

Explosion protected linear light luminaire
Zone 1, 2, 21 and 22

CROUSE-HINDS
SERIES

VLL Series

LED linear fixtures for hazardous areas



Safe. Reliable. Efficient.

EATON

Powering Business Worldwide

VLL LED Zone 1 GRP linear luminaires

Features & specifications

The Zone 1 VLL product Series 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 luminaires.

Model	Nominal* lumens	Wattage	Efficacy	Equivalent fluorescent
VLL-3L	3100	<25 W	>130~Lm/W	2x18 W
VLL-5L	6400	<50 W	>130~Lm/W	2X36 W
VLL-7L	7400	<58 W	>130~Lm/W	2X54 W

*Lumen values apply to 5700K light color, 70 CRI luminaires. Lumen output may vary slightly for different models.

*Tolerance+/-10%

Application

- Locations where require continuous and consistent light levels in extreme ambient temperatures
- Areas requiring frequent on-and-off of lights
- Where flammable vapors, gases, ignitable dusts, fibers 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



Benefits:

EFFICIENCY

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

SAFETY AND RELIABILITY

- Rugged design for extremely harsh environments, IP66 even under vibration.
- Optional self-contained battery for emergency lighting applications delivers 25% of standard lumen output for 1.5-hours or 3-hours.

EASY INSTALLATION AND MAINTENANCE

- Retrofit- friendly with optional sliding rail mounting system, allowing brackets to be easily adjusted to existing mounting holes.
- Self-monitoring status battery indicator makes easy for maintenance check.
- Inhibit switch comes as standard for our emergency fitting which is suitable for offshore unmanned platform application.

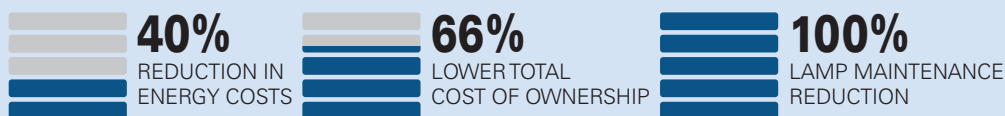
LATEST POLE MOUNTING

- Strengthened reliability with build-in cable gland and no-exposed cables
- No sideways rotation with strong resistance to heavy winds
- Externally accessible Ex e chamber for easy termination

LED vs. fluorescent savings at a glance

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

VLL-5L vs. 2 x 36 W Fluorescent



VLL LED Zone 1 GRP linear luminaires

Standard materials

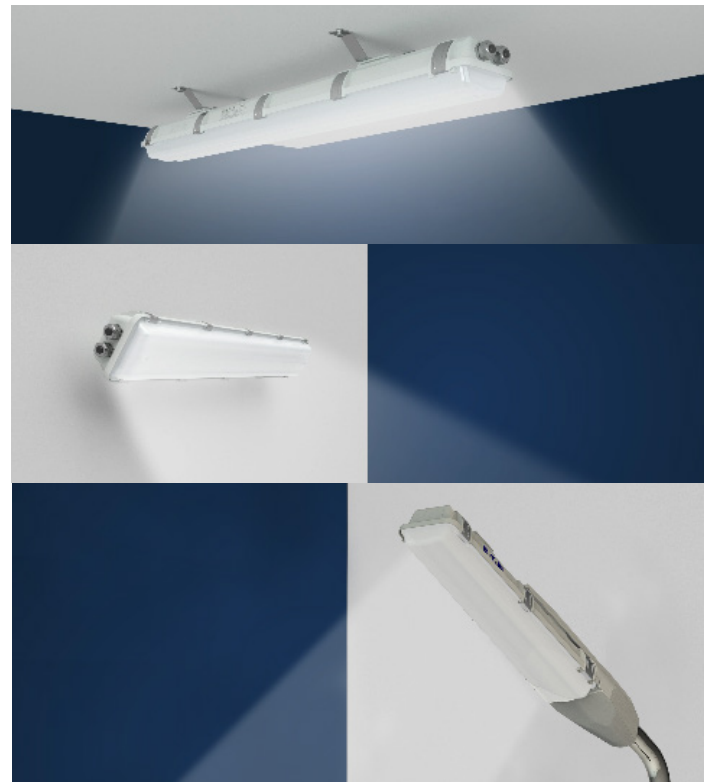
- Enclosure-Glass Fiber Reinforced Plastic (GRP)
- Diffuser-Polycarbonate (PC)
- Gaskets-Silicone
- Fasteners-All external fasteners stainless steel
- Safety switch as standard

LED system:

- Cold white 5700K
- Optional: 4000K, 5000K
- All series feature field replaceable LED modules
- Fog diffuser with glare protection as standard
- Rated life of 5 years at 55°C provides long term, low-maintenance operation.

