

Victor
Lighting

Hazardous Area Lighting Quick Reference Guide



Ex Designations Explained

ATEX
CODING



IP Code

The IP rating given states the degree of protection with two digits.

First Digit

Contact with foreign bodies

- 0 = No Protection
- 1 = Objects larger than 50mm
- 2 = Objects larger than 12.5mm
- 3 = Objects larger than 2.5mm
- 4 = Objects larger than 1mm
- 5 = Protected against dust (No harmful deposits)
- 6 = Totally protected against dust

Second Digit

Protection from water

- 0 = No Protection
- 1 = Vertically falling drops
- 2 = Sprays up to 15° from vertical
- 3 = Sprays up to 60° from vertical
- 4 = Sprays from all directions
- 5 = Low pressure jets
- 6 = High pressure jets
- 7 = Temporary immersion
- 8 = Continuous immersion

Device Group

- I = Mining
- II = All other areas

Category

- 1 = Can be used in Zones 0 or 20
- 2 = Can be used in Zones 1 or 21
- 3 = Can be used in Zones 2 or 22

Atmosphere

- G = Gas
- D = Dust

Ex = Compliance with Ex Standards

Types of Ignition Protection

- o = Oil Immersion
- p = Pressurisation
- q = Powder Filling
- d = Pressure-proof housing
- e = Increased safety
- ia = Intrinsic safety (required for Zone 0)
- ib = Intrinsic safety (required for Zone 1 & 2)
- m = Encapsulation
- s = Special protection
- n = Normal operation under normal conditions (for Zone 2 only)
- nA = Non-sparking
- nC = Protected contacts
- nR = Restricted breathing

Temperature Classes

Maximum surface temperature

- T1 = 450°C
- T2 = 300°C
- T3 = 200°C
- T4 = 135°C
- T5 = 100°C
- T6 = 85°C

Explosion Group

Data only for devices used in areas rendered potentially explosive by gas

- IIA = Methane, propane, petrol & other industrial gases
- IIB = Ethylene, coke oven gas & other industrial gases
- IIC = Hydrogen, acetylene & carbon disulphide

For a detailed explanation of Hazardous Area classification refer to www.victor-lighting.com

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Introduction

Founded in 1929, Victor has over 75 years of experience in manufacturing hazardous area equipment to the highest standards of quality and reliability.

The company is now a division of Hubbell Limited and based in Glasgow, Scotland.

Victor has developed a range of unique technologies that are used to create innovative lighting solutions. These are installed and relied upon in the most arduous environments throughout the world. Our extensive product range will fulfil all lighting requirements in hazardous or industrial environments and in both onshore and offshore installations.

The Victor Lighting hazardous area range is certified to comply with the latest ATEX directives. In addition a number of products are also certified under the IEC Ex scheme and to Russian and Chinese standards.

This short form catalogue features a brief introduction to our world class range of light fittings that are designed in accordance with IEC electrical standards. Victor Lighting is a quality company, in addition to ISO 9001:2000 certification, the company has also implemented the requirements of the WEEE & RoHS directives.

LiteGuide™ Lighting Design Software

Victor Lighting has created a design program to assist in the development of your installation's lighting design. This easy to use package allows new designs to be developed rapidly, removing the need to use time consuming and complicated photometric tables. This software is available free of charge, no licence is required to run LiteGuide™.

LightGuide allows you to:

- Design lighting layouts from the very basic to the extremely complex
- Account for shadowing and effects of reflection
- Incorporate interior and exterior components in a single scheme
- Use shortcut icons to:
 - Turn individual fittings on/off or assess in emergency mode
 - Move, change or delete luminaires easily
 - Re-size icons to suit the scale of your project
- Use scrolling wheel mouse to zoom in/out
- Import and export to CAD packages (DXF format)
- Print to a pdf or hardcopy (A0 to A4 sizes)

LiteGuide also includes quality estimators for interior, exterior and isle lighting schemes to allow for quick and easy budgeting.

To obtain a copy of LiteGuide, visit the Victor Lighting website www.victor-lighting.com, here you can register and download the latest version of the software.

