KNX-DALI Gateway

DLC-02-KN series

User's Manual
Click Me



KNX-DALI Gateway

Features

- KNX to DALI gateway(DALI-2)
- 2 independent DALI Bus channels with built in DALI power supply (up to 250mA per bus)
- Connect up to 2×64 DALI ECGs
- Max 16 scenes and groups setting per channel
- OLED display, LED indicators and buttons for local operation
- Built in with 250V/5A（×4) relay
- Easy installation and configuration via ETS(database and DCA)
- Program via ETS5 / ETS6 software
- Up to 16 Sequence (32 Steps per Sequence) and 16 Timer (6 Operations per Timer) can be parameterized
- Support DALI-2 devices with part 202/206/207/208/209 (DT1/DT5/DT6/DT7/DT8)
- 5 years warranty

Applications

- Office lighting
- Smart home lighting
- Luxury villas lighting
- LED indoor lighting
- Human centric lighting control
- RGBW lighting control
- Building automation system

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

Description

DLC-02-KN is a KNX to DALI gateway used to connect a digital DALI lighting system to the KNX installation. It enables the room-based lighting control units to be conveniently incorporated into the higher-level KNX building management system. This device transforms switch and dim commands from the connected KNX system into DALI telegrams and status information from the DALI bus into KNX telegrams. DLC-02-KN supports up to 128 DALI participants via two independent DALI Bus. The DALI Bus power supply comes directly within DLC-02-KN, so no additional DALI power supply is required. This device comes in 4 built-in relays, providing switching possibilities for home applications and non-dimmable lighting.

In addition, DLC-02-KN is also integrated with several features. The Sequence function allows users to customize a series of brightness values and color gradients with limited cycles (1-255) or unlimited cycles, which is suitable for entertainment applications. Thanks to an embedded battery, time is memorized even AC is lost. The clock of DLC-02-KN can be synchronized in real-time; therefore, the regular events and actions can be scheduled by the Timer function accordingly. Furthermore, Standby switch-off function can be realized in combination with a KNX switch actuator (e.g., KAA-8R-S). Through this setup, when all DALI devices are under OFF status, DLC-02-KN can inform the actuator to cut-off AC input of DALI ECGs to save energy.

