

EXPLOSION-PROOF LUMINAIRE

AV-02C LED

AV-02C LED II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIIC T80°C Db



		EN IEC 60598	RoHS	IP65		-20°C÷....+40°C	WARRANTY 5 years	MAX 58W LED
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General specifications


Product name	AV-02C LED
Application Area	Lighting in explosion-hazardous areas of group II, zones 1 and 2. The AV-02C LED product consists of a body with a light source and a CAEx-02 LED control box (ordered separately) – which powers the light source. The AV-02C LED 230V product is a version consisting only of the body with the light source.
Light source	High-power SAMSUNG COB LED, CRI≥70, cool white 5000K, 6500K, extended lifespan according to TM-21 calculations.

Lxx	Byy	Number of hours tsp 740C
L70	B50	182.000
L70	B10	103.000
L80	B50	113.000
L80	B10	65.000
L90	B50	53.000
L90	B10	31.000

DOB (driver on board) Vossloh-Schwabe, 4000K, CRI≥80, extended lifetime according to:

B10		
L70	L80	L90
> 50.000 ore	>40.000 ore	> 20.000 ore

The system with the LED module included in the product is equivalent to 125W HME mercury lamps.

Protection against dust and water (IP)	IP65
Explosion protection 	II 2G Ex db eb IIC T6 Gb II 2D tb IIC T80°C Db <ul style="list-style-type: none"> Explosion-proof encapsulation (d) for the optical compartment Increased safety (e) for the terminal box Housing protection (t) for the optical compartment
Operating temperature range	-20°C÷+40°C
Warranty	5 years

Electrical specifications

Nominal voltage	230 Vac
Frequency (Hz)	50-60 Hz
Power factor	≥0,95
Conductors and cable glands	Cable glands with rubber gasket sealing for cable diameters of $\Phi 11 - \Phi 14$ mm. Number of terminals: 2 + 2 PE and 4 in the terminal compartment of the CAEx-02 LED control box (F, N, L, PE). Number of terminals 2 + 2 PE for the AV-02C LED 230V (without CAEx-02 LED control box). Maximum conductor cross-section: 2.5 mm ² .

Technical specifications

Housing and frame	Die-cast aluminum alloys and painted.
Protection globe	The lamp protection globe is made of heat-resistant glass.
Optical system	The optical system includes medium-power LEDs that provide a wide light distribution.
Source	The AV-02C LED product consists of a body with the light source and the CAEx-02 LED gear box (ordered separately) – which powers the light source.
Color	Yellow

Mounting

- Suspended. Fixed installation.
- Individual connection with the CAEx-02 LED gear box.
- Individual/series connection to the network for the AV-02C LED 230V version.

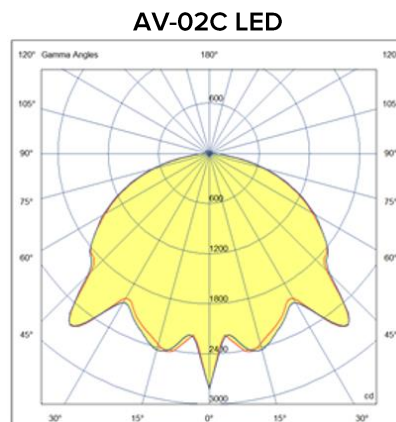
Standards and certifications

Standards	<ul style="list-style-type: none"> - EN 60598-1 - EN IEC 60079-0: 2018 - EN 60079-1: 2015 - EN 60079-7:2016+A1:2018 - EN 60079-31: 2024
Certificates	<ul style="list-style-type: none"> - AV-02C LED: INSEMEX-OEC.ATEX.22.0302X Protection type: II 2G Ex db eb IIC T6 Gb II 2D tb IIIC T80°C Db - CAEx-02 LED: INSEMEX-OEC.ATEX.22.0301X + A1/2024 + A2/2026 Protection type: II 2G Ex db eb IIC T6 Gb II 2D tb IIIC T80°C Db - AV-02C LED 230V: INSEMEX-OEC.ATEX.22.302X + A1/2023 + A2/2026 Protection type: II 2G Ex db eb IIC T6 Gb II 2D tb IIIC T70°C Db

In compliance with European Directives:

- Electromagnetic compatibility directive.
- Low voltage directive.
- RoHS Directive, DEEE Directive.
- ATEX Directive 2014/34/EU "Equipment and protective systems intended for use in explosive atmospheres "

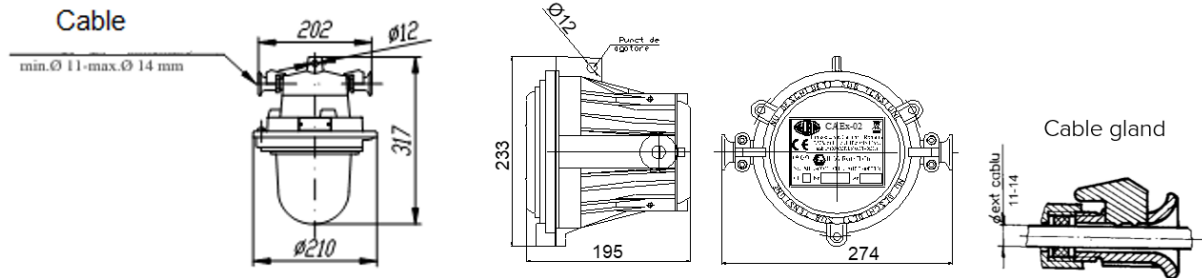
Photometric data



Light intensity distribution curve [Cd/1000lm]