ZONE 1 - CATEGORY 2

VL125 Trident Fluorescent Luminaire

Part No	Description
TRIE/218/BI	2 x 18W Bi-pin Fluorescent
TRIE/236/BI	2 x 36W Bi-pin Fluorescent
TRIE/258/BI	2 x 58W Bi-pin Fluorescent



- Certified 2 GD Ex em II T4 • IP66/67 • Easy installation • Ambient -45°C to +50°C
- Cassette re-lamping technology • High frequency control gear • Voltage: 220/254V 50/60Hz (110/130V option)
- Low profile • Mounting orientation variations • End of life (EOL) technology • Low voltage option available

VL126 Trident Emergency Fluorescent Luminaire

Part No	Description
TRIE/218/BI/EM	2 x 18W Bi-pin Fluorescent
TRIE/236/BI/EM	2 x 36W Bi-pin Fluorescent
TRIE/258/BI/EM	2 x 58W Bi-pin Fluorescent



- Certified 2 GD Ex em II T4 • IP66/67 • Easy installation, Light weight yet robust • Ambient -45°C to +50°C
- Cassette re-lamping technology • Voltage: 220/254V 50/60Hz (110/130V option) • End of life (EOL) technology
- Low voltage option available • Dedicated 11W lamp for 3 hour emergency operation • Self test features available

VL19E Excalibur Fluorescent Luminaire

Part No	Description
EXCE/218/BI	2 x 18W Bi-pin Fluorescent
EXCE/236/BI	2 x 36W Bi-pin Fluorescent
EXCE/218/MO	2 x 18W Mono-pin Fluorescent
EXCE/236/MO	2 x 36W Mono-pin Fluorescent



- Certified 2 GD Ex em II T4 • IP66/67 • Polycarbonate housing & stainless steel reflector
- Ambient -35°C to +55°C • 2 x M20 cable entries • Voltage: 220/270V AC/DC 50/60Hz (110/130V option)
- Self test features available • Electronic ballast • Terminals up to 6mm² • Mono-pin & Bi-pin options
- Dedicated 11W lamp for 3 hour emergency operation • End of life (EOL) technology

VL24E Excalibur Fluorescent Luminaire

Part No	Description
EXCE/218/BI/EM	2 x 18W Bi-pin Fluorescent
EXCE/236/BI/EM	2 x 36W Bi-pin Fluorescent
EXCE/218/MO/EM	2 x 18W Mono-pin Fluorescent
EXCE/236/MO/EM	2 x 36W Mono-pin Fluorescent



- Certified 2 GD Ex emd IIC T4 • IP66/67 • Polycarbonate housing & stainless steel reflector
- Ambient -10°C to +55°C • 2 x M20 cable entries • Voltage: 220/254V AC/DC 50/60Hz (110/130V option)
- Electronic ballast • Terminals up to 6mm² • End of life (EOL) Technology
- 3 hour emergency duration - 1 lamp in operation

FLUORESCENT LUMINAIRES



VL51A Viscount Fluorescent Luminaire

Part No	Description
VISD/118/BI	1 x 18W Bi-pin Fluorescent
VISD/218/BI	2 x 18W Bi-pin Fluorescent
VISD/136/BI	1 x 36W Bi-pin Fluorescent
VISD/236/BI	2 x 36W Bi-pin Fluorescent
VISD/158/BI	1 x 58W Bi-pin Fluorescent
VISD/258/BI	2 x 58W Bi-pin Fluorescent

- Certified 2 GD Ex d IIC T6 (18W only) • Certified 2 GD Ex d IIB T6 (36W & 58W) • IP66/67
- LM6 aluminium alloy (die cast), Borosilicate glass tube • Ambient -10°C to +55°C
- 2 x M20 cable entries • Voltage: 220/254V AC/DC 50/60Hz (110/130V option)
- Electronic ballast • Terminals up to 6mm²



VL52A Viscount Emergency Fluorescent Luminaire

Part No	Description
VISD/218/BI/EM	2 x 18W Bi-pin Fluorescent
VISD/236/BI/EM	2 x 36W Bi-pin Fluorescent
VISD/258/BI/EM	2 x 58W Bi-pin Fluorescent

