

8-Channel Relay Unit (498)

Helvar

freedom in lighting



The DIGIDIM 498 8-Channel Relay Unit is fitted with high-inrush specification relays rated at 16 A per channel, which handle short-lived high peak inrush currents during switch-on of loads.

It can be networked through either DALI or SDIM communication to be incorporated into a DIGIDIM or Imagine lighting control system.

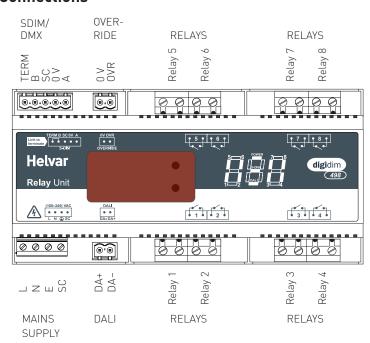
The unit has an intuitive LED segment display and push buttons for monitoring, manual configuration and control purposes.

Key Features

- High-inrush specification relays (single pole, normally open).
- Wired override input to allow for external triggers.
- LED segment display and push buttons.
- Can operate as:
 - 8 individual channels (8 x 1);
 - 4 sets of 2 channels (4 × 2); or
 - 2 sets of 4 channels (2×4) .



Connections





Technical Data

freedom in lighting

Connections

Mains/relay: Up to 4 mm² solid or up to 2.5 mm²

stranded

DALI: 0.5 mm² – 1.5 mm² solid or stranded.

Max. length: 300 m @ 1.5 mm².

SDIM/DMX: 0.22 mm² – 1.5 mm² low-loss RS485

type (multistranded, twisted and shielded). Max. length: 1000 m (lowloss cable). Examples: Belden 8102

or Alpha 6222C.

Note: One twisted pair for A and B (85 Ω to 100 Ω impedance), one core or twisted pair for 0 V, and shield for

screen.

Cable rating: All cables must be mains rated.

Power

Mains supply: 100 VAC - 240 VAC (nominal)

85 VAC - 264 VAC (absolute)

45 Hz - 65 Hz

Power consumption: 2.6 W

Standby power

consumption: 1.1 W

Internal losses: 2.1 W + max. 1.6 W per channel Control circuit 6 A maximum. The unit's mains supply must be protected.

DALI consumption: 2 mA

Compliance: Complies with DSI standard v 2.0. **Isolation:** Between every connector, with this

Between every connector, with this exception: 'SDIM 0 V' and 'OVR 0 V'

are not isolated from each other.

Inputs

Communication: DALI, SDIM and DMX
Override: Wired override input

User interface: 2 push buttons for configuration

Channels: 8 (2 channels per four-way

connector)

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

pole, single-throw (SPST) relay. W premake contact + AgSnO₂. Optimised for high currents.

Relay voltage: 240 VAC / 400 VAC

Max. load per 16 A resistive/incandescent; **contact:** 10 A HID [cos y = 0.6]

Number of devices: For ballasts, quantity is limited by

MCB; refer to manufacturer's data. Relay circuit external protection

must not exceed 16 A.

These are power relays and

therefore not suitable for extra-low

voltage operation.

Where power relays are used to control contactors, make sure that

snubbers are fitted.

Mechanical data

Dimensions: 160 mm × 90 mm × 58 mm **Housing:** White plastic (polycarbonate)

DIN-rail case

Weight: 400 g

IP code: IP30 (IP00 at terminals)

Operating and storage conditions

Ambient

temperature: 0 °C to +40 °C

Relative humidity: Max. 90 %, noncondensing

Storage

temperature: -10 °C to +70 °C

Conformity and standards

 Emission:
 EN 55015

 Immunity:
 EN 61547

 Safety:
 EN 60950

DALI: DALI standard IEC 60929, with Helvar

additions

SDIM: Helvar SDIM protocol
DMX: DMX512-A protocol

(max. refresh rate: 33 Hz)

Environment: Complies with WEEE and RoHS

directives.

Dimensions (mm)

