JUMiTECH

DALI RTC Timer

Datasheet

Control Device

DALI Real Time Clock with Scheduler

Art. Nr. 86459531
Art.Nr. 86459531-HS

DALI RTC Timer Control Device

Overview

- DALI Real Time Clock
- Time can be set and queried via DALI
- Scheduler Function – up to 28 entries
- Astro-clock function (up from firmware 2.4)
- For each scheduler job weekday mask, time stamp and a DALI command can be defined
- Easy schedule configuration via DALI Cockpit software tool and DALI USB interface

- The DALI RTC module must not be connected to the mains. It is supplied directly via the DALI signal line.
- Battery inside, as factory default the clock is set to local time (GMT+1)
- Simple installation due to DALI double-clamp connector
- Types for backbox installation and dinrail mounting, suitable for installation in protection class II devices

CE

Specification, Characteristics

type	DALI RTC Timer	
article number	86459531	86459531-HS

DALI-Interface, supply: DA, DA

input type	DALI, supply
marking terminals	DA, DA
input voltage range	9,5Vdc … 22,5Vdc (acc. to IEC62386)
max. current consumption DALI	5mA
number of DALI addresses	1

insulation data:

impulse voltage category	II
pollution degree	2
rated insulation voltage	250V
insulation DALI / housing	reinforced isolation
Insulation test voltage DALI / housing	3000Vac

environmental conditions::

storing and transportation temperature	-20°C … +75°C
operational ambient temperature	0°C … +50°C
rel. humidity, none condensing	15% … 90%

general data:

dimensions (l x w x h)	59mm x 33mm x 15mm	98mm x 17,5mm x 56mm
mounting	back box	dinrail mounting

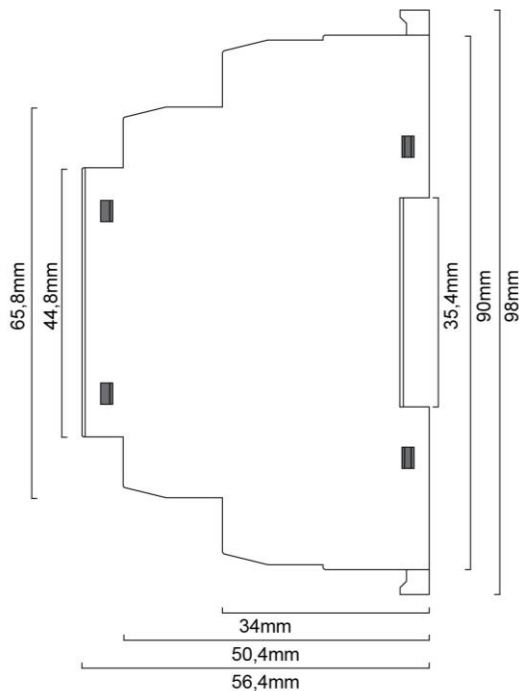|	integration in class II devices	integration in class II devices
rated max. temperature tc	50°C	
expected life time @tc	50.000 h	
protection class	II in intended use	
protection degree housing	IP40	
protection degree terminals	IP20	
real time clock (accuracy)	quarz based (~20ppm)	

terminals:

connection type	spring terminal connector	screw connector
wire size solid core	0,5 … 1,5 mm² (AWG20 … AWG16)	0,5 … 2,5 mm² (AWG20 … AWG14)
wire size fine wired	0,5 … 1,5 mm² (AWG20 …AWG16)	0,5 … 2,5 mm² (AWG20 …AWG14)
wire size using wire end ferrule	0,25 … 1 mm²	0,25 … 1,5 mm²
stripping length	8,5 … 9,5 mm / 0,33 … 0,37 inch	7 mm / 0,27 inch
locking torque	-	0,5Nm
release of wire	push button	open screw

standards:

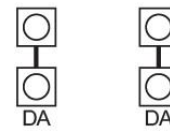| EMC	EN 61547 EN 50015 / IEC CISPR15	
safety	EN 61347-2-11 EN 61347-1	
markings	CE	CE
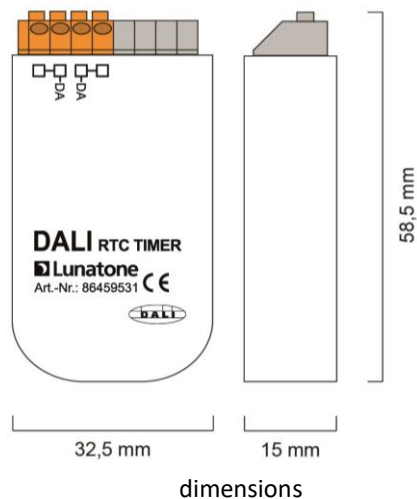
dimensions

connection plan

dimensions HS-type

dimensions HS-type

Installation

- The DALI RTC Timer is intended for back box installation or integration in protection class II devices, the HS-type is suited for dinrail mounting, ensure protection against electric shock by an appropriate enclosure

- Wiring as fixed installation in a dry and clean environment

- Installation only by qualified person when no voltage is applied

- Attend regulations regarding electrical installations of national authorities

- The DALI RTC Timer is powered by the DALI line (typical current consumption 5 mA), no separate power supply needed

- the connection to the DALI-line is polarity free

- DALI-line wiring with standard low voltage installation material

- The DALI-interface can handle mains voltage, protecting the device in case of wrong wiring

- Wiring topology of the DALI-line: Line, Tree, Star

- Connect only one wire on each terminal, if twin ferrules are used take care to the maximum wire size

HINT: The DALI-signal is not classified as SELV circuit. Therefore the standards for installation in low voltage system apply.

