

DIN Rail 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.

The 498 relay unit can be networked through either DALI or S-DIM 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 × 1) or
- 4 sets of 2 channels (4×2) or
- 2 sets of 4 channels (2×4)

Installation Notes

- For installation in a restricted access location only
- Isolate the mains supply before installation
- The unit's 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 498 DIN Rail 8-Channel Relay Unit (Helvar document 7860184).



Connections

S-DIM/ DMX	OVER- RIDE	RELAYS	RELAYS
TERM SC 0 V	0 V 0 V 0 V 8	Relay 5 Relay 6	Relay 7 Relay 8
0.0.0.0.0	0.0	0000	0000
Helvar Relay Unit	OV OVR OVERRIDE		[77][18] digidim 498
(85 to 264)VAC • • • • L N E SC	DALI • • DA-DA+	1 0 2	3 4 4
0000	<u> </u>	0000	0000
SEZ	DA+ DA-	Relay 1 Relay 2	Relay 3 Relay 4
MAINS SUPPLY	DALI	RELAYS	RELAYS



Technical Data freedom in lighting

Connections

DALI: 0.5 mm² – 1.5 mm² stranded or

solid core

(max. 300 m @ 1.5 mm²)

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

2.5 mm² stranded

S-DIM / DMX: 0.22 mm² – 1.5 mm² low-loss RS485

Type

multistranded, twisted and shielded

Cable rating: All cables must be mains rated.

Power

Mains supply: 85 VAC - 264 VAC

45 Hz - 65 Hz

Power consumption: 2.6 W Standby power 1.1 W

consumption:

Internal losses: 2.1 W + max. 1.6 W per channel

Control circuit 6 A maximum. The unit's mains **protection:** supply must be protected.

DALI consumption: 2 mA

Isolation: 4 kV between every connector, with

these exceptions:

SDIM 0V and 0VR 0V are NOT isolated from each other

Compliance: Complies with DSI standard v 2.0

Inputs

Communication: DALI, S-DIM and DMX
Override: Wired override input

User interface: 2 push buttons for configuration
Channels: 8 (2 channels per 4-way connector)

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

single-pole, single-throw (SPST)

relay.

W pre-make contact + AgSnO2. Optimised for high currents.

Relay voltage: 240 VAC / 400 VAC

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

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 are not suitable for extra low-voltage

operation.

Where power relays are used to control contactors, please ensure

snubbers are fitted.

Mechanical data

Dimensions: $160 \text{ mm} \times 100 \text{ mm} \times 58 \text{ mm}$

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 %, non-condensing

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

S-DIM: Helvar S-DIM protocol
DMX: DMX512-A protocol

Environment: Complies with WEEE and RoHS

directives

Dimensions