Model Encoding

DLC - 02 - KN

- KNX to DALI gateway
- Number of output Channels
- Series name

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

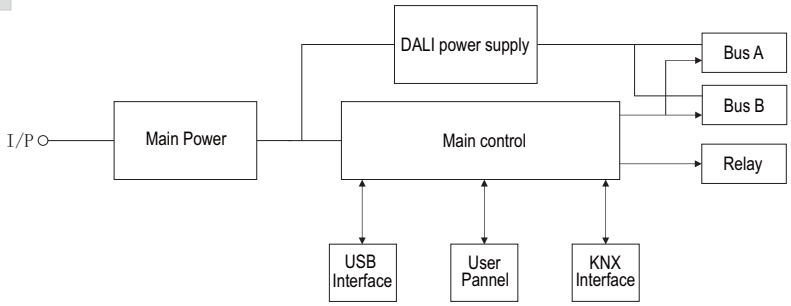
DLC-02-KN series

SPECIFICATION

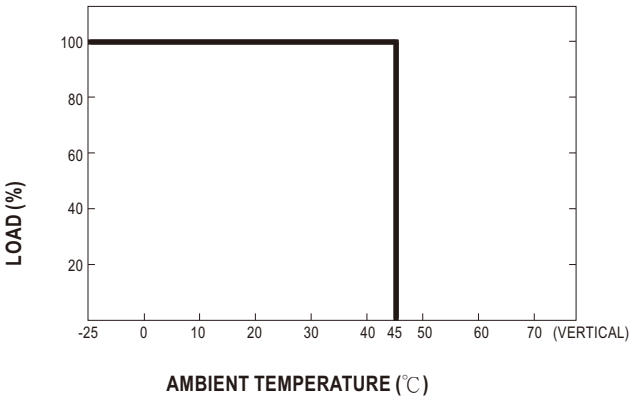
MODEL		DLC-02-KN
OUTPUT	BUS VOLTAGE	Built-in DALI bus power supply; Voltage range : 2x16V
	GUARANTEED SUPPLY CURRENT	2x240mA
	MAXIMUM SUPPLY CURRENT	2x250mA
	RATED POWER	7.68W
	SETUP,RISE TIME	250ms,50ms/115VAC,230VAC
INPUT	VOLTAGE RANGE	100~305VAC, 140~430VDC,(class Ⅱ)
	FREQUENCY RANGE	47~63Hz
	AC CURRENT(Typ.)	0.5A/115VAC 0.25A/230VAC
	INRUSH CURRENT(Typ.)	COLD START 45A/230VAC
PROTECTION	SHORT CIRCUIT	Short circuit delay 0.7S shutdown,Restart period 5S, Retry time 0.7S
FUNCTION	USB INTERFACE	1 USB slave connector , type-B
	DISPLAY	OLED display for easy operation
	INDICATOR	2*LED indicators for BUS voltage; 4*LED indicators for relay ;1*LED indicators for power on.
	GENERIC SETTING	Three buttons(MOVE, SET,ESC) on the front panel to set and view settings
	KNX	DALI Gateway(KNX type)
	Relay	10A/125VAC ,5A/250VAC
ENVIRONMENT	WORKING TEMP.	-25 ~ +45℃
	WORKING HUMIDITY	5 ~ 93% RH non-condensing; comply with climatic EN50090-2-2
	STORAGE TEMP., HUMIDITY	-25 ~ +70℃, 10 ~ 95% RH non-condensing
	VIBRATION	5 ~ 150Hz, 2G 12min./1cycle, each along X, Y, Z axes according to EN50090-2-2
SAFETY & EMC	SAFETY STANDARDS	Compliance to BS EN/EN63044-1, BS EN/EN63044-3
	DALI STANDARDS	Compliance to BS EN/EN62368-101,BS EN/EN62386-103
	EMC EMISSION	Compliance to BS EN/EN63044-5-2, BS EN/EN63044-5-3(BS EN/EN50491-5-2/3)
	EMC IMMUNITY	Compliance to BS EN/EN63044-5-2, BS EN/EN63044-5-3(BS EN/EN50491-5-2/3)
OTHERS	MTBF	562.4K hrs min. Telcordia SR-332 (Bellcore) ; 167.2K hrs min. MIL-HDBK-217F (25℃)
	DIMENSION	144*90*58.3mm (L*W*H)
	PACKING	0.43Kg; 30pcs/13.9Kg/ 1.30CUFT
	DIN RAIL MOUNTING	35 mm rail ; 8 units wide
	ENCLOSURE MATERIAL	ABS-V0
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input and 25℃ of ambient temperature. 2. Maximum allowable DALI driver is 64 per channel. 3. The devices may be operated only up to 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx	

