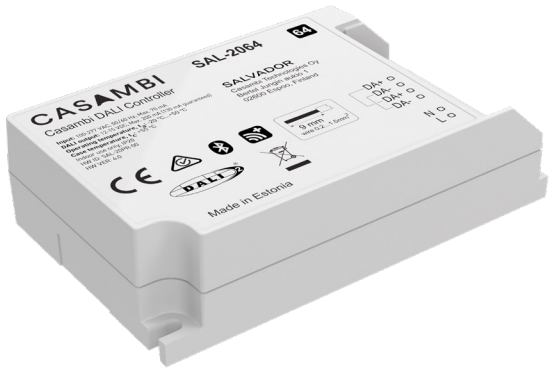
SAL-2016 | SAL-2032 | SAL-2064

Salvador Series 2000



Warning!

Hazardous voltages. Risk of electric shock or fire. Only qualified professionals should make the connections. Disconnect the mains power supply and verify its absence prior to installation.

PRODUCT DESCRIPTION

The Salvador Series 2000 product family includes three models: SAL-2016, SAL-2032 and SAL-2064.

- SAL-2016: Can address up to 16 DALI driver addresses.
- SAL-2032: Can address up to 32 DALI driver addresses.
- SAL-2064: Can address the maximum allowed 64 DALI driver addresses.

The Salvador Series 2000 seamlessly integrates wired DALI drivers into the Casambi system. When integrated, DALI luminaires appear as luminaires in the Casambi network. Notably, this product supports industry standards such as DALI D4i, DALI DT6, and DALI DT8.

The Salvador Series 2000 is only for connecting to DALI drivers. No DALI controls must be connected to Salvador Series 2000 products.

The Salvador Series 2000 has integrated 130 mA bus power supply for the DALI operation.

TECHNICAL DATA

Input

• Voltage range:	100 - 277 VAC
• Frequency:	50/60 Hz
• Max. mains current:	70 mA
• Inrush current:	20 A

DALI Output

• Voltage range:	12 - 15 VDC
• Guaranteed current:	130 mA
• Max. current:	200 mA
• Max. shutdown current:	<4 mA

Radio transceiver

• Operating frequencies:	2402...2480 MHz
• Maximum output power:	+8 dBm

Operating conditions

• Ambient temperature, t_a :	-20 °C to +50 °C
• Max. case temperature, t_c :	+55 °C
• Storage temperature:	-25...+75 °C
• Max. relative humidity:	0...80 %, non-cond.

Internal Real Time Clock back-up time

• Back-up time, min.:	12 hours

Mechanical data

• Dimensions (w/o strain relief):	106,0 x 67,0 x 28,0 mm
(with strain relief attached):	127,0 x 67,0 x 28,0 mm
• Weight:	95 g
(with strain relief attached):	120 g
• Degree of protection:	IP20 (indoor use only)

Connectors

• Wire range, solid/ stranded:	0,2 – 1,5 mm²
	AWG 16–24
• Wire strip length:	9 mm

Insulation

• Casing to DALI:	Reinforced
• DALI to Mains:	FELV

Certifications

- CE
- RCM

Disposal Instructions

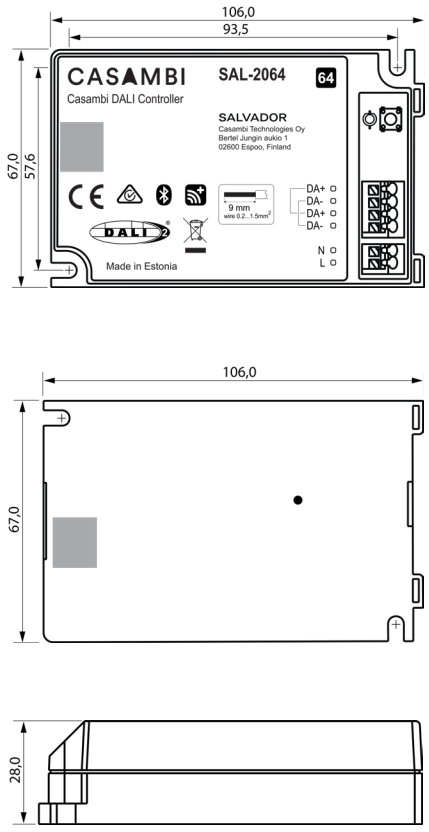
In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste.

Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling.

www.casambi.com

© 2024 Copyright Casambi Technologies Oy

DIMENSIONS (WITHOUT STRAIN RELIEF, IN MM)

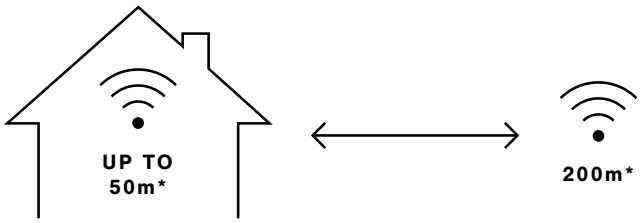


*t_c point is on bottom side • | Mounting hole diameter 3,5mm

Antenna location

RANGE

The communication range in radio technology may ultimately vary depending on the design of the product in which the antenna is housed and on the environment in which it operates. In practice, this means a well-designed product from a radio point of view, with a good line of sight connection between nodes, can achieve radio coverage up to 50 meters indoors, and, in theory, up to 200 meters in the open air. Casambi uses a mesh network technology, whereby each Casambi unit, or Casambi Ready product, also acts as a repeater. Hence, longer ranges can be achieved by using multiple Casambi products within the network.



*The wireless range of a Casambi unit is dependent on several factors; how it has been integrated into a luminaire, where it has been installed; taking into consideration surrounding obstacles such as walls and other building materials that may block signals.

CASAMBI MESH-NETWORK COMPATIBILITY

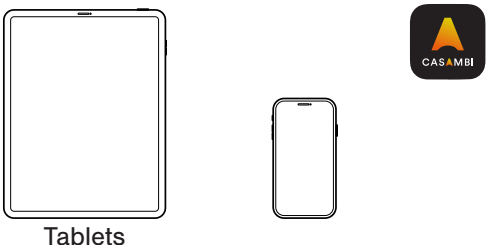
There are different radio modes that can be selected when creating a network in the Casambi App: ‘Balanced’, ‘Better Performance’ and now ‘Long Range’ options. The Salvador Series 2000 enables long-range capabilities only when the long-range radio mode has been selected and all the other devices within the network are long-range capable. It will revert to the shorter, standard range when deployed in networks set to ‘Balanced’ or ‘Better Performance’ modes.

COMPATIBLE DEVICES

Download on the App Store | GET IT ON Google Play

Compatible devices: Android and iOS Operating Systems.

We support the latest OS versions for Android and iOS, and their last two major versions respectively.



Tablets

Smartphone

Information in this document is subject to change.
SAL-20PR-00 PTS EU V1.2 EN (CPRPTS-EU-SAL-20v1.2)
© 2024 Copyright Casambi Technologies Oy

INSTALLATION

Make sure that the mains voltage is switched off when making any connections.

Detach the strain relief cover, supplied with the Salvador Series 2000 unit before starting an installation process.

The mains input connectors are marked with “L” (Live) and “N” (Neutral). The DALI connectors are marked with DA+ (Positive) and DA- (Common) text.

The connectors are of push-in spring type, which does not require any special tools for installation. Use 0,2...1,5 mm^2 solid or stranded conductor electrical wires. Conductor cross section is limited to 0,25...1,0 mm^2 in case stranded conductor when ferrule without plastic sleeve is used or 0,25...0,5 mm^2 in case ferrule is with plastic sleeve. Strip the wire 9 mm from the end for rigid or stranded wires for installation without ferrule.

Insert the wires into the corresponding holes in the connector and make sure connector is locked.

If you install the Salvador Series 2000 into a heat-sensitive environment (i.e. inside a luminaire or in a ceiling outlet box above a luminaire), make sure that the ambient temperature does not exceed the specified maximum value.

