# **Elaho Relay Controller**

# **Distributed Power Series**



Type(s

Project Date

Notes

### GENERAL INFORMATION

Relay Controllers offer fully-rated 20 A relays to switch lighting loads on and off. Relay Controllers mount to fixtures and electrical junction boxes.

#### **APPLICATIONS**

- · Houses of worship
- Education
- Hospitality
- Healthcare facilities
- Office buildings
- Conference rooms
- Meeting rooms
- Retail

#### **FEATURES**

- Single- and dual-zone options
- 20 A fully-rated relay for use with general purpose, tungsten, fluorescent and LED loads
- 120–277 VAC power input
- Plug and Play: ready to go out of the box, no software or external programming required
- Supports control stations and responsive controls
- Two-wire topology-free system gives you the freedom to put stations where you need them
  - Up to 16 control products
  - Up to 16 output products
- Up to 500 m (1,640 ft) of control-wire per system
- Supports Demand Response via Station Bus

#### GENERAL

- cULus Listed
- Rated for plenum use

### ORDERING INFORMATION

### **Relay Controller**

| MODEL   | DESCRIPTION                  |  |  |
|---------|------------------------------|--|--|
| ERC-G2  | Single-Zone Relay Controller |  |  |
| EDRC-G2 | Dual-Zone Relay Controller   |  |  |

#### **Accessories**

| MODEL | DESCRIPTION                     |  |  |  |
|-------|---------------------------------|--|--|--|
| E4VB  | 4 inch box with voltage barrier |  |  |  |

### **Power Requirements**

| Bus Power:       | One unit of output power |  |
|------------------|--------------------------|--|
| Auxiliary Power: | Not required             |  |

#### **Presets**

Supports 16 Presets



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#### GENERAL INFORMATION

#### **FUNCTIONAL**

- Control individual fixtures or zone power
- Plug and Play: ready to go out of the box, no software or external programming required
- Interacts with control stations and responsive controls

#### **MECHANICAL**

- Constructed of injection-molded ABS plastic
- Button interface and LED indicator per zone for configuration
- Rotary dials for selection of space and zone number
- 1/2 in conduit knockout mounted
- Mains-voltage wiring exits through knockout mount
- Station bus wiring exits through side of controller
- Optional mounting plate available for applications that require low-voltage wiring to be in conduit
- microSD for field software upgrades
- Mains power input:
  - 4 mm<sup>2</sup> (12 AWG) Hot Black
  - 2.5 mm<sup>2</sup> (14 AWG) Neutral White
- Relay output:
  - Zone 1, 4 mm<sup>2</sup> (12 AWG) Red
  - Zone 2, 4 mm<sup>2</sup> (12 AWG) Red/White (Dual-zone only)
- Control connection:
  - Control, 1 mm<sup>2</sup> (18 AWG) Black and White
  - Ground, 1 mm<sup>2</sup> (18 AWG) Green/Yellow

#### **ELECTRICAL**

- 120-277 V, 60 Hz, 1 pole power input
- Normally Open (NO) 20 A fully-rated relay
- Class 2 control network
  - Topology-free wiring using Belden 8471 or equivalent and one 1 mm<sup>2</sup> (18 AWG) drain wire
  - Wiring may be bus, loop, home run or any combination of these
- Up to 500 m (1,640 ft) of control wiring per system
- Optional Cat5/5e wiring using Belden 1583A or equivalent
  - Requires optional Cat5 termination accessories
- cULus Listed
- Conforms to UL 508 and UL 2043

#### **THERMAL**

- Ambient room temperature: -10°C to 45°C (14°F to 113°F)
- Ambient humidity: 5%-95% non-condensing

### ELAHO FAMILY PRODUCTS

# **Bus Power Supplies**

| MODEL     | DESCRIPTION                                      |
|-----------|--|
| E-SPS     | 6 U Room Station Power Supply, Knockout Mount    |
| E-SPS-DIN | 16 U DIN rail Station Power Supply with 24 V Aux |
| E-APS     | 24 V Aux Power Supply, Knockout Mount            |

### **ElahoTouch**

| MODEL | DESCRIPTION               |  |
|-------|---------------------------|--|
| ETS   | ElahoTouch Controller Mk2 |  |

### **Elaho Stations**

| MODEL | DESCRIPTION                            |
|-------|--|
| E1001 | Inspire One Button Station             |
| E1002 | Inspire Two Button Station             |
| E1004 | Inspire Four Button Station            |
| E1006 | Inspire Six Button Station             |
| E1008 | Inspire Eight Button Station           |
| E1104 | Inspire Four Button with Fader Station |
| EPS05 | Preset Station - 5 Button              |
| EPS10 | Preset Station - 10 Button             |
| EPSKS | Keyswitch Station                      |
| E-ATC | TimeClock                              |