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

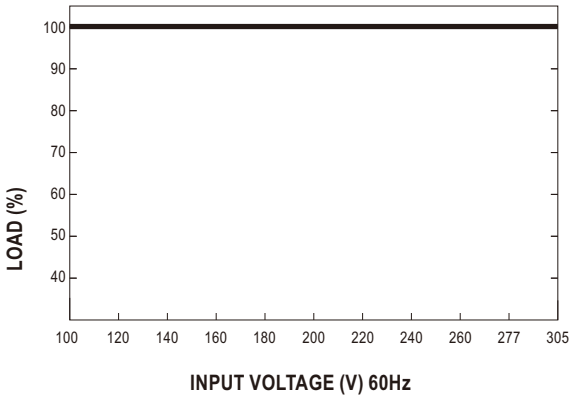
Block Diagram



Derating Curve

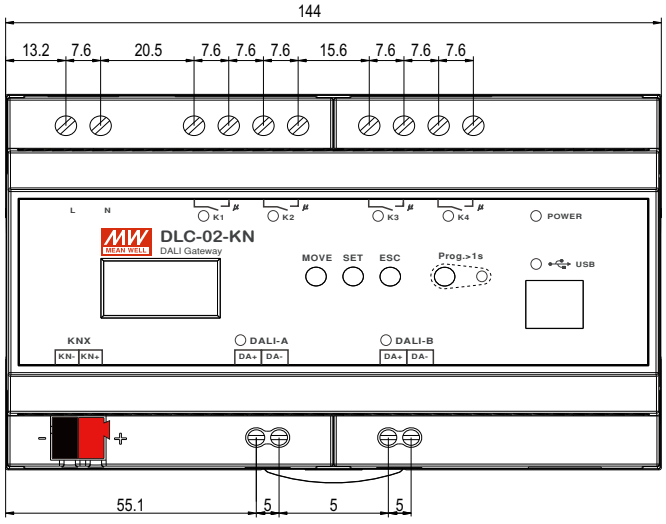


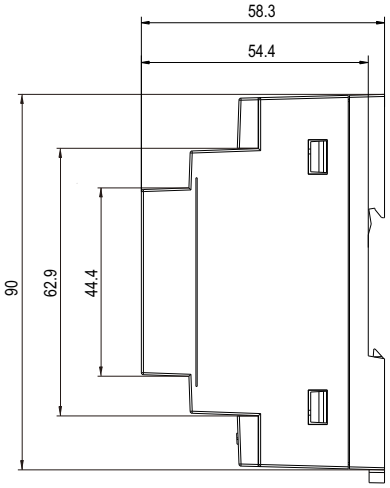
Static Characteristics

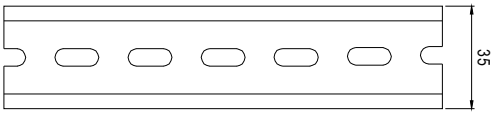


Mechanical Specification

Case No.DLC-02 Unit:mm Tolerance:±1





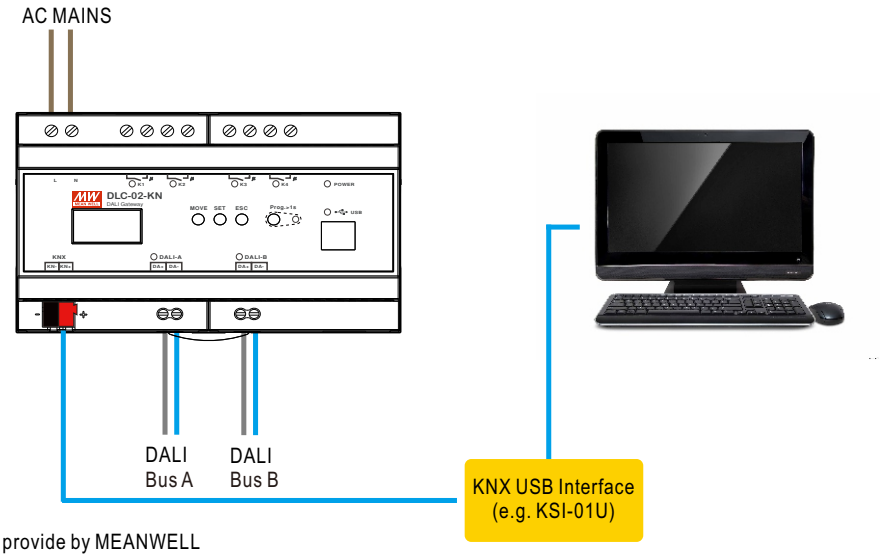


ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

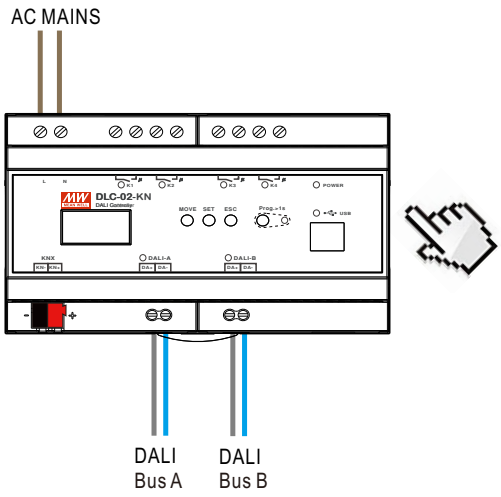
■ Program Setting

◎ Comission through ETS(database and DCA)