- Certified 2 GD Ex d IIC T6 (18W only) • Certified 2 GD Ex d IIB T6 (36W & 58W) • IP66/67
- LM6 aluminium alloy (die cast), Borosilicate glass tube • Ambient -15°C to +45°C
- Voltage: 220/254V AC 50/60Hz (110/130V option) • Electronic ballast • Terminals up to 6mm²
- 2 x M20 cable entries
- 3 hour emergency duration - 1 lamp in operation



VL77C/VL78C Recessible Fluorescent Luminaire

Part No	Description
V77E/218/BI	2 x 18W Bi-pin Fluorescent
V77E/236/BI	2 x 36W Bi-pin Fluorescent
V78E/218/BI/EM	2 x 18W Bi-pin Fluorescent
V78E/236/BI/EM	2 x 36W Bi-pin Fluorescent

- Certified 2 GD eqm II T4 • Ambient -40°C to +45°C (insulated) / -40°C to +55°C (non-insulated) • IP65
- Designed for solid or M300 plank ceiling types • Voltage: 220/254V AC/DC 50/60Hz (110/130V option)
- Terminals up to 6mm² • 4 x M20 cable entries, two at each end • SOLAS B15 fire rating
- End of life (EOL) technology • Emergency version - 90 minutes as standard, 3 hour option available

ZONE 1 - CATEGORY 2

VL104E Recessible Fluorescent Luminaire

Part No	Description
104E/418/BI	4 x 18W Bi-pin Fluorescent
104E/436/BI	4 x 36W Bi-pin Fluorescent
104E/418/BI/EM	4 x 18W Bi-pin Fluorescent
104E/436/BI/EM	4 x 36W Bi-pin Fluorescent



- Certified 2 GD Ex eqm II T4 ● IP65 ● Ambient -20°C to +40°C ● Designed for modular ceiling types
- 3 x M20 cable entries ● Voltage: 220/254V AC/DC 50/60Hz (110/130V option) ● Terminals up to 6mm²
 - End of life (EOL) technology ● SOLAS B15 fire rating
- Emergency version - 90 minutes as standard, 3 hour option available

NOTE: Two lamp versions are available but will be supplied in a four lamp (600mm) body

VL114S Pathfinder Fluorescent Luminaire

Part No	Description
PATE/111/CF	1 x 11W Compact Fluorescent
PATE/218/CF	2 x 18W Compact Fluorescent



- Certified 2 GD Ex em II T4 ● IP66/67 ● Lightweight yet robust construction ● Easy Installation
- Mounting orientation variations available ● Voltage: 220/254V AC/DC 50/60Hz
 - Low profile ● Ideal for exit signs

VL114E Pathfinder Emergency Fluorescent Luminaire

Part No	Description
PATE/111/CF/EM	1 x 11W Compact Fluorescent



- Certified 2 GD Ex em II T4 ● IP66/67 ● Lightweight yet robust construction ● Easy Installation
- Emergency lamp has integral battery back up as standard ● Mounting orientation variations available
 - Voltage: 220/254V AC/DC 50/60Hz (110/130V option) ● Low profile ● Ideal for exit signs
- Emergency version 3 hour duration in emergency mode ● Emergency version voltage: 220/254V AC

HAZARDOUS AREA LUMINAIRES



VL64 Equal Plus Fluorescent Luminaire

Part No	Description
64ED/150/MS	150W HPS/Metal Halide
64ED/250/MS	250W HPS/Metal Halide
64ED/400/MS	400W HPS/Metal Halide
64ED/500/TH	500W Tungsten Halogen

- Certified 2 GD Ex de IIB T4
- IP66/67
- Ambient -20°C to +55°C
- Voltage: 220/254V 50Hz (60Hz option)
- LM6 aluminium alloy, toughened glass plate
- 2 x M20 cable entries (M25 option)
- Integral control gear
- Excellent photometrics
- Hinged cover for easy access and maintenance