Certifications and compliances

- Marking accd.to IECEx (versions with safety switch)
 Ex db eb mb IIC T5 Gb
 Ex db eb ib mb IIC T5 Gb (EM)
 Ex tb IIC T80°C Db
- Marking accd.to ATEX (versions with safety switch)
 Ⓢ II 2 G Ex db eb mb IIC T5 Gb
 Ⓢ II 2 G Ex db eb ib mb IIC T5 Gb (EM)
 Ⓢ II 2 G Ex tb IIC T80°C Db



Technical data

IECEx-certification	IECEx NEP 21.0020X		
EU-type examination certificate	SEV 24ATEX 0708X		
Ambient temp	standard	VLL 3L, 5L, -40 °C ... 55 °C	VLL 7L -40 °C ... 50 °C
	emergency:	VLL 3L, 5L, -25 °C ... 50 °C	VLL 7L -25 °C ... 45 °C
Rated input volt		100 - 240 V AC 50/60 Hz,	DC 108 - 250 V
Power factor	>0.9		
Color Temperature	5700 K as standard		4000 K / 5000 K optional
CRI	CRI 70 5700 K		CRI 80 4000 K / 5000 K
System watt*	VLL 3L series: <25 W		
	VLL 5L series: <50 W		
	VLL 7L series: <58 W		
Lumen output	VLL 3L series: 3100 Lm		
	VLL 5L series: 6400 Lm		
	VLL 7L series: 7400 Lm		
Material	GRP and PC		
Weight	VLL 3L series Normal and EM:		4.3Kg / 5.8Kg
	VLL 5L /7L series Normal and EM:		7.5Kg / 9.8Kg
Terminals	Max 6 mm ²		
Entry size	M20 or M25		
Out line dimension	VLL 3L series: 732x178x125		VLL 5L /7L series:1333x178x125
Backup duration & Lumen percentage	EM1 = 1.5 h, 25% output as standard version		
	EM2 = 3 h, 25% output is available		
IP(IEC60598)	IP66		

*Tolerance+/-5%

VLL LED Zone 1 GRP linear luminaires

Ordering Information standard version

Product Type	Colour Temp ¹⁾	Throughwiring ²⁾			Entry Threaded	Ex e		Part No. ⁴⁾
		Terminals	Single-ended	Twin-ended		Threaded Plug ³⁾		
VLL 3L								
VLL-3L-57-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004125AE	
VLL-3L-57-2/6-220		2x6	-	●	4xM20	2	CCL2004129AE	
VLL-3L-57-1/6-125		1x6	●	-	2xM25	1	CCL2004127AE	
VLL-3L-57-2/6-225		2x6	-	●	4xM25	2	CCL2004131AE	
VLL 5L								
VLL-5L-57-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004173AE	
VLL-5L-57-2/6-220		2x6	-	●	4xM20	2	CCL2004177AE	
VLL-5L-57-1/6-125		1x6	●	-	2xM25	1	CCL2004175AE	
VLL-5L-57-2/6-225		2x6	-	●	4xM25	2	CCL2004179AE	
VLL 7L								
VLL-7L-57-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004221AE	
VLL-7L-57-2/6-220		2x6	-	●	4xM20	2	CCL2004225AE	
VLL-7L-57-1/6-125		1x6	●	-	2xM25	1	CCL2004223AE	
VLL-7L-57-2/6-225		2x6	-	●	4xM20	2	CCL2004227AE	

Ordering Information emergency version

Product Type	Colour Temp ¹⁾	Throughwiring ²⁾			Entry Threaded	Ex e		Part No. ⁴⁾
		Terminals	Single-ended	Twin-ended		Threaded Plug ³⁾		
VLL 3L Emergency								
VLL-3L-57-EM1-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004133A	
VLL-3L-57-EM1-2/6-220		2x6	-	●	4xM20	2	CCL2004137A	
VLL-3L-57-EM1-1/6-125		1x6	●	-	2xM25	1	CCL2004135A	
VLL-3L-57-EM1-2/6-220		2x6	-	●	4xM25	2	CCL2004139A	
VLL 5L Emergency								
VLL-5L-57-EM1-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004181A	
VLL-5L-57-EM1-2/6-220		2x6	-	●	4xM20	2	CCL2004185A	
VLL-5L-57-EM1-1/6-125		1x6	●	-	2xM25	1	CCL2004183A	
VLL-5L-57-EM1-2/6-225		2x6	-	●	4xM25	2	CCL2004187A	
VLL 7L Emergency								
VLL-7L-57-EM1-1/6-120	5700K	1x6	●	-	2xM20	1	CCL2004229A	
VLL-7L-57-EM1-2/6-220		2x6	-	●	4xM20	2	CCL2004233A	
VLL-7L-57-EM1-1/6-125		1x6	●	-	2xM25	1	CCL2004231A	
VLL-7L-57-EM1-2/6-225		2x6	-	●	4xM25	2	CCL2004235A	

¹⁾ Tolerance +/- 10%

²⁾ Through wiring 6 x 2.5 mm²

³⁾ Standard version without cable gland. if need, please order separately

⁴⁾ Contact your local sales representative for special requirements.

