Harsh and hazardous area Lighting solutions

11

# CROUSE-HINDS SERIES

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86

# **VLL Series** LED Linear fixtures

Safe. Reliable. Efficient.





# Introducing VLL linear LED fixture

# Linear LED fixtures for use in Zone 1 and 21 hazardous areas.

Manufactured with a high-strength, glass-reinforced polyester enclosure and a polycarbonate cover, the VLL LED is engineered for long-life reliability and performance in areas prone to impact, corrosion, high vibration and adverse weather.

VLL LED luminaires provide an ideal solution for both indoor and outdoor areas, allowing for seamless retrofitting of existing fluorescent fixtures



# **Benefits:**

# 🧼 EFFICIENCY

- Lumen efficacy up to 130~lm/w reduces energy consumption and delivers cost savings.
- Three lumen packages, from 3100lm to 7400lm, provide a versatile solution for different illumination applications.

#### Ð SAFETY AND RELIABILITY

• Rugged design suitable for extremely harsh environments, with an IP66 rating that ensures protection even under vibrations.

# **K** EASY INSTALLATION AND MAINTENANCE

- Retrofit- friendly with optional sliding rail mounting system, allowing brackets to be easily adjusted to existing mounting holes.
- The inclusion on an optional inhibit switch makes it suitable for offshore unmanned platforms.

# LED vs. fluorescent savings at a glance

Why are so many facilities making the switch from fluorescent to LED? The numbers say it all.



ENERGY COSTS



VLL-5L vs. x 36W Fluorescent

LOWER TOTAL COST OF OWNERSHIP



# VLL linear LED fixture

# **Features & specifications**

CEAG VLL LED Luminaires with high-quality LED chips, have extremely long lifespan. Multiple versions of the LED are available, providing ideal solutions for indoor or outdoor areas to retrofit existing fluorescent fixtures.

Model*	Nominal* lumens	Wattage	Efficacy	Equivalent fluorescent
VLL-3L	3100	<25W	>130~Lm/W	2x18W
VLL-5L	6400	<50W	>130~Lm/W	2X36W
VLL-7L	7400	<60W	>130~Lm/W	2X54W

\*Lumen values apply to 5700K light colour, 70 CRI fixtures. Lumen output may vary slightly for different models.

- \*Tolerance+/-10%
- \*Optional emergency versions available (25% of standard lumen out put for 1.5-hours or 3-hours)

# Application

- Suitable for locations that require continuous and consistent light levels in extreme ambient temperatures
- Areas requiring frequent switching on and off of lights
- · Where flammable vapours, gases, ignitable dusts, fibres or flyings are present; indoors or outdoors
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Marine, wet locations and hose-down environments
- Manufacturing plants; heavy industrial, chemical, petrochemical or pharmaceutical facilities; platforms; loading docks; tunnels

## **Technical data**

IECEs: contification of conformity	
IECEx-certification of conformity	IECEx NEP 21.0020X,
Ex Marking	Ex db eb mb IIC T5 G
	Ex tb IIIC T80°C Db
EC-Type Examination Certificate	SEV 22 ATEX 0584X
Marking accd. to 2014/34/EU	EX II 2 G Ex eb mb II0
	EX II 2 D Ex tb IIIC T8
Ambient temp	Normal:-40°C to 55°C
Rated input volt	100-240VAC 50/60Hz
Power factor	>0.9
Colour Temperature	5700K as standard, 3
CRI	Cool white>70 as sta
System watt*	VLL 3L series: <30W
	VLL 5L series: <55W
	VLL 7L series: <65W
Lumen output	VLL 3L series: 3100L
	VLL 5L series: 6400L
	VLL 7L series: 7400L
Material	GRP and PC
Weight	VLL 3L series Norma
	VLL 5L /7L series Nor
Terminals	Max 6mm <sup>2</sup>
Entry Size	M20 as standard, M2
Out line dimension (HxWxL)	VLL 3L series: 732x1
	VLL 5L /7L series:133
Backup duration & Lumen percentage	Standard version EM
	EM2=3h, 25% outpu
IP(IEC60598)	IP66

\*Isolation switch is available as optional \*Tolerance+/-5%



### **Standard materials**

- Enclosure-Glass Fibre Reinforced Plastic (GRP)
- Diffuser-Polycarbonate (PC)
- Gaskets-Silicone
- Fasteners-All external fasteners stainless steel

### LED system:

- Cold white 5700K
- Optional 3000K, 4000K, 5000K
- Fog diffuser comes with standard protection against harmful glare.
- Rated life of 5 years up to 50/55°C provides long term, low maintenance operation.

