ZONE 1,21&2,22

EXF300LED

KDB 15ATEX0049X
IECEx KDB 20.0003X

IECEx | ATEX | ZONE 1,21 & 2,22 | -40°C | +60°C | IK10 | IP66 | IP67 | CONTROL SYSTEM DALI-2

EX MARKING: II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db or T70°C Db

EXEMPLARY APPLICATIONS

REFINERIES | OFFSHORE | CHEMICAL PLANTS | CHEMICAL WAREHOUSES | PASSAGEWAYS IN EX ZONES

Explosionproof light fitting with **LED modules** for suspended coffered ceilings or to be mounted on the ceiling surface. Designed to work in the zone **1.21 & 2.22** of the explosion hazard of gases, vapors and mists of flammable liquids with air, as well as of flammable dusts and fibers. The housing is made of powder coated steel or stainless steel.

Optional version powered from central battery **ZB** or with DALI-2 driver **DA**.

FEATURES

MECHANICAL PARAMETERS

housing	powder coated stainless steel (NIRO)
diffuser	UV stabilised polycarbonate (PC)
ingress protection	IP67
protection class	I
impact resistance	IK10
mounting	using brackets *check: mountings*

ELECTRICAL PARAMETERS

connection terminals	2,5 mm^2
input voltage	**35E:** 220-240V 50-60Hz, 220-240V 0Hz **25E:** 110-254V 50-60Hz, 220-250V 0Hz
light source	intrisically safe LED modules
power factor	>0,97
cable inlets	Ø20 *(wire 6-13mm)* Ø25 - *optionally (wire 9-17mm)*
overvoltage protection	**35E:** 4kV (L-N), 4kV (L-PE) **25E:** 1kV (L-N), 2kV (L-PE)

WORK PARAMETERS

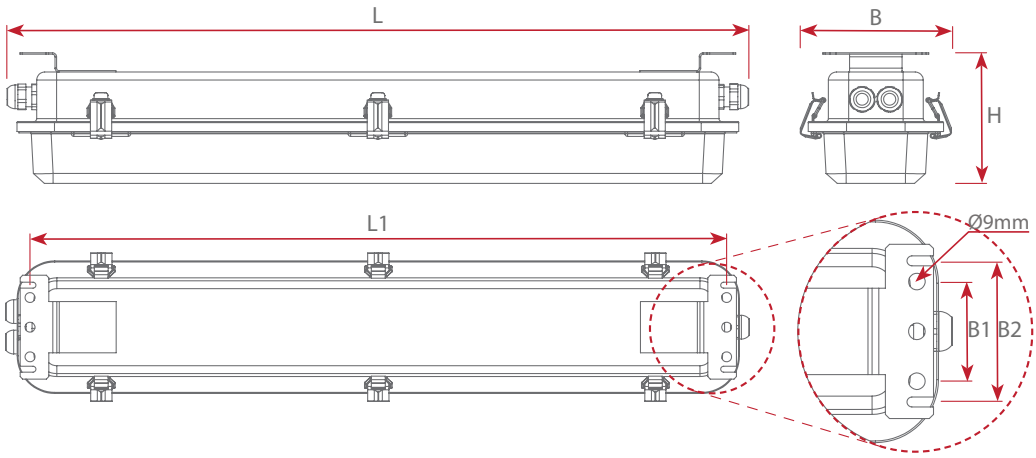
ambient temperature	-40°C to +60°C *check: types comparison*
lifetime	>100.000h L_{80} B_{50}

PHOTOMETRICAL PARAMETERS

CRI	>85
colour temperature	4000K 6500K - *option*

As a standard, the housing is equipped with a 21 gland system (two glands on one side and one on the other side of the housing). This housing can be used both as a terminal and a cross-type (both sides or one side).
The glands are equipped with sealing plugs, which should be left in place if the glands are not used.

