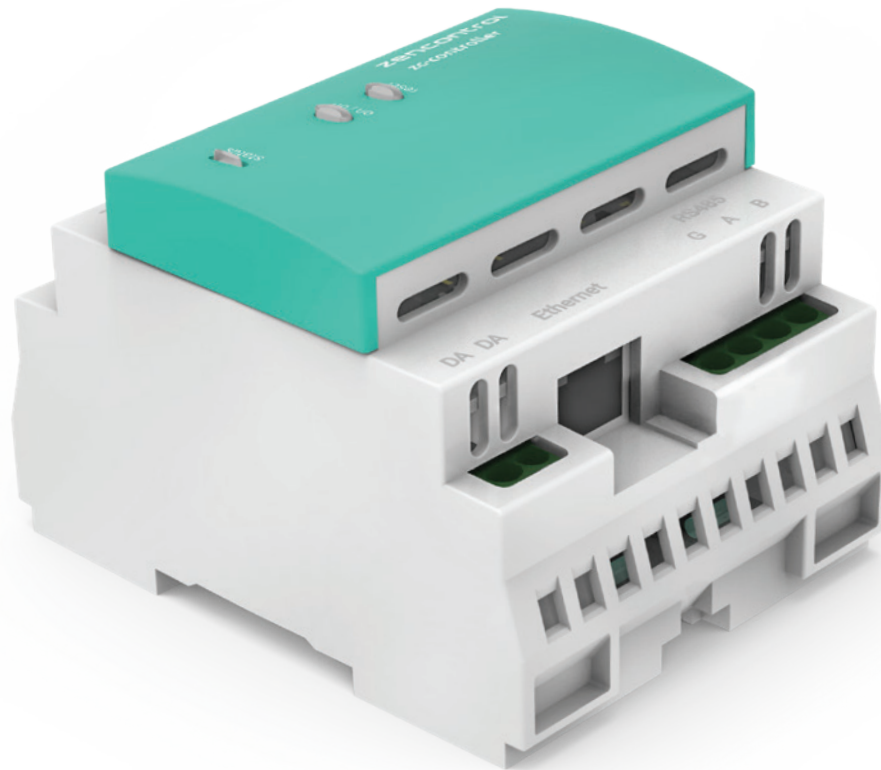


DALI-2 Application controller **datasheet**



Features

- DALI-2 certified application controller
- Compliant to DALI IEC 62386-103 Ed 2.0
- Suitable for one DALI line of up to 64 devices and 63 control devices
- 10 / 100 Ethernet gateway to connect to cloud and extended system
- Suitable for distribution board mounting on standard 35 mm DIN rail
- Automatic DALI scanning for device changes
- Automatic DALI short addressing



DALI device

Fully DALI-2 compliant and compatible



Over-voltage

Protected against DALI over-voltage conditions



Extended

Ethernet gateway to connect to Cloud and extended system



Insulated

Reinforced insulation between DALI, mains supply and Ethernet



DALI-2 Application controller **datasheet**



Product range

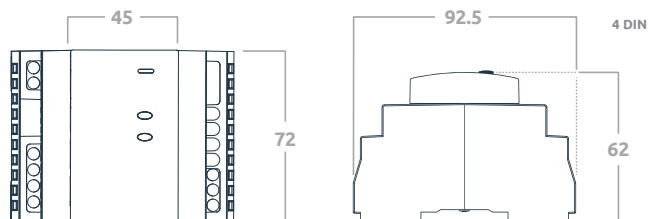
Order code	Description
zc-controller	DALI-2 Application controller and Ethernet DALI gateway

Features

- Compatible with DALI devices
- Compliant to IEC 62386-103 Ed 2.0
- DALI compliant application controller
- Protected against DALI over voltage
- LED indicators for system status
- Suitable for one line of up to 12 RS-485 motors per controller
- Suitable for distribution board mounting on standard DIN rail
- Reinforced insulation between DALI, mains supply and Ethernet
- Suitable for 1 DALI line of up to 64 devices and 63 control devices
- 10/100 TCP/IP Ethernet compatible w. standard IT switches and equipment

Dimensions

Width	Height	Length
92.5 mm	62 mm	72 mm



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	DALI-2
DALI line current	2 mA
Ethernet	10/100 TCP/IP Ethernet
Wiring	1 - 4 mm ² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Classification	Class II
Mounting	DIN rail (35 mm)
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 IEC 60950-1 CISPR 15 CISPR 22 EN 55015 EN 55022 IEC 62386-103 Ed 2.0 EMC-2004/108/EC LVD-2006/95/EC

Accessories range

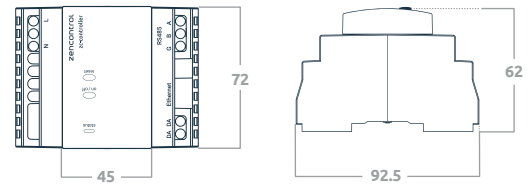
Order code	Description
zc-psu	DALI-2 power supply

Notice

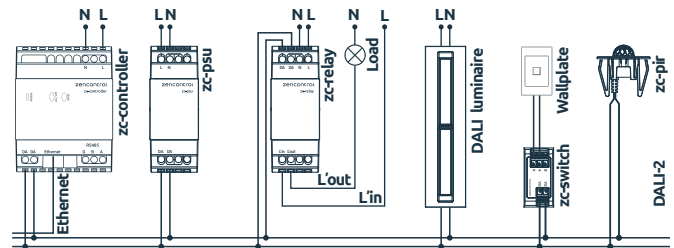
- Requires external DALI power supply such as **zc-psu**
- Each motor consumes an additional DALI address i.e. with 12 blind motors connected only 52 ECGs can be connected.
- A termination resistor needs to be placed at each end of the RS-485 line for reliable operation. The resistor should be matched to the impedance of the cable, typically 120 Ohm.
- Blind motors appear on controller as DALI devices and can be configured in the same manner.
- Before operation motor limits must be set using the *Somfy Digital Network™ (SDN) RS485 Motor Limit Setting & Address Reader Tool*.