VL65A Floodlight Luminaire

Part No	Description
V65D/050/HS	50W HPS
V65D/050/MV	50W Mercury Vapour
V65D/070/MS	70W HPS/Metal Halide
V65D/080/MV	80W Mercury Vapour
V65D/125/MV	125W Mercury Vapour
V65D/250/TH	250W Tungsten Halogen

- Certified de IIB T3
- IP66/67
- LM6 aluminium alloy, toughened glass plate
- Ambient -50°C to +55°C
- Voltage: 240V 50Hz (60Hz option)



VL34 Vanguard Helideck Bulkhead Luminaire

Part No	Description
VANE/801/LE/HE	8 x 1W Green LED
VANE/801/LE/EM/HE	8 x 1W Green LED

- Energy efficient LED light source
- Certified 2 GD Ex emb II T4
- Ambient -20°C to +55°C / Low temperature version -45°C to +55°C
 - Emergency version with battery backup available
- Meets CAA (CAP 437) & ICAO guidelines on helicopter landing area lighting

ZONE 1 - CATEGORY 2

VL38 Titan Wellglass Luminaire

Part No	Description
T18D/070/MS	70W HPS/Metal Halide
T18D/080/MV	80W Mercury Vapour
T18D/125/MV	125W Mercury Vapour
T18D/200/GL	200W GLS
T18D/126/CF	1x 26W Compact Fluorescent



- Certified 2 GD Ex de IIC T4 ● Flameproof type ● Ambient -50°C to +68°C ● IP66/67 ● 120V option
 - Maintenance free option available with Philips QL lamps (60,000 hours operation)
- Lightweight construction ● Terminal chamber has dual certification for Ex 'd' or Ex 'e' applications
 - External spun reflector available for high bay lighting - ST18D-00003
 - Additional wattages and lamp options available

VL39 Titan Wellglass Luminaire

Part No	Description
T19D/150/MS	150W HPS/Metal Halide
T19D/250/MS	250W HPS/Metal Halide
T19D/400/MS	400W HPS/Metal Halide
T19D/250/MV	250W Mercury Vapour
T19D/400/MV	250W Mercury Vapour
T19D/500/GL	500W GLS



- Certified 2 GD Ex de IIC T4 ● Flameproof type ● Ambient -50°C to +68°C ● IP66/67
 - Maintenance free option available with Philips QL lamps (60,000 hours operation) ● Lightweight construction
 - Lightweight construction ● QL option gives instant re-start and good colour rendering
 - Terminal chamber has dual certification for Ex 'd' or Ex 'e' applications
- External spun reflector available for high bay lighting - ST19D-00003 ● Additional wattages and lamp options available

VL147 Titan Wellglass Luminaire

Part No	Description
T17D/070/HS	70W HPS
T17D/080/MV	80W Mercury Vapour
T17D/150/HS	150W HPS
T17D/200/GL	200W GLS



- Certified 2 GD Ex de IIC T4 ● Flameproof type ● Ambient -50°C to +70°C ● IP66/67
 - Maintenance free option available with Philips QL lamps (60,000 hours operation)
 - Additional wattages and lamp options available

ZONE 2 - CATEGORY 3



VL53 Marquis II Fluorescent Luminaire

Part No	Description
MA2N/218/BI	2 x 18W Bi-pin Fluorescent
MA2N/136/BI	1 x 36W Bi-pin Fluorescent
MA2N/236/BI	2 x 36W Bi-pin Fluorescent
MA2N/158/BI	1 x 58W Bi-pin Fluorescent
MA2N/258/BI	2 x 58W Bi-pin Fluorescent

- Certified 3 GD Ex nA II T4 • IP65 • Ambient -20°C to +40°C • Voltage: 220/254V AC/DC 50/60Hz
- Terminal up to 4mm² • High frequency electronic ballast with End of life (EOL) technology
- Through wired as standard • Slimline lightweight construction • Easy to install and maintain
- Glass Reinforced Polyester (GRP) body and robust polycarbonate diffuser



VL54 Marquis II Emergency Fluorescent Luminaire

Part No	Description
MA2N/218/BI/EM	2 x 18W Bi-pin Fluorescent
MA2N/136/BI/EM	1 x 36W Bi-pin Fluorescent
MA2N/236/BI/EM	2 x 36W Bi-pin Fluorescent
MA2N/158/BI/EM	1 x 58W Bi-pin Fluorescent
MA2N/258/BI/EM	2 x 58W Bi-pin Fluorescent