DIMENSIONS



TYPE	L [mm]	L1 [mm]	B [mm]	B1 [mm]	B2 [mm]	H [mm]	weight [kg]
EXF300LED-0600	730	704	150	60	85	134	5,2
EXF300LED-1200	1340	1314	150	60	85	134	7,6

STANDARD TYPES COMPARISON

Voltage 220-240V 50-60Hz, 220-240V 0Hz (35E)

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-FX1	2806	19,8	142	45
EXF300LED-0600-FX2	5435	36,6	148	45
EXF300LED-1200-FX2	5561	36,6	152	45
EXF300LED-1200-FX4	10837	70,3	154	45

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T70°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-GX2	3507	24,4	144	60
EXF300LED-1200-GX2	3560	24,4	146	60
EXF300LED-1200-GX4	6969	45,8	152	55

OPTIONAL TYPES COMPARISON

Voltage 110-254V 50-60Hz; 220-250V 0Hz (25E)

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-FX1	2806	20,5	137	45
EXF300LED-0600-FX2	5435	37,2	146	45
EXF300LED-1200-FX2	5561	37,3	149	45
EXF300LED-1200-FX4	10837	74,5	145	45

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T70°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-GX2	3507	25,3	139	60
EXF300LED-1200-GX2	3560	25,3	141	60
EXF300LED-1200-GX4	6969	46,7	149	55

Luminous flux tolerance +/- 10%
Power tolerance +/- 10%
The parameters given in the following data sheet has been determined for the temperature Ta=25°C.

Luminous flux, light intensity distribution and efficiency has been tested on the basis of the standards EN ISO 17025:2005, norm series EN13032 and LM-79.

The actual data and General Warranty Conditions are available on our website **www.atmlighting.pl**

CENTRAL BATTERY VERSION

ZB — Central battery: Version with a driver fot central battery. **ZB**

For ZB version, below -35°C power source switching is not allowed.

35E (50% nominal luminous flux)

MEAN EMERGENCY LUMINOUS FLUX

TYPE	EMERGENCY FLUX [lm]
EXF300LED-0600-FX1	1403
EXF300LED-0600-FX2	2718
EXF300LED-0600-GX2	1754
EXF300LED-1200-FX2	2781
EXF300LED-1200-FX4	5419
EXF300LED-1200-GX2	1780
EXF300LED-1200-GX4	3485

25E (100% nominal luminous flux)

MEAN EMERGENCY LUMINOUS FLUX

TYPE	EMERGENCY FLUX [lm]
EXF300LED-0600-FX1	2806
EXF300LED-0600-FX2	5435
EXF300LED-0600-GX2	3507
EXF300LED-1200-FX2	5561
EXF300LED-1200-FX4	10837
EXF300LED-1200-GX2	3560
EXF300LED-1200-GX4	6969

OPTIONAL VERSIONS

3F — 3-phase: Version with terminals L1, L2, L3, PE, N powered from L and N with voltage of 230V **3F**

