

Features

DALI Converter

- Compliant with DALI Standard (IEC62386 Part 102 & Part 206)
- Screw-less Connectors, Easy to Install
- Selectable Output for PWM / DC 0-10V / DC 1-10
- Built-in Relay to Turn ON/OFF Driver Completely (Zero Standby Current)

Description

The RELI-DA01/R is a DALI to analog control signal interface which is compliant with the DALI IEC62386 standard. The output is selectable between PWM and 0-10V or 1-10V and is compatible with all RECOM dimmable LED drivers as well as other manufacturer's products. The output can control six or more LED drivers, allowing the lighting in a whole room or office to be dimmed with just one DALI address. A built-in relay can be used to switch off the LED drivers under software control to give zero no-load consumption.

The interface is AC powered (110VAC or 230VAC) and consumes typically only 1.6W in operation.

Selection Guide

Part Number	Input Voltage (VAC)	Power Consumption (W)	DALI Bus Power Consumption (mA)	DALI Standard IEC62386	Dimming Output
RELI-DA01/R	90-264	1.6 typ.	2 max.	Part-102 Part-206	PWM or DC 0-10V DC 1-10V

Specifications

Input Voltage Range	90-264VAC 50/60Hz
Power Consumption	1.6W typ. / 3W max.
DALI Bus Current Consumption	2mA max.
Suitable Electric Wire	22 AWG - 16 AWG
PWM Frequency	500Hz typ.
PWM High Level Voltage	9.5VDC min. / 10VDC typ. / 10.5VDC max.
PWM Low Level Voltage	0VDC typ.
PWM Output Current Sourcing (mA)	60mA max.
DC 0/1-10V Output Accuracy	±3%
DC Output Current Sourcing (mA)	-5mA min. / 60mA max.
DALI Standard	IEC62386 Part-102 & Part-206
Number of Output Channel	1
Output Channel Short Circuit Protection	Yes
Operating Temperature Range	-20 to +40°C
Relay Switch	1 Channel, 2A / 7A peak.
IP Rating	IP20
Dimensions	150 x 40 x 30mm
Weight	100g
Safety Standards (designed to meet)	EN61347-1 EN61347-2-13 UL8750 EN61000-3-2 Class C EN61000-4-2,3,4,5,6,11, 20 EN61547 EN55015 FCC15
MTBF (+25°C)	using MIL-HDBK 217F 200 x 10 ³ hours min.

LIGHTLINE

DALI-Converter AC/DC

with 5 year Warranty

RECOM

1.6 Watt DALI- Converter



IEC 62386-102 Compliant
IEC 62386-206 Compliant

RELI-DA01/R

Typical Characteristics

DALI Declaration for Factory Variables (for Part 102)

Variable	Default Value	Reset Value	Range of Validity
Actual Dim Level	254	254	0, Min Level - Max Level
Power on Level	254	254	0 - 255 (Mask)
System Failure Level	254	254	0 - 255 (Mask)
Min Level	Physical Min Level	Physical Min Level	Physical Min Level - Max Level
Max Level	254	254	Min Level - 254
Fade Rate	7 (45 steps/s)	7 (45 steps/s)	1-15
Fade Time	0 (no fade)	0 (no fade)	0-15
Short Address	255 (Mask)	no change	0-63 255 (Mask)
Search Address	FF FF FF	FF FF FF	00 00 00 - FF FF FF
Random Address	FF FF FF	FF FF FF	00 00 00 - FF FF FF
Group 0-7	0000 0000 (no group)	0000 0000 (no group)	0 - 255
Group 8-15	0000 0000 (no group)	0000 0000 (no group)	0 - 255
Group 0-15	255 (Mask)	255 (Mask)	0 - 255 (Mask)
Status Information	1xx0 xxxx	0x10 0xxx	0 - 255
Version Number	1	no change	Factory-defined

x = actual value depend on the operation status

DALI Declaration for Factory Variables (for Part 206)

Variable	Default Value	Reset Value	Received Command	Range of Validity
Dimming Curve	0	No change	0	0-1; (2 - 255 reserved)
Converter Features	0111 0101	No change	0111 0101	Factory-defined
Failure Status	0000 0000	No change	0000 0000	0 - 255
Converter Status	0000 0000	No change	0000 0000	0 - 255
Extended Version Number	1	No change	1	Factory-defined
Device Type	5	No change	5	Factory-defined
Physical min Level	1	No change	1	1-253

Recommended LED Drivers, DALI-Bus Power Supplies and DALI Master

AC/DC LED Driver

RACD20-xxxD
RACD60-xxxxA
RACD45-xxxxA
RACD100-xxxxA
RACD150-xxxxA

DC/DC LED Driver

RCD24-xxx
RCD48-xxx
RBD12-xxx

DALI Master

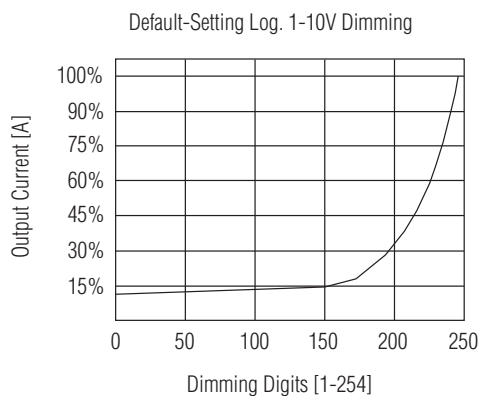
tested with DALI-USB
Tridonic Osram*

*Software masterCONFIGURATOR V2.6.8.1005 Tridonic

Note:

For one DALI Converter (RELI-DA01/R) you can connect max. 6pcs of all series for RECOM AC/DC LED-Drivers with 3in1 dimming.

