# A-Series Lighting Control Panels 

 Remote Operated Circuit Breaker Catalog/Selection Guide

## A-Series Lighting Control Panels

Remote Operated Circuit Breaker

A-Series Lighting Control Panels reduce energy costs by providing programmable control of the breaker. The integration of the controller in the panel lowers installation costs and provides valuable space savings over traditional external relay panels. The A-Series Lighting Control Panel can be stand-alone or networked into a building automation system.

Panel Interior


Service Information:
3-ph, 4-w, 480Y/277Vac, 208Y/120Vac
1-ph, 3-w, 120/240Vac
Main Breaker: Main Lugs:
100A-TEY, SE 125-400A
225A-TFJ, SF
400A-TJJ, SG
Bolt On Branch Breakers:
Type TEYRC, TEY

## Remote Operated Circuit Breakers

Breaker Selection

| Poles | Amperage | Catalog Number |
| :---: | :---: | :---: |
| 1 | 15 A | TEYRC115 |
|  | 20 A | TEYRC120 |
|  | 30 A | TEYRC130 |
| 2 | 15 A | TEYRC215 |
|  | 20 A | TEYRC220 |
|  | 30 A | TEYRC230 |

Interrupting Ratings (Amps RMS)

| System Voltage | 120 Vac | 240 Vac | 480Y/277 Vac |
| :---: | :---: | :---: | :---: |
| 1-Pole | 65,000 | 14,000 | 14,000 |
| 2-Pole | - | 65,000 | 14,000 |



Breakers suitable for $120 / 240 \mathrm{~V}, 120 / 208 \mathrm{Y}, 277 / 480 \mathrm{~V}$ applications.

Main Breaker Series Ratings with TEYRC(1)

|  | 125A | 225A | 400A |
| :--- | :---: | :--- | :---: |
| $120 / 240$ Vac | SEL - 100kA | SFL - 100kA <br> J or T Fuse - 100kA | J or T Fuse - 100kA |
| 240 Vac | SEL - 100kA <br> SEP - 200kA | SFH - 65kA <br> J or T Fuse - 100kA | J or T Fuse - 100kA |
| 277 Vac | SEH - 25kA <br> SEL - 25kA | SFL - 65kA <br> J or T Fuse - 100kA | J or T Fuse - 100kA |
| $480 \mathrm{Y} / 277$ Vac | SEH - 25kA <br> SEL - 25kA | SFH - 35kA <br> SFL - 65kA <br> J or T Fuse - 100kA | J or T Fuse - 100kA |

(1) Please refer to UL Component Recognized Series Connected Ratings publication DET-008 for latest testing results.

TEYRC


## A-Series Lighting Control Panels

Remote Operated Circuit Breaker

Controller


## Features

- Open Protocol; Native BACnet \& Modbus
- 16 Lighting Groups of Control
- Real-time Clock, Astronomical Clock
- Programmable Off Warning - Flick
- Self Diagnostics
- Breaker Contact Status
- Event Alarm and Recovery


## Overrides

- 16 Digital Inputs, 2- or 3-Wire, Momentary or Maintained, Dry Contact Input
- 3 Analog Inputs, 4-20mA, 10K, 5V, 10V


## Scheduling

- 16 Time-of-Day On / Off Scheduling
- Day-of-Week Repeating Schedule
- Holidays Control Override
- Leap Year \& Daylight Savings Time


## Autoflip

- Allows user to easily rotate breaker mapping by $180^{\circ}$ without reprogramming or rewiring


## Burnhour Tracking

- Totals the run time of breaker loads

Load Priority Management

- Enables setting of load shed levels on each breaker

How To Select and Price A-Series Lighting Control Panels

1. Choose main device and number of branch circuits
2. Choose branch breakers
3. Choose controller
4. Add panel options and accessories
5. Add external accessories

