JUNO

Project:

Fixture Type:

Location:

Contact/Phone:

# TRAC-LITES Current Limiting Feeds For R Series Trac Systems

BAA

## PRODUCT DESCRIPTION

Juno Trac-Lites Current Limiting Feeds provide a simple solution for complying with stringent energy codes like ASHRAE 90.1 and California Title 24. Installed at every trac lighting feed location, these feeds employ supplementary current limiting circuit breakers which are designed to limit available wattage to lighting circuits to only that necessary to meet the lighting design criteria. Rather than lighting loads being calculated by the greater of maximum fixture wattage ratings or an arbitrary watts-per-foot multiplier, the Trac-Lites Current Limiting Feeds enable calculations to instead be made based on the rating of the supplementary breaker(s) installed in the feeds. Because they limit a circuit, not the lighting equipment itself, the Trac-Lites Current Limiting Feeds provide maximum flexibility to accommodate frequent lighting design modifications and layout changes, especially typical for retail spaces.

## PRODUCT SPECIFICATIONS

**Features** Designed to be installed at every trac feed location, in place of a standard non-limiting feed • In-line feeds can be used to feed trac as one electrical circuit in both directions or as two separate circuits using two current limiters • Feed connector and current limiting circuit breaker are specified and ordered separately for maximum configuration flexi-bility • Not intended to be used as a primary circuit protector.

**Mini End Feed Construction** Surface mounting only – not intended to be installed over a j-box • T-bar compatible only when installed off-grid and fed directly • One 7/8" knockout for direct electrical feed connections • Includes ground terminal attachment screw • Injection molded polycarbonate cover attaches to mounting plate using tamper-resistant screws (screwdriver bit supplied with each mini end feed) • Mini end feed connector is permanently attached to trac using one-way screw • Also available in reverse polarity configuration.

**End Feed Construction** Heavy-duty 14 gauge (0.075 thick) die formed galvanized steel mounting plate • Surface or j-box mounting • T-bar compatible when fed directly • Mounting holes provided for j-box attachment • Center knockout enables feeding from j-box for simple wiring termination • Two 7/8" knockouts for direct electrical feed connections • Includes ground terminal attachment screw • Injection molded polycarbonate cover with tearout for 2-breaker installations • Cover attaches to mounting plate using tamper-resistant screws (screwdriver bit supplied with each mini end feed) • Feed connector is permanently attached to trac using one-way screw.

**Finish** Available in white, black, bronze or silver finishes • Supplementary current limiting circuit breakers are ordered separately and can be specified in complementary finishes to match feed connector.

**Supplementary Current Limiting Circuit Breakers** Miniature single pole supplementary current limiters limit the current (wattage) that can be consumed on the trac section being fed • Utilizes hydraulic magnetic technology which provides accurate and reliable circuit protection even when exposed to extremely hot and/or cold application environments • Rated for 120VAC, 60Hz operation • Available in individual amperage ratings of 0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 10A, 12A and 14A, selected based on actual lighting loads • Can be operated continuously at rated current • Specially designed to prevent nuisance tripping • Easily snaps into mounting plate without the use of tools • Leads wires provided for simplified installation • ON/OFF indication clearly identifies breaker status • Easily resettable in the event of an overcurrent situation • UL 1077, CSA 22.2 approved.

**Labels** UL and cUL Listed • Approved by the California Energy Commission to meet the requirements of Title 24 • Complies with ASHRAE 90.1 and IECC Section 805.5.1.4 for trac current limiting.

**Buy American Act** This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

**Note**: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.



## ORDERING INFORMATION

Electrical feeds are chosen based on application (end or in-line). Supplementary current limiters are chosen separately based on total wattage to be applied to the trac circuit. Feeds and current limiters are supplied separately and easily assembled by the installer.

### Current Limiting Electrical Feeds

| Catalog Number | Description | Finish | Trac Type |
|---|---|---|---|
| **RCLFM11 BL** | Mini End Feed | Black | 1-Circuit |
| **RCLFM11 WH** | Mini End Feed | White | 1-Circuit |
| **RCLFM11 SL** | Mini End Feed | Silver | 1-Circuit |
| **RCLFM11 BZ** | Mini End Feed | Bronze | 1-Circuit |
| **RCLFM11 RP BL** | Mini End Feed - Reverse Polarity | Black | 1-Circuit |
| **RCLFM11 RP WH** | Mini End Feed - Reverse Polarity | White | 1-Circuit |
| **RCLFM11 RP SL** | Mini End Feed - Reverse Polarity | Silver | 1-Circuit |
| **RCLFM11 RP BZ** | Mini End Feed - Reverse Polarity | Bronze | 1-Circuit |
| **RCLF11 BL** | End Feed | Black | 1-Circuit |
| **RCLF11 WH** | End Feed | White | 1-Circuit |
| **RCLF11 SL** | End Feed | Silver | 1-Circuit |
| **RCLF11 BZ** | End Feed | Bronze | 1-Circuit |
| **RCLF21 BL** | In-Line Feed | Black | 1-Circuit |
| **RCLF21 WH** | In-Line Feed | White | 1-Circuit |
| **RCLF21 SL** | In-Line Feed | Silver | 1-Circuit |
| **RCLF21 BZ** | In-Line Feed | Bronze | 1-Circuit |

