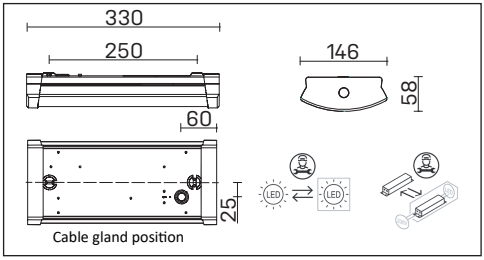
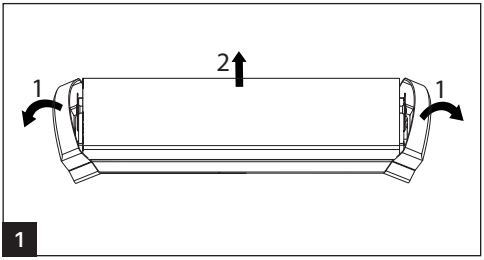
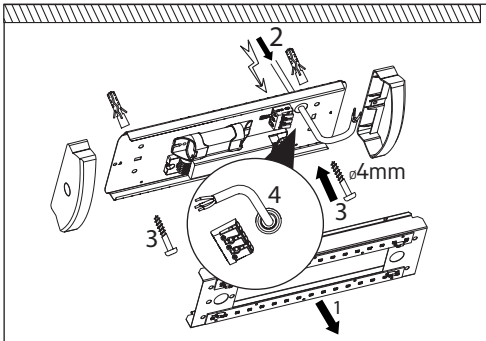
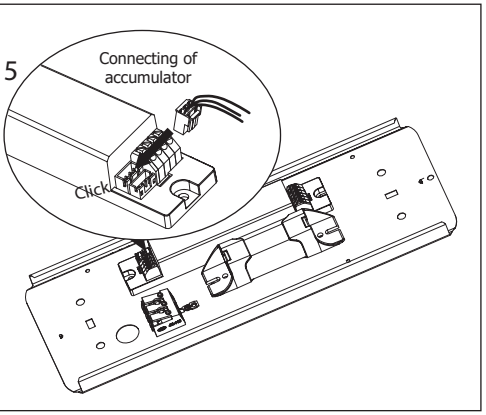
IP40 220-240V 50/60Hz



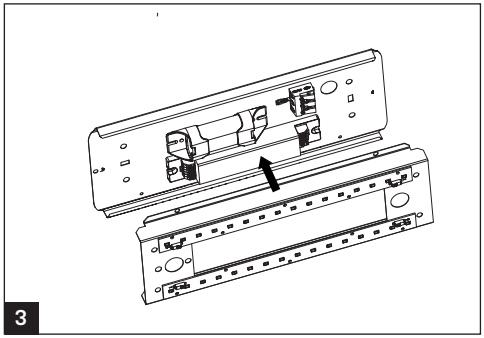


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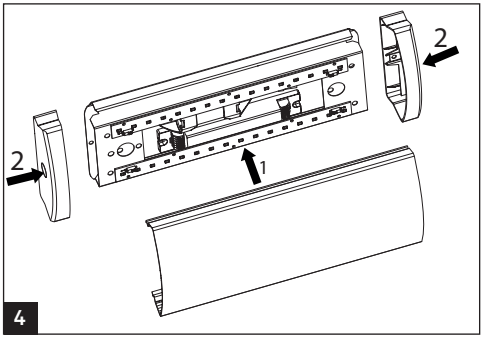




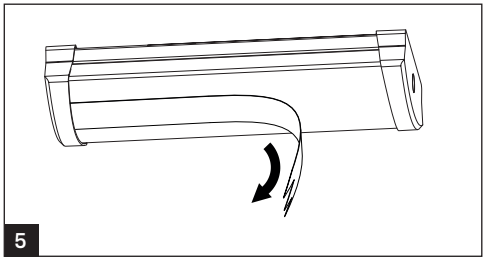
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4



5

Installation can only be carried out by an authorized person and according to the mounting instructions. Any other installation is considered to be improper. For well installation and good luminaire work is necessary ensure a planarity of a mounting surface. Make sure that the luminaire is always disconnected from the power supply before the installation work. Do not use the luminaire if damaged or if damaged the power cable. Only damp microfiber cloth can be used for cleaning. Technical changes are subjected without notice. Do not dispose the luminaire or its parts as household waste, but make the proper recycling.

