

EXEL-L series increased safety lighting fixtures for LEDs resin-bonded strips are suitable to be installed in hazardous areas where a high degree of protection and resistance against corrosion is required. EXEL-L series is GRP made and features the 'Ex de mb op is' according to the safe optical radiation standard. It's equipped with LED strips sealed in a transparent resin. The LED strips are manufactured by manufacturer and they are certified and supplied along with the lighting fixture. The through wiring double ended makes installation on field easier and faster. The transparent cover is clipped into place on both sides of the fixture body with 8 dips on the EXEL-215L model and 14 clips on the EXEL-230L unit. This ensures excellent protection against dust and water over time. A safety switch housed inside the lighting fixture cuts off automatically the power supply when the lighting fixture is opened for the LED module and/or electrical component replacement. The EXEL-L series provides twelve models fitted with a Ni-Cd bat-tery with electronic inverter for use in emergency operation. Thanks to the use of LED technology applied also on the emergency models, the operating time and the energy saving are considerably greater. A red LED warning light comes off if the battery needs to be replaced due to a short circuit or if the battery itself is dead.

Application sectors:















Offshore plants

produce applications

Onshore plants

Low Chemical and temperatures petrochemical plants

water purification

Naval installations

CERTIFICATION DATA

Classification: Category 2GD Group Installation: EN 60079.14 zone 1 - zone 2 (Gas) zone 21 - zone 22 (Dust) **C**€ 0722 **Ex II 2GD** - **Ex db eb mb op is IIC T6/T5 Gb** Marking: Ex tb op is IIIC T...°C Db IP66 **Certification: ATEX CML 15 ATEX 3188X** CML 15.0044X **IEC Ex** TR CU **AVAILABLE** datacan contact comm@antideflagrantigce.com INMETRO DNV 12.0055 X CENELEC EN60079-0: 2012, EN60079-1: 2007, EN60079-7: 2007, EN60079-18: 2015, EN60079- 28: 2015, EN60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE. Standards: IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-18: 2014, IEC60079-28: 2015, IEC60079- 31: 2013, IEC60079-7: 2006-07 100°C (T5) 85°C (T6) Class temperature: -40°C +40°C (T6) With emergency Ambient temperature: -20°C +50°C (T5) 40°C +55°C (T5) **IP66** Degree of protection:





Black shock and UV resistant fibreglass reinforced anti-static polyester resin Body:

Diffuser: Transparent polycarbonate, shock and UV resistant

Protected opening system: Sliding system operated by a hexagonal-head tool (for safety reasons, the fixture can not be

opened without the tool)

Acid/hydrocarbon resistant expanded silicone Gasket:

Reclining frame: Aluminium and stainless steel

Inner fixed frame: Extruded aluminium **Bolts and screws:** Stainless steel

Entries: 4 x Ø25.5 entries (suitable for ISO M25x1.5 threads). Lighting fixture kit contains 3 model

PLG2ILXE7 plugs and 2 model UNI2LXE7DS cable glands for non-armoured cable

Mounting: Nickel plated brass inserts with 2 x M8 holes

ELECTRICAL FEATURES

Ballast: Electronic

110/277 Vac/dc (EXEL-215L, EXEL-130L) Rated voltage:

> 220/240 Vac/dc (EXEL-230L) 220/240 Vac (EXEL-115L)

Rated frequency: 50/60 Hz

Connection: Directly to terminal board L, N, Pe section 4 mm² terminal board with jumpers suitable for

through wiring double ended

Emergency unit: Electronic inverter 110/240 Vac 50/60 Hz, 110-270 Vdc. Batteries Ni/Cd, 4 Ah o 7 Ah, 6V

Silicone rubber cables with glass braid insulation for high temperatures Wiring:

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Installation brackets

Grey polyester resin body (code EXEL-215LG)

Cable entry: 4 x Ø20.5 holes. Lighting fixture kit contains 3 model PLG1ILXE7 plugs and 2 cable glands for non

-armoured cable (code EXEL-215L/20)

Earthing continuity plates for metal cable glands





Inner fixed frame in extruded aluminium for components housing

Battery pack

LED tubes certified by manufacturer CE Ex II 2GD Ex e mb IIC T.. Gb Ex mb IIIC T..°C Db IP6x

Certified electronic inverter housed in cylindrical aluminium box with one end sealed to allow passage of cables

Electronic ballast by manufacturer according to: EN 61347-1, EN 61347-2-13, EN 62384, EN 61000-3-2, EN 61000-4-5, EN 55015, EN 61547

Reclining frame in alluminium and stainless steel for LED tubes housing

Safety switch

Terminal board section 4 mm²

Quick access

Thanks to the new reclining frame on which the LED strips are housed, it's possible an easy access to the inside part of the lighting fixture. This system simplifies the maintenance and any interventions on the electrical part by the operator, ensuring greater safety and quick service

180° opening of the transparent diffuser by means of a hexagonalhead tool





Manually loosening the two screws, you can recline entirely the frame and access directely to the electrical components.



Internal electrical components easily accessible by the operator for a rapid replacement in case of fault. Wiring is carried out with safety and without that detached parts of the frame obstacle maintenance operations.



