MEAN WELL

GRUBER Electric Ges.m.b.H.
A-2542 KOTTINGBRUNN, INDUSTRIESTRASSE 4
Tel. +43-2252-251080-0 / Fax +43-2252-251080-30
Internet: www.gruber-electric.at   Email: office@gruber-electric.at
Komponenten für Steuerungsbau und Industrieelektronik

KNX to DALI Gateway

KDA-64

Made in EU   CE   **KNX**

Indoor | LED | Network | Household | Building Automation

■ Features

· KNX proof gateway
· Easy configuration & installation
· Cost effective solution for smart building
· Connect up to 64 DALI ECGs/Drivers
· Built-in DALI power supply
· LCD 2x12 display
· Lighting control via the button
· Lighting control via the integrated web server
· Up to 16 DALI lighting groups setting
· Up to 16 DALI scenes setting
· 3 year warranty

■ Applications

· Office lighting
· Smart home lighting
· Luxury villas lighting
· LED indoor lighting

■ Description

KDA-64 is used to connect a digital DALI lighting system to the KNX installation. Thus, room-based lighting control is conveniently incorporated into the higher-level KNX building management system.

The device transforms switch and dim commands from the connected KNX system into DALI telegrams and status information from the DALI bus into KNX telegrams.
KDA-64 is a Category 1 device (in accordance with EN 62386-103). This means the device must only be used in DALI segments with connected ECGs and not with other DALI control devices within the segment (No multi-master function).

Power supply for the up to 64 connected ECGs comes directly from the KDA-64. An additional DALI power supply is not required and not permitted.
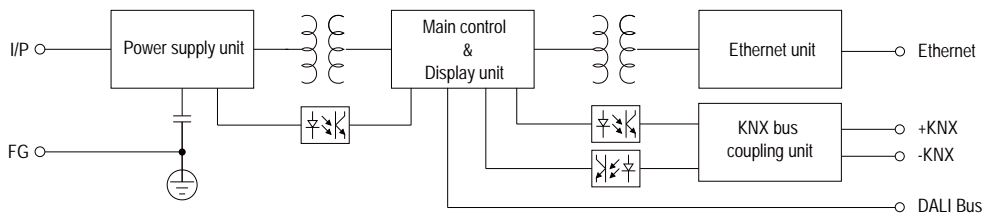
The device comes in a 4 units wide DIN Rail casing so it can be directly integrated into the mains distribution box. Connection to the KNX bus is via a bus connector. DALI Bus is connected via screw connectors on the device.

ECGs can be switched, dimmed and set to a defined value in 16 groups per gateway. In addition to group control, KDA-64 offers the possibility to individually control up to 64 ECGs.
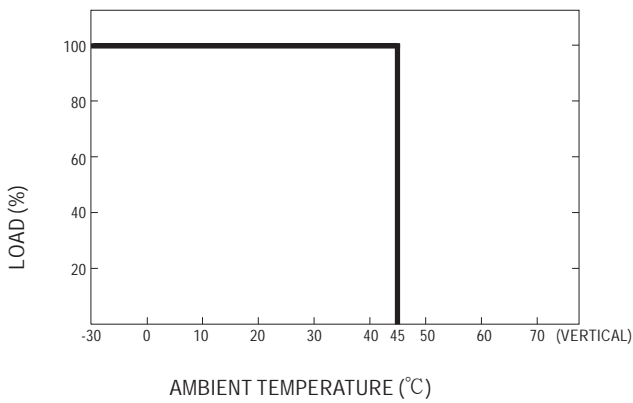
SPECIFICATION

