

KNX-DALI Interface for up to 64 ballasts per channel - 2 channels

ZDID64X2

TECHNICAL DOCUMENTATION

FEATURES

- Interface for two DALI channels
- Possibility of controlling up to 64 DALI ballasts per channel
- Single Master DALI-2 Controller
- Compatibility with emergency lighting and color ballasts (DT8)
- Supports KNX Data Secure
- Scene sending and saving
- Error detection and monitoring
- Burn-in, Stand-by and Auto-off functions
- Manual control through buttons and status indication through display
- 1.54" display (128 x 64 pixels) for settings and notifications
- External power supply of 110-240 VAC 50/60 Hz
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Size 67 x 90 x 79 mm (4.5 DIN units)
- DIN rail mounting according to IEC 60715 TH35, with fixing clamp
- **DALI Standard certified**
- Conformity with the CE, UKCA, RCM directives (marks on the right side)

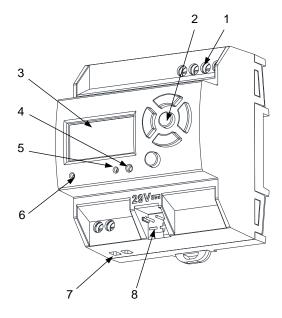


Figure 1: DALI BOX Interface 64 X2

1. DALI bus channel	2. Control buttons	3. Display	Programming button
Programming LED	Power supply indicator LED	External power supply	KNX connector

Programming button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode. In order to perform a KNX Secure factory reset, while the device is in safe mode, press the button for 10 seconds until the programming LED changes its

Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. e is not in safe mode, it starts a blue blinking sequence.

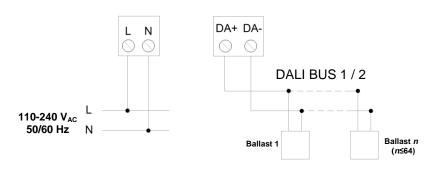
GENERAL SPECIFICATIONS					
CONCEPT		DESCRIPTION			
Type of device		Electric operation control device			
	Voltage (typical)		29 VDC SELV		
	Voltage range		21-31 VDC		
KNX supply	Connection type		Typical TP1 bus connector for 0.8 mm Ø rigid cable		
	Maximum	Voltage	mA	mW	
		29 VDC (typical)	6,2	179.8	
	consumption	24 VDC ¹	10	240	
External power	Voltage		110-240 VAC 50/60 Hz PF=0.5		
supply	Maximum consun	nption	140 mA @ 110 VAC / 85 mA @ 230 VAC		
Operation temper	rature		-5 +45 °C		
Storage temperat	ture		-20 +55 °C		
Operation humidi	ty		5 95%		
Storage humidity			5 95%		
Complementary of			Class B		
Protection class / Overvoltage category		II / III (4200 V)			
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period			Long		
Degree of protection		IP20, clean environment			
Installation		Independent device to be mounted inside electrical panels with DIN rail (IEC 60715)			
Minimum clearan	Minimum clearances		Not required		
Response on KN	X bus failure		Data saving according to parameterization		
Response on KN	Response on KNX bus restart		Data recovery according to parameterization		
Operation indicator		The programming LED indicates programming mode (red). The power supply LED indicates external power (green). Display allows both configuring the DALI system and supervising the current status.			
Weight		252 g			
PCB CTI index		175 V			
Housing material		PC FR V0 halogen free			
Maximum consumption in the warst ages congris (KNV For In m					

¹ Maximum consumption in the worst-case scenario (KNX Fan-In model).

DALI OUTPUT SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of channels	2	
Output type / Voltage	DALI bus / 18 VDC FELV	
Guaranteed current per channel	200 mA	
Maximum current per channel	250 mA	
Maximum DALI ballasts per channel	64	
Maximum length of cable	300 m (@ 1.5 mm²)	
Short-circuit protection	YES	
Overload protection	YES	
Over-voltage protection	YES	
Connection method	Screw terminal block (0.5 Nm max.)	
Cable cross-section	1.5-4 mm ² (IEC) / 26-10 AWG (UL)	

EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS					
CONCEPT		DESCRIPTION			
Power supply protection fuse	Voltage	250 V			
	Current	4 A			
	Response type	F (Fast acting)			
Connection method		Screw terminal block (0.5 Nm max.)			
Cable cross-section		1.5-4 mm² (IEC) / 26-10 AWG (UL)			

WIRING DIAGRAMS



- In case of ballast replacement, please follow the steps defined in the user manual.
- ⚠ In case of a DALI channel short circuit, the device will monitor the DALI channel in order to switch on the output at full current just as the short circuit is removed.











Removing DALI BOX Interface 64 X2 from DIN rail:









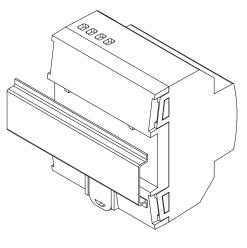


Figure 2: Mounting DALI BOX Interface 64 X2 on DIN rail



SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- The facility must be equipped with a device that ensures the omnipolar sectioning. Installation of a 10 A mini-circuit-breaker is recommended. To prevent accidents, it must remain open in case of manipulation of the device.
- The device has a short-circuit protection fuse that, in case of activation, should only be rearmed or replaced by the Zennio technical service.
- This device contains a security short-circuit proof transformer.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- For indoor use only.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to https://zennio.com/licenses.