### Current Limiting Circuit Breakers

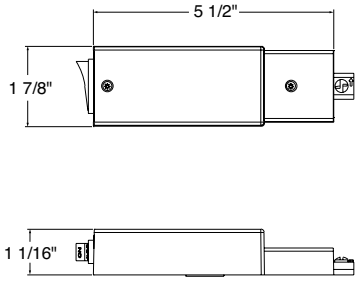
**(order separately)**

| Catalog Number | Description | Finish | Wattage |
|---|---|---|---|
| **TCLCB 0.5A BLCK** | 0.5A Current Limiter | Black | 60W |
| **TCLCB 0.5A WHT** | 0.5A Current Limiter | White | 60W |
| **TCLCB 1A BLCK** | 1A Current Limiter | Black | 120W |
| **TCLCB 1A WHT** | 1A Current Limiter | White | 120W |
| **TCLCB 2A BLCK** | 2A Current Limiter | Black | 240W |
| **TCLCB 2A WHT** | 2A Current Limiter | White | 240W |
| **TCLCB 3A BLCK** | 3A Current Limiter | Black | 360W |
| **TCLCB 3A WHT** | 3A Current Limiter | White | 360W |
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| **TCLCB 5A WHT** | 5A Current Limiter | White | 600W |
| **TCLCB 6A BLCK** | 6A Current Limiter | Black | 720W |
| **TCLCB 6A WHT** | 6A Current Limiter | White | 720W |
| **TCLCB 7A BLCK** | 7A Current Limiter | Black | 840W |
| **TCLCB 7A WHT** | 7A Current Limiter | White | 840W |
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| **TCLCB 8A WHT** | 8A Current Limiter | White | 960W |
| **TCLCB 10A BLCK** | 10A Current Limiter | Black | 1200W |
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| **TCLCB 12A WHT** | 12A Current Limiter | White | 1440W |
| **TCLCB 14A BLCK** | 14A Current Limiter | Black | 1680W |
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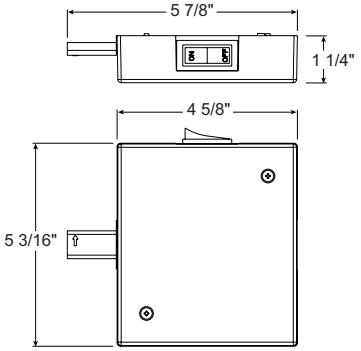

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# TRAC-LITES
# Current Limiting Feeds
# For R Series Trac Systems

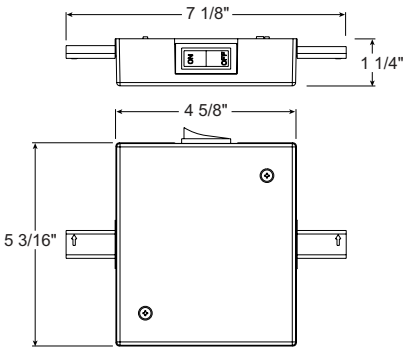
**MINI END FEED**




**END FEED**




**IN-LINE FEED**

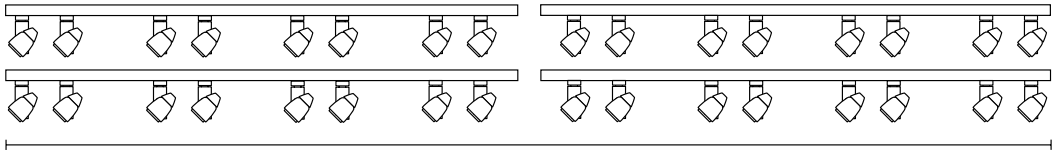



## APPLICATION

Energy codes typically calculate trac lighting loads based on linear feet of installed trac. Some codes use an arbitary multiplier as low as 30 watts/foot while others use a multiplier as high as 70 watts/foot. When using the energy efficient lighting technologies available today, the connected load is typically much less than the per-foot multipliers used by most energy codes. This penalizes lighting designs that employ trac lighting and wastes available lighting watts that could be used more effectively.

Below is a typical trac lighting example. The Standard Layout consists of 100' of single circuit trac (4 circuits x 25' each) with 32 LED trac heads, each consuming 24W, for a total connected load of 768W. The scenario with the Trac-Lites Current Limiting Feeds uses the original 100' of single circuit trac, with each 25' trac section monitored by a 2-Amp supplementary current limiter that is closely matched to the actual connected load of 768W plus a small buffer. This significantly reduces the calculated watts per the energy codes.

