



DALI PS2 standby

DALI power supply for installation in switchgear cabinets and standby function

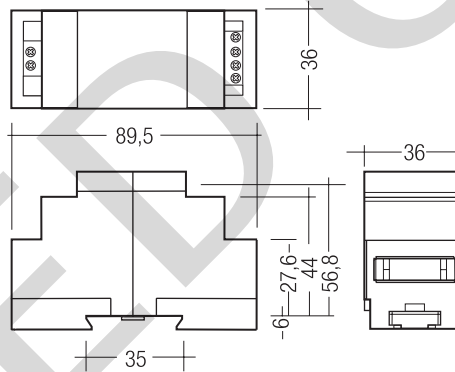
Product description

- For supplying 240 mA for DALI devices or control modules without their own power supplies
- For installation in switching cabinets
- Automatic monitoring of the connected luminaires
- The built-in relay isolates the connected equipment from the power supply via an external contactor if all the luminaires are switched off
- The ballasts are switched on and set to the required status via DALI commands



Technical data

Rated supply voltage	220 – 240 V
Mains frequency	50 / 60 Hz
Power	5 W
Max. output current, DALI	240 mA
Output voltage	16 V ±5 %
Operating temperature	0 ... +50 °C
Storage temperature	0 ... +70 °C
Type of protection	IP20

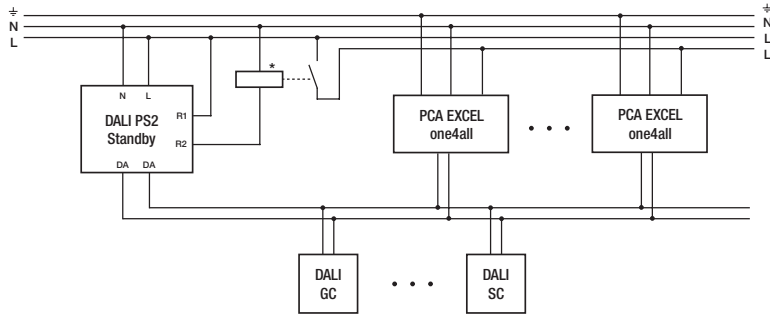


Ordering data

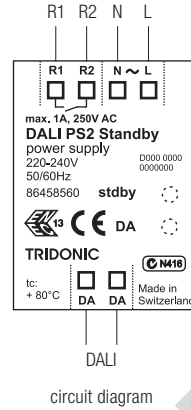
Type	Article number	Packaging, carton
DALI PS2 Standby	86458560	25 pc(s).

Specific technical data

Type	Output, relay			
	Max. switching voltage AC	Max. switching current	DC switching capability	
DALI PS2 Standby	250 V	1 A	at 100-250 V _{DC}	0.3 A
			at 50-100 V _{DC}	0.5 A
			at 0-50 V _{DC}	1.0 A



* the inrush currents of the ECGs must be taken into account when dimensioning the contactor



circuit diagram

Standards

EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
EN 61347-2-11
EN 62386-101

Glow-wire test
according to
EN 60598-1 passed.

Functional description

The DALI PS2 Standby monitors the connected units in the DALI circuit. As soon as it detects that all the DALI units have been switched off it changes to standby mode after a user-definable delay and switches a built-in relay contact. With the aid of this relay contact the connected units can be disconnected from the power supply via a contactor. Only the DALI control modules are then still in the DALI circuit.

As soon as a DALI control module sends a "Light ON" command the DALI PS2 Standby reverts to normal operating mode, connects the units back to the power supply and puts them in the required status.

The parameters of the DALI PS2 Standby, such as delay, monitoring interval etc. can be set using the masterCONFIGURATOR (from V1.22) configuration software. The software tools can be downloaded free of charge from the Tridonic homepage.

LEDs status

LED DA: Lights up if the power supply is ready for operation.
The LED goes out briefly when there is communication on the DALI bus (factory default)

LED Stbby: Lights up when standby mode is active (factory default)

The function of the two status LEDs can be inverted with the masterCONFIGURATOR or configTOOL configuration software.