## 1. Choose Main Device and Number of Branch Circuits

Main Lug Interiors

| Panel Amps Max. | Branch Space Required | Catalog Number | List Price, GO-101 | Sizing Dim. (In.) |
| :---: | :---: | :---: | :---: | :---: |
| 125 | 0-12 | AEF3121MB | \$605.00 | 22.5 |
|  | 13-18 | AEF3181MB | \$658.00 | 25.5 |
|  | 19-24 | AEF3241MB | \$750.00 | 28.5 |
|  | 25-30 | AEF3301MB | \$841.00 | 31.5 |
|  | 31-36 | AEF3361MB | \$933.00 | 34.5 |
|  | 37-42 | AEF3421MB | \$1,024.00 | 37.5 |
| 225 | 0-12 | AEF3122MB | \$672.00 | 28.5 |
|  | 13-18 | AEF3182MB | \$726.00 | 31.5 |
|  | 19-24 | AEF3242MB | \$817.00 | 34.5 |
|  | 25-30 | AEF3302MB | \$908.00 | 37.5 |
|  | 31-36 | AEF3362MB | \$1,000.00 | 40.5 |
|  | 37-42 | AEF3422MB | \$1,091.00 | 43.5 |
| 400 | 0-12 | AEF3124MB | \$832.00 | 37.5 |
|  | 13-18 | AEF3184MB | \$908.00 | 40.5 |
|  | 19-24 | AEF3244MB | \$992.00 | 43.5 |
|  | 25-30 | AEF3304MB | \$1,084.00 | 46.5 |
|  | 31-36 | AEF3364MB | \$1,175.00 | 49.5 |
|  | 37-42 | AEF3424MB | \$1,265.00 | 52.5 |

## Main Breaker Interiors ${ }^{\circledR}$

| Panel Amps Max. | Branch Space <br> Required | 14KA 480Y/277Vac(3) |  |  | 25kA 480Y/277Vac |  |  | 65kA 480Y/277 Vac 85kA 240 Vac Max. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog <br> Number(2) | List Price, GO-101 | Sizing Dim. (In.) | Catalog <br> Number (2) | List Price, GO-101 | Sizing Dim. (In.) | Catalog <br> Number(2) | List Price, GO-101 | Sizing Dim. (In.) |
| 100 | 0-12 | AEF3121BB | \$990.00 | 22.5 | AEF3121KB | \$1,285.00 | 25.5 | AEF3121DB | \$1,606.00 | 25.5 |
|  | 13-18 | AEF3181BB | \$1,043.00 | 25.5 | AEF3181KB | \$1,338.00 | 28.5 | AEF3181DB | \$1,659.00 | 28.5 |
|  | 19-24 | AEF3241BB | \$1,134.00 | 28.5 | AEF3241KB | \$1,429.00 | 31.5 | AEF3241DB | \$1,750.00 | 31.5 |
|  | 25-30 | AEF3301BB | \$1,225.00 | 31.5 | AEF3301KB | \$1,520.00 | 34.5 | AEF3301DB | \$1,842.00 | 34.5 |
|  | 31-36 | AEF3361BB | \$1,317.00 | 34.5 | AEF3361KB | \$1,612.00 | 37.5 | AEF3361DB | \$1,933.00 | 37.5 |
|  | 37-42 | AEF3421BB | \$1,406.00 | 37.5 | AEF3421KB | \$1,701.00 | 40.5 | AEF3421DB | \$2,025.00 | 40.5 |
| 225 | 0-12 | AEF3122BB | \$1,711.00 | 40.5 | AEF3122KB | \$2,006.00 | 40.5 | AEF3122DB | \$3,224.00 | 40.5 |
|  | 13-18 | AEF3182BB | \$1,764.00 | 43.5 | AEF3182KB | \$2,059.00 | 43.5 | AEF3182DB | \$3,276.00 | 43.5 |
|  | 19-24 | AEF3242BB | \$1,854.00 | 46.5 | AEF3242KB | \$2,149.00 | 46.5 | AEF3242DB | \$3,367.00 | 46.5 |
|  | 25-30 | AEF3302BB | \$1,946.00 | 49.5 | AEF3302KB | \$2,241.00 | 49.5 | AEF3302DB | \$3,459.00 | 49.5 |
|  | 31-36 | AEF3362BB | \$2,037.00 | 52.5 | AEF3362KB | \$2,332.00 | 52.5 | AEF3362DB | \$3,550.00 | 52.5 |
|  | 37-42 | AEF3422BB | \$2,128.00 | 55.5 | AEF3422KB | \$2,423.00 | 55.5 | AEF3422DB | \$3,642.00 | 55.5 |
| 400 | 0-12 | AEF3124BB | \$2,556.00 | 46.5 | - | - | - | - | - | - |
|  | 13-18 | AEF3184BB | \$2,642.00 | 49.5 | - | - | - | - | - | - |
|  | 19-24 | AEF3244BB | \$2,731.00 | 52.5 | - | - | - | - | - | - |
|  | 25-30 | AEF3304BB | \$2,823.00 | 55.5 | - | - | - | - | - | - |
|  | 31-36 | AEF3364BB | \$2,914.00 | 58.5 | - | - | - | - | - | - |
|  | 37-42 | AEF3424BB | \$3,004.00 | 61.5 | - | - | - | - | - | - |

