ABB i-bus® EIB / KNX

DALI Gateway, 8-fold, MDRC
DG/S 8.1, 2CDG 110 025 R0011

2CDC 071 131 F0004

The DALI gateway is a DIN rail mounted device for insertion in the distribution board on a DIN rail. It is used to control DALI devices e.g. electronic ballasts, transformers, relays etc. via the EIB/KNX.

Up to 128 DALI devices (max. 16 per output) can be connected to 8 independent DALI outputs (channels).

Each output can also be switched in sequence without an EIB/KNX connection using the test button.

The following functions can be implemented: Per channel: switching, dimming, value setting, slave mode, lamp burning, status value, electronic ballast and lamp failure.

Management of up to 16 lightscenes.

Manual addressing or DALI commissioning of the connected DALI devices is not necessary.

The DALI power supply is integrated in the gateway.

Technical Data

Operating voltage	– Mains voltage	85…265 V AC, 50/60 Hz, 110…240 V DC
	– Total power consumption from the system	max. 12.5 W at 230 V AC and max. load
	– Total current input from the system	max. 55 mA at 230 V AC and max. load
	– Total leakage loss from the device	max. 6 W at 230 V AC and max. load
	– Current input via the EIB	< 10 mA at 29 V DC
	– Power consumption via the EIB	< 150 mW
DALI outputs (channels)	– Number	8 independent channels acc. to IEC 60929
	– Number of DALI devices	128 (max. 16 per output)
	– Cable length per output	
	– Cable cross-section 0.5 mm²	116 m
	0.75 mm²	174 m
	1.0 mm²	232 m
	1.5 mm²	300 m
Connections	– EIB / KNX	Screwless bus connection terminal, 0.6 to 0.8 mm Æ, single-core
	– DALI outputs and	Screw terminal
	– Mains voltage	0.2 … 2.5 mm² finely stranded 0.2 … 4 mm² single-core
	– Tightening torque	max. 0.6 Nm
Operating and display elements	– EIB programming button	For displaying the physical address
	– Test button	For checking the DALI outputs
	– Red LED and push button	For assigning the physical address
	– Green LED	For displaying readiness for operation
	– Yellow LED	For displaying DALI fault, constant light For displaying test mode, flashing light
Type of protection	– IP 20	In accordance with DIN EN 60529
Protection class	– II	In accordance with DIN EN 61 140
Insulation category	– Overvoltage category	III in accordance with DIN EN 60664-1
	– Degree of pollution	2 in accordance with DIN EN 60664-1
EIB / KNX safety extra-low voltage	– SELV 24 V DC	In accordance with DIN IEC 60292
Typical DALI voltage	– 16 V DC (9.5 … 22.5 V DC)	In accordance with DIN IEC 60292
Temperature range	– Operation	– 5 °C … + 45 °C
	– Storage	– 25 °C … + 55 °C
	– Transport	– 25 °C … + 70 °C
Design	– DIN rail mounted device	Modular installation device, proM
	– Dimensions	90 x 108 x 64 mm (H x W x D)
	– Mounting width	6 modules at 18 mm
	– Mounting depth	68 mm
Installation	– on 35 mm mounting rail	DIN EN 60 715
Mounting position	– As required	
Weight	– 0.190 kg	
Housing, colour	– Plastic, grey	
Certification	– EIB / KNX in accordance with EN 50 090-1, -2 Certificate	
CE mark	– In accordance with the EMC and low voltage guideline	

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Application programs	Number of communication objects	Max. number of group addresses	Max. number of associations
Dim Slave Lightscenes Dynamic 8f/1	104	254	255

See the product manual "DALI Gateway DG/S 8.1" for a detailed description of the application program. The manual is available free of charge on the Internet at www.abb.de/eib.
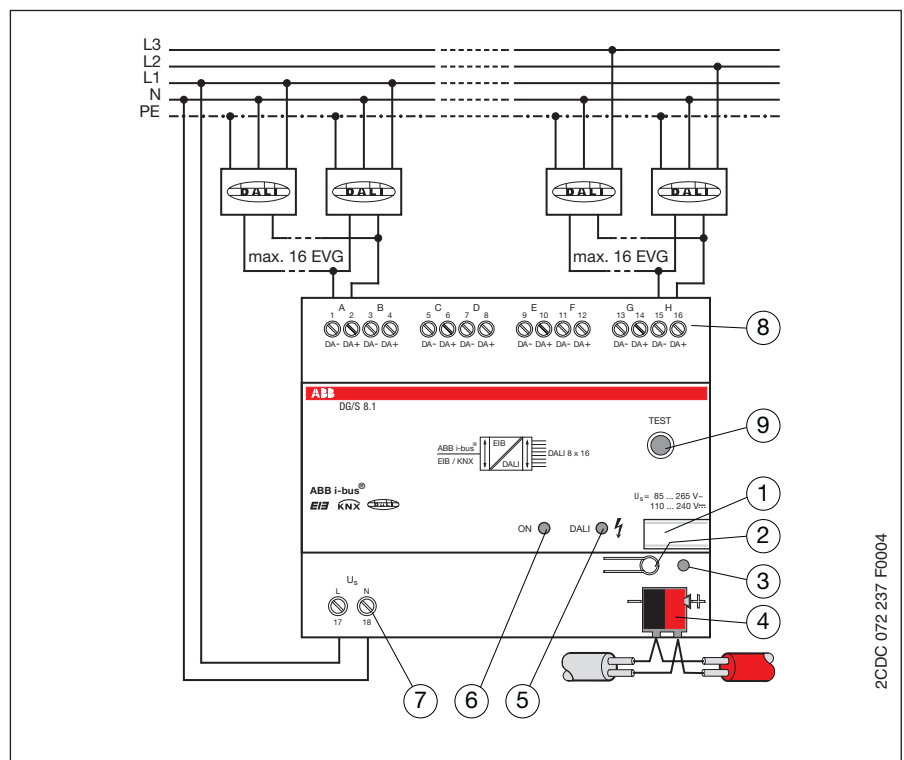
Circuit diagram

2CDC 072 235 F0004
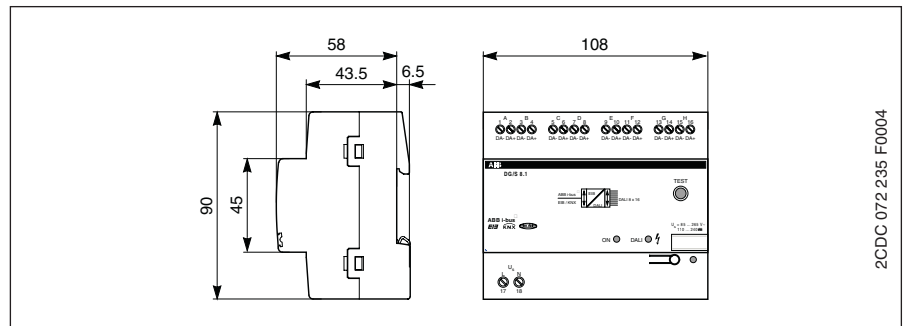
Dimension drawing

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1 Label carrier	**6** Green operating LED
2 EIB programming button	**7** Operating voltage
3 Red EIB programming LED	**8** DALI channels
4 EIB connecting terminal	**9** DALI test button
5 Yellow DALI fault LED	

Note

The programming is carried out with ETS from version ETS2 V1.2a onwards. The corresponding VD3 file must be used for programming in ETS3.