DIN-1DIM4

DIN Rail 4-Channel Dimmer

> 4 channels of dimming

> 120 to 277 Volt 50/60 Hz operation

> Selectable non-dim mode

> Master air-gap relay

> Override input

> Cresnet® communications

> Setup via front panel or software

> Programmable functionality via DIN-AP3

> 12M wide DIN rail mounting

> CEC Title 24 2013 Compliant

The DIN-1DIM4 is a DIN rail mounted lighting control module with four channels of dimming. A single model supports both 120 and 220-277 Volt electronic and magnetic low-voltage, incandescent, neon/cold cathode, 2-wire dimmable fluorescent, and non-dimmable lighting loads up to 5 Amps per channel, 10 Amps total.

Phase-Synchronous Detection Circuitry

Proprietary zero cross filter technology from Crestron® provides superior immunity to noise on the power line, reducing lamp flicker and compensating for fluctuations in line voltage and frequency.

Master Air-Gap Relay

When all four channels are turned fully off, the internal master relay automatically opens providing air-gap isolation to allow safe servicing and changing of light bulbs on all four controlled circuits.

Override Input

An override input is provided to allow an external contact closure to momentarily override the control system program and set each channel output to its override preset level. Levels can be adjusted and saved locally from the front panel, or remotely via software.

DIN Rail Installation

The DIN-1DIM4 is designed to snap onto a standard DIN rail for installation in a wall mount enclosure. Wiring connections are made using screw terminals positioned along the bottom, clearly accessible from the front for easy installation and servicing. All setup controls and indicators are positioned on the center front panel. When installed in an enclosure utilizing 45 mm cutouts, the DIN-1DIM4's front panel stays accessible while the connections are concealed.

Cresnet®

The DIN-1DIM4 communicates with a DIN-AP3 Automation Processor, or other Crestron 3-Series® control systems, via the Cresnet control network. A pair of Cresnet ports on the DIN-1DIM4 allows for easy daisy-chaining of several DIN Rail Series automation control modules.

SPECIFICATIONS

Load Ratings

Dimmer Channels: 4
Maximum Per Channel: 5 Amps @ 120 to 277 Volts AC, 50/60 Hz;
600 Watts @ 120 Volts AC;
1150 Watts @ 230 Volts AC;
1200 Watts @ 240 Volts AC
1385 Watts @ 277 Volts AC
Module Total: 10 Amps @ 120 to 277 Volts AC, 50/60 Hz;
1200 Watts @ 120 Volts AC;
2300 Watts @ 230 Volts AC;
2400 Watts @ 240 Volts AC
2770 Watts @ 277 Volts AC
Load Types: Leading edge ELV, Incandescent, Neon/Cold Cathode, Magnetic Low Voltage, Dimmable 2 Wire Fluorescent, & Non-Dim Lighting

Input Voltage

Line Power: 120 to 277 Volts AC, 50/60 Hz

Connections

NET: **(2)** 4-pin 3.5mm detachable terminal blocks, paralleled;
Cresnet® slave port
OVERRIDE: (2) 2-pin 3.5mm detachable terminal blocks, paralleled;
Sensing input for external low-voltage contact closure;
Activates override mode when a closure is present;
Minimum Closure Rating: 10mA (per module) at 24 Volts
LIVE: (2) Captive screw terminals[1], brown;
Line power input
NEUTRAL: (5) Captive screw terminals[1], blue
DIMMED LIVE 1 – 4: (4) Captive screw terminals[1], red;
Dimmer channel outputs 1 - 4
Ground: (5) Captive screw terminals[1], green

CRESTRON®

Controls & Indicators

NET ID: (2) 7-Segment green LED digits and (2) miniature pushbuttons for setting Cresnet ID; digits also display output levels and protection/error codes

SETUP: (1) Red LED and (1) recessed miniature pushbutton for enabling setup mode and touch-settable ID

OVR: (1) Red LED and (1) miniature pushbutton for enabling override mode and saving override presets

PWR: (1) Green LED, normally indicates AC line power is connected to either LIVE terminal, blinks when only powered by Cresnet

NET: (1) Yellow LED, indicates communication with the control processor

RESET: (1) Recessed miniature pushbutton, resets internal processor

DIM 1 – 4: (4) Red LEDs, illuminate when a corresponding channel is operating in forward-phase mode

NON-DIM 1 – 4: (4) Red LEDs, illuminate when a corresponding channel is operating in non-dim mode

Channel Mode Select 1 – 4: (4) Recessed miniature pushbuttons, used to select each channel's operating mode

LOADS 1 – 4: (4) Red LEDs and (4) miniature pushbuttons for status indication and local control of each channel

Enclosure

Aluminum with polycarbonate label overlay, 35mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45mm front panel cutout, occupies 12 DIN module spaces (216mm)[2]

Power Requirements

Cresnet Power Usage: 0.6 Watts (0.03 Amps @ 24 Volts DC) when line power is not available

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 60 BTU/hr @240 Volts with 2 channels
52 BTU/hr @ 120 Volts with 2 channels

Dimensions

Height: 3.71 in (95 mm)
Width: 8.49 in (216 mm)
Depth: 2.35 in (60 mm)

Weight

2.1 lb (953 g)

Standards & Certifications

UL Listed, CEC Title 24 2013 Compliant, CE

MODELS

Available Models

DIN-1DIM4: DIN Rail Dimmer, 1 feed, 4 channels

Notes:

1. Captive screw terminals accept up to 12 AWG (2.5 mm²) wires per terminal.
2. Unit dissipates significant heat when fully loaded and should be mounted in an enclosure that is sufficiently ventilated to maintain an ambient temperature not exceeding 104°F (40°C). Maintain 4 inches (102 mm) minimum spacing above and below for proper ventilation and heat dissipation, 6 inches (153 mm) spacing recommended.

CAD DRAWINGS

94.2mm (3.709")

215.5mm (8.484")

90mm (3.543")

59.5mm (2.343")

58mm (2.283")