



DALI switch actuator, 2-fold, 16 A, MDRC DSA/S 2.16.1, 2CDG 110 009 R0011



The 2-fold DALI switch actuator is a DIN rail mounted device for insertion in the distribution board on a DIN rail in accordance with DIN EN 60715. Using floating contacts (normally open contacts), the DALI switch actuator switches 2 independent electrical loads through a switch contact each. The contacts can be controlled via DALI cable or operated manually. The DALI switch actuator is particularly suitable for switching resistive, inductive and capacitive loads with high inrush peaks which occur for example with parallel-compensated fluorescent lamps.

The DALI switch actuator is used e.g. to control non-dimmable groups of luminaires and to integrate them in a DALI lightscene management system. The device has a DALI interface in accordance with DIN IEC 60929. Both switch channels are addressed via this interface using two DALI addresses. The two channels work as two independent DALI devices. The setting of the two DALI addresses is carried out via a DALI programming software e.g. winDIM®, a DALI processor-dependent push button code (DALI GC module) or the "physical selection mode". The device requires an external AC or DC auxiliary voltage U_s .

Technical data

Operating voltage:	– Mains voltage, U_s	85 ... 265 V AC, 50/60 Hz 110 ... 240 V DC
	– Power consumption	Typically in idle state 2 W During switching process max. 8 W At nominal voltage 230 V AC
Outputs:	– Current input DALI	< 2 mA per device
	– Number	2 floating contacts (NO contacts)
	– Switching voltage	230 V AC 400 V AC
	– Switching current	16 A (AC1) 10 A (AC1) 16 A (AC3) 6 A (AC3)
	– Max. starting current	500 A
	– Basic delay	typ. 20 ms
	– Mechanical contact endurance	> 5 x 10 ⁶
	– Electrical contact endurance at 230 V AC, 16 A/AC3	> 10 ⁵
	– Electrical contact endurance at fluorescent lamp load, C = 200 µF	> 3 x 10 ⁴ (acc. to VDE 0632 part 1)
	– Switching capacity acc. to DIN EN 60669 cos φ = 0.6	16 AX / 250 V AC
Connections:	– Outputs, U_s , DALI	Screw terminal 0.2... 2.5 mm ² finely stranded 0.2... 4 mm ² single-core
	– Tightening torque	max. 0.6 Nm
Operating and display elements:	– 2 switch position displays	Also used for manual operation
	– DALI addressing button with red LED	Addressing in DALI physical selection mode
Type of protection:	– IP 20 nach DIN EN 60529	
Protection class:	– II	
Insulation category:	– Overvoltage category	III in accordance with DIN EN 60664-1
	– Degree of pollution	II in accordance with DIN EN 60664-1
DALI voltage:	– Typically 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:	– Modular DIN rail mounted device	Modular installation device, ProM
	– Dimensions	90 x 72 x 64 mm (H x W x D)
	– Mounting width	4 modules at 18 mm
	– Mounting depth	68 mm
Installation:	– on 35 mm mounting rail	DIN EN 60 715

