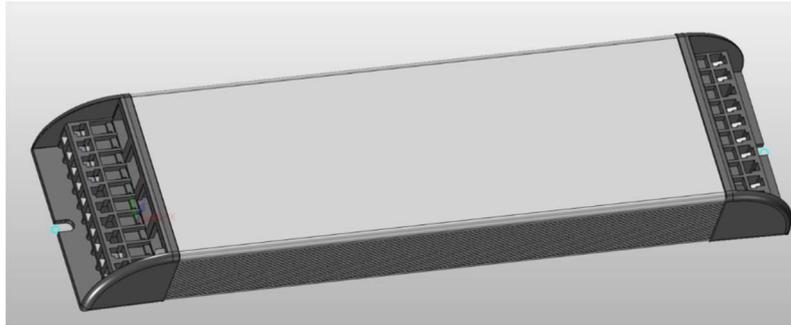


Technical Data

HFXE LED BG2

Ex zone 1



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1 Technical data

1.1 Product range

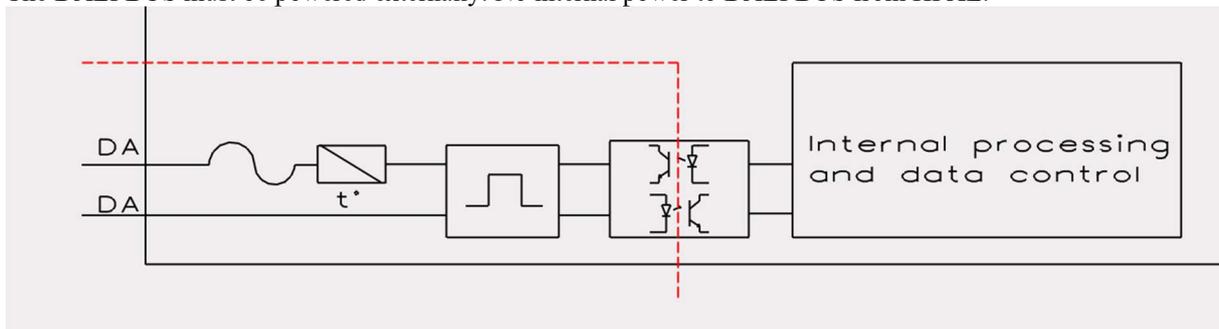
Name	Part number	Output LED current/LED voltage	Ta (Ambient temperature in operation)	Tc (on marking label)
HFXE LED BG2 6-12-1500 200mA 220-254VAC/220-250VDC	831220110	200mA/64-160VDC	-40°C to +76°C	88°C
HFXE LED BG2 6-12-1500 250mA 220-254VAC/220-250VDC	831220120	250mA/64-160VDC		
HFXE LED BG2 6-12-1500 370mA 220-254VAC/220-250VDC	831220130	370mA/64-160VDC		
HFXE LED BG2 12-1500 550mA 220-254VAC/220-250VDC	831230150	550mA/128-160VDC	-40°C to +66°C	
HFXE LED BG2 6-1200 250mA 110-127VAC/110-127VDC	831380120	250mA/64-128VDC	-40°C to +76°C	
HFXE LED BG2 6-1200 370mA 110-127VAC/110-127VDC	831380130	370mA/64-128VDC		
HFXE LED BG2 DALI 6-1200 370mA 110-127VAC/110-127VDC	831581130	370mA/64-128VDC		
HFXE LED BG2 DALI 6-12-1500 250mA 220-254VAC/220-250VDC	831231120	250mA/64-160VDC	-40°C to +66°C	
HFXE LED BG2 DALI 3-6-12-1500 370mA 220-254VAC/220-250VDC	831221130	370mA/32-160VDC		
HFXE LED BG2 DALI 12-1500 550mA 220-254VAC/220-250VDC	831431150	550mA/128-160VDC		

1.2 DALI:

DALI2 Supported parts: 101, 102, 202, 207, 251, 252 & 253

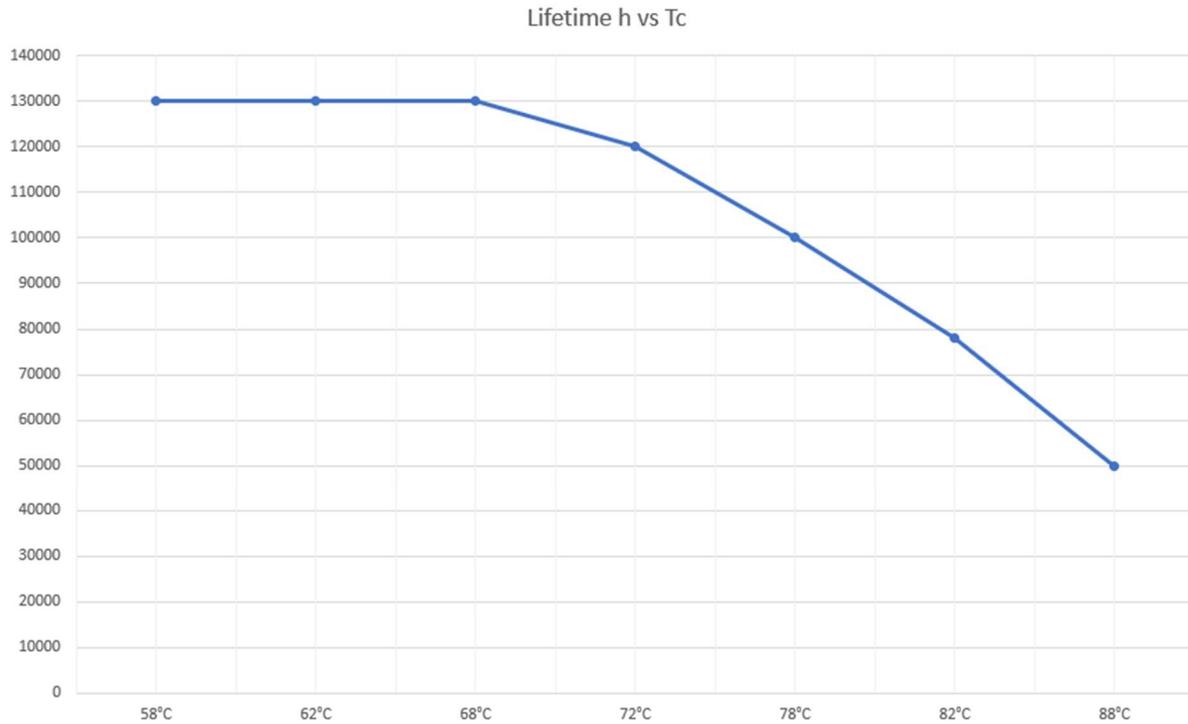
The DALI input is galvanically separated from the driver side and internal functions. Fuse, 1A/254V Ik1500A, and thermal fuse, located on the input, will permanently open circuit in case of internal fault.