The unit has a radio transceiver and an embedded antenna. To guarantee optimal unit performance and operational range, avoid enclosed installation into metal boxes. Antenna location is marked on the picture above.

The unit can be installed with two cheese-headed screws. Do not use countersunk screws to avoid enclosure damage. Overtightening the screws may damage the enclosure.

If necessary, use the cable strain relief and relevant accessories supplied with the Salvador Series 2000 unit.

DALI DRIVER CONNECTIONS

Only DALI drivers can be physically connected to a Salvador. DALI controls (such as switches and sensors) must not be connected. If DALI controls are required to be part of the Casambi network, they must be converted to be Casambi Ready using a suitable Casambi CBU or device from one of our Ecosystem partners.

Salvador Series 2000 devices are compatible with Casambi Evolution networks only.

The Salvador Series 2000 allows the addressing, programming and control of wired DALI drivers individually from the Casambi App. It enables the creation of hybrid networks consisting of both Casambi Ready and DALI devices. All DALI drivers connected to a Salvador can be easily programmed and controlled in the same way as Casambi Ready devices via the Casambi App. This eliminates the need for a specific DALI controller, complex DALI configuration software, or a DALI specialist. The Salvador SAL-2016 is ideal for low-budget renovations, replacing multiple standalone DALI networks, while the Salvador SAL-2064 is designed for larger hybrid network setups.

The Salvador does not permit the discovery and addressing of more DALI drivers than the capabilities of the specific Salvador Series 2000 model you are using.

Physically connecting more DALI drivers than the particular Salvador Series 2000 product can discover and address is possible. However, during the discovery process, you will be prompted that too many drivers are connected, and the process will terminate. However, multiple Salvadors can be wirelessly connected to form a single Casambi mesh network.

One Salvador is one Casambi node. Each addressed wired DALI driver is one Casambi node. A Casambi network can contain up to 250 nodes, regardless of whether they are wired DALI drivers or Casambi Ready devices.

Information in this document is subject to change.
SAL-20PR-00 PTS EU V1.2 EN (CPRPTS-EU-SAL-20v1.2)
© 2024 Copyright Casambi Technologies Oy

Wired DALI luminaires appear in the Casambi App in the same way as Casambi Ready luminaires. They can be individually controlled, grouped, or used in scenes that combine both Casambi Ready and wired DALI luminaires.

INTERNAL DALI BUS POWER SUPPLY

The Salvador Series 2000 has an integrated 130 mA bus power supply for the DALI operation.

Observe polarity when connecting additional DALI bus power supply and/or D4i driver with integrated power supply. Note: When powered on, a Salvador Series 2000 module automatically sends a command to all connected D4i drivers to turn off their internal power supply.

When designing the DALI power system, ensure the total DALI line current from all connected DALI power supplies does not exceed 250mA. Exceeding this limit may cause DALI system components to malfunction or may cause permanent damage.

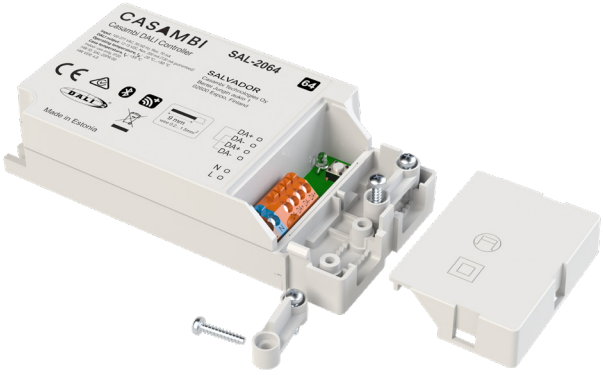
Salvador Series products with integrated DALI bus power supply have internal power shutdown mechanisms, as a safety measure. When the embedded MCU detects a prolonged short circuit for min 800 ms (Shutdown delay time) on the DALI bus, the DALI power supply will be disabled. DALI bus power supply will be enabled after 10 s (Restart period), with the Retry time of 800 ms.

Warning!

