

EXCALIBUR VL24E



INCREASED SAFETY TYPE Ex 'e' EMERGENCY FLUORESCENT LUMINAIRE

APPLICATIONS

- | Zone 1 hazardous gas areas
- | Zone 21 hazardous dust environments
- | Offshore platforms safe havens and muster points
- | Emergency exits and escape route illumination
- | Process areas
- | Walkways
- | Gas pumping stations

CERTIFICATION AND APPROVAL

ATEX Certificate BAS00ATEX2191

 II2GD EEx emd IIC T4 T100°C

Ambient temperature range:
-10°C to +55°C

Ingress protection to IP66 and IP67

FEATURES AND BENEFITS

- | ATEX Approved
- | Proven ingress protection
- | Mono pin or bi-pin options
- | Voltage versatility from HF electronic control gear
High voltage 220V to 254V AC only
Low voltage 110V to 130V AC only
- | Over-voltage protection to 380V for 60 seconds
- | Remote switching on mains operation
- | End of life (EOL) protection to IEC 60079-7*

*All Victor Lighting fluorescent luminaires and ballasts are now certified to the requirements of Annex H of the draft standard IEC 60079-7 edition 4.



CATEGORY 2 TYPE Ex 'e' INCREASED SAFETY

TECHNICAL SPECIFICATION

LAMP TYPES

Mono pin - T8. 18/20W (600mm luminaire) and 36/40W (1200mm luminaire) 'cold start' with Fa6 caps.

Bi-pin - T8. 18/20W (600mm luminaire) and 36/40W (1200mm luminaire) with G13 caps.

EMERGENCY DURATION

Typically 3 hours duration for 18/20W and 36/40W versions at 25°C ambient.

POWER SUPPLY

High voltage 220V-254V AC 47/63Hz.
Low voltage 110V-130V AC 47/63Hz.

POWER CONSUMPTION

2 x 18W lamps - 42W circuit watts at 240V 0.19A
2 x 36W lamps - 76W circuit watts at 240V 0.36A

POWER FACTOR

Better than 0.95.

TERMINALS

Suitable for conductors up to 6mm².
Terminals for live, neutral, earth, and looping are provided. Internal earth on gland entry plate. External earth is a brass M6 stud.

CABLE ENTRIES

Two x M20 threaded entries supplied with 1 x transit plug and 1 x Ex e blanking plug.

TEMPERATURE

Surface temperature classification - T4.
Ambient temperature range -10°C to +55°C.

MATERIALS

Control Gear Housing - Polycarbonate with silicone rubber gaskets.
Lamp Envelope - Polycarbonate end mouldings and clear extruded tube.
Reflector/Battery Tube - Marine grade stainless steel.
External Fasteners - Stainless steel.

WEIGHT

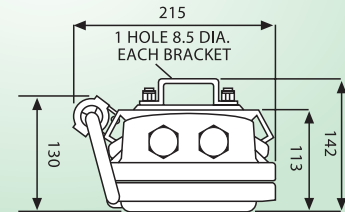
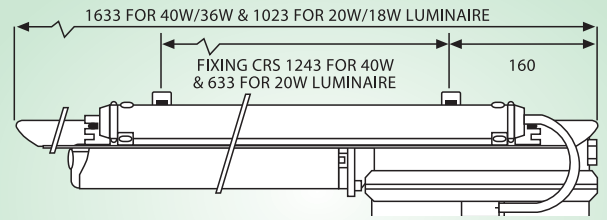
18/20W luminaire - 10.5kg.
36/40W luminaire - 12.0kg.

SUSPENSION

Standard via two saddle brackets. Optional ceiling, wall, pole mounting brackets, and eye bolts are also available on request. The luminaire may be mounted in any attitude.

DIMENSIONS

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Dimensions in millimetres

To calculate photometric values for lighting design, please use the free Victor "Lite Guide" software package. To request your copy, please contact your local Victor agent or use the request form on the website.

ORDERING REFERENCE

Std. Cat Ref.	Wattage	Lamp Type
EXCE/218/BI/EM	2x18W	Bi-Pin
EXCE/236/BI/EM	2x36W	Bi-Pin
EXCE/218/MO/EM	2x18W	Mono-Pin
EXCE/236/MO/EM	2x36W	Mono-Pin

OPTIONS - SUFFIX TO CATALOGUE REF.