[^0]
## 2. Choose Branch Breakers

## Branch Breakers, Bolt-on

| Branch Breaker Mounting | Type | Bolt-on frame | Trip Range (amps) | List Price, GO-101 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1-Pole 277Vac | 2-Pole 480Y/277Vac | 3-Pole 480Y/277Vac |
| Double Branch | TEYRC (14kAIC) | TEYRC | 15-303) | \$248.00 | \$550.00 | - |
|  | TEY (14kAIC) | TEY | 15-604 | \$53.00 | \$130.00 | \$230.00 |
|  |  |  | 70-100¢ | \$116.00 | \$274.00 | \$326.00 |
|  | THQB (10kAIC) | THQBGF | 15-306 | \$122.00 | \$203.00 | - |
|  |  | THQBGFEP | 15-30® | \$232.00 | \$533.00 | - |
| Subfeed Breakers(1)(2) | TED4 (14kAIC) | TED4 | 125-150 | - | - | \$1002.00 |
|  | SEH (25kAIC) | SEH | 125-150 | - | - | \$1930.00 |
|  | SELL (65kAIC) | SEL | 125-150 | - | - | \$2280.00 |
|  | SFH (25kAIC) | SFH | 125-225 | - | \$1256.00 | \$1571.00 |
|  | SFL (65kAIC) | SFL | 125-225 | - | \$2297.00 | \$2761.00 |

(1) Create appropriate option product number and determine size requirements from options table in section 4 below. Specify breaker type, poles and ampacity in addition to option product number when ordering.
(2) Subfeed horizontally mounted. Subfeed breaker types cannot be combined in the same panel.
(3) HID, HACR, \& SWD rated.
(4) 15 and 20 ampere breakers are SWD rated for fluorescent lighting applications.
(5) The sum of double branch breakers mounted opposite each other cannot exceed 150 amperes.
(6) $120 / 240 \mathrm{Vac}$, factory installed only.

## 3. Choose Controller

## Remote Controller, Options and Accessories

| Description | Product Number Option Suffix | Panel Sizing Adder | List Price Adder, GO-101 |
| :--- | :---: | :---: | :---: |
| Internal Controller | MR | 9 | $\$ 4751.00$ |
| Internal Controller with Ethernet Option | MR | 9 | $\$ 5418.00$ |
| External Controller | MX(1) |  | $\$ 4751.00$ |
| External Controller with Ethernet Option | MX(1) | - | $\$ 5418.00$ |
| External Controller Connection Cable - 5 Feet | - | - | $\$ 139.00$ |
| External Controller Connection Cable - 10 Feet | - | - | $\$ 209.00$ |
| External Controller Connection Cable - 15 Feet | - | - | $\$ 290.00$ |
| External Controller Connection Cable - 20 Feet | - | - | $\$ 342.00$ |
| External Controller Connection Cable - 25 Feet | - | - | $\$ 402.00$ |

(1) External controller requires external controller connection cable.