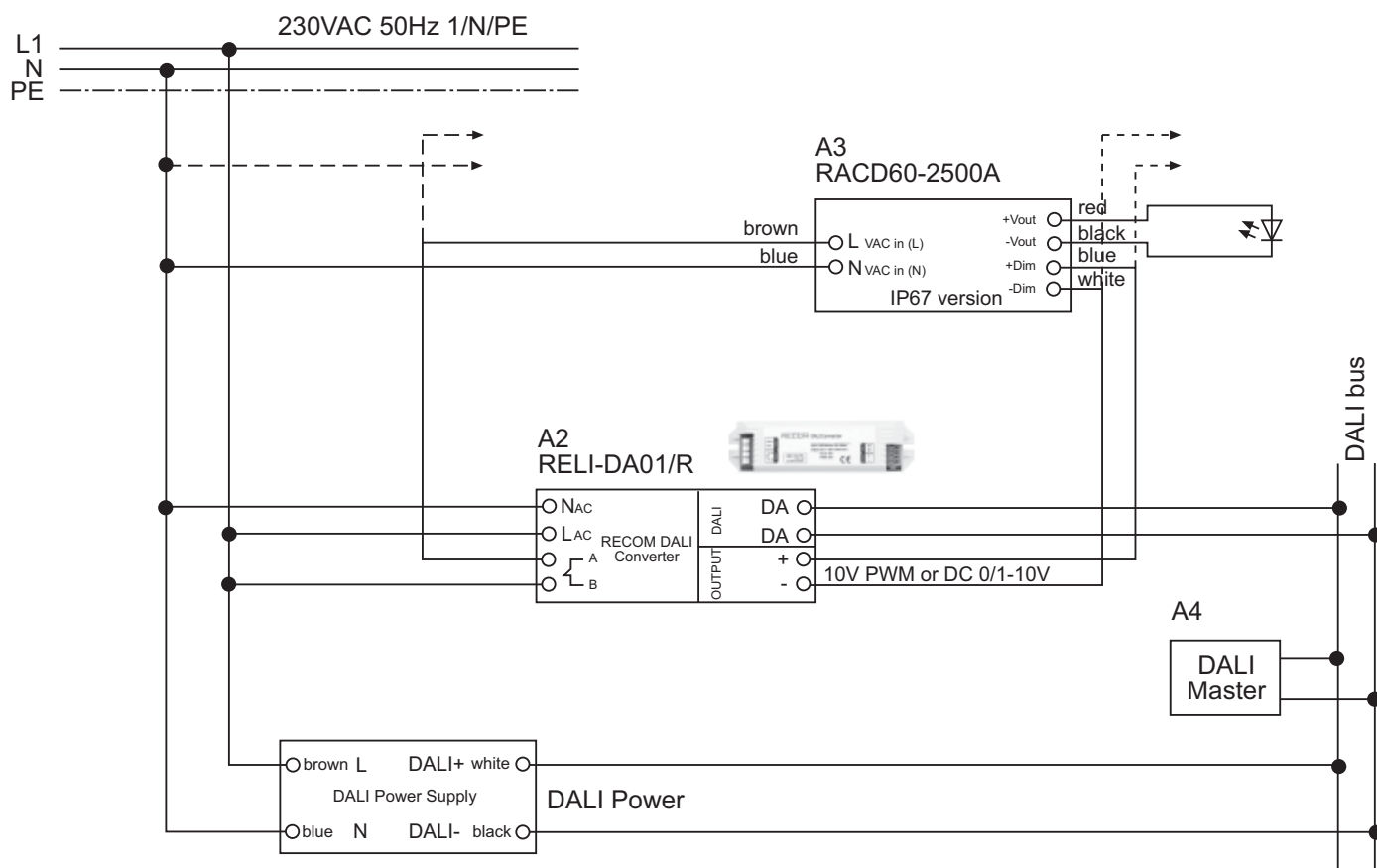
Typical Characteristics



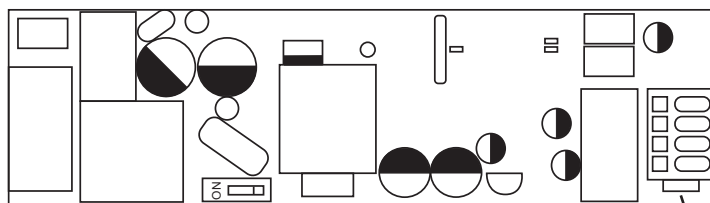
DALI-COMAND
Logarithmic Dimming; 1-10V
6 Recall MIN Level
272 ENABLE DEVICE TYPE X / Value: 5 dez
224 QUERY APP EXT Cmd224
257 DATA TRANSFER REGISTER (DTR) / Value: 0 dez
229 QUERY APP EXT Cmd229

Internal switch: OFF

DALI Connection



Package Style



 ON / OFF
PWM / DC
By internal switch

Inductor LED
flashes with
DALI signal

ON: PWM 10V
OFF: DC 1-10V (Default DC)
DC 0-10V (By DALI Command-225*)

*DALI-Command-225
--> Query application-oriented extension commands

Delivery setting:
Output signal: DC 1-10V
Dimming curve: Logarithmic

Dimensions