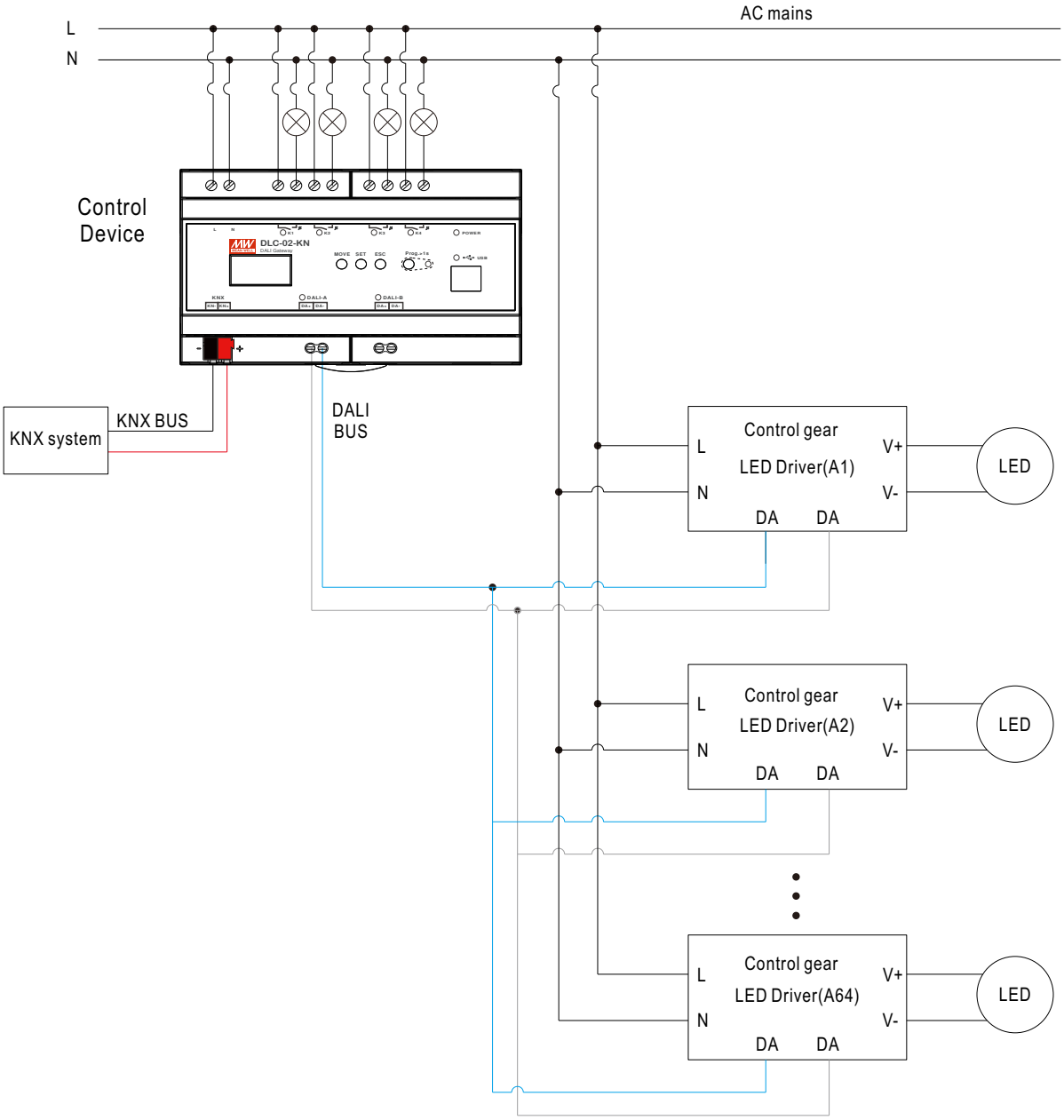
Database and DCA provide by MEANWELL

◎ Local setting



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

■ Installation Diagram



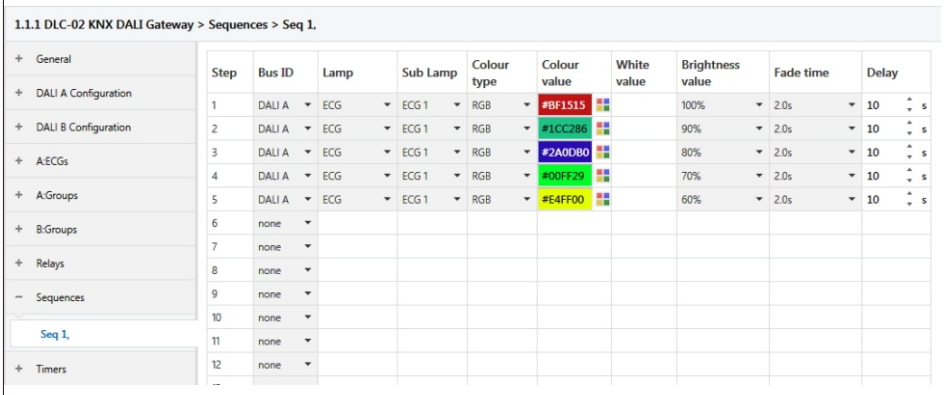
Support DALI-2 Device Type

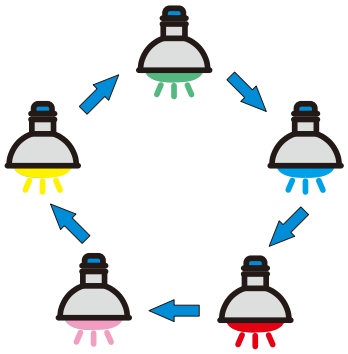
Part	Type of control gear	Device type number
202	**Self-contained emergency** control gear	Device Type 1 (DT1)
206	**Conversion to D.C. voltage** (1-10V,0-10V converter)	Device Type 5 (DT5)
207	**LED lamp** control gear	Device Type 6 (DT6)