Dimensional characteristics

AV-02C LED



Product type	D [mm]	I [mm]	h [mm]
Light source body AV-02C LED	210	202	317
Gear box AV-02C (CAEx-02) LED	233	274	195

Annex-product code

Product type	Product code	Nominal voltage [Vdc]	Max power light source [W]	Current [mA]	Protection degree	Protection class	Temp. class	Environment group	Weight [Kg]	Total net flux [lm]	Overall luminous efficacy [lm/W]
AV-02C LED 44.5W 5000K	32321142	48.7	39.4	810	IP65	I	T6	IIC	4	6753	171
AV-02C LED 44.5W 5000K V2	32321143	48.7	38.47	790	IP65	I	T6	IIC	4	6753	175
AV-02C LED 44.5W 6500K	32321144	48.7	39.4	810	IP65	I	T6	IIC	4	6753	171
AV-02C LED 44.5W 6500K V2	32321145	48.7	38.47	790	IP65	I	T6	IIC	4	6753	175
AV-02C LED 57.5W 5000K	32321146	49.4	51.4	1040	IP65	I	T6	IIC	4	8829	171
AV-02C LED 57.5W 5000K V2	32321148	49.4	51.4	1040	IP65	I	T6	IIC	4	8829	171
AV-02C LED 64.5W 5000K	32321150	49.6	58	1170	IP65	I	T6	IIC	4	8992	155
AV-02C LED 64.5W 5000K V2	32321151	49.7	57.7	1160	IP65	I	T6	IIC	4	8992	155

Product type	Product code	Nominal voltage [Vdc]	Max power light source [W]	Current [mA]	Protection degree	Protection class	Temp. class	Environment group	Weight [Kg]	Total net flux [lm]	Overall luminous efficacy [lm/W]
AV-02C LED 64.5W 6500K	32321152	49.6	58	1170	IP65	I	T6	IIC	4	8992	155
AV-02C LED 64.5W 6500K V2	32321153	49.7	57.7	1160	IP65	I	T6	IIC	4	8992	155
AV-02C LED with protective basket											
AV-02C LED 44.5W 5000K protective basket	32321172	48.7	39.4	810	IP65	I	T6	IIC	4,2	6753	171
AV-02C LED 44.5W 5000K V2 protective basket	32321173	48.7	38.47	790	IP65	I	T6	IIC	4,2	6753	175
AV-02C LED 44.5W 6500K protective basket	32321174	48.7	39.4	810	IP65	I	T6	IIC	4,2	6753	171
AV-02C LED 44.5W 6500K V2 protective basket	32321175	48.7	38.47	790	IP65	I	T6	IIC	4,2	6753	175
AV-02C LED 57.5W 5000K protective basket	32321176	49.4	51.4	1040	IP65	I	T6	IIC	4,2	8829	171
AV-02C LED 57.5W 5000K V2 protective basket	32321178	49.4	51.4	1040	IP65	I	T6	IIC	4,2	8829	171
AV-02C LED 64.5W 5000K protective basket	32321180	49.6	58	1170	IP65	I	T6	IIC	4,2	8992	155
AV-02C LED 64.5W 5000K V2 protective basket	32321181	49.7	57.7	1160	IP65	I	T6	IIC	4,2	8992	155
AV-02C LED 64.5W 6500K protective basket	32321182	49.6	58	1170	IP65	I	T6	IIC	4,2	8992	155
AV-02C LED 64.5W 6500K V2 protective basket	32321183	49.7	57.7	1160	IP65	I	T6	IIC	4,2	8992	155
AV-02C LED 230V (without CAEX-02 LED)											
AV-02C LED 19,1W 4000K 230V	32321160	230	19.1	810	IP65	I	T6	IIC	4.3	2170	113
AV-02C LED 18,7W 4000K 230V	32321161	230	18.7	500	IP65	I	T6	IIC	4.3	3000	160

Product type	Product code	Nominal voltage [Vdc]	Max power light source [W]	Current [mA]	Protection degree	Protection class	Temp. class	Environment group	Weight [Kg]	Total net flux [lm]	Overall luminous efficacy [lm/W]
AV-02C LED 18,7W 5000K 230V	32321162	230	18.7	500	IP65	I	T6	IIC	4.3	3000	160
AV-02C LED 230V (without CAEX-02 LED) – with protective basket											
AV-02C LED 19,1W 4000K 230V protective basket	32321190	230	19.1	810	IP65	I	T6	IIC	4.5	2170	113
AV-02C LED 18,7W 4000K 230V protective basket	32321191	230	18.7	500	IP65	I	T6	IIC	4.5	3000	160
AV-02C LED 18,7W 5000K protective basket	32321192	230	18.7	500	IP65	I	T6	IIC	4.5	3000	160

The values are approximate and may be subject to change.

The tolerance of the initial flux and initial active power is $\pm 10\%$ of the specified value. These values are measured at an ambient temperature of 25°C unless another temperature is specified.

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