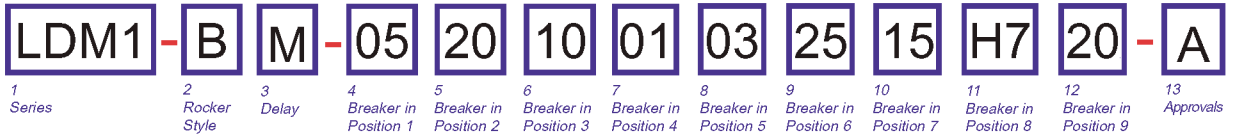
### General Specifications

|                           |  |
|---------------------------|--|
| <b>Standards:</b>         | UL 1801, CUL Approved  |
| <b>Dimensions:</b>        | Rack mounts to EIA standard EIA-310-D 19" rack for a 1RU panel, 1.75"H.  |
| <b>Enclosure:</b>         | 16 gauge yellow zinc chromate cold rolled steel.   |
| <b>Feeds:</b>             | Dual, rated up to 150 amps per feed.<br>Max. circuit breakers per feed: 9<br>Max. breaker rating: 25 amps.<br>Connections: two hole compression lugs for 1/4 - 20 stud terminals x 5/8 centers.  |
| <b>Load Connections:</b>  | Requires 10 awg wire/ring or fork terminal for 25 A/75 C Rating, Top or bottom wire entry.   |
| <b>Operating Voltage:</b> | -36V to -60V DC (-48VDC nominal)   |
| <b>Alarm Feature:</b>     | Power alarm: If either A or B FEED or both fail.<br>Breaker alarm: If any populated breaker is OFF or "tripped."<br>Alarm is not affected by unused breaker positions. LED indicators on the front panel. Breaker slots can be set or deactivated on the removable Alarm Card. |
| <b>LED indicators:</b>    | Green lamps on A and B feeds.<br>Red lamp for tripped breaker alarm indication.  |
| <b>Chassis Ground:</b>    | Via studs on the back panel. Use two hole X 5/8" center lugs. Grounding is also achieved through the rack mounting brackets to the yellow zinc chromate steel panel enclosure.   |

### Features & Benefits

- Panel incorporates Carling M-Series style hydraulic/magnetic breakers: The smallest UL489A listed hydraulic-magnetic circuit breaker on the market today!
  - Keyed terminal to prevent breaker from being mounted incorrectly.
  - Hot "swappable" circuit breakers that can be installed, changed, or replaced in the field or factory.
  - Circuit breakers are front panel accessible.
  - Maximum of 9 circuit breakers per feed; 18 per panel.
  - One Rack Unit (1RU) size.
  - Panel plugs provided for non populated circuit breaker slots.
  - Rockerguard circuit breakers to prevent accidental operation.
  - Panel is easily configurable and upgradeable in the field. Provides flexibility when designing added features or options.
  - Conserves valuable cabinet space to meet the tough demands of today's applications.
  - Front accessible removable alarm card.
  - Optional Rack Extenders to expand the panel mounting from a 19" rack to a 23" rack.
- Part Numbers:        8L1-A-DC1A (offset mounting)  
                              8L1-A-DC1B (center mounting)

## LDM1-Series Ordering Scheme



|                         |
|-------------------------|
| <b>1 SERIES</b><br>LDM1 |
|-------------------------|

|                                  |   |
|----------------------------------|---|
| <b>2 ROCKER STYLE</b>            |   |
| <b>N</b> No breaker              | <b>W</b> White Visi-Rocker indicate OFF |
| <b>B</b> Black with white legend |   |

