4 Channel (Push Switch/Dry Contact) to DALI input Device

SR-DA2833PN-DA2

K4 K3 COM K2 K1

**NFC Programmable
DALI Push Button Coupler
SR-DA2833PN-DA2**

Power is provided by DALI bus
9.5V-22.5V ⎓ 9mA
ta=-20°C...+50°C

NFC

CE ♻ DALI 2

RoHS

DA DA

0.5-1.5mm²
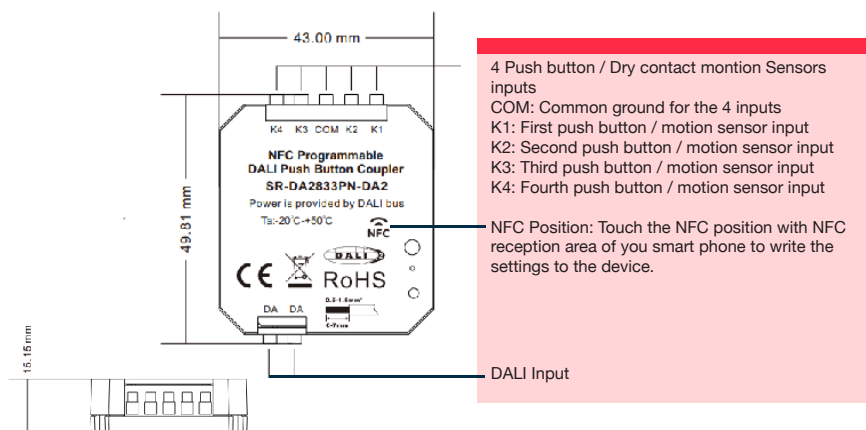
6-7mm

DALI 2 CE FC RoHS COMPLIANT IP20

Features:

- DALI-2 control device with standalone mode and DALI-2 instance mode
- 4 Channel push switch input or dry contact motion sensor input
- Four DALI-2 push button instances are available for instance mode
- Functionality of standalone mode can be easily configured through NFC
- Functionality of DALI-2 instance mode can be configurable through DALI application controller
- IP20: Ingress Protection rating
- 2 year warranty

Model		SR-DA2833PN-DA2
DALI Interface	Operation Mode	Standalone Mode / DALI-2 Instance Mode
	Master Mode Commissioning	NFC
	DALI-2 Instance Mode Commissioning	Application Controller
	Marking	DA, DA
	Power Supply	DALI Bus
	Voltage Range	9.5VDC - 22.5VDC (according IEC62368-101)
	Typ. Current Consumption DALI (at 16.5V)	2.7mA
	Max. Current Consumption DALI (Inrush Current at 22.5V)	9mA
	DALI-2 Address	1
Input	Input For	Potential free button/switch/dry contact
	Number of inputs	4
	Marking input terminals	K1, K2, K3, K4, COM
	Max wire length	200m
General Data	Dimensions	49.8*43*15.1mm (L*W*H)
	Mounting	Back box installation, installation in protection class II device
	Max. casing temperature TC	75°C
	Expected Life time @TC	50,000H
	Protection Class	II in intended use
	Protection Degree Housing	IP20
	Protection Degree Terminals	IP20
Terminals	Connection type	Spring Terminal connectors
	Wire Size Solid Core	0.2 - 1.5mm2 (AWG28 - AWG14)
	Wire Size Fine Core	0.2 - 1.5mm2 (AWG28 - AWG14)
	Stripping Length	9-10mm / 0.35 - 0.39 inch
	Tightening / Release of wire	Push Mechanism
Environment	Storing Temperature	-20°C~+50°C
	Working Ambient Temperature	-20°C~+50°C
	Relative Humidty	8%-80%
Standards	DALI	IEC62386-101:2014 IEC62386-103:2014 IEC62386-301
	EMC	EN 61547 EN 50015 / IEC CISPR15
	Safety	EN 61347-2-11 EN 61347-1
	Markings	DALI-2, CE