LIGHT FITTING WITH CYANTRONIC EMERGENCY MODULE

In the light fitting is used the emergency module **ANI03-30/ST, ANI03-30/DA**

Product Information:
This emergency module with Automatic Self-Test Technology and DALI is used in LED luminaires with integrated LEDs and separate LED drivers. It is designed for installing within the fitting to provide a battery back-up supply in the event of a power cut. The emergency module requires a permanent live un-switched supply to maintain the battery charge. In the event of a power cut, the battery will supply the luminaires at a reduced output.
Automatic Self-Test technology that will perform regular automatic function and duration tests as required by EN 62034, reporting the results via a bi-coloured LED indicator.
A DALI command from a suitable control unit can be used to initiate function and duration tests at individually selected times. Status flags are set for report back and data logging of results.

Features:
For LED modules with a forward voltage of 30-300Vdc
For maintained or non-maintained emergency lighting systems
Automatic Self-Test technology conforming to EN 62034
DALI conforming to EN 62386-101, EN 62386-102, EN 62386-202
Conforms to EN 61347-1 and EN 61347-2-7
Wired between driver and LED module via internal terminals
Suitable for use in luminaires for high-risk task area lighting
Voltage change-over threshold according to EN 60598-2-22
3 hours rated duration
LiFePO4 battery pack
Over-charge, over-current, short-circuit and deep discharge protection for battery
Bi-coloured status LED
Weekly function test and yearly duration test
For building-in
Constant power output

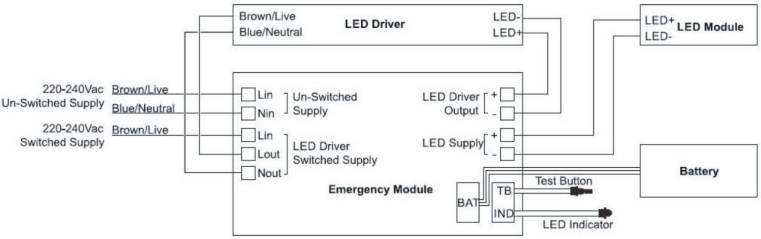
Mounting and operation:
The accumulator must be disconnected from the emergency module during the storage.
The replacement of the battery is necessary if the light fitting does not meet the nominal service life.
The function of the emergency module has to be checked every month – if the light fitting does not work check the light source and the accumulator.
To prevent the discharge of the accumulator connect the accumulator to the module only when the light fittings is connected to the mains.
Luminaire may not be switched from mains the first 168 hours after inicialization!!
Luminaires are not suitable for areas with frequent disconnection of the mains. In such areas battery life and safety can not be guaranteed.

Advice:
The manufacturer is not responsible for the defects caused by improper handling of the light fitting.
The light fitting must be connected to electric grid by a professional technician in accordance with valid standards and regulations.
Do not check the duration test sooner than 36 hours after connecting the light fitting to the electric grid.
The emergency module only works correctly when the accumulator is fully charged.
Maximum current in through-wiring is 10 A for cross-section 1,5 mm2 and 16 A for 2,5 mm2.