**1. Standard Layout <u>without</u>** Trac-Lites Current Limiting Feeds



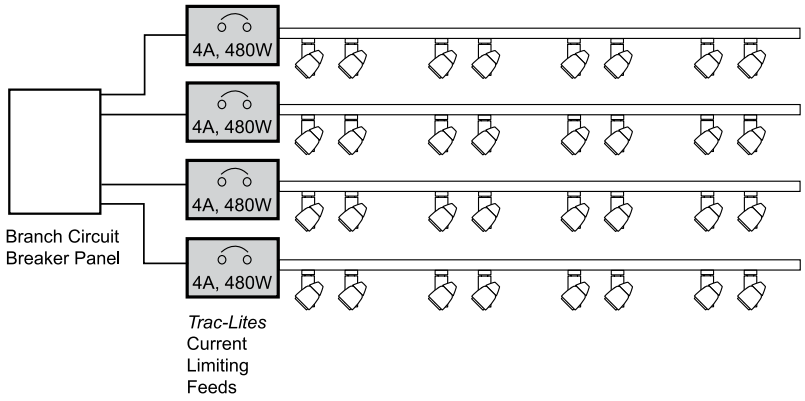
Trac length determines wattage calculation

**100 ft of track = 4500W***

*Based on 45W/ft multiplier of California Title 24

Trac-Lites Current Limiting Feeds install between the branch circuit breaker and the trac lighting, solving the energy code calculation discrepancy, making the wattage calculation independent of trac length.

**3. Standard Layout <u>with</u>** Trac-Lites Current Limiting Feeds




**Same 100 ft of trac: 4A @ 120V = 480W (x4 circuits)**
**1920W total**


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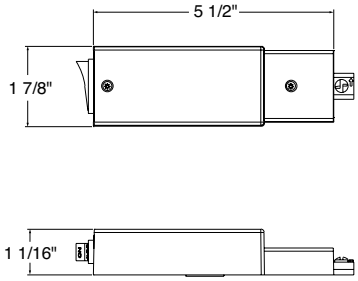
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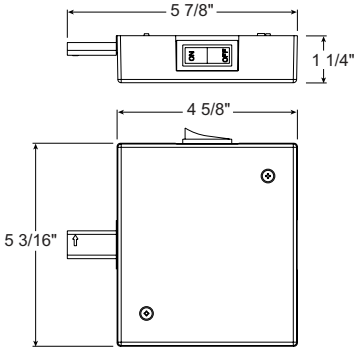

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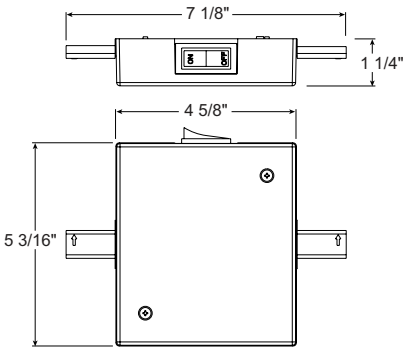
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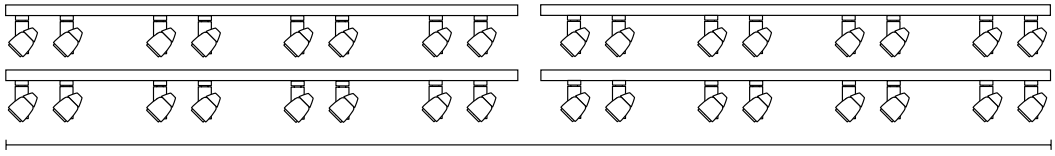



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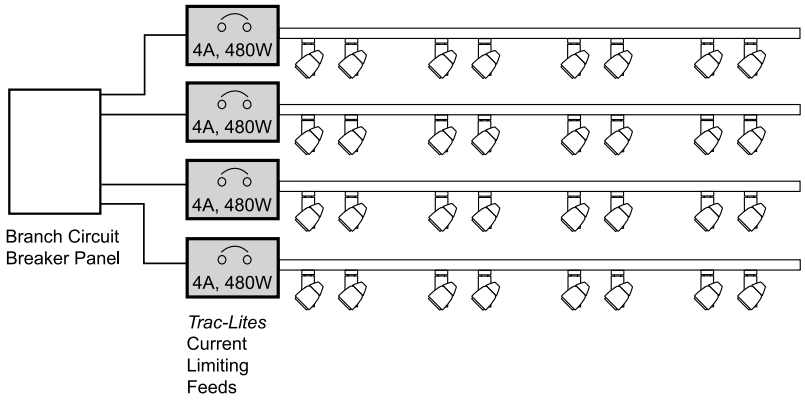
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