

Lighting: LED High Bay Lighting Fixture (Compatible with Antenna barrier), DFDR2 Series

Flameproof/ Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Application

The DFDR2 series is suitable for Zone 1 & Zone 2 (Ex-gas) and Zone 21 & Zone 22 (Ex-dust) hazardous areas, such as chemical and petrochemical facilities, offshore platforms, shipyards, electric power stations, loading docks, and wastewater treatment plants, etc.

Specification

Body material	: Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey) (optional offshore painting-acrylic polyurethane coating)
Lens	: Heat and high impact resistant clear glass (4J impact)
Bolts	: Stainless steel, SS 304 (optional SS 316)
Bracket	: Hot-dip galvanized steel (optional SS 304 or SS 316)
Sealing (O-ring)	: Silicone

Product Features

Luminous efficacy	: 117 lm/W
Colour temperature	: Standard 5,700 K (daylight) (optional 2,700 K; 3,000 K; 3,500 K; 4,000 K; 5,000 K; 6,500 K etc.)
Colour Rendering Index (Ra)	: ≥ 80
Chip	: LUXEON 5050 - Lumileds (optional Cree, Bridgelux, Nichia)
Beam angle	: Average 115-120° without lens with lens 30-100 W; 60° 110-240 W; 30°, 60°, 90° (other beam angle, please specify)

Fixture Life

- L70 - Rated lifetime of 60,000 hours at ambient temperatures of 85°C.
- L80 - Rated lifetime of 43,318 hours at ambient temperatures of 85°C.
- L90 - Rated lifetime of 20,534 hours at ambient temperatures of 85°C.



Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex II 2G	Ex II 2D
Symbol of Protection	Ex db eb IIC T6..T4 Gb	Ex tb IIIC T85°C..T135°C Db
Certificate	KDB 24 ATEX 0001X IECEx KDB 24.0001X	
Conformity to Standards	EN IEC 60079-0, EN 60079-1, EN IEC 60079-7, EN IEC 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31	
Ambient Temperature	-40°C to +60°C	
Index of Protection	IP66/ IK10	
Entry Threads	2x M20x1.5, 2x M25x1.5 (1x stopping plug) or 2x 1/2" NPT, 2x 3/4" NPT (1x stopping plug)	
Mounting	Bracket mounting	
Connection	L, N and PE ; for 1-4 mm² cable (Through wiring system with an extra terminal block for cable connection at both ends.)	
Rated Voltage	110-240 V AC, 50/60 Hz, P.F. ≥ 0.95	

Catalogue Number Logic

DFDR2 -	■ ■ ■	○	-	□ □	-	○
Series	LED power (see ordering requirement table below)	LED driver	Entry threads	Option		
A	Standard LED driver	M1	M20x1.5	G	Guard	
B	LED driver with dimming function	M2	M25x1.5	AN	Antenna (ANTE series)	
		N1	1/2" NPT	SP	Surge protection 10 kA, 8/20 μs	
		N2	3/4" NPT			

Ordering Requirements

Cat. No.	LED power	Voltage	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)	
			Ta 40°C	Ta 60°C	Ta 40°C	Ta 60°C
DFDR2-30	30 W	110-240 V AC, 50/60 Hz	T6	T6	T85°C	T85°C
DFDR2-40	40 W					
DFDR2-50	50 W					
DFDR2-60	60 W					
DFDR2-70	70 W					
DFDR2-80	80 W					
DFDR2-90	90 W					
DFDR2-100	100 W		T5	T4	T100°C	T135°C
DFDR2-110	110 W		T5	T4	T100°C	T135°C
DFDR2-120	120 W					
DFDR2-130	130 W					
DFDR2-140	140 W					
DFDR2-150	150 W					
DFDR2-160	160 W					
DFDR2-170	170 W					
DFDR2-180	180 W					
DFDR2-190	190 W		T5	T4	T100°C	T135°C
DFDR2-200	200 W					
DFDR2-210	210 W					
DFDR2-220	220 W					
DFDR2-230	230 W					
DFDR2-240	240 W					

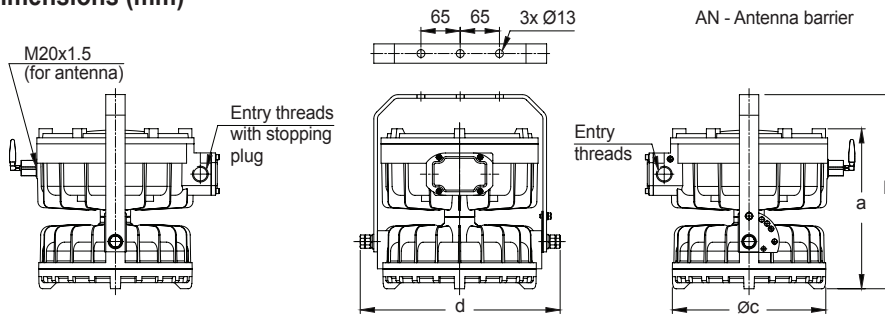
Remark * : The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause higher surface temperature.