- Certified 3 GD Ex nA II T4 • IP65 • Ambient -20°C to +40°C • Voltage: 220/254V AC/DC 50/60Hz
- Terminal up to 4mm² • High frequency electronic ballast with End of life (EOL) technology
- 3 hour battery duration • Through wired as standard • Slimline lightweight construction
- Easy to install and maintain • Glass Reinforced Polyester (GRP) body and robust polycarbonate diffuser

ZONE 2 - CATEGORY 3

VL71 Regent Floodlight Luminaire

Part No	Description
REGN/150/MS	150W HPS/Metal Halide
REGN/250/MS	250W HPS/Metal Halide
REGN/400/MS	400W HPS/Metal Halide
REGN/500/TH	500W Tungsten Halogen



- Certified 3 GD Ex nR II
- IP66/67
- Ambient -50°C to +60°C (dependant on lamp type)
- Marine grade stainless steel body
- Lightweight construction
- Anti-glare shield option
- Quick release fasteners for easy release and maintenance
- Wire guard available
- Various bracket assemblies

VL100 Floodlight Luminaire

Part No	Description
V10N/150/MS	150W HPS/Metal Halide
V10N/250/MS	250W HPS/Metal Halide
V10N/250/MV	250W Mercury Vapour
V10N/400/MS	400W HPS/Metal Halide
V10N/400/MV	400W Mercury Vapour
V10N/500/TH	500W Tungsten Halogen



- Certified 3 GD Ex nR II T3
- IP66/67
- LM6 aluminium alloy body, toughened glass reflector
- Terminals up to 6mm²
- Ambient -50°C to +50 °C (Wide beam) / -50°C to +40°C (Narrow beam)

HAZARDOUS AREA LUMINAIRES



VL14 Monarch Pendant Luminaire

Part No	Description
MONN/070/HS	70W HPS
MONN/080/MV	80W Mercury Vapour
MONN/125/MV	125W Mercury Vapour
MONN/160/MB	160W MBTF
MONN/200/GL	200W GLS

- Certified 3 GD Ex nR II T5 (70W HPS & 80W MV lamp types) • IP67
- Certified 3 GD Ex nR II T4 (125W MV & 160W MBTF lamp types)
- Low loss ballast with power factor correction for HID and compact fluorescent lamps
- Ambient -20°C to +50°C (dependant on lamp type) • Easy to install and maintain
- Suitable for pendant or 45° inclination • Glass retaining mechanism



VL15 Monarch II Pendant Luminaire

Part No	Description
MO2N/050/HS	50W HPS
MO2N/070/MS	70W HPS/Metal Halide
MO2N/100/MS	100W HPS/Metal Halide
MO2N/150/MS	150W HPS/Metal Halide
MO2N/250/MS	250W HPS/Metal Halide
MO2N/400/MS	400W HPS/Metal Halide
MO2N/080/MV	80W Mercury Vapour
MO2N/125/MV	125W Mercury Vapour
MO2N/250/MV	250W Mercury Vapour
MO2N/400/MV	400W Mercury Vapour

- Certified 3 G Ex nA nR II • IP65 • Ambient -45°C to +55°C • Corrosion resistant
- Voltage: 220/240V 50Hz (50, 80, 100 & 125W) / 220/254V 50Hz (70, 150, 250 & 400W)
 - Excellent light distribution
 - Easy access for wiring and control gear
- Enclosed reflector for highbay applications • Wall, stanchion & pendant mounting options available



VL20 Vanguard Bulkhead Luminaire

Part No	Description
VANN/070/HS	70W HPS
VANN/080/MV	80W Mercury Vapour
VANN/150/GL	150W GLS

- Certified 3 G Ex nR II T4 • IP66/67 • Ambient -50°C to +40°C
- Lamp options: 70W SON, 80W Mercury Vapour & 150W GLS • Easily installed and maintained

Victor

L i g h t i n g

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