## 4. Add Panel Options <br> Interior Options

| Option | Description | Catalog Number Option Suffix ${ }^{(1)}$ | Panel Sizing Adder | List Price Adder, GO-101 | Panel Sizing Adder | List Price Adder, GO-101 | Panel Sizing Adder | List Price Adder, GO-101 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Optional Lugs② | Compression Alum. | L1 | N/A | \$30.00 | - | \$50.00 | - | \$130.00 |
|  | Pressure Copper | L2 | N/A | \$49.00 | - | \$49.00 | - | \$92.00 |
|  | Comp. Alum. Oversize | L3 | N/A | \$152.00 | - | \$152.00 | - | \$461.00 |
|  | Pressure Alum. Oversize | L4 | N/A | \$54.00 | - | \$54.00 | - | \$330.00 |
| Subfeed Breakers (Select Only One) | 3 Poles TED, SE | E3 | N/A | Price From Panel Section | 6 | Price From Panel Section | 6 | Price From Panel Section |
|  | 2 or 3 Poles SF | F1 | N/A |  | 12 |  | 18 |  |
| Feed Thru | Feed Thru Lugs ${ }^{(3)}$ | T1 | 3 | \$164.00 | 3 | \$164.00 | 3 | \$286.00 |
| Busbar | 600 APSI Alum | B1 | - | \$595.00 | - | \$595.00 | - | \$759.00 |
|  | 750 APSI Alum. | B2 | - | \$135.00 | - | \$135.00 | - | Std. |
|  | 1000 APS Copper ${ }^{4}$ | B4 | - | \$210.00 | - | \$210.00 | - | \$323.00 |
| 200\% Rated Neutrals | 2 Standard Lugs | N2 | - | \$60.00 | - | \$100.00 | - | \$140.00 |

(1) Option Catalog Number prefix is "AX."
(2) Oversize lugs available on single main lug panels only.
(3) Feed thru lugs not available on subfeed or oversized main lug panels.
(4) For silver or tin plating 1000 APSI Cu only add $\$ 100$ List, GO-101.

# A-Series Lighting Control Panels <br> Remote Operated Circuit Breaker 

TVSS Transient Voltage Surge Suppression ${ }^{\text {(1) }}$

| Maximum Surge Current <br> per Mode | Maximum Surge Current <br> per Phase | Description | List Price GO-101 |
| :---: | :---: | :--- | :---: |
| 65 kA | 130 kA | TVSS UL1449,UL1283 | $\$ 6350.00$ |
| 80 kA | 160 kA | TVSS UL1449,UL1283 | $\$ 7000.00$ |
| 100 kA | 200 kA | TVSS UL1449,UL1283 | $\$ 8500.00$ |
| 100 kA | 200 kA | TVSS UL1449, no counter | $\$ 2875.00$ |
| 100 kA | 200 kA | TVSS UL1449 | $\$ 3575.00$ |

(1) For factory installed transient voltage surge suppression (TVSS) units in 10" module, add T 6 suffix to interior catalog number and $10^{\prime \prime}$ to box height.

## Enclosures

| Sizing Dimensions (Inches) | Box Catalog Number | Inside Box Dimensions (Inches) |  |  | Front Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Length | Width | Depth |  |
| 28.5-31.5 | AB31 | 31.5 | 20 | 5.81 | AF31F, S |
| 34.5-37.5 | AB37 | 37.5 | 20 | 5.81 | AF37F, S |
| 40.5-43.5 | AB43 | 43.5 | 20 | 5.81 | AF43F,S |
| 46.5-49.5 | AB49 | 49.5 | 20 | 5.81 | AF49F, ${ }^{\text {a }}$ |
| 52.5-55.5 | AB55 | 55.5 | 20 | 5.81 | AF55F, ${ }^{\text {a }}$ |
| 57.5-64.5 | AB64 | 64.5 | 20 | 5.81 | AF64F, S |
| 67.5-76.5 | AB76 | 76.5 | 20 | 5.81 | AF76F, S |

Flush fronts are 1.5 inches larger than box. Surface fronts are .25 inches larger than box.