The voltage drop on the DALI-line shall not exceed 2V.

2019-01-22
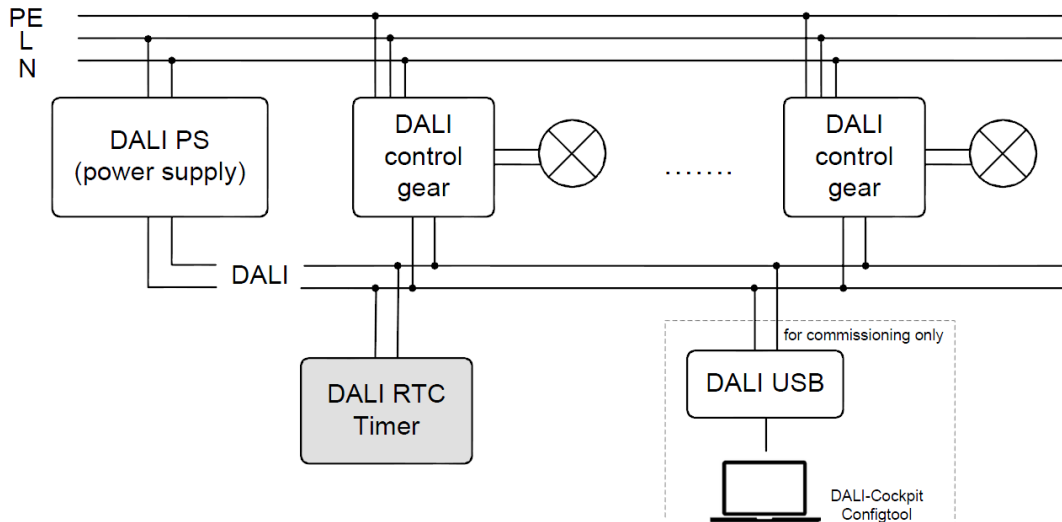
typical application

Commissioning

- After installation the DALI RTC Timer is ready for use

- The configuration can be done with the help of the DALI-Cockpit software (interface module to DALI-line required, e.g. DALI USB, DALI SCI RS232, DALI4Net)

- The DALI RTC Timer is automatically detected during the addressing procedure and is then shown in the component tree

- The device can be selected – date and time can be set and the scheduler entries can be configured.

Function

The DALI RTC timer sends out DALI commands to the DALI-line based on the entries defined in the scheduler.

In the scheduler up to 28 scheduler jobs can be defined. Each entry consists of status, a weekday mask, a time and finally DALI-command and DALI address.
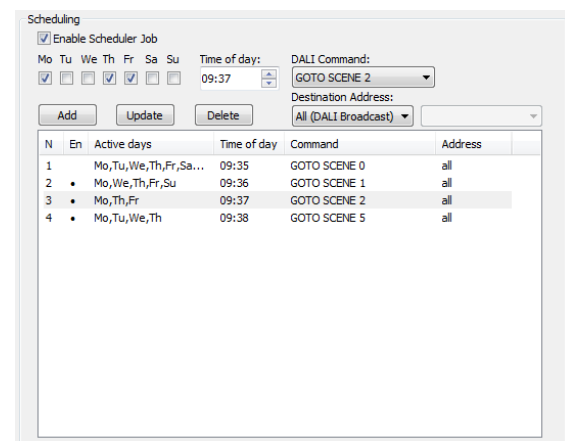
Up from firmware version 2.4 the module supports astroclock-function, i.e. instead of absolute time a timestamp can be defined relatively to sunset or sunrise. For this function information about the GPS-

coordinates in decimal degree format is required.

Please note that it is not possible to postpone actions based on sunset/sunrise beyond midnight.

Furthermore date and time can be queried using QUERY SCENE commands:

QUERY SCENE 0 LEVEL: seconds

QUERY SCENE 1 LEVEL: minutes

QUERY SCENE 2 LEVEL: hours

QUERY SCENE 3 LEVEL: day of month

QUERY SCENE 4 LEVEL: month

QUERY SCENE 5 LEVEL: year-2000

Purchase Information

Art.Nr. 86459531: DALI RTC Timer, DALI Real Time Clock with Scheduler Function, back box installation and class II device integration

Art.Nr. 86459531-HS: DALI RTC Timer, DALI Real Time Clock with Scheduler Function, dinrail mounting, built-in

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

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