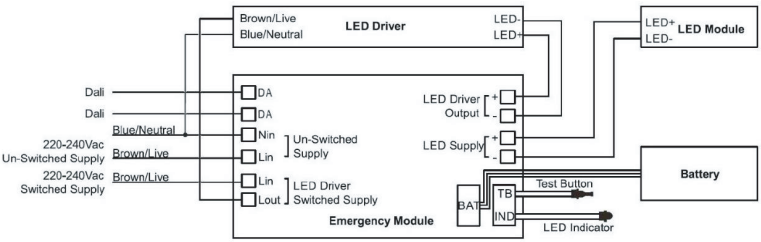
Specifications	ANI03-30/ST	ANI03-30/DA
Output Wattage	3W	3W
Input Voltage	220-240Vac 50/60Hz	220-240Vac 50/60Hz
Input Current (max)	19mA	19mA
Output Voltage	30-300Vdc	30-300Vdc
Output Current	8-80mA	8-80mA
Open Circuit Voltage	310Vdc	310Vdc
Maximum Working Voltage	310Vdc	310Vdc
Protection	IP20, For built-in installation	IP20, For built-in installation
Input to Output Protection	Double Insulation	Double Insulation
Emergency Operation Time	>3 h	>3 h
Emergency Onversion Time	<1s	<1s
Test Function	Automatic and Manual	DALI / Automatic and Manual
Length x Width x Depth	168 x 32x 23mm	168 x 32x 23mm
Input Connection	Push-fit terminals 0.5-1.5mm2	Push-fit terminals 0.5-1.5mm2
Output Connection	Push-fit terminals 0.5-1.5mm2	Push-fit terminals 0.5-1.5mm2
Maximum Case Temperature	75°C	75°C
Ambient Temperature Range	0 to 50°C	0 to 50°C

Battery Pack Options	ANI03-30/ST	ANI03-30/DA
Battery Code	2IFpR19/66 2.0Ah 6.4V	2IFpR19/66 2.0Ah 6.4V
Battery Type	LiFePO4 18650	LiFePO4 18650
Battery Capacity	2000mAh	2000mAh
Battery Voltage	6.4V	6.4V
Battery Charge Voltage	7.3V	7.3V
Battery Charge Current	250mA	250mA
Battery Discharge Voltage	5.0-7.2 Vdc	5.0-7.2 Vdc
Battery Discharge Current	450-480mA	450-480mA
Charging Time	>24h	>24h
Battery Life	2 Years	2 Years

Wiring diagram of the emergency module ANI03-30/ST:



Wiring diagram of the emergency module ANI03-30/DA:



Automatic Self-Test Emergency Module User Guide

Please read these instructions thoroughly before use and retain for future reference.

If you are in any doubt about using this product, please consult a qualified electrician.

Commissioning

- Commissioning takes place by connecting the battery and then the un-switched supply. The battery must be connected first.
- The green LED will immediately flash 1 x second to indicate that there is a pending duration test.
- A duration test will occur at a random point between 24 hours and 48 hours after commissioning to allow up to 24 hours for battery charging.
- Any faults found in the duration testing will be reported via the LED indicator, as detailed below.
- Disconnecting the un-switched supply and then the battery resets the emergency module's schedule, this means that a function test will be performed 7 days form the time of reset and a duration test will be performed in 52 weeks.

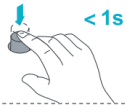
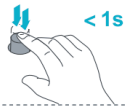
Note: Resetting the module will **not** clear **Battery Duration Fault and Lamp or Luminaire Fault**. The user should initiate Duration Test or Functional Test to clear these faults. Please refer to the following instructions for details.

Note: The indicator will only be illuminated when connected to a supply, and not when in emergency mode. In the case of both a fault and duration test pending, only the fault will be displayed.

LED Indicator function

LED indication		Description	Status
		Green Permanently On	System Healthy
		Permanently OFF	Emergency Mode: Mains failure or mains disconnected
		Green Slow Flash (0.5s on-0.5s off)	Duration Test Pending
		Green Medium Flash (0.25s on-0.25s off)	Duration Test Running
		Green Fast Flash (0.125s on-0.125s off)	Functional Test Running
		Red Permanently On	Battery Charging Fault
		Red Medium Flash (0.25s on-0.25s off)	Battery Duration Fault
		Red Fast Flash (0.125s on-0.125s off)	Lamp or Luminaire Fault
		OFF 1s then Red Stay On 5s	26 Weeks Duration Test Interval
		OFF 1s then Red Fast Flash 5s (0.125s on-0.125s off)	52 Weeks Duration Test Interval
		OFF 1s then Green/Red Fast Flash 5s (0.125s on-0.125s off)	Self-test mode
		Green Fast Flash Twice (0.1s on - 0.1s off) then off 1s	Inhibit Mode Activated