### **Certifications and compliances**

- Marking accd.to IECEx Ex db eb mb IIC T5 Gb or Ex eb mb IIC T5 Gb / Ex db eb ib mb IIC T5 Gb (EM)\* Ex tb IIIC T80°C Db
- Marking accd.to ATEX II2 G Ex eb mb IIC T5 Gb II2 G Ex db eb mb IIC T5 Gb II2 G Ex db eb ib mb IIC T5 Gb(EM) II2 D Ex tb IIIC T80°C Db

### , SEV 22 ATEX 0584X, IECEx SEV 22.0001X

IC T6... T5 Gb

80°C Db

for 3L, 5L,-40°C to 50°C for 7L z, DC 105-250V

BOOOK,4000K,5000K is available. andard, CRI>80 is optional m m

al and EM: 4.3Kg / 5.8Kg ormal and EM: 7.5Kg / 9.8Kg

125 is available.

178x125

33x178x125

11=1.5h,25% output.

ut is available.

# **VLL linear LED fixture**

# **Ordering Information**

Product Type	Colour Temp <sup>1)</sup>	Terminals	Throughv Single-ended	viring <sup>2)</sup> Twin-ended	Entry Threaded	Ex e Threaded Plug <sup>3)</sup>	Part No.4)
VLL 3L	Tomp	Torminuto	enigie enided		Infoddod	Tidg	runno.
VLL-3L-57-1/6-120-N		1x6	•	-	2xM20	1	CCL2004126A
VLL-3L-57-2/6-220-N		2x6	-	•	4xM20	2	CCL2004130A
VLL-3L-57-1/6-125-N	5700K	1x6	•	-	2xM25	1	CCL2004128A
VLL-3L-57-2/6-225-N		2x6	-	•	4xM25	2	CCL2004132A
VLL 5L							
VLL-5L-57-1/6-120-N		1x6	•	-	2xM20	1	CCL2004174A
VLL-5L-57-2/6-220-N		2x6	-	•	4xM20	2	CCL2004178A
VLL-5L-57-1/6-125-N	5700K	1x6	•	-	2xM25	1	CCL2004176A
VLL-5L-57-2/6-225-N		2x6	-	•	4xM25	2	CCL2004180A
VLL 7L							
VLL-7L-57-1/6-120-N		1x6	•	-	2xM20	1	CCL2004222A
VLL-7L-57-2/6-220-N		2x6	-	•	4xM20	2	CCL2004226A
VLL-7L-57-1/6-125-N	5700K	1x6	•	-	2xM25	1	CCL2004224A
VLL-7L-57-2/6-225-N		2x6	-	•	4xM25	2	CCL2004228A

<sup>1)</sup> Tolerance +/- 10%

 $^{2)}$  Through wiring 6 x 2.5 mm $^{2}$ 

<sup>3)</sup> Standard version without cable gland. if need, please order separately

<sup>4)</sup> Contact your local sales representative for special requirements.

# Metallic Cable Glands (Order Separately)

# ADE-1F2

Catalog #	Metric Thread Size	Cable Types	Cable sealing range - Min	Cable seaing range - Max
ADE1M201NPN	M20	Non-armoured, Marine shipboard, Type P, Tray cable	4.5	8.5
ADE1M202NPN	M20		7.0	12.0
ADE1M203NPN	M20	(armoured)	10.0	16.0