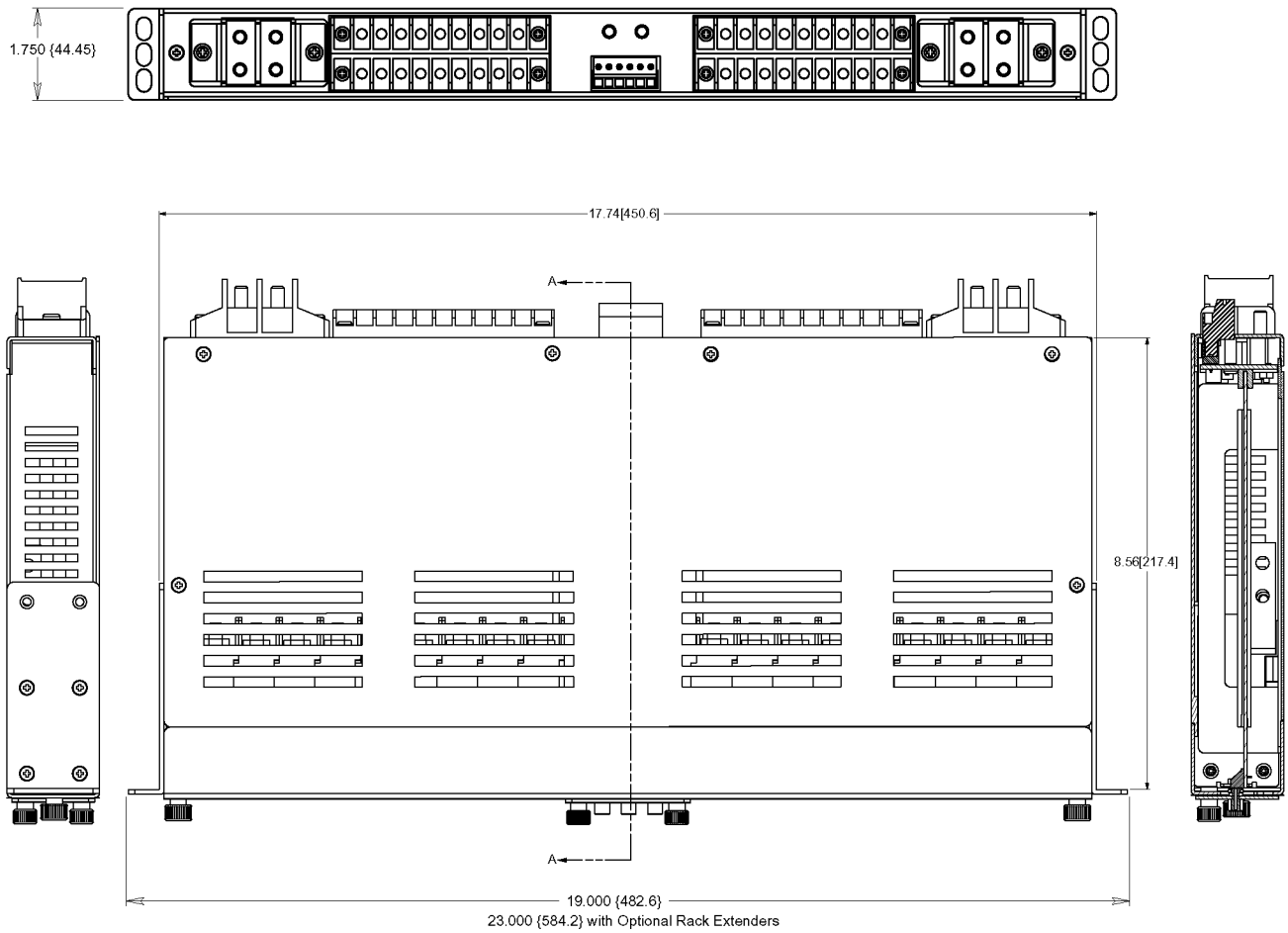
|                     |                                 |
|---------------------|---------------------------------|
| <b>3 DELAY</b>      |                                 |
| <b>N</b> No breaker | <b>M</b> Medium Delay, Curve 14 |