Functionality of the test button

		**Press 1-2s**	**Manual functional test**
		**Press 5-10s**	**Manual duration test**
		**Press <1s**	**Confirm the current duration test interval**
		**Double press <1s**	**Set the duration test interval**
		**Double press <1s during emergency mode**	**Rest mode activated**

Duration Testing (3 hours)

- An automatic duration test will occur at a random point between 24 hours and 48 hours after commissioning to allow for battery charging.
- An automatic duration test will occur annually at a random point in the 52nd week after commissioning.
- A duration test will occur after pressing the manual test button for 5-10 seconds. The battery will be allowed to fully charge for up to a maximum of 24 hours, then a duration test will occur at a random point in following 24 hours.
- A duration test may be delayed by other events, such as a power cut that interrupts the test or a lack of charging time, in which case the green LED will continue to flash 1 x second to indicate there is a pending duration test.
- Any faults found in the duration testing will be reported via the LED indicator, as detailed above.
- A functional test will not override Battery Duration Fault. A full duration test or re-commissioning is required to clear such fault.

Functional Testing (<2 minutes)

- A short automatic functional test will occur every 7 days.
- A manual functional test will start immediately after pressing the manual test button for 1-2 seconds.
- Any faults found in the functional testing will be reported via the LED indicator, as detailed above.
- A functional test will not override Battery Duration Fault. A full duration test or re-commissioning is required to clear such fault.

Manual Testing

- Manual functional test: Press the manual test button for 1-2 seconds. A manual functional test lasting <2 minutes will start immediately.
- Manual duration test: Press the manual test button for 5-10 seconds. A manual duration test will occur at a random point between 0 and 24 hours after pressing the manual test button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging less than 24 hours.

Pending Duration Testing

- A duration test may be delayed by other events, such as a power cut that interrupts the test or charging period, in which case the green LED will flash to indicate there is a pending duration test that the emergency module has rescheduled until charging is complete.

Lamp or Luminaire Fault

- Turn off the supply and replace or correct the fault with the lamp or luminaire, and then reconnect the supply.
- Press the manual test button for 1-2 seconds. A manual functional test lasting <2 minutes will start immediately to clear the fault.
- Alternatively press the manual test button for 5-10 seconds. A manual duration test will occur at a random point between 0 and 24 hours after pressing the manual test button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging less than 24 hours. The fault LED indication is overridden, during the pending and testing period.
- If the battery and power have been disconnected the module will re-commission and automatically test the replacement.
- A functional test will not override Battery Duration Fault. A full duration test or re-commissioning is required to clear such fault.

Battery Charging Fault & Battery Duration Fault

- Turn off the un-switched supply to the emergency module and replace the battery, and then reconnect the supply.
- If the fault was because the battery was not connected, the un-switched supply must still be turned off when connecting the battery to clear the battery charging fault.
- To clear a battery duration fault after replacing the battery a duration test will need to be successfully completed, see duration test procedure.

Table for customer's records of the course of tests and service life of emergency module of light fitting.

Type:		Date of installation:				Place of installation:			
month	test	1st YEAR		2nd YEAR		3rd YEAR		4th YEAR	
		date	signature	date	signature	date	signature	date	signature
1	FUNCTION								
2	FUNCTION								
3	FUNCTION								
4	FUNCTION								
5	FUNCTION								
6	FUNCTION								
7	FUNCTION								
8	FUNCTION								
9	FUNCTION								
10	FUNCTION								
11	FUNCTION								
12	FUNCTION								

month	test	5th YEAR		6th YEAR		7th YEAR		8th YEAR	
		date	signature	date	signature	date	signature	date	signature
1	FUNCTION								
2	FUNCTION								
3	FUNCTION								
4	FUNCTION								
5	FUNCTION								
6	FUNCTION								
7	FUNCTION								
8	FUNCTION								
9	FUNCTION								
10	FUNCTION								
11	FUNCTION								
12	FUNCTION								