Digidim 474 Helvar

DIN Rail 4-Channel Ballast Controller

The Digidim 474 is a 4-channel ballast controller fitted with high inrush relays rated at 16 A per channel, which handle short-lived high peak currents during switch on of loads.

The outputs can be configured to match common ballast control loads including 0/1-10 V, DSI, DALI-broadcast and PWM. The outputs can be configured independent of, or paired with relay channels; 4 additional outputs can be utilized if required. The 474 ballast controller can operate with either a Helvar Digidim or Imagine lighting control system. It is a DIN-rail mounted device for ease of installation.

The 474 ballast controller has an intuitive LED segment display and push buttons for monitoring, manual configuration and control purposes.

Key Features

- High inrush specification relays
- Wired override input to allow for external triggers
- LED segment display and push buttons
- Multiple output configurations of:

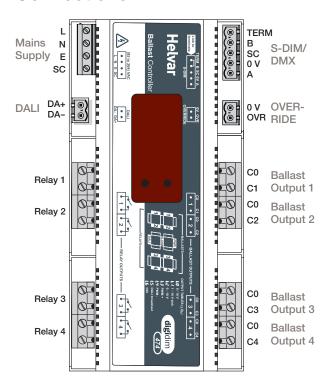
0 - 10 V: source 10 mA
1 - 10 V: sink 100 mA

DALI-broadcast: source 100 mA

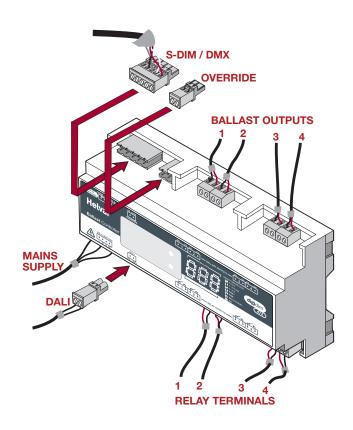
DSI: source 100 mA

PWM: source 100 mA

Connections







Installation Notes

- · For installation in a restricted access location only
- Isolate the mains supply before installation
- The external mains supply must be protected.
 External protection must not exceed 6 A
- All DALI and Mains cabling must be 230 V mains rated
- Do not connect DALI or S-DIM / DMX at the same time
- Install the unit horizontally to allow for heat dissipation
- Any enclosure must provide adequate cooling ventilation
- Please refer to the 474 DIN Rail 4-Channel Ballast Controller Installation Guide

Technical Data

Connections

Mains/relay/output: Solid core: up to 4 mm²

Stranded: 2.5 mm²

DALI: 0.5 mm² - 1.5 mm²

(max. 300 m @ 1.5 mm²)

S-DIM / DMX: 0.22 mm² -1.5 mm² low loss

RS485 Type (multi-stranded,

twisted and shielded)

Relay channels: 2 channels per 4-way connector;

2.5 mm² stranded

Power

Mains Supply: 85 - 264 VAC, 45 - 65 Hz

Power Consumption: 2.4 W (min) to 11 W (all outputs

fully loaded)

Power Circuit Protection: 6 A maximum.

The external supply must be

protected.

DALI Consumption: 2 mA

Inputs

Communication: DALI, S-DIM and DMX

Override: Wired override input

User interface: 2 push buttons for configuration

Outputs

0 - 10 V: Source 10 mA **1 - 10 V:** Sink 100 mA

DALI / DSI: (50 ballasts): Source 100 mA

PWM +/-: (50 ballasts): Source 100 mA

Relay contacts

Channels: 4

Relay contacts: High inrush (200 µs at 800 A),

single pole normally open (SPNO)

Max. load per contact: 16 A resistive / incandescent;

10 A HID ($\cos y = 0.6$)

For ballasts, quantity is limited by MCB, refer to manufacturer's data. Relay circuit external protection must

not exceed 16 A.

Operating and Storage Conditions

Ambient Temperature: 0°C to 40°C

Relative Humidity: 90% max, non-condensing

Storage Temperature: -10°C to +70°C

Mechanical Data

Housing: DIN-rail case; 9U

Weight: 280 g

IP Rating: IP 00 (for installation in a restricted

access location only)

Conformity and Standards

DALI: According to DALI standard IEC

62386, with Helvar additions

S-DIM: According to Helvar S-DIM

protocol

DMX: According to DMX512-A protocol
Environment: Complies with WEEE and RoHS

directives

EMC

 Emission:
 EN 61000-6-3

 Immunity:
 EN 61 547

 Safety:
 EN 60 950

Isolation: 4 kV between every connector

(apart from common C0 ballast output terminals and S-DIM and

Override connectors)

Dimensions