|                                    |                   |  |  |
|------------------------------------|-------------------|--|--|
| <b>4 through 12 BREAKER RATING</b> |                   |  |  |
| <b>00</b> No breaker               | <b>10</b> 10 amps |  |  |
| <b>01</b> 1 amp                    | <b>12</b> 12 amps |  |  |
| <b>03</b> 3 amps                   | <b>15</b> 15 amps |  |  |
| <b>05</b> 5 amps                   | <b>20</b> 20 amps |  |  |
| <b>H7</b> 7.5 amps                 | <b>25</b> 25 amps |  |  |

|                       |                 |                          |  |
|-----------------------|-----------------|--------------------------|--|
| <b>13 APPROVALS</b>   |                 |                          |  |
| <b>A</b> No approvals | <b>G</b> UL/CUL | <b>J</b> UL/CUL, CE, TUV |  |

NOTES:  
 Redundant feed. Breaker layout will be duplicated on the second feed.  
 Feeds A and B are rated for 150 amps. Total combined breaker ratings can not exceed 150 amps per feed.  
 A panel plug will be supplied in the breaker positions that do not have a circuit breaker selected.

## LDM1-Series Dimensional Specifications

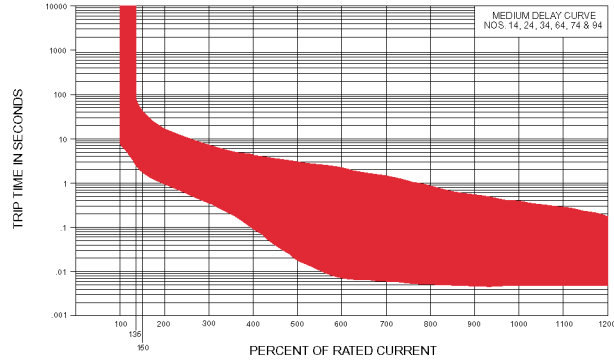


## Circuit Breakers

Circuit breakers can be ordered separately to upgrade or reconfigure panel at a later date. Standard circuit breaker part numbers are listed on the chart below. For other ratings, consult factory.

**General Specifications:**  
UL/CUL and TUV approved

| STANDARD TRIP, MEDIUM DELAY, CURVE #14 |                         |                        |
|--|-------------------------|------------------------|
| RATING (amps)                          | BLACK ROCKER            | WHITE VISI-ROCKER      |
| 1                                      | MA1-X-00-927-2-A26-2-J  | ME1-X-00-927-5-A16-2-J |
| 3                                      | MA1-X-00-902-7-A26-2-J  | ME1-X-00-927-6-A16-2-J |
| 5                                      | MA1-X-00-902-6-A26-2-J  | ME1-X-00-927-7-A16-2-J |
| 7.5                                    | MA1-X-00-927-3-A26-2-J  | ME1-X-00-927-8-A16-2-J |
| 10                                     | MA1-X-00-902-5-A26-2-J  | ME1-X-00-927-9-A16-2-J |
| 12                                     | MA1-X-00-927-47-A26-2-J | ME1-X-00-928-0-A16-2-J |
| 15                                     | MA1-X-00-902-4-A26-2-J  | ME1-X-00-928-1-A16-2-J |
| 20                                     | MA1-X-00-902-3-A26-2-J  | ME1-X-00-928-2-A16-2-J |
| 25                                     | MA1-X-00-897-5-A26-2-J  | ME1-X-00-928-3-A16-2-J |



| M-SERIES TIME DELAY VALUES |       | PERCENT OF RATED CURRENT |         |           |           |           |           |           |           |           |           |
|----------------------------|-------|--------------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| TRIP TIME (SECONDS)        | Delay | 100%                     | 135%    | 150%      | 200%      | 400%      | 600%      | 800%      | 1000%     | 1200%     |           |
|                            |       | 14,24,34,64,74,94        | No Trip | 3.00-70.0 | 2.00-40.0 | 1.00-15.0 | .100-4.00 | .008-2.00 | .006-.800 | .005-.350 | .005-.160 |

## Circuit Breakers Dimensional Specifications