Normal working

Codo		Dimensi	ions mm		Watt	LED strips	Dower ownsky	Weight	
Code	Α	A1	В	C	watt	n°	Power supply	kg	mm
EXEL-115L	785	420	185	155	17	1	220-240 Vac 50/60Hz	4,9	195x155x820
EXEL-215L	785	420	185	155	29	2	110-277 Vac/dc 50/60Hz	4,9	195x155x820
EXEL-130L	1370	720	185	155	29	1	110-277 Vac/dc 50/60Hz	9,2	196x155x1400
EXEL-230L	1370	720	185	155	56	2	220-240 Vac/dc 50/60Hz	9,2	196x155x1400

Normal + emergency working

						9	, ,				
Code	Di A	mensi A1	ons mi B	m C	Operating type	LED strips n°	Power supply	Watt	Discharge time in minutes	Weight kg	mm
EXEL-115LEF4	785	420	185	155	normal + emergency	1	220-240 Vac 50/60Hz	17	180'	7,2	196x155x820
EXEL-215LEF4	785	420	185	155	normal + emergency	2	110-240 Vac/dc 50/60Hz	29	180'	7,2	196x155x820
EXEL-130LEF4	1370	720	185	155	normal + emergency	1	110-240 Vac/dc 50/60Hz	29	180'	10,1	196x155x1400
EXEL-230LEF4	1370	720	185	155	normal + emergency	2	220-240 Vac/dc 50/60Hz	56	180'	10,1	196x155x1400
EXEL-115LEF7	785	420	185	155	normal + emergency	1	220-240 Vac 50/60Hz	17	240'	7,2	196x155x820
EXEL-215LEF7	785	420	185	155	normal + emergency	2	110-240 Vac/dc 50/60Hz	29	240'	7,2	196x155x820
EXEL-130LEF7	1370	720	185	155	normal + emergency	1	110-240 Vac/dc 50/60Hz	29	240'	10,1	196x155x1400
EXEL-230LEF7	1370	720	185	155	normal + emergency	2	220-240 Vac/dc 50/60Hz	56	240'	10,1	196x155x1400

Single and double lamp units with separate emergency battery pack for temperatures of -20 $^{\circ}$ C to + 55 $^{\circ}$ C example code EXEL-115LEF4**E**

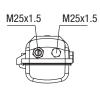
Only emergency working

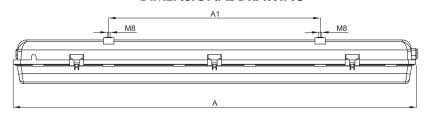
Code	D A	imensio	ons mn B	ı C	Operating type	LED strips n°	Power supply	Discharge time in minutes	Weight kg	mm
EXEL-115LEE4	785	420	185	155	only emergency	1	110-240 Vac ±10% 50/60Hz	180'	7,2	196x155x820
EXEL-130LEE4	1370	720	185	155	only emergency	1	110-240 Vac/dc ±10% 50/60Hz	180'	10,1	196x155x1400
EXEL-115LEE7	785	420	185	155	only emergency	1	110-240 Vac ±10% 50/60Hz	240'	7,2	196x155x820
EXEL-130LEE7	1370	720	185	155	only emergency	1	110-240 Vac/dc ±10% 50/60Hz	240'	10,1	196x155x1400

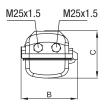
Single and double lamp units with separate emergency battery pack for temperatures of -20 $^{\circ}$ C to + 55 $^{\circ}$ C example code EXEL-115LEE4**E**



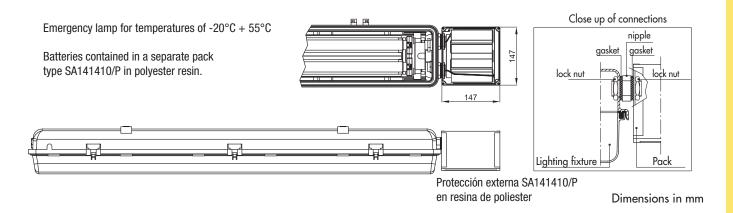
DIMENSIONAL DRAWING







Single and double lamp units with separate emergency battery pack for temperatures of -20°C to + 55°C



DON'T FORGET TO ORDER THE ACCESSORIES

Example: Type of lighting fixture + EXEL-215L

U bracket G-0609

other ...see key



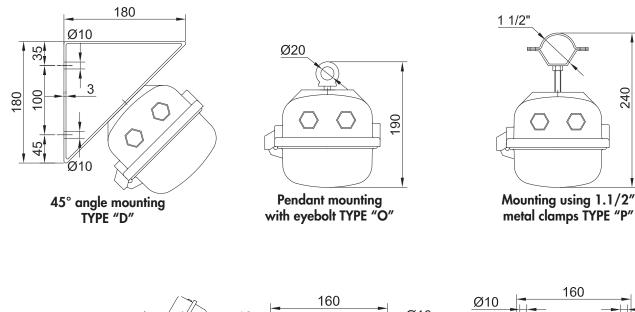
ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
M8	Tige	Length: 250 mm	Material: stainless steel	BRF8MIN/250	ACCESSORY SPARE PART
Q	Eyebolt		Material: galvanised steel	GOF-8	SPARE PART
910 Ø10	Type U bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0609	SARE PAIT
Ø10 Ø10	Type V bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0610	SAME PAIT
210	Type D bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0611	SAAR PART