VLL LED Zone 1 GRP linear luminaires

Dimensions (mm)

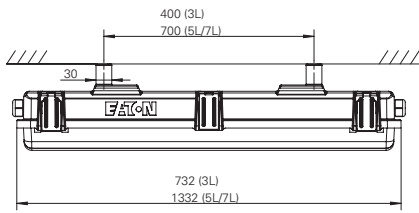


Fig. 1
Ceiling Mounting

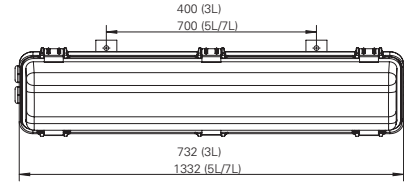
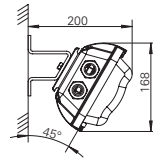


Fig. 2
Wall Mounting

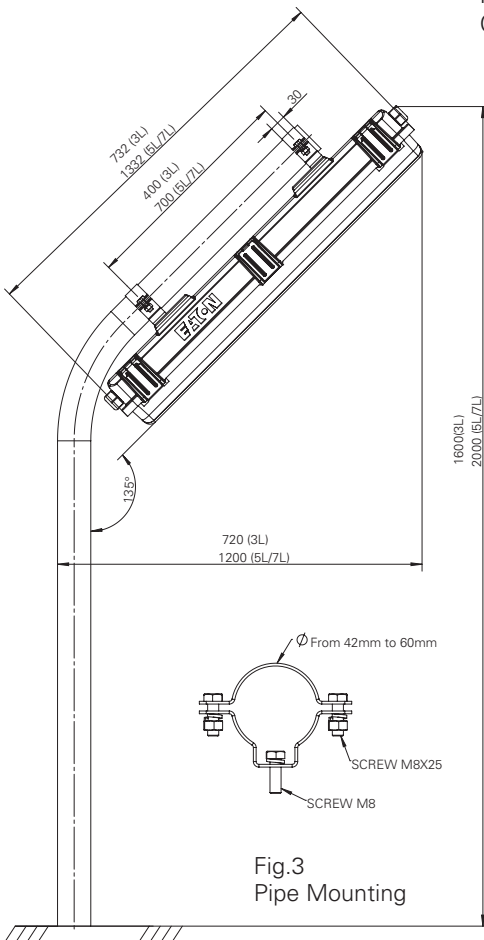


Fig. 3
Pipe Mounting

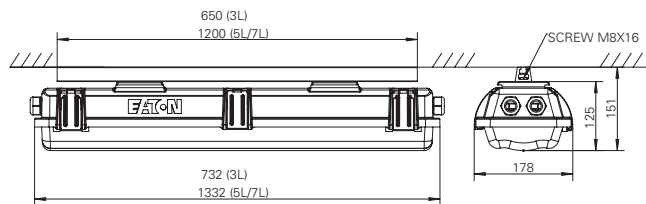
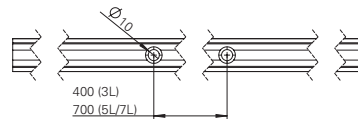
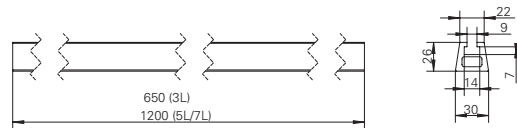
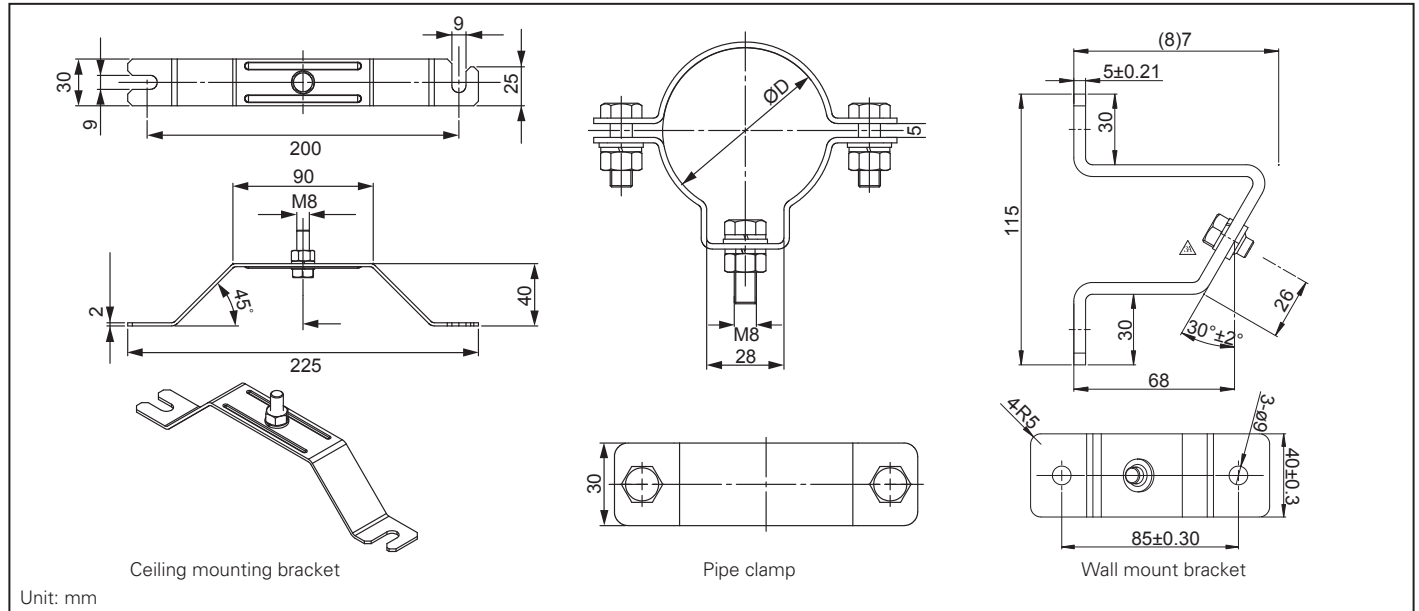