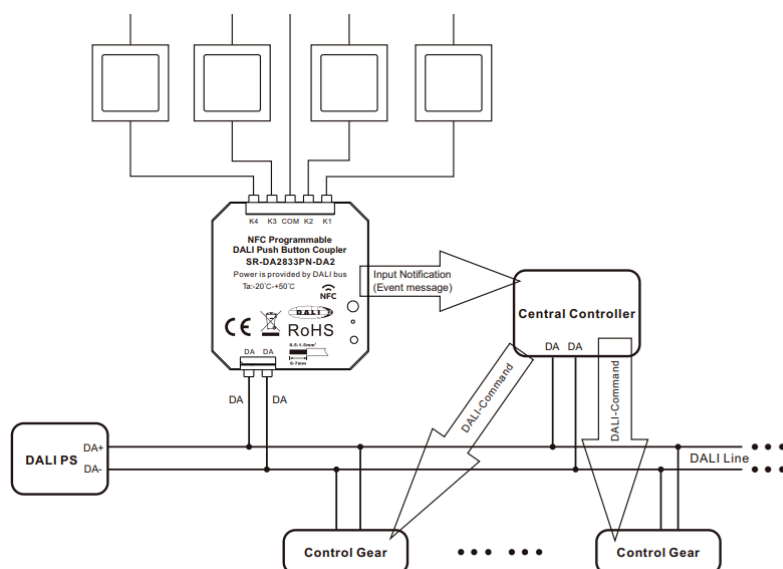| Product Features | • DALI-2 control device with standalone mode and DALI-2 instance mode
• 4 channels push switch input or dry contact motion sensor input
• Four DALI-2 push button instances are available for instance mode
• In compliance with IEC62386-101, IEC62386-103, IEC62386-301
• Functionality of standalone mode can be easily configurable through NFC
• Functionality of DALI-2 instance mode can be configurable through DALI application controller
• Multimaster capable, multiple modules can be installed on the DALI- line
• Controlled DALI device type for standalone mode can be freely configured through NFC App | • Supported device types for master mode : DT6, Tc, XY Coordinates, RGBWAF
• Controlled object of each push switch for master mode can be freely configured through the NFC app.
• Standalone mode supports broadcast, single address, and group control
• For standalone mode, each push switch supports three different operations: Short press, long press, double click
• For standalone mode, DALI command triggered by a push switch operation can be freely configured through the NFC App
• DALI bus powered, no extra power supply required
• Easy installation: The device can be installed in a flush-mounted installation box. |
| Safety & Warnings | • DO NOT install with power applied to device.
• DO NOT expose the device to moisture. | |

Mechanical Specification

43.00 mm
49.81 mm
16.15 mm

4 Push button / Dry contact montion Sensors inputs
COM: Common ground for the 4 inputs
K1: First push button / motion sensor input
K2: Second push button / motion sensor input
K3: Third push button / motion sensor input
K4: Fourth push button / motion sensor input

NFC Position: Touch the NFC position with NFC reception area of you smart phone to write the settings to the device.

DALI Input

Wiring Diagram

DALI-2 Instance Mode (Button operation mode should be configured as "Slave" in NFC App)

Integration in a system with DALI-2 compliant central control unit, push buttons results in input notifications (event messages)

Application and Function
The DALI-2 PBC can be used as input device for the integration in DALI-2 compliant central lighting control systems. In this operating mode, no DALI control commands are sent on the bus, but DALI-2 event messages for DALI-2 compatible central control systems. In this mode each input ("instance") informs about changes by using so called "input notifications". These event-messages can be evaluated by other controllers on the DALI-line e.g. as trigger for commands sent to luminaires.

The DALI-2 PBC supports 4 instances of type 1 (IEC62386-301, Input Devices - Push Button), which are assigned to the 4 button inputs.