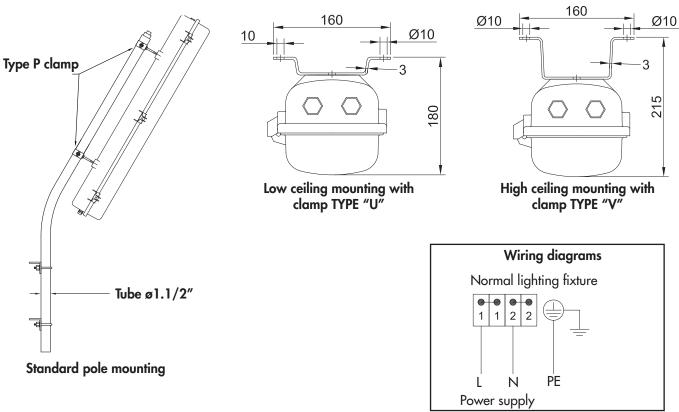


ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
1½- 04 1½- 04	Type P bracket		Material: bracket: galvanised steel screws: stainless steel	G-0480	ACCESORO ELEMENTO
		EXEL-115L		B115-0300/1	
	LED resin-bounded	EXEL-215L	LED strips	B215-0300/1	SPARE PART
N ST	module	EXEL-130L	exec. Ex mb	B130-0300/1	
		EXEL-230L		B230-0300/1	
		EXEL-115L		B18-363	
	Transparent diffuser	EXEL-215L	Material:	D10-303	SPARE PART
	iranspareni ainuser	EXEL-130L	polycarbonate	B36-363	
		EXEL-230L		D30-303	
	Non-armoured cable gland complete with rubbers, seal and lock nut	ISO M25x1,5	Ex e II IP 66/67 (std. range cavo 10-18)		SPARE PART
	Plug with seal and lock nut	ISO M25x1,5	Ex e II IP 66/67	PLG2ILXE7	STARE FART
	Hexagonal-head tool	Hexagon 10		CLAFT10	STARE PART
	Electronic inverter		110-240 Vac, 110-270 Vdc	EI-30L	STANE PART
	Battery pack		4 Ah 6V NiCd	G-0309B	SPARE PART
O			7 Ah 6V NiCd	G-0309	
	Electronic ballast	EXEL-115L	220/240 Vac 50/60Hz	EB115L	SPARE PART
	Electronic ballast	EXEL-215L EXEL-130L	110/277 Vac/dc 50/60 Hz	EB215L	
•	Electronic ballast	EXEL-230L	220/240 Vac/dc 50/60 Hz	EBL4040-2	SPARE PART
	Earthing continuity	Holes M25x1.5	Material:	B-479	
	plates for metal cable glands	Holes M20x1.5	brass	B-479/1	SPARE PART

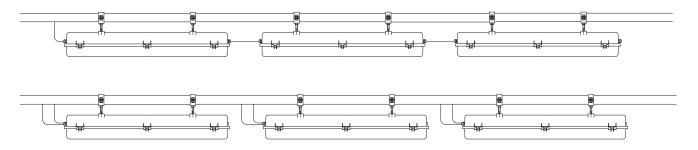


240





Connections can be made on either side of the fixture body for simple, fast installation





Electrical features	EXEL-115L	EXEL-215L	EXEL-130L	EXEL-230L
Power supply:	220-240 Vac	110-277 Vac/dc	110-277 Vac/dc	220-240 Vac/dc
Rated frequency:	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Power consumption:	17 W	29 W	29 W	56 W
Connection:		Direct connection to te Section 4mm², suitable		
Power factor:	>0,94 *	>0,93 *	>0,93 *	>0,98 *
Rated current:	81 mA*	146 mA*	146 mA*	265 mA*
EMC (electromagnetic compatibility):	EN	N 55015, EN 61547, IEC	61000-3-2, IEC 61000	-3-3
THD (total harmonic distortion):		<4% 230 \	/ac, 50 Hz	
Over-voltage protection:	4 kV	4 kV	4 kV	4 kV
Driver performances:	Over-Voltag	e protection, Over-Curre	nt protection, Short-Cir	cuit protection
Photometric features				
LED:		Resin-bonde	ed LED strips	
Viewing angle:	120°	120°	120°	120°

LED:	Resin-bonded LED strips						
Viewing angle:	120°	120°	120°	120°			
LED Colour temperature:	5000 K	5000 K	5000 K	5000 K			
CRI:	80	80	80	80			
Instant Restrike:	SI	YES	SI	YES			
Lumen:	1426 lm	2850 lm	2817 lm	5637 lm			
Maximum light intensity:	464 cd	927 cd	960 cd	1920 cd			
Overall efficiency:	84 lm/W	98 lm/W	98 lm/W	100 lm/W			

^{*} Test at 220Vac