/120	Specific voltage (110/130V)
/M25	M25 Entries
/T	Through wiring
/SC	Screwed connection terminal block
/BCM	Battery control management system
/RI	Remote inhibition (only available with /BCM)

ACCESSORIES

Description	Part No.
Ceiling mount bracket	SEXCE-00001
Pole mount bracket (35-40mm)	SEXCE-00002
Pole mount bracket (40-50mm)	SEXCE-00003
Pole mount bracket (50-60mm)	SEXCE-00007
Pole mount bracket (60-70mm)	SEXCE-00005
M8 eye bolt	SEXCE-00008
Wall bracket	SEXCE-00009
Wire guard s/s (600mm)	SEXCE-00011
Wire guard s/s (1200mm)	SEXCE-00010

EXCALIBUR VL24E

INTRODUCTION

The system has been designed in order that the status/health of the system can be quickly and easily assessed at any time.

The system, provides:

- | A visual indication of whether the system is healthy, testing or potentially faulty.
- | Automatic battery capacity check by instigating the internal test procedure (see below).
- | Full battery charge, following complete discharge, in 14 hours. Automatic fast charge maintains guarantee of 2 hours min emergency light output.
- | System self test on installation and every 3 months.
- | Warning if the emergency battery has insufficient capacity to maintain emergency operation after internal test has been carried out.
- | Extended battery life. Achieved via the automatic discharge cycle maintaining the battery memory.

BATTERY CAPACITY TEST PROCEDURE

- | Measurement of battery capacity by infrequent discharges yields inaccurate results.
- | To ensure long life, the system managed Excalibur VL42E battery is automatically discharged to a preset level on a regular basis and then recharged to full ('as new') capacity.
- | The capacity needed to meet emergency operation is set at the time of manufacture, and automatic comparison with this level indicates a healthy or failing battery.
- | In a 'Fully Charged' condition typical emergency duration is 4 hours for 18/20W & 3 hours for 36/40W versions at 25°C ambient.

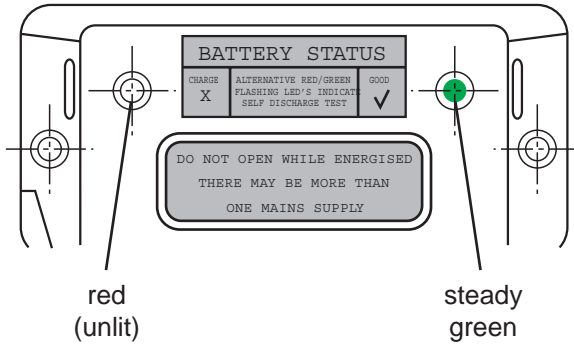
Note:

For battery control management add / BCM suffix as detailed on previous pages.

BATTERY CONTROL MANAGEMENT

HEALTHY SYSTEM

INDICATION
Steady green light



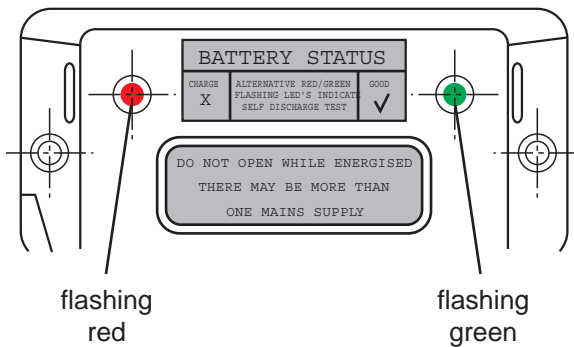
STATUS

System healthy, battery on trickle charge.

Self test successful.

SYSTEM TEST

INDICATION
Alternative red/green flashing LED's



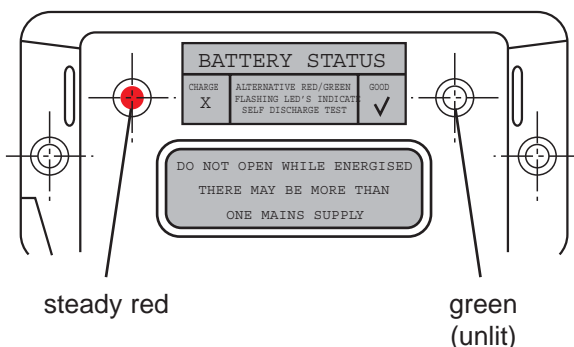
STATUS

System undergoing self test.

N.B. one lamp will be extinguished and the other will be at a reduced output level.

SYSTEM MAY BE FAULTY

INDICATION
Steady red light



POSSIBLE CAUSES

Battery fault.

Battery low capacity due to age or faulty cell.

Failed emergency lamp.

Failed ballast or inverter unit.

Mains has failed twice without enough time in between to charge the battery fully.