## Front Options

| Description | Catalog Number(1) | List Price, GO-101 |
| :--- | :---: | :---: |
| Screw cover | C | $\$ 61.00$ |
| Front hinged to box | D | $\$ 110.00$ |
| Optional Lock: Yale 511S W/ Rosette | Y | $\$ 300.00$ |
| Optional Lock: Corbin 15767 | L | $\$ 146.00$ |
| Door within a door (2) | P | $\$ 238.00$ |
| Stainless steel (3) | S | $\$ 1467.00$ |
| 30" wide | W | $\$ 82.00$ |
| Screw on nameplate | U | $\$ 74.00$ |
| Metal directory | M | $\$ 50.00$ |

(1) Add to base box catalog number.
(2) Consists of two lockable doors - one over panel interior and one over box wiring
gutters. Yale locks not available.
(3) Flush only. Available with C and N options.

## Box Options

| Description | Catalog Number <br> Suffix (1) | List Price, <br> GO-101 |
| :--- | :---: | :---: |
| Blank Endwalls | B | (2) |
| Painted Box | P | $\$ 200.00$ |
| $30^{\prime \prime}$ Wide (3) | W | $\$ 250.00$ |
| NEMA 3R/12 | 3 | $\$ 950.00$ |
| NEMA 4X (Stainless Steel) | 4 S | $\$ 4950.00$ |
| Endwall with Knockouts | K | (2) |

(1) Add to base box product number.
(2) No charge if included on original order.
(3) Includes field installable gutter barrier.

## 5. Add External Accessories

## A-Series Lighting Control Panel Accessories

| Item | Description | Catalog <br> Number | List Price <br> GO-134B |
| :--- | :--- | :--- | :--- |
| Handheld Programmer | Customer interface with LCD screen | ASRGLCHPK | $\$ 1680.00$ |
| Daylight Optimization <br> Module | Performs sunlight harvesting by measuring the amount of <br> light and providing a control signal to a dimming mechanism <br> to maintain a preset lighting level. | ASRGLCDOK | $\$ 2000.00$ |
| Remote Switch <br> Expansion Module | Provides additional 16 digital input signals to the controller <br> for each module. | ASRGLCDSK | $\$ 1238.00$ |
| Control Wiring Insulation <br> Tubing | Requirement, per UL 67 and NEC 725.55, that low voltage <br> Class 2 \& 3 control wiring be separated with tubing <br> having an insulation rating equal to branch load wiring. | ASRGLCCWT | $\$ 25.00$ |



Daylight Optimization Module



# It's just one part of a more productive solution only from GE 

As part of a GE integrated switchboard, the A-Series Lighting Control Panel gives you even more of what you need.

The integrated switchboard packs all your power requirements into a single integrated system that turns non-productive mechanical space into revenue-generating sales or storage areas. And it arrives fully pre-wired to your specifications. All you have to do is set it in place, run the incoming power and wire out the branches. Installation takes less than half the time.

Still, you sacrifice nothing in terms of safety, performance or flexibility. Units expand or contract to meet specific needs. They reflect GE's rigorous quality standards, and they are built and tested in accordance with NEMA PB-2, UL 891 and the NEC. All sections and devices are UL Listed and UL Labeled.

## The service is part of the solution

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## GE Consumer \& Industrial

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[^0]:    (1) Bottom feed supplied as standard - change last character in Catalog Number from B to T for top feed.
    (2) Includes standard panelboard interior, box and front. Add price for options when required.
    (3) Ratings at $120 / 240 \mathrm{Vac}: 100 \mathrm{~A}-65 \mathrm{kA}, 225 \mathrm{~A}-25 \mathrm{kA}, 400 \mathrm{~A}-42 \mathrm{kA}$.