Lighting: LED High Bay Lighting Fixture (Compatible with Antenna barrier), DFDR2 Series

Flameproof/ Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

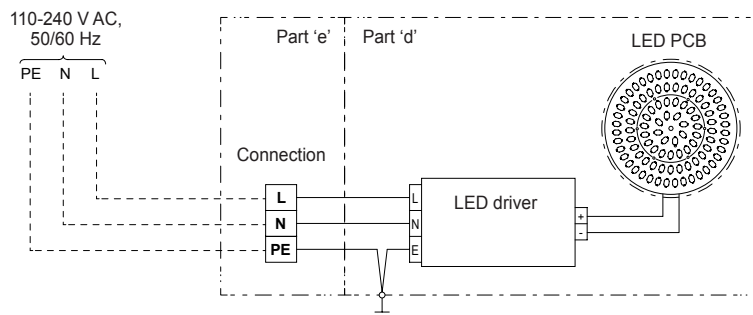
Dimensions (mm)



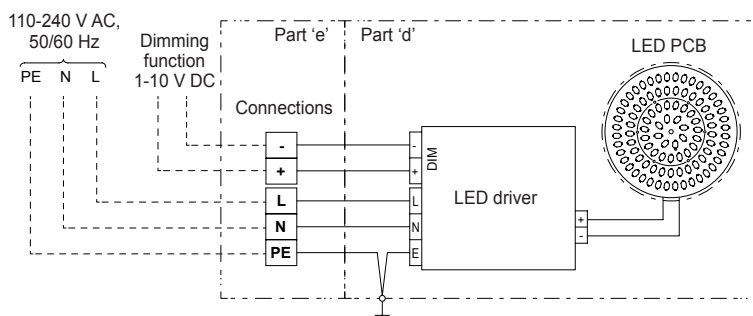
LED power	Dimensions in mm				Approx. weight (kg)	
	a	b	Øc	d	without AN	with AN
30 W to 90 W	273	306	254	314	10.5	13.0
100 W	265	341	254	331	12.5	13.0
110 W to 240 W	278	389	338	401	23.0	24.0

Wiring Diagram

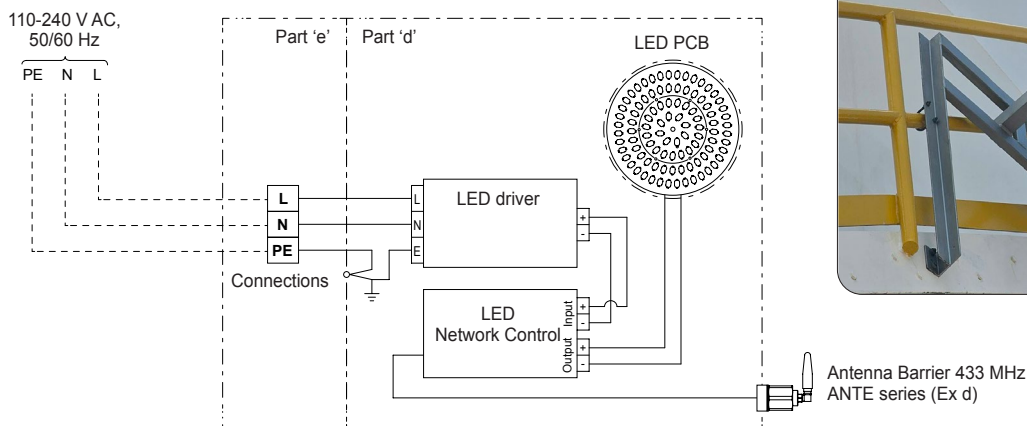
LED driver without dimming functionality provided as a standard product.



LED driver with a dimming function



Optional feature for LED network control



Antenna Barrier 433 MHz
ANTE series (Ex d)