Fig. 4
Ceiling Mounting
with Sliding Rail



VLL LED Zone 1 GRP linear luminaires

Mounting accessories (To be ordered separately)



Pipe mounting

Part No	Description	Quantity per luminaire
NOR000005110605	VLL/HLL Pipe clamp assy D42 304S/S	2
NOR000005110600	VLL/HLL Pipe clamp assy D51 304S/S	2

Wall mounting

Part No	Description	Quantity per luminaire
NOR000005110602	VLL/HLL Wall suspension 304S/S	2

Ceiling mounting

Part No	Description	Quantity per luminaire
NOR000005110601	VLL/HLL Ceiling mounting 304S/S	2
CHLMT2372-01	Mounting sliding rail for 3L	1
CHLMT2372-02	Mounting sliding rail for 5L/7L	1

Metallic Cable Glands (Order Separately)

ADE-1F2

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



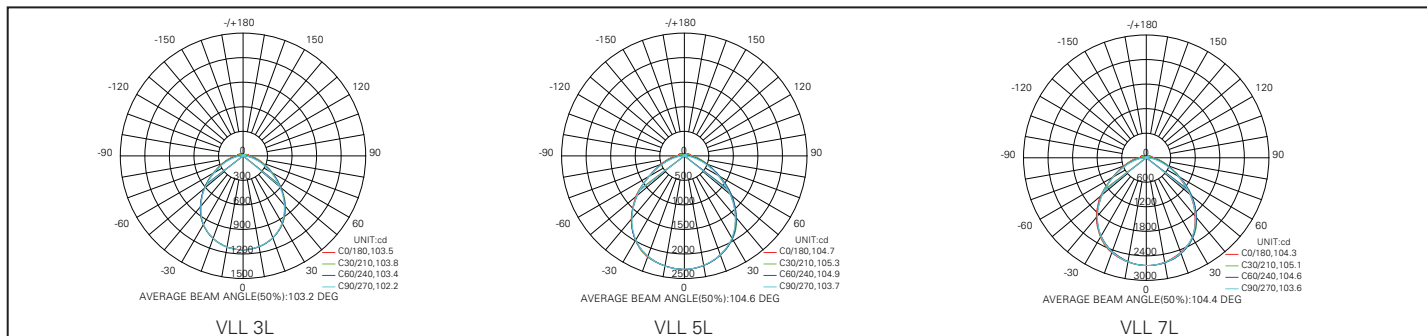
ADE-4F

Catalog #	Metric Thread Size	Cable Types	Cable sealing range inner sheath		Cable sealing range outer sheath		Armor	
			Min.	Max.	Min.	Max.	Min.	Max.
ADE4M201NPN	M20	SWA, SWB, STA, Braided marine shipboard,	4.5	8.0	7.0	12.0	0.2	0.9
ADE4M202NPN	M20	Type P; Leadsheathed cable (with addition of earthing washer)	7.0	12.0	10.0	16.0	0.2	1.3
ADE4M203NPN	M20		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.

Polar curve





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