

498 8-Channel Relay Unit

The 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 or Imagine lighting control system.

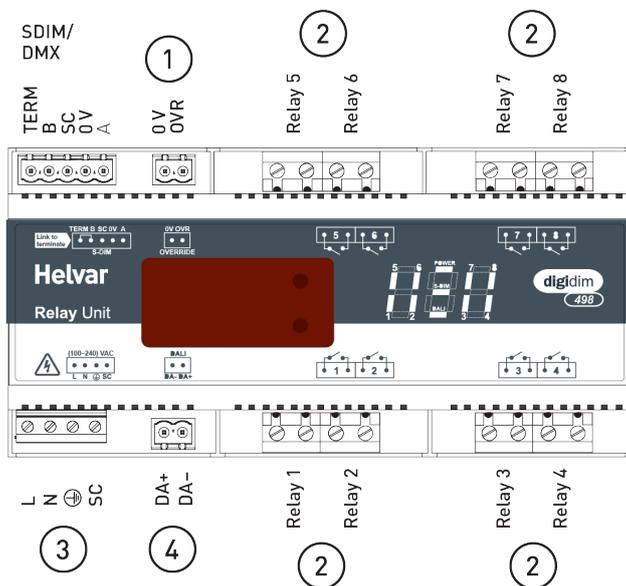
The unit has an intuitive LED segment display and push buttons for monitoring, manual configuration and control purposes.



Key Features

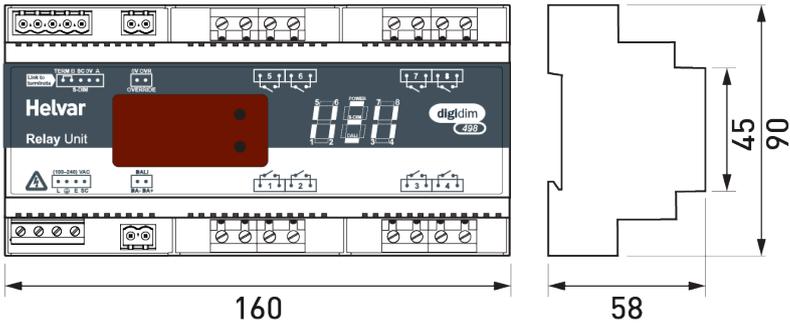
- High-inrush specification relays (single pole, normally open).
- Wired override input to allow for external triggers.
- LED segment display and push buttons.
- Can operate as:
 - 8 individual channels (8 × 1)
 - 4 sets of 2 channels (4 × 2)
 - 2 sets of 4 channels (2 × 4)

Connections



1. Override
2. Relays
3. Mains supply
4. DALI

Dimensions (mm)



Technical Data

Connections	
Mains/relay:	Up to 4 mm ² solid or up to 2.5 mm ² stranded
DALI:	0.5 mm ² – 1.5 mm ² solid or stranded. Max. length: 300 m @ 1.5 mm ²
SDIM/DMX:	0.22 mm ² – 1.5 mm ² low-loss RS485 type (multistranded, twisted and shielded). Max. length: 1000 m (lowloss cable). Examples: Belden 8102 or Alpha 6222C. <div style="display: flex; align-items: center;"> <p>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.</p> </div>
Cable rating:	Mains cables, relay cables and DALI cables must be mains rated.

Electrical data	
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
External protection:	The mains supply must be protected at 6 A maximum. The relays must be protected by a 16 A Type C MCB maximum.
DALI consumption:	2 mA
Compliance:	Complies with DSI standard v 2.0.
Isolation:	Between every connector, with this exception: 'SDIM 0 V' and 'OVR 0 V' are not isolated from each other.

Operating and storage conditions	
Ambient temperature:	0 °C to +40 °C
Relative humidity:	Max. 90 %, non-condensing
Storage temperature:	-10 °C to +70 °C

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), singlepole, single-throw (SPST) relay. W premake contact + AgSnO ₂ . Optimised for high currents.
Relay voltage:	240 VAC (400 VAC between channels)
Max. load per contact:	16 A resistive/incandescent 10 A HID (cos φ = 0.6)
Number of devices:	For ballasts, quantity is limited by MCB; refer to manufacturer's data. 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
Weight:	400 g
Housing:	Plastic (polycarbonate) DIN-rail case
Mounting:	DIN rail (installation in switchgear/ control-gear cabinet)
IP rating:	IP30 (IP00 at terminals)

Conformity and standards	
Conformity:	
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
DALI:	IEC 60929, with Helvar extensions
SDIM:	Helvar protocol (RS485, 115 kbps)
DMX:	DMX512-A protocol (max. refresh rate: 33 Hz)
Environment:	Complies with WEEE and RoHS directives.