When designing the DALI power system, ensure the total DALI line current from all connected DALI power supplies does not exceed 250mA. Exceeding this limit may cause DALI system components to malfunction or may cause permanent damage.

SCOPE OF SUPPLY

Salvador Series 2000 products are always delivered from the factory with a clip-on strain relief accessory.



OTHER FUNCTIONS

The Salvador Series 2000 products have integrated push-button and bi-colour LED.

- Green LED is ON, when unit is powered.
- Green LED is blinking, when Bluetooth connection is open.
- Red LED indicates failures, e.g. short circuit on the DALI bus.

Push-button is reserved for future use.



Information in this document is subject to change.
SAL-20PR-00 PTS EU V1.2 EN (CPRPTS-EU-SAL-20v1.2)

© 2024 Copyright Casambi Technologies Oy

FIXTURE PROFILES

Profile#	Profile name / in app description	Description	Wiring
5*	Salvador 2000	Generic profile for Casambi SAL-2016, SAL-2032 and SAL-2064 DALI controller products.	1

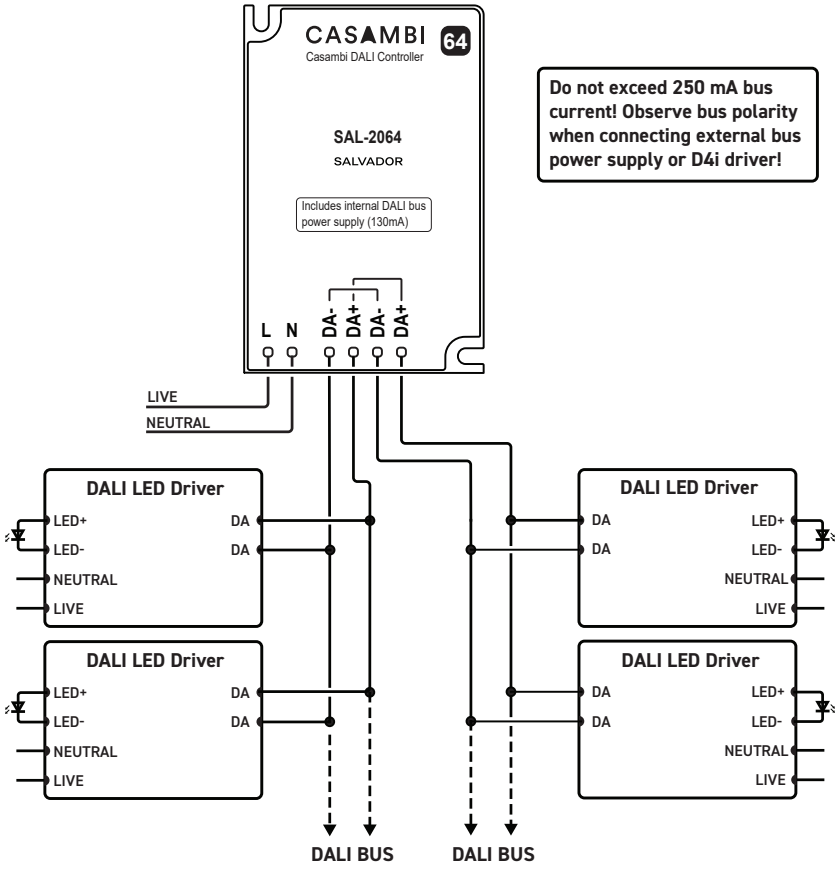
* Default profile

DALI CONFIGURATIONS

ADR#	Description	Remarks
16	Salvador 2000 product with sixteen (16) addressable devices configuration.	SAL-2016
32	Salvador 2000 product with thirty two (32) addressable devices configuration.	SAL-2032
64	Salvador 2000 product with sixty four (64) addressable devices configuration.	SAL-2064

WIRING DIAGRAMS

1.



Information in this document is subject to change.
SAL-20PR-00 PTS EU V1.2 EN (CPRPTS-EU-SAL-20v1.2)
© 2024 Copyright Casambi Technologies Oy