The DALI BUS must be powered externally. No internal power to DALI BUS from HFXE.



1.3 Expected lifetime:

Expected lifetime to 90% survival at temperature Tc:



1.4 MCB

MCB, type	MCB parameters		Driver parameters			Calculation			Amount of HFX, max
	multiplier	I _{max} , A	I _{inrush} , A	t _{inrush} , us	I _{nom} , A	K-factor	by I _{max}	by I _{pk}	
C16	5	16	22	200	0,4	11	40	40	40
B10	3	10	22	200	0,4	11	25	15	15

1.5 EMC

HFXE LED BG2 is designed to meet the requirements of “EMC Class B -Bridge & Open deck”, except the 550mA units.

1.6 Battery

HFXE BG2 is suitable to use with 7,2V 2,5- 5Ah NiCD battery.

The integrated battery-charger functions of HFXE fulfil the requirements of 60079-7 regarding maximum charge current, charge voltage, discharge current and deep discharge protections:

- Maximum continuous charge current: 240mA
- Maximum continuous charge voltage: 9,2V
- Discharge voltage cut-off 6,0V
- Maximum discharge current 6,8A

2 Emergency Mode

2.1 Emergency mode output power setting

Battery back-up operation 90 or 180 minutes set by connection of indicator LED as indicated on marking-label.

Default value without indicator LED: i90

Changed setting of indicator must be followed by full reset of mains and battery to be active.

Output current in emergency mode (tol +/-15%)	i90 (2,5Ah)	i90 HO (5Ah)	i180 (5Ah)
ARC 300	79mA	160mA	79mA
ARC 600	90mA	160mA	90mA
ARC 1200	42mA	83mA	42mA
ARC 1500	41mA	85mA	41mA

In test mode, the unit will return to normal operation after preset time + 2minutes.

In backup mode, the duration will be until low voltage <6,2V is detected, or mains supply is re-energized. If low voltage cut-off is reached before preset time, the unit will set faultcode "battery low capacity".

2.2 Emergency mode indication and test

Allow min 24h of charging after first connection or reset/emergency mode before testing.

Self-test according to IEC 62034

	Battery faulty or missing, faulty internal circuit	System OK	Lamp-Fault	Battery capacity low	Battery voltage low – charging OK
Green indicator LED – No self-test active	No indication (indicator LED off)	Constant GREEN	No indication (indicator LED off)	No indication (indicator LED off)	Slow blinking GREEN (1s ON/ 2s OFF)
Bi-color (red+green) indicator LED – Self- test active	Constant RED	Constant GREEN	Intermittently blinking RED (0.5s ON/ 3s OFF) - de- energise unit and replace lamp	Intermittently blinking RED (0.5s ON/ 1s OFF) – allow min. 24h charging period or replace battery	Slow blinking GREEN (1s ON/ 2s OFF)

2.3 Self-test:

- Reset unit and memory by disconnection of mains and battery minimum 5 seconds
- Start sequence after mains and battery reset, or if connected to battery while powered by mains supply.
 - 2 seconds lamp test in normal mode
 - In case faulty lamp- the unit will turn off output and indicate LAMP-FAULT. Battery charger will be active.
 - Read indicator LED setting, +i90 + i90HO or +i180
 - 5 seconds emergency mode test
 - Return to normal mode
 - Indicator will be green if all ok.
 - Fault will be indicated if no battery/low battery voltage is detected. See Chapter 2.2
- Self-test timer and function enabled only with bi-color LED:
 - Initial 24h test:
 - After a full reset, the internal clock starts counting to 24h + a random period (<1h) until first full test
 - Duration 90 or 180 minutes according to iLED setting
 - Lamp and battery present test
 - Full battery capacity test
 - + 30 days test:
 - 30 days after initial test
 - Short test
 - 12 x 30 days test (1 year):
 - After 12x 30 days
 - Full test
 - Duration 90 or 180 minutes according to iLED setting
 - Lamp and battery present test
 - Full battery capacity test
- An emergency cycle within 24h before a scheduled self-test will postpone the self-test to 24h after last cycle.
- Reset self-test timer and fault-code memory by disconnection of mains and battery, minimum 5 seconds
- General note: after a full duration test, or after a significant time operating in emergency mode, when the unit returns to operating normally from the mains supply, it is normal for the indicator LED to be blinking green. This is to indicate that the battery voltage is low, but charging, and operating otherwise normally.