Instance 1-4: Push Button, Instance Type 1 (according IEC62386-301, Input Devices – Push Button)
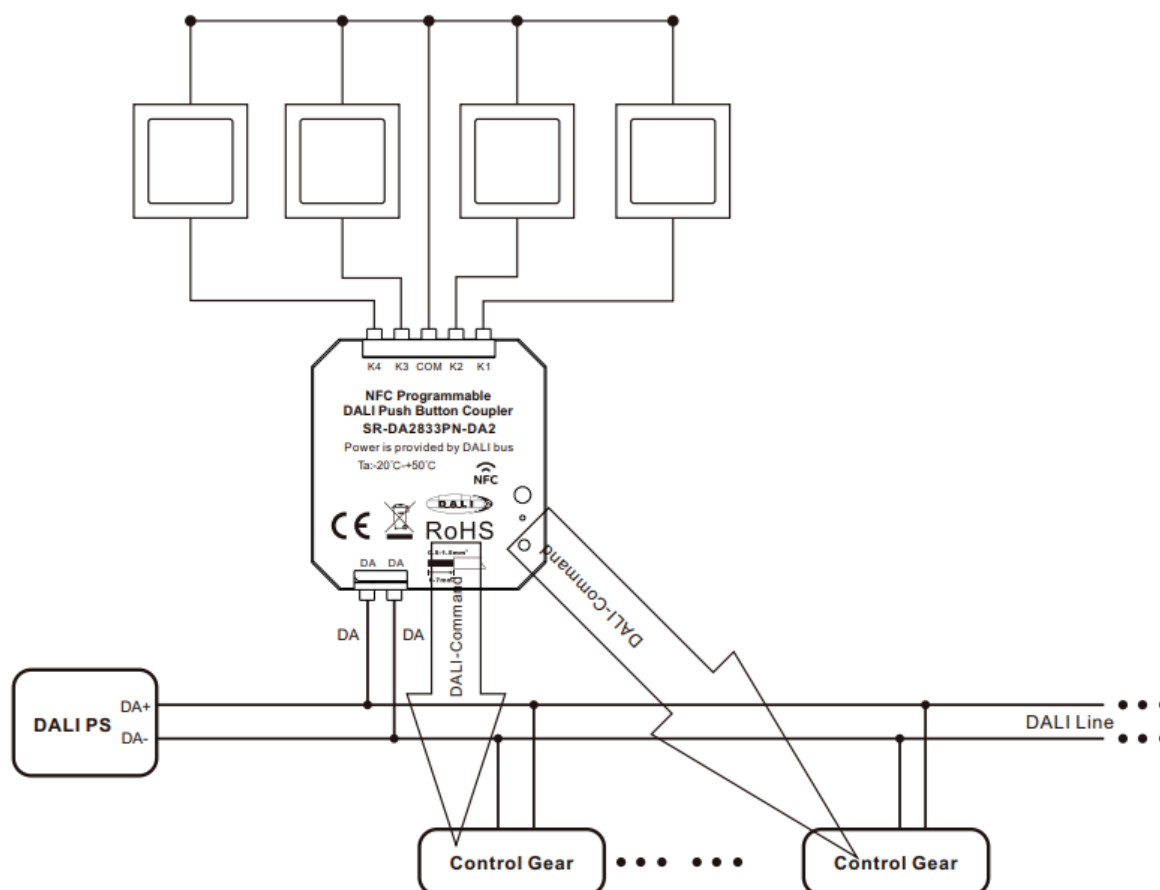
According to the standard the following INPUT NOTIFICATIONs are supported:

