

# 8-Channel Relay Unit (498)

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 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

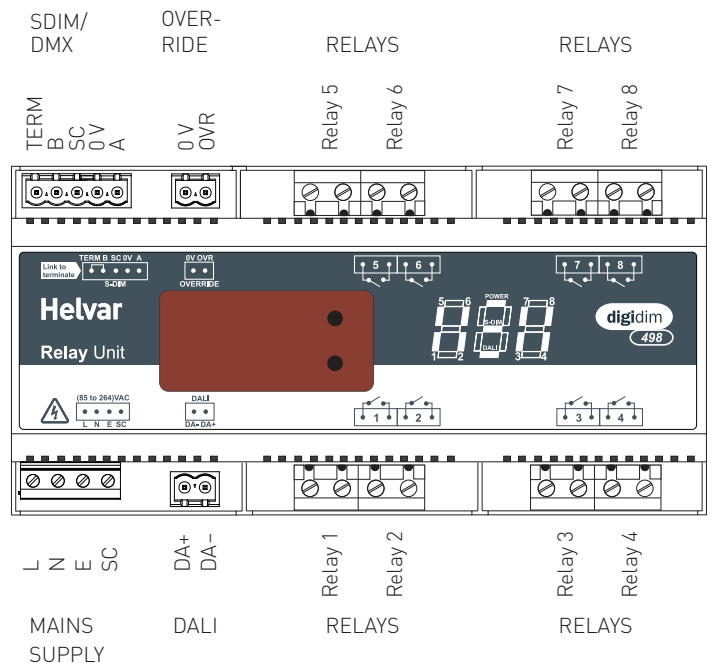
- High inrush specification relays (single pole, normally open).
- Wired override input to allow for external triggers.
- LED segment display and push buttons.
- Can operate as:
  - 8 individual channels (8 × 1);
  - 4 sets of 2 channels (4 × 2); or
  - 2 sets of 4 channels (2 × 4).

### 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 SDIM/DMX at the same time.
- Install the unit horizontally to allow for heat dissipation.
- Any enclosure must provide adequate cooling ventilation
- Refer to the 498 DIN Rail 8-Channel Relay Unit (Helvar document 7860184).



### Connections



## Technical Data

### Connections

<b>DALI:</b>	0.5 mm <sup>2</sup> – 1.5 mm <sup>2</sup> stranded or solid core (max. 300 m @ 1.5 mm <sup>2</sup> )
<b>Mains/relay:</b>	Up to 4 mm <sup>2</sup> solid core or up to 2.5 mm <sup>2</sup> stranded
<b>SDIM / DMX:</b>	0.22 mm <sup>2</sup> – 1.5 mm <sup>2</sup> low-loss RS485 Type multistranded, twisted and shielded
<b>Cable rating:</b>	All cables must be mains rated.

### Power

<b>Mains supply:</b>	85 VAC – 264 VAC 45 Hz – 65 Hz
<b>Power consumption:</b>	2.6 W
<b>Standby power consumption:</b>	1.1 W
<b>Internal losses:</b>	2.1 W + max. 1.6 W per channel
<b>Control circuit protection:</b>	6 A maximum. The unit's mains supply must be protected.
<b>DALI consumption:</b>	2 mA
<b>Isolation:</b>	4 kV between every connector, with these exceptions: SDIM 0V and OVR 0V are NOT isolated from each other.
<b>Compliance:</b>	Complies with DSI standard v 2.0

### Inputs

<b>Communication:</b>	DALI, SDIM and DMX
<b>Override:</b>	Wired override input
<b>User interface:</b>	2 push buttons for configuration
<b>Channels:</b>	8 (2 channels per 4-way connector)
<b>Relay contacts:</b>	High inrush (200 μs at 800 A), single-pole, single-throw (SPST) relay. W premake contact + AgSnO <sub>2</sub> . Optimised for high currents.
<b>Relay voltage:</b>	240 VAC / 400 VAC
<b>Max. load per contact:</b>	16 A resistive / incandescent; 10 A HID (cos γ = 0.6)
<b>Number of devices:</b>	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, make sure that snubbers are fitted.

### Mechanical data

<b>Dimensions:</b>	160 mm × 100 mm × 58 mm
<b>Housing:</b>	White plastic (polycarbonate) DIN-rail case
<b>Weight:</b>	400 g
<b>IP code:</b>	IP30 (IP00 at terminals)

### Operating and storage conditions

<b>Ambient temperature:</b>	0 °C to +40 °C
<b>Relative humidity:</b>	Max. 90 %, noncondensing
<b>Storage temperature:</b>	-10 °C to +70 °C

### Conformity and standards

<b>Emission:</b>	EN 55015
<b>Immunity:</b>	EN 61547
<b>Safety:</b>	EN 60950
<b>DALI:</b>	DALI standard IEC 60929, with Helvar additions
<b>SDIM:</b>	Helvar SDIM protocol
<b>DMX:</b>	DMX512-A protocol
<b>Environment:</b>	Complies with WEEE and RoHS directives

### Dimensions

