

EMERGENCY LIGHT UNITS FOR EX - ENVIRONMENTS

Application :

Emergency Light units suitable for use in explosive gas atmospheres.

The units are supposed to be used together with the following external parts :

- EX-Charging Transformer
- Battery (7 D-cell NiCd)
- Electronic Ballast, PCX-serie.

Technical Specification :

NOTE :

The transformer is made as a step down transformer without isolation between primary and secondary side. This must be regarded while working with the emergency unit and battery, while these part are referred to line voltage.

Operating principles :

Normal Operation Mode (Mains supply is present):

The Emergency Unit is controlling the charging current to the battery. The unit charges continuously in 15 hours with a charging current of 0,08C (320mA). After this period the charger goes into pulse charging mode and supplies the battery with an average current of 0,02C (80mA). If the mains supply is absent more than 5 minutes, the charger will start a new continuous charging period of 15 hours.

If the battery is defective or not connected, the Emergency Unit will give short interruptions of the mains supply to the external electronic ballast (PCX). This result in a blinking of the light each 4th second, which is an indication of an error.

Emergency Mode (Mains supply is absent) :

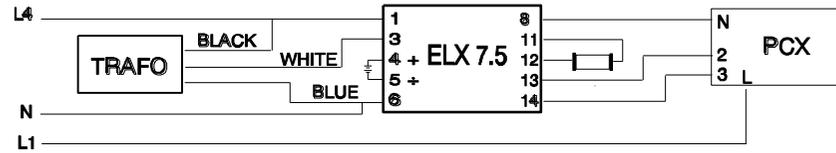


The ballast is disconnected and an internal electronic transformer gives power to the lamp in emergency mode.

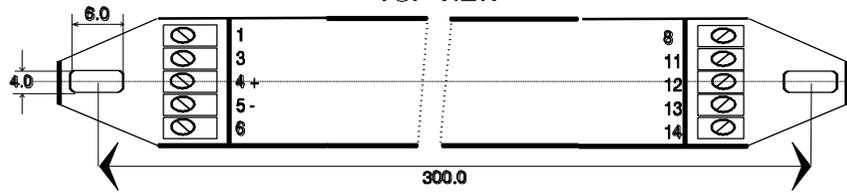
Order. No.	Model	Voltage +/-10%	Discharge period	Battery NiCd	* Light Output 18 / 36 W lamps	Dimensions LxWxH mm	Weight (Kg)	EX Approval NEMKO No.	Ex Protection Code	EX-Charging Transformers
80073	ELX7.5 001/2	220-230VAC 240-250VAC	1 hour	7 D-cells 4,3Ah	40 / 30 %	312x42x34	0,43	Ex 92C100U	Eex em II T5	DT1 220/230V DT2 240/250V
80173	ELX7.5 003/2	220-230VAC 240-250VAC	3 hours	7 D-cells 4,3Ah	25 / 17 %	312x42x34	0,43	Ex 92C100U	Eex em II T5	DT1 220/230V DT2 240/250V
80273	ELX7.5 001/1	110-115VAC 120-127VAC	1 hour	7 D-cells 4,3Ah	40 / 30 %	312x42x34	0,43	Ex 92C100U	Eex em II T5	DT01 110/115V DT02 120/127V
80373	ELX7.5 003/1	110-115VAC 120-127VAC	3 hours	7 D-cells 4,3Ah	25 / 17 %	312x42x34	0,43	Ex 92C100U	Eex em II T5	DT01 110/115V DT02 120/127V

* Light output at nominal battery voltage of 8,4 Volt - Maximum power consumption in continuous charging mode = 8W

