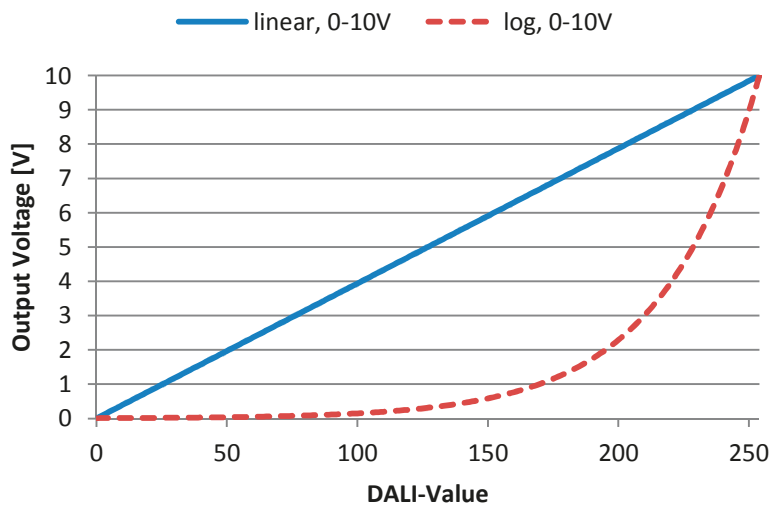


typical installation

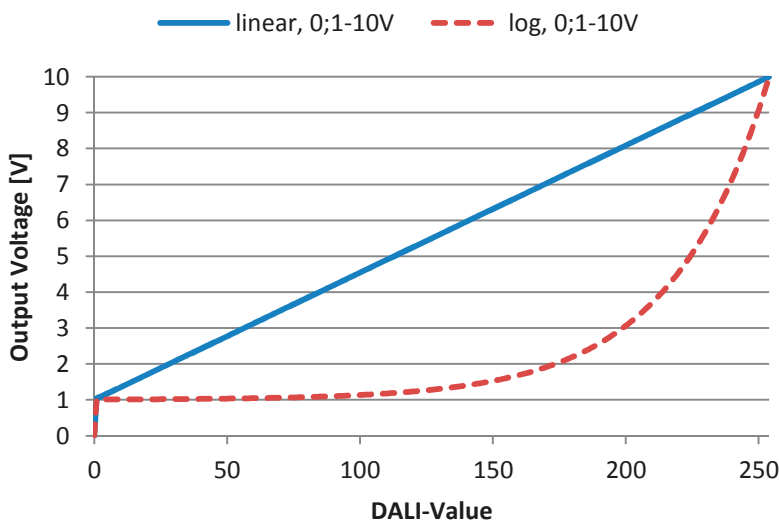


Output Voltage 0-10V or 0-100%:

control characteristic:

DALI 0-254 is converted to an output voltage of 0-10V (0%-100% PWM)

- linear
- - - logarithmic



Output Voltage 1-10V or 10-100%:

control characteristic:

DALI 0 (=OFF) is converted to an output voltage <0,8V.

DALI 1-254 is converted to an output voltage of 1-10V (10%-100% PWM)

- linear
- - - logarithmic (factory default)

Hint: the voltage values in the characteristics are only valid if the device is supplied with 10V at the 0-10V output.

Installation

The module has to be connected directly to the DALI line. It does not need any additional supply. Typical values of the current consumption depend on type and range from 3mA to 4.2mA. The connection to the DALI line is polarity free. Types providing PWM-output support sinking currents up to 2mA, the type with analog output sinking currents up to 1mA.

The SPST relay of the RM8 module support nominal loads of up to 1000VA. The RM16 type supports nominal loads of up to 2000VA and inrush currents up to 160A.

The terminals allow cross sections of the connecting wires from 0.5-1.5mm².

Function

The interface converts the desired DALI dim level into a corresponding PWM pattern or analog output voltage.

Up from firmware 2.0 device type 5 is supported. Therefore a linear and a logarithmic control characteristic are available. In addition for the PWM-Types the output range can be selected between 0-10V and 1-10V. The DALI value [0-254] is converted either linearly or logarithmic to the output range. The behaviour is shown in detail in the control characteristics.

The SPST-relay is directly linked to the 8-bit direct arc power level. If the value is 0 the relay is OFF, whereas at any other value [1...254] the relay is ON.

The combination of the 0-10V control signal and the additional SPST-relay offers the possibility to power on/off the mains supply of the 0-10V controlled electronic ballast.

In case of a system failure 100% (10V) are applied at the 0-10V control output. The behaviour of the relay depends on the

firmware version. In any case the relay holds the output state. In newer versions the system failure level can be set. The relay can be switched on or off or set to hold the current state (option available up from FW 3.5.0 at 86458667-DE, up from FW 3.3.0 at 86458668, and up from FW 1.3.0 at 86458668-AN).

DALI Instruction Set

The module is based on the standard for DALI Control Gear (IEC 62386-102) and Device Type 5 extension (IEC 62386-206). With few exceptions mentioned above the entire instruction set defined by the DALI standard is supported. Furthermore the newer versions already support the DALI2-command GOTO LAST ACTIVE LEVEL.

Auto Calibration Mode

In the DALI RM8 1-10V module with analog output an automatic calibration routine is implemented. After power up the module the stored calibration values are checked. If a new calibration is required a duration of up to 2 minutes has to be taken into account before the module can be used. The automatic calibration can be en-/disabled and triggered manually with the DALI Cockpit software tool. While the calibration is running the device does not react to any dimming commands.