		2
_	21	R
	ST	3
_		P

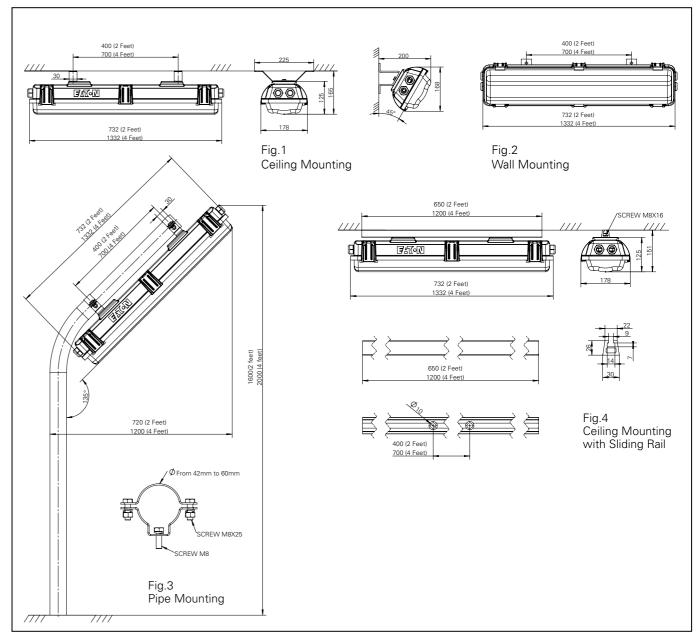
Cable sealing range outer sheath Cable sealing range Armo inner sheath

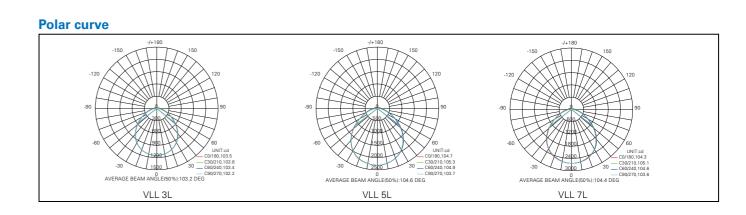
Catalog #	Metric Thread Size	Cable Types	Min.	Max.	Min.	Max.	Min.	Max.
ADE4M201NPN	M20	SWA, SWB, STA,	4.5	8.0	7.0	12.0	0.2	0.9
ADE4M202NPN	M20	<ul> <li>Braided marine shipboard, Type P; Leadsheathed</li> </ul>	7.0	12.0	10.0	16.0	0.2	1.3
ADE4M203NPN	M20	cable (with addition of earthing washer)	10.0	15.5	13.5	21.0	0.2	1.3

ADE-1F2 and ADE-4F catalog numbers are for nickel-plated brass; For other material options, please contact our sales representative.

# **VLL linear LED fixture**

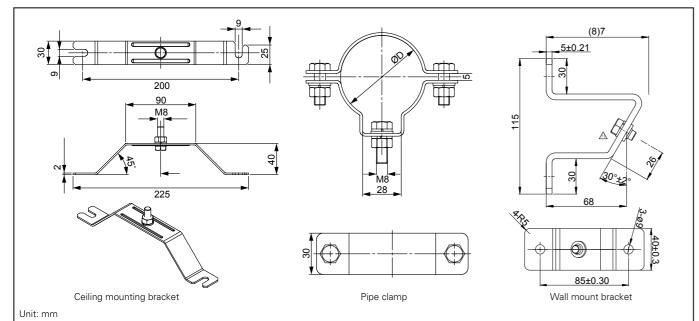
**Dimensions (mm)** 





# VLL linear LED fixture

## Mounting accessories (to be ordered separately)



### **Pipe mounting**

Part No	Description	Quantity per luminaire
CHR5218	Pipe clamp assy D42 316S/S	2
CHR5221	Pipe clamp assy D51 316S/S	2

## Wall mounting

Part No	Description	Quantity per luminaire
CHR5248	Wall suspension 316S/S	2

### **Ceiling mounting**

Part No	Description	Quantity per luminaire
CHR5245	Ceiling mounting BKT 316S/S	2
CHLMT2372-01	Mounting sliding rail for 2 feet	1
CHLMT2372-02	Mounting sliding rail for 4 feet	1



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