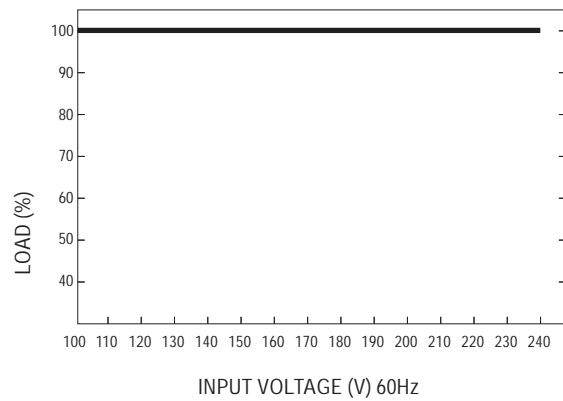| MODEL		KDA-64
COMMUNICATION SIGNAL	KNX BUS	Standard KNX connector
	DALI BUS VOLTAGE	Built-in DALI Voltage 16-20VDC ; Screw terminal for solid or stranded copper conductors 1-2.5m^2
	DALI BUS RATED CURRENT	250mA
	ETHERNET	100MB/s via RJ45 connector
INPUT	VOLTAGE RANGE	100~240VAC, 142~339VDC
	FREQUENCY RANGE	50~60Hz
	AC CURRENT	0.1A
	POWER CONSUMPTION	7W(Typ.)
	TERMINAL	Screw terminal for solid or stranded copper conductors 1-2.5m^2
PROTECTION	OVERLOAD	100% at DALI rated current
		Protection type: Constant current limiting
FUNCTION	DISPLAY	LCD-Display of 2 lines with 12 characters each for comission the device and parameter settings
	KNX PROGRAMMING	One physical button to toggle between normal and programming/addressing mode
	GENERIC SETTING	Three buttons(Move, Prg/Set, ESC) on the front panel to set and view the settings
ENVIRONMENT	WORKING TEMP.	-5 ~ +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, each along X, Y, Z axes according to EN50090-2-2
	OVER VOLTAGE CATEGORY	III
	POLLUTION DEGREE	2, EN60664-1
	PROTECTION TYPE	IP20, EN60529
SAFETY & EMC	SAFETY STANDARDS	Compliance to EN60669-2-1, EN50428, EN50090-2-2
	DALI STANDARDS	Comply with IEC60926, EN62386-103 DALI controller
	EMC EMISSION	Compliance to EN50491-5-1, EN60669-2-1, EN50428, EN50090-2-2, EN61000-3-3
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11
OTHERS	DIMENSION	86*72*55mm (L*W*H)-Weight 0.2Kg
	DIN RAIL MOUNTING	35 mm rail ; 4 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. 3. The devices may be operated only up to 2000m(6500ft).

■ Block Diagram

I/P —○ [Power supply unit] —〜〜— [Main control & Display unit] —〜〜— [Ethernet unit] —○ Ethernet

FG —○ ⏚

[KNX bus coupling unit] —○ +KNX
—○ -KNX

—○ DALI Bus

■ Derating Curve

LOAD (%)

AMBIENT TEMPERATURE (℃)

■ Static Characteristics

LOAD (%)

INPUT VOLTAGE (V) 60Hz

■ Mechanical Specification

Case No.   Unit:mm

58

48.7

31

72

86

1.8

55

52.9

59.8

46

35

D+ D-   Led Prog.

Move Pro/Set ESC   ERR LINK

KNX-DALI Gateway
KDA-64

Made in EU   100-240VAC 50/60Hz

Eth. 1   L N PE

A4   A5 A6

A9

A7

A8

A12

A1

A2   A3

A10

A11

D+ D-   Led Prog.

Move Pro/Set ESC   ERR LINK

KNX-DALI Gateway
KDA-64

Made in EU   100-240VAC 50/60Hz

Eth. 1   L N PE

A1: RJ-45 plug for Ethernet connection
A2: KNX bus connector
A3: Power supply connector
A4: DALI output connector
A5: Programming LED for normal/addressing mode
A6: Programming button normal/addressing mode
A7: MOVE button
A8: Prg/Set button
A9: ESC button
A10: ERR-LED red: Signals fault status
A11: LINK-LED yellow: Signals device Ethernet readiness
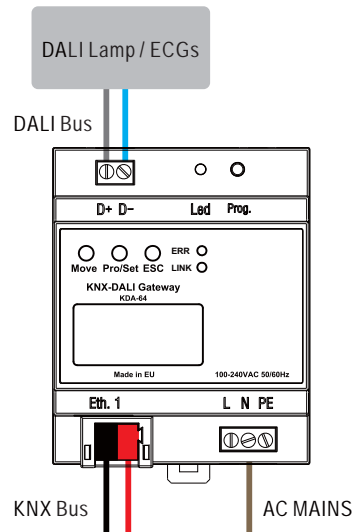A12: Display 2x12 characters for DALI configuration

35

ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15
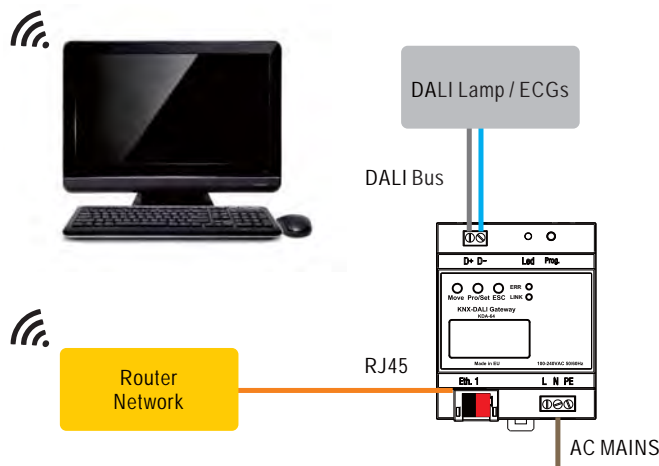
■ Configuration and Commissioning

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

■ Typical application

◎ Application 1: KNX DALI lighting control

◎ Application 2:Wire or wireless ethernet(Web browser) lighting control

■ 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