DALI-2 driver: Version equipped with DALI-2 driver **DA**

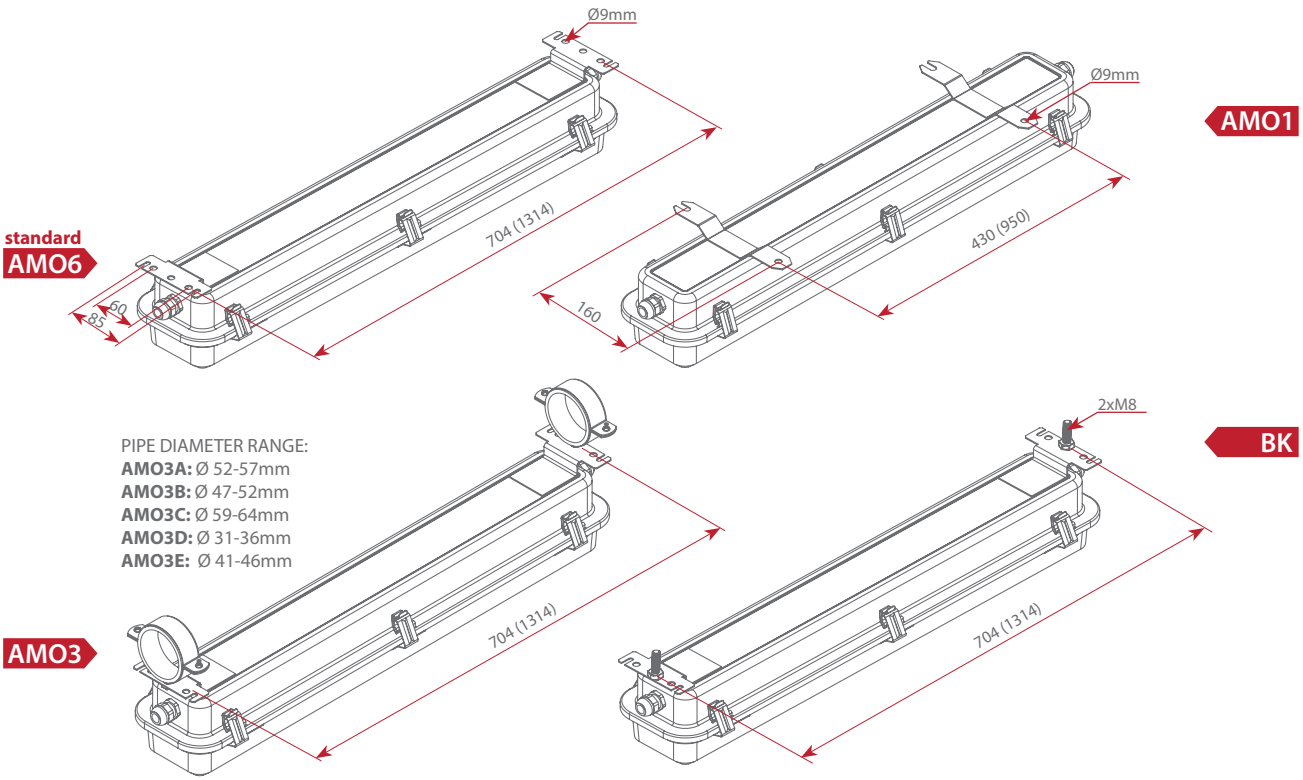
Optionally, the housing can be equipped with an integrated power supply with a DALI-2 interface, which allows monitoring the operation of the fixture and controlling the lighting using data directly from motion sensors or from the building management system (BMS). A properly configured lighting control system can significantly reduce electricity costs and improve user ergonomics.
The DALI-2 power supply is available only for the 35E power version (220-240V, 50-60Hz).
For temperatures below -30°C, DALI functionality may be limited. Power at the terminal > 12V.

MAXIMUM NUMBER OF FIXTURES CONNECTED IN LINE

MAXIMUM NUMBER OF LINE CONNECTED LUMINAIRES DEPENDING ON THE USED CIRCUIT BREAKERS

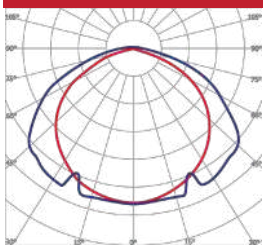
Power supply	B16	C16	Max. starting current	Starting time
25E	24	40	24A	< 250 µs
35E	27	45	4A	< 1300 µs

MOUNTINGS



PHOTOMETRY

FWHM/FWTM: 134.0°/113.0°



CONFIGURATIONS

E	X	F	3	0	0	L	E	D	-					-			-	35E	-	33	-	21*	P	20	-	NIRO	-	PC	-		-		-	AMO6
										0	6	0	0		FX	1		25E		30		10	M	25				ZB		DA		AMO1
										1	2	0	0		GX	2				50		11										BK
																4				55		20*										AMO3
																						22*										

group
explosionproof light fittings

type
type 300

source of light
LED modules

approximate length
~ 600mm, 1200mm

LED module type

LED module quantity

power supply
35E - 220-240V 50-60Hz, 220-240V 0Hz
25E - 110-254V 50-60Hz, 220-250V 0Hz

wiring
30 - single 3-pole terminal → [3]
33 - double 3-pole terminal → [3 3] ←
50 - single 5-pole terminal → [5] version DA
55 - double 5-pole terminal → [5 5] ← version DA

cable inlets - quantity
10 - one cable inlet on one side → [1 0]
11 - one cable inlets on both sides → [1 1] ←
20 - two cable inlets on one side → [2 0] *only for M20 and P20
21 - two cable inlets on one side and one on the other side → [2 1] ← *only for M20 and P20
22 - two cable inlets on both sides → [2 2] ← *only for M20 and P20

cable inlets - material
P - plastic
M - metal

cable inlets - size
20 - Ø20
25 - Ø25

housing material
NIRO - powder coated stainless steel

diffuser material
PC - UV stabilized polycarboate

central battery version
ZB - version with driver for central battery

optional version
DA - version equipped with integrated DALI-2 power supply. Version available only for 35E power supply (220-240V, 50-60Hz).

mountings
check: mountings on page 5.

DOWNLOADS

LDT | ATEX | IECEx