208	**Switching** (relay) control gear	Device Type 7 (DT7)
209	**Colour** control gear (Tc tunable white, RGBW, xy-coordinate)	Device Type 8 (DT8)

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

■ Sequence

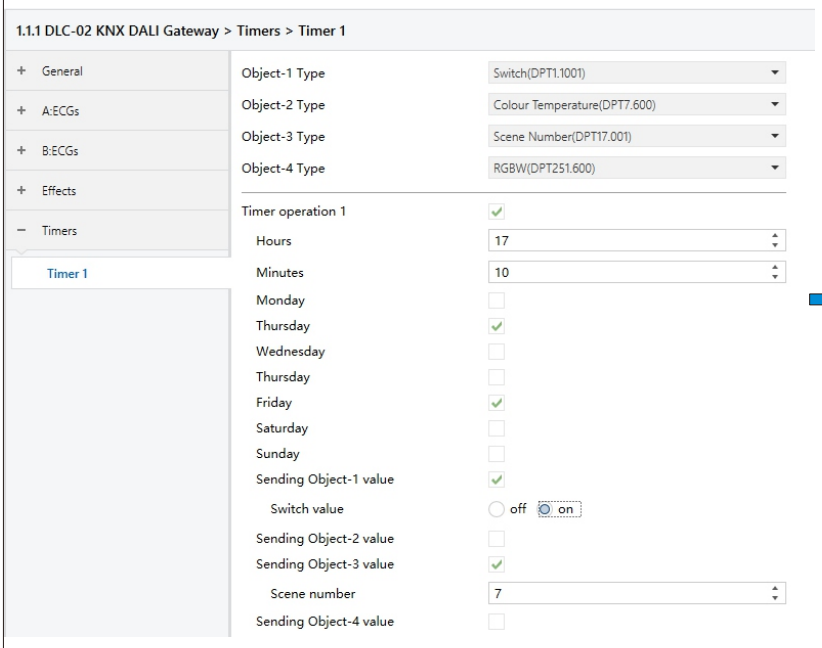
Allows users to customize a series of brightness values and color gradients with limited cycles (1-255) or unlimited cycles.

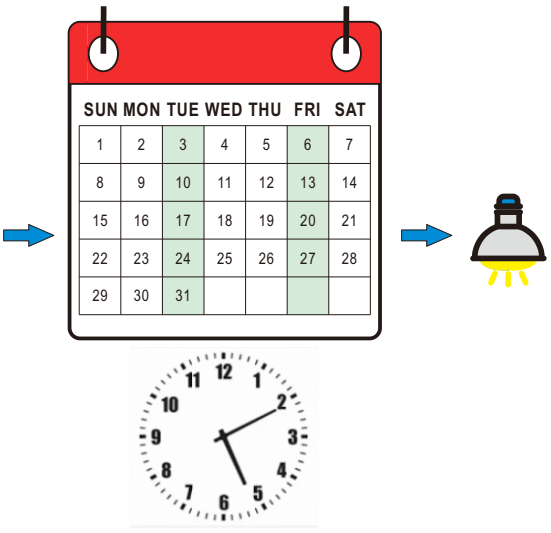




■ Timer

Regular events and actions can be scheduled by the Timer function.