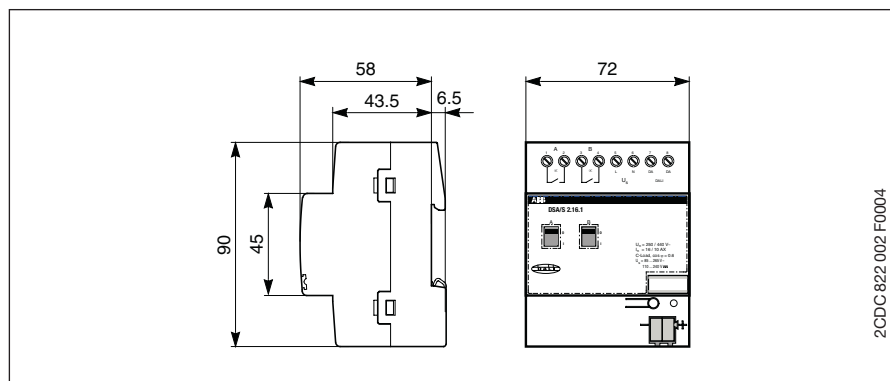


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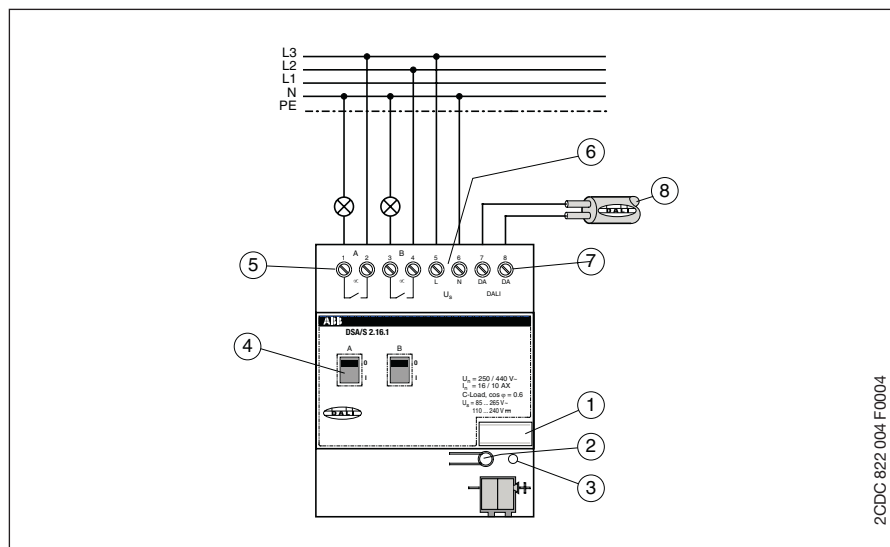
Technical data

Mounting position:	As required	
Weight:	0.210 kg	
Housing, colour:	Plastic, grey	
Certification:	DALI compliant	In accordance with DIN IEC 60929
CE mark:	In accordance with the EMC and low voltage guidelines	

Dimension drawing



Circuit diagram



- 1 Label carrier
- 2 DALI button (physical selection mode)
- 3 Red DALI LED (physical selection mode)
- 4 Op. device and switch position display
- 5 Load circuit terminal
- 6 DALI control cable
- 7 Operating voltage, U_s
- 8 DALI control cable

Operation and display



ON/OFF manual operation (4)

The load circuits can be switched manually with manual ON (I) or OFF (0). At the same time, the operating device is used to display the closed (I) or open (0) contact position.



DALI LED (3)

Flashes red, during DALI addressing in the physical selection mode



DALI button (2)

Operating button in the DALI physical selection mode



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DALI commissioning / addressing

For the addressing of the DALI switch actuator, it must be linked with the DALI control cable and the operating voltage must be connected.

The DALI groups or scene assignment can be carried out with a DALI programming software (e.g. winDIM®), via a push button code that is dependent on a DALI controller or in the “physical selection mode” defined in the DALI protocol.

The precise description of the addressing must be taken from the technical data of the DALI controller, group or scene module that is used.

If the DALI addressing requires the status response of the DALI device in the physical selection mode, the DALI button (2) must be pressed in the described format: A short operation (< 1s) leads to a status feedback of channel 1, signalled by the DALI LED (3) flashing once at intervals of one second. Pressing the button again switches the status feedback and LED off again. A long operation (> 1s) leads to a status feedback of channel 2. This is signalled by the LED flashing twice at intervals of one second. The status feedback is ended by a new push button action.

Switch function

A channel of the DALI switch actuator is switched OFF if a DALI telegram “0” (Off) is received. In all other cases, the channel is switched ON.
In case of loss of the operating voltage the contact position does not change.
On recovery of the operating voltage the contacts switches ON.



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