# **Elaho Responsive Controls**

| MODEL     | DESCRIPTION                                |  |  |  |  |
|-----------|--|--|--|--|--|
| ELS       | Light Sensor                               |  |  |  |  |
| EOCC      | Ceiling-Mount PIR Occupancy Sensor         |  |  |  |  |
| EVAC      | Ceiling-Mount PIR Vacancy Sensor           |  |  |  |  |
| E-DOC-C   | Ceiling-Mount Dual Tech Occupancy Sensor   |  |  |  |  |
| E-DVAC-C  | Ceiling-Mount Dual Tech Vacancy Sensor     |  |  |  |  |
| E-DOC-W   | Wall-Mount Dual Tech Occupancy Sensor      |  |  |  |  |
| E-DVAC-W  | Wall-Mount Dual Tech Vacancy Sensor        |  |  |  |  |
| E-DOC-SM1 | Switch-Mount Dual Tech Sensor - One Button |  |  |  |  |
| E-DOC-SM2 | Switch-Mount Dual Tech Sensor - Two Button |  |  |  |  |

### **Elaho Interfaces**

| MODEL | DESCRIPTION               |  |  |  |  |
|-------|---------------------------|--|--|--|--|
| EACC  | ElahoAccess Interface     |  |  |  |  |
| EEB   | Expansion Bridge          |  |  |  |  |
| EDMXC | DMX Scene Controller      |  |  |  |  |
| EEI   | Elaho-Echoflex Interface  |  |  |  |  |
| ECII  | Contact Input Interface   |  |  |  |  |
| ECOI  | Contact Output Interface  |  |  |  |  |
| EDRI  | Demand Response Interface |  |  |  |  |
| EBI   | BACnet Interface          |  |  |  |  |
| EII   | Integration Interface     |  |  |  |  |

### **Zone Controllers**

| MODEL           | DESCRIPTION                            |  |  |  |  |
|-----------------|--|--|--|--|--|
| ERC-G2          | One Zone Relay Controller              |  |  |  |  |
| EDRC-G2         | Two Zone Relay Controller              |  |  |  |  |
| ELD-G2          | One Zone 0–10 V Controller             |  |  |  |  |
| EDLD-G2         | Two Zone 0–10 V Controller             |  |  |  |  |
| ESSC-G2         | One Zone SmartSpace Controller         |  |  |  |  |
| EDSSC-G2        | Two Zone SmartSpace Controller         |  |  |  |  |
| ELVD-G2         | 600-Watt Phase Adaptive Dimmer (120 V) |  |  |  |  |
| ELVD-277-G2     | 600-Watt Phase Adaptive Dimmer (277 V) |  |  |  |  |
| ELVD-G2-MLV     | 600-Watt Forward Phase Dimmer (120 V)  |  |  |  |  |
| ELVD-277-G2-MLV | 600-Watt Forward Phase Dimmer (277 V)  |  |  |  |  |

### **Room Controllers**

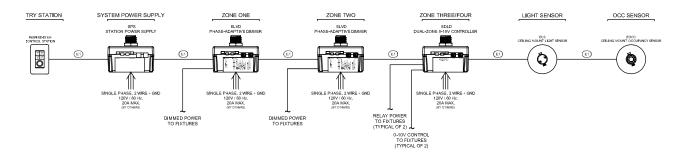
| MODEL     | DESCRIPTION                               |
|-----------|---|
| ERMC4-G2  | Four Zone Room Controller                 |
| ERMCT4-G2 | Four Zone Room Controller with TimeClock  |
| ERMC8-G2  | Eight Zone Room Controller                |
| ERMCT8-G2 | Eight Zone Room Controller with TimeClock |

### **Panel Products**

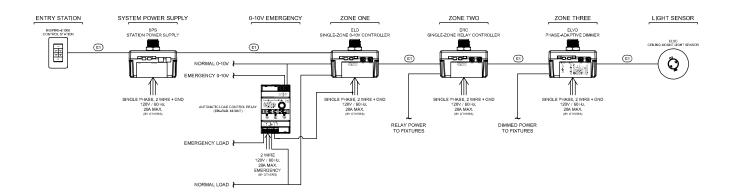
| MODEL  | DESCRIPTION                        |  |  |  |
|--------|------------------------------------|--|--|--|
| ERP    | Elaho Relay Panel Mains Feed       |  |  |  |
| ERPA   | Elaho Relay Panel Mains Feed 277 V |  |  |  |
| ERP-FT | Elaho Relay Panel Feedthrough      |  |  |  |

### SAMPLE SYSTEMS

### **SMALL SYSTEM**



#### **CONFERENCE ROOM**



### PHYSICAL

### **Controller Dimensions**

| MODEL   | HEIGHT |     | WIDTH |     | DEPTH |     |
|---------|--------|-----|-------|-----|-------|-----|
|         | mm     | in  | mm    | in  | mm    | in  |
| ERC-G2  | 51     | 2.0 | 89    | 3.5 | 77    | 3.0 |
| EDRC-G2 | 51     | 2.0 | 89    | 3.5 | 77    | 3.0 |

# **Controller Weight**

| MODEL   | WEIGHT |     |
|---------|--------|-----|
|         | kg     | lb  |
| ERC-G2  | 0.4    | 0.8 |
| EDRC-G2 | 0.4    | 0.8 |