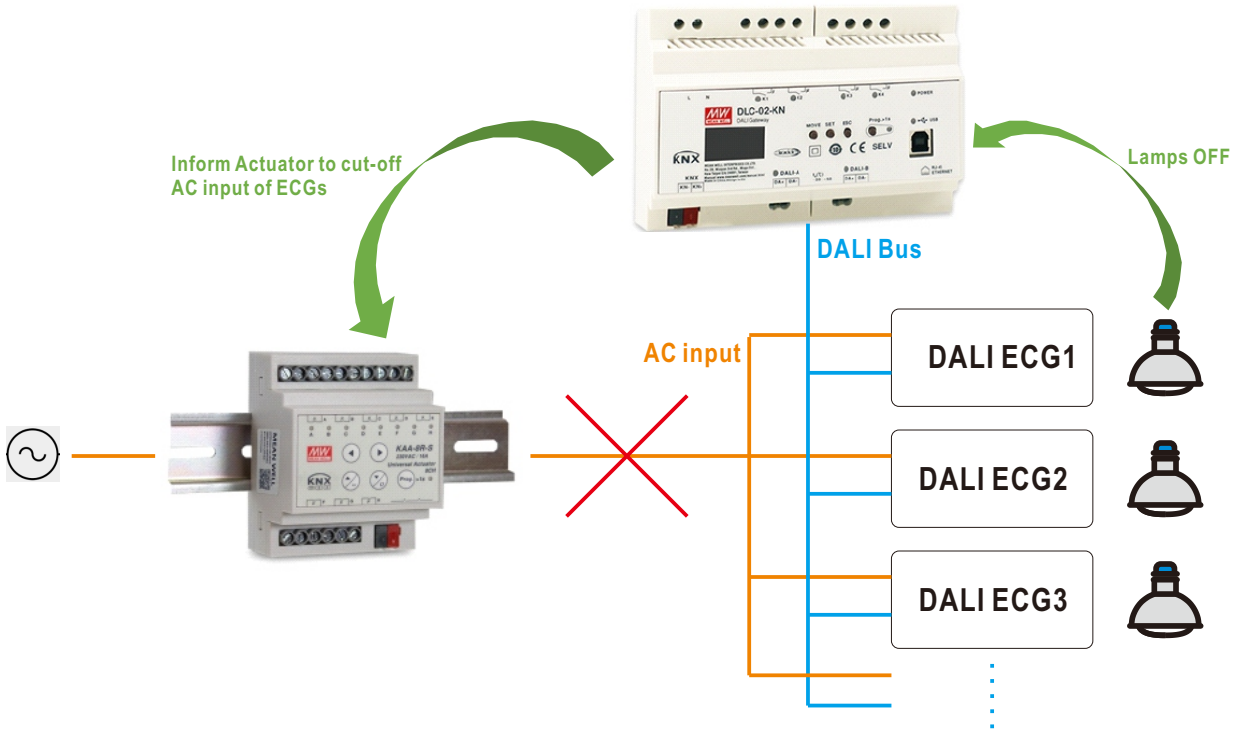




LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

■ Standby switch-off

When all DALI devices are under OFF status,
DLC-02-KN can inform the actuator (e.g., KAA-8R-S)
to cut-off AC input of DALI ECGs to save energy.



■ Recommended Screwdriver, Wire and Torque Setting

1.Screwdriver(Width*Thick):Slotted screwdriver 2.5*0.4~3.5*0.6
2.Wire:1~2.5mm^2 solid core or 1~2.5mm^2 finely stranded
3.Torque:0.8Nm

■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html

■ Configuration and Commissioning

The application program(database and DCA) for ETS can be downloaded via
http://www.meanwell.com/productCatalog.aspx

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000