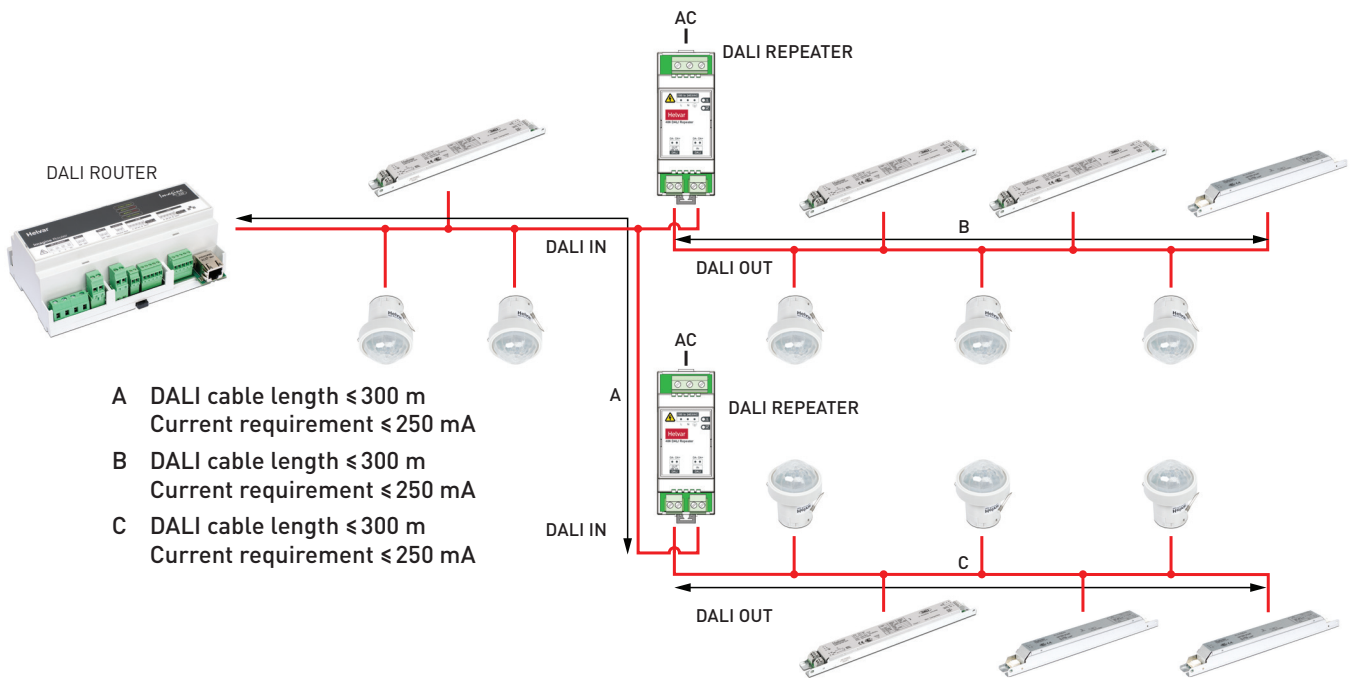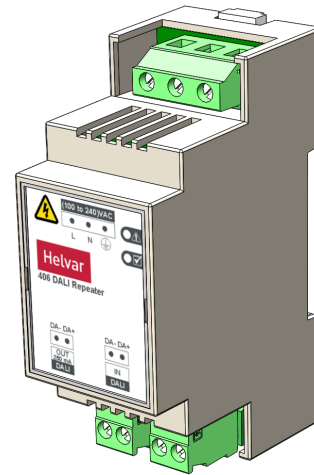# DALI Repeater (406)

The DIN rail mounted 406 DALI Repeater extends the maximum DALI line length from 300 m to 600 m and provides an additional 250 mA of DALI current. This device does not provide additional DALI addresses. The DALI limit of 64 addresses still applies.

The existing DALI network is connected to the DALI-IN side, and the extended network is connected to the DALI-OUT side. The DALI-IN side is powered by the network, whereas the DALI-OUT side is fed by the repeater. Mains power must be provided to the repeater.

Several DALI repeaters can be connected in parallel at the DALI-IN side (as shown in the following figure). Connecting multiple DALI repeaters in series is not possible, due to propagation delay. Do not cascade.

A   DALI cable length ≤ 300 m
    Current requirement ≤ 250 mA

B   DALI cable length ≤ 300 m
    Current requirement ≤ 250 mA

C   DALI cable length ≤ 300 m
    Current requirement ≤ 250 mA

The DALI Repeater has two LEDs, red and green (see 'Connections'). They flash to indicate the following:

- Red is off, green is on: Normal operation.
- Red is off, green blinks off briefly: DALI commands are sent and received.
- Red blinks, green is off: Connection fault.
- Red blinks, green blinks: DALI-OUT side is shorted.

Key Features

- Extends the maximum DALI line length from 300 m to 600 m.
- Provides 250 mA current at the DALI-OUT side.
- Messages are unfiltered.
- No isolation between DALI IN and DALI OUT. Both are isolated from the mains input.
- Click-on strain relief for standalone installation (included).

Technical Data

Electrical data

Supply:	100 VAC – 240 VAC (nominal) 85 VAC – 264 VAC (absolute) 48 Hz – 62 Hz
Current consumption:	100 mA
External protection:	6 A MCB maximum
Mains cable:	0.5 mm² – 1.5 mm² solid or stranded

DALI

DALI addresses:	None
DALI consumption:	2 mA (DALI-IN side)
DALI cable:	0.5 mm² – 1.5 mm²
DALI-OUT current:	250 mA

Mechanical data

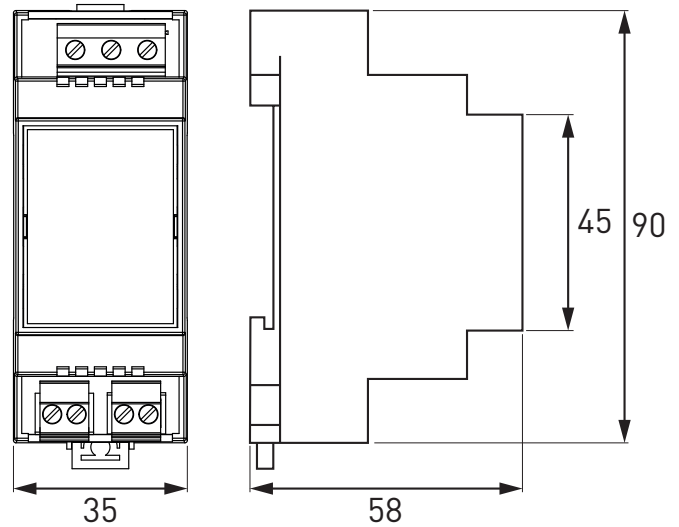|	
Dimensions:	35 mm × 90 mm × 58 mm
Weight:	90 g
Mounting:	DIN rail (For installation in a restricted access location only.)
IP code:	IP20

Operating and storage conditions

Ambient temperature:	–20 °C to +50 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	–20 °C to +70 °C

Conformity and standards

DALI standard:	IEC 62386-101
Emission:	EN 61000-6-3
Immunity:	EN 61547
Safety:	EN 61347-2-11
Environment:	Complies with WEEE and RoHS directives.

Dimensions (mm)

Connections