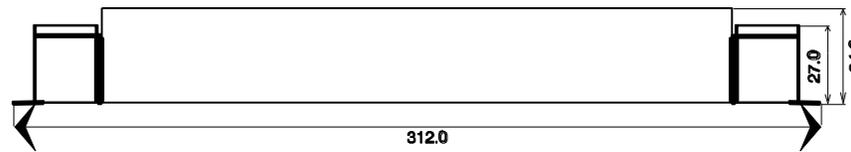
WIRING DIAGRAM



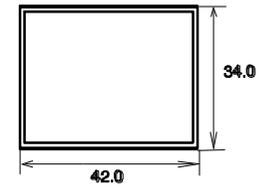
TOP VIEW



SIDE VIEW



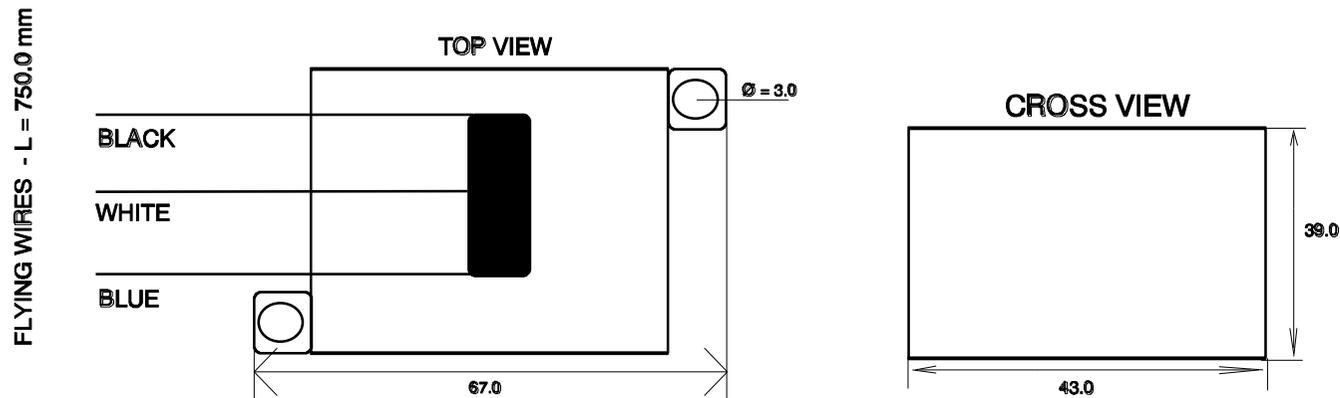
CROSS VIEW



EX-CHARGING TRANSFORMERS

Art. No.	Model	Mains Voltage +/-10%	Output Voltage	Max. Charging Current	Dimensions LxWxH mm	Weight Kg	Ex Protection Code	EX Approval NEMKO No.
9481000	DT1 220/230V	220-230VAC	14-15 VAC	320 mA. or 0,08C	67x43x39	0,25	Eexm II T4	Ex 96D351U
9482000	DT2 240/250V	240-250VAC	14-15 VAC	320 mA. or 0,08C	67x43x39	0,25	Eexm II T4	Ex 96D351U
9481010	DT01 110/115V	110-115VAC	14-15 VAC	320 mA. or 0,08C	67x43x39	0,25	Eexm II T4	Ex 96D351U
9482010	DT02 120/127V	120-127VAC	14-15 VAC	320 mA. or 0,08C	67x43x39	0,25	Eexm II T4	Ex 96D351U

The transformers are made as step down transformers without isolation between primary and secondary side.
This must be regarded while working with the emergency unit and battery.



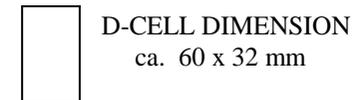
BATTERY PACKS

Art. No.	Model	Voltage	Cell capacity	Max. continous Charging Current	Mechanical outline
530003	BATT. NI-CD 8.4V AMP STAV	8,4V DC	4,3Ah	0,1C	STICK (The cells are placed in a row) w/plug
19596502	BATT. NI-CD 8.4V AMP SIDE	8,4V DC	4,3Ah	0,1C	BLOCK (The cells are placed side by side)
	ON REQUEST	8,4V DC	4,3Ah	0,1C	CUBE (The cells are placed in a cube)
	ON REQUEST	8,4V DC	4,3Ah	0,1C	RING (The cells are placed in a circle)

All battery configurations requires full mains voltage insulation.

The are no separate approvals for the batteries. The battery shall be approved as a part of the luminary. All batteries have earlier been through that process.

Special battery arrangements can be supplied on request.



BLOCK L=230MM



RING DIA = 124MM
1 CELL FILLED OUT