Dimensions

Mounting options DIN rail (35 mm)

Dimensions 92.5 / 72 / 62 mm


System overview

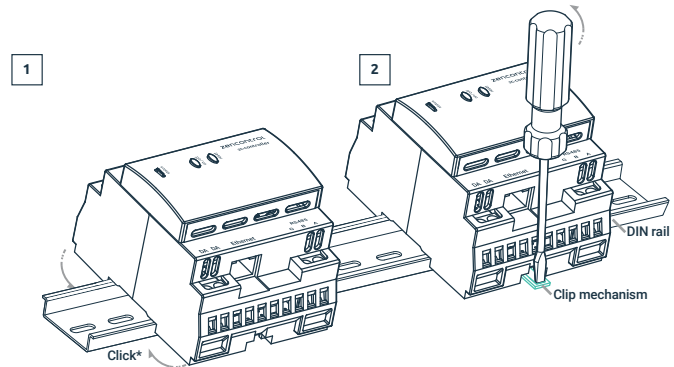


Installation

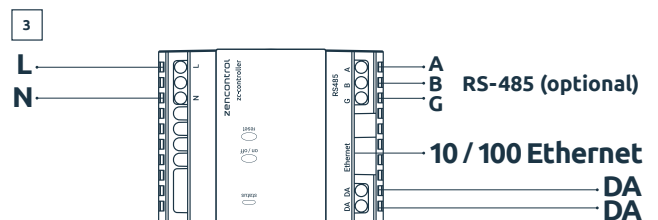
Remove the product from the box and inspect it for any damage. If you believe the product to be damaged or otherwise unsound, **do not** install the product. Please pack it back into its box and return it to the place of purchase for replacement.

If the product is satisfactory, proceed with the installation:

- 1 Ensure safety warnings are adhered to.
- 2 Mount the DALI application controller on DIN rail inside a mains rated enclosure as shown in **fig 1**. To remove from DIN rail, release the clip mechanism with a flat blade screw driver, as per **fig 2**.
- 3 Wire the DALI application controller as per **fig 3**.



Wiring diagram



Wire preparation

1 - 4 mm²



Product range

Order code	Description
zc-controller	DALI-2 application controller and Ethernet DALI gateway

Specifications

Supply voltage	230 V ~ 50 Hz
Control system	DALI-2
DALI line current	2 mA
Ethernet	10/100 Ethernet port
RS-485 network type	Half duplex
Wiring	1 - 4 mm ² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Classification	Class II
Ingress protection	IP20

Safety information

- This product must only be installed by a licensed electrician.
- Before commencing installation turn off and isolate the electrical supply.
- There are no user serviceable parts, attempting to service any part of the product will void the warranty
- DALI is not SELV and as such should be treated as LV.
- As the installer, it is your responsibility to ensure you comply to all relevant building and safety codes. Refer to application standards for the relevant rules.
- When the installation is complete, leave this manual with the building's owner for future reference.

Configuration

- Requires external DALI power supply such as **zc-psu**
- Each motor consumes an additional DALI address i.e. with 12 blind motors connected only 52 ECGs can be connected.
- A termination resistor needs to be placed at each end of the RS-485 line for reliable operation. The resistor should be matched to the impedance of the cable (typically 120 Ohm).
- Digital motors controlled by RS-485 appear on controller as DALI devices and can be configured in the same manner.
- Before operation motor limits must be set using the *Somfy Digital Network™ (SDN) RS485 Motor Limit Setting & Address Reader Tool*.

Status LEDs

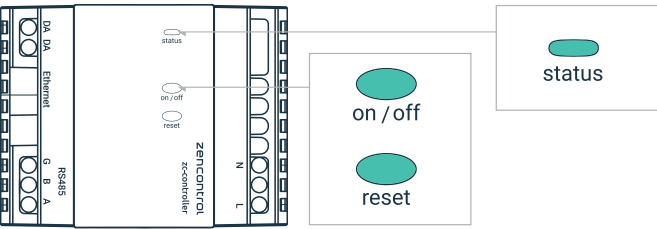
LED	State	Meaning
Status	Green - On	Unit is powered
On / off & reset	Green - Alternating flash	Bootload in process
On / off & reset	Green - Synchronised flash	Start up in process
On / off	Green - Flash / flicker	DALI activity
On / off	Red - Flash	DALI failure

Note: DALI failure indicates the DALI line has a short, is overloaded, is disconnected or is not powered

Button actions

Button	Action	Function
On / off	Short press	Toggles lights (max / off)
On / off	5 second press	Toggles identify function
Reset	1 - 2 seconds press	Force Cloud reconnect
Reset	3 - 10 second press	Reboot
Reset	11 - 15 second press	Factory reset

Indicators



Accessories range

Order code	Description
zc-psu	DALI-2 power supply, DIN mount

Notice



For more information on compliant software see our website zencontrol.com