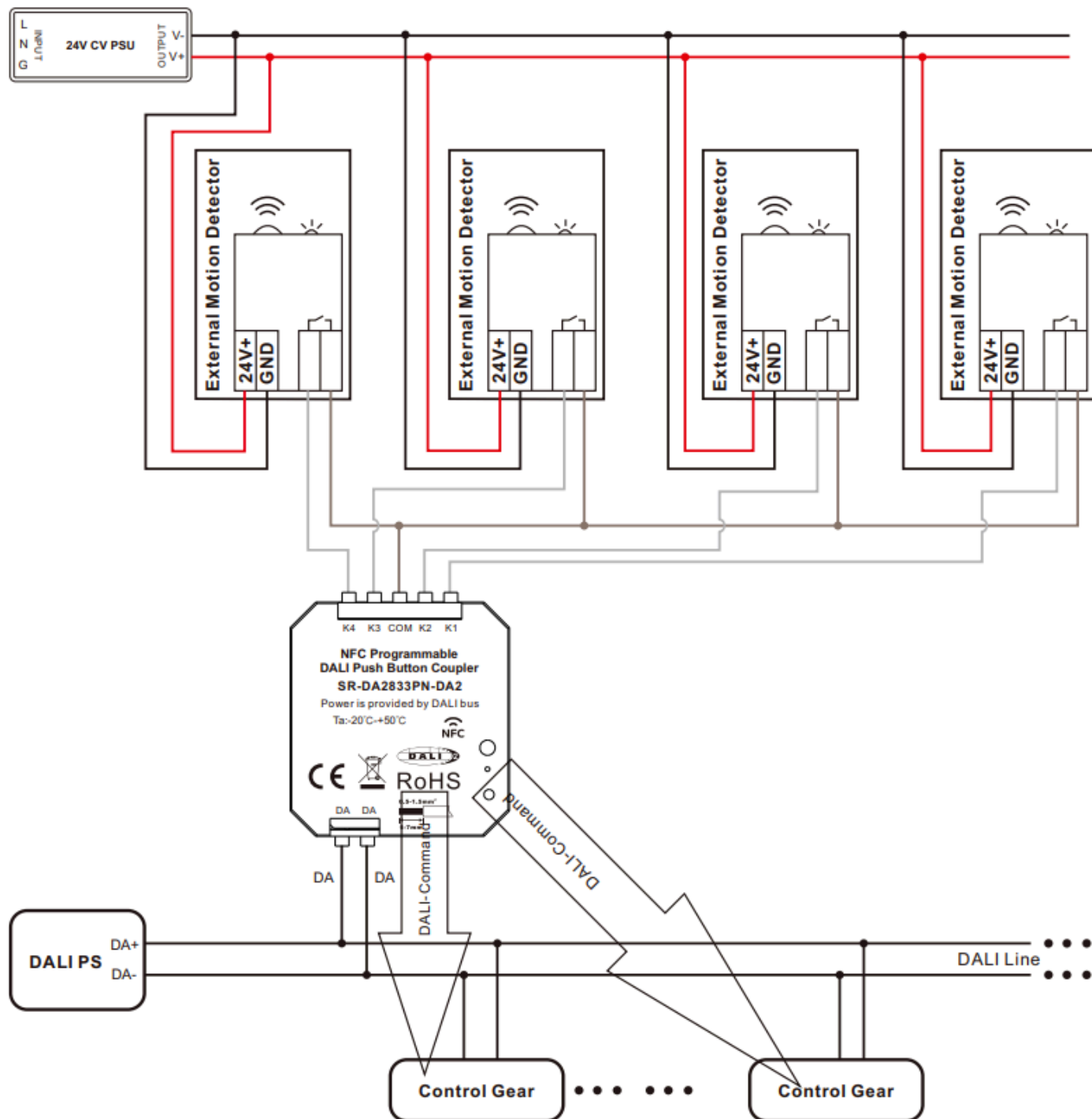| Event name	Event Information	Description
Button released	00 0000 0000b	The button is released
Button pressed	00 0000 0001b	The button is pressed
Short press	00 0000 0010b	The button is pressed and released, without being pressed quickly again (in case of double press enabled), or the button is pressed and quickly released (in case of double press is disabled)
Double press	00 0000 0101b	The button is pressed and released, quickly followed by another button press
Long press start	00 0000 1001b	The button is pressed without releasing it
Long press repeat	00 0000 1011b	Following a long press start condition the button is still pressed, the event occurs at regular intervals as long as the condition holds
Long press stop	00 0000 1100b	Following a long press start condition, the button is released
Button free	00 0000 1110b	The button has been stuck and is now released
Button stuck	00 0000 1111b	The button has been pressed for a very long time and is assumed stuck.

Further parameters of the instances 1-4 are: event filter, event timer settings (short timer, double timer, repeat timer, stuck timer), which can be configured according to IEC62386-301.

Standalone Mode (NFC Commissioning, button operation mode should be configured as "Master" in NFC App, no DALI application controller required)

1. PD Mode (Connect with push buttons)

2. CD Mode (Connect with dry contact motion sensors)

Note: the external motion detector can be either DC powered or AC powered, as long as its output is potential free dry contact output.