Limitation

The DALI PS2 Standby is not compatible with the following DALI devices because of a flashing of the lamp on return to supply voltage:

- TALEXconverter 0025 K210 24 V
- TALEXconverter 0025 K211 24 V
- TALEXconverter 0018 K350 DALI RGB
- TE-0105 one4all
- DALI 3 RM-C
- DALI DSI II

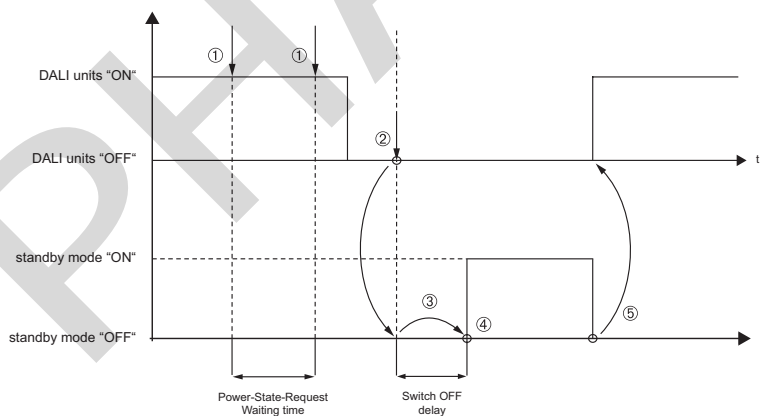
The DALI PS2 Standby is not compatible with DALI devices which do not support the DALI command "Query Lamp Power ON", e. g. the PCI FOX B011.

The DALI PS2 Standby is conditionally compatible with the following DALI control devices:

- x-touchBOX / x-touchPANEL (on return to supply voltage commands can get lost)
- DALI MSensor with firmware version before V1.4
- DALI Somfy animeo Interface with firmware version before V1.9

The DALI PS2 Standby is not suitable in conjunction with units that have to be supplied with power at all times, such as emergency lighting systems

To initialise / address the DALI service the DALI PS2 Standby must be "active".



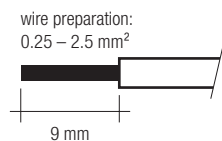
- ① Status request for the units from the DALI PS2 Standby
- ② Power Supply detects all units off
- ③ Switch-off delay expires (parameter: Switch off delay)
- ④ Power Supply switches to standby mode (relay is opened)
- ⑤ "ON" command from a control module; Power Supply leaves standby mode (relay closes)

Description of parameters

Parameter	Range	Description	Factory default
"Power-State-Request-Waiting-Time"	1 min – 23 h	in this interval the DALI devices are polled about their state of operation	5 min
Switch-Off delay	1 min – 2 d	delay between detection that all the DALI units have been switched off and changeover to standby mode	1 h
EVG-Startup delay	0.01 – 1 s	in the startup process (leaving the standby mode) all the commands are buffered during the "ECG Startup Delay" (maximum of 10 commands). At the end of this time the commands are sent by the Power Supply to the ECGs. This ensures that none of the commands is lost during the startup process	0.51 s
standby mode deactivated	0, 1	0... the standby function is activated 1... the standby function is deactivated	0
relay state inverted	0, 1	0... the relay output is open if all the units have been switched off 1... the relay output is closed, if all the units have been switched off	0
LED DA inverted	0, 1	0... lights if the Power Supply is ready for operation. The LED goes out briefly when there is communication on the DALI bus 1... lights only if there is communication on the DALI bus	1
LED Stdby inverted	0, 1	0... lights when standby mode is active 1... lights when standby mode is not active	0
buffering size	1 – 10	number of commands which will be max. buffered	10

Wiring type and cross section

The wiring can be solid wire, stranded wire or stranded wire with end sleeve with a cross-section of 0.25 mm² to 2.5 mm².



Installation

- DALI signals are not SELV. Therefore the same procedures should be applied as working with mains voltage
- The relay contacts R1 and R2 are not SELV
- Loads must not be connected directly to the relay (R1, R2). The load **must always** be switched via an external contactor.
- When selecting the correct contactor please check the inrush currents of the switched loads. Electronic ballasts may have very high inrush currents. Check with the contactor manufacturer.
- Individual DALI circuits must not exceed 240 mA
- The maximum cable length of the DALI signal wires must not exceed 300 m or drop more than 2 V on the signal line voltage

Relay

Insulation to IEC 60664-1

Type of insulation	
coil-contact circuit	basic
open-contact circuit	functional
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230/400 V
Overvoltage category	III

tc control point

tc: max. 80 °C

