

Acciaio Eco LED

Industrial LED luminaire

Acciaio Eco LED is the reply to the request for products with a high technological content for particularly demanding applications in highrisk areas. The steel housing and glass diffuser present both excellent mechanical resistance (IK09) and resistance to aggressive chemical agents. In the industrial field, it is ideally used in installations in environments with an explosive atmosphere, caused either by alterations of a gaseous type or by the presence of combustible powders suspended in the air (according to Standard ATEX 2014/34/EU for zones 02 and 22).

The optic system is composed of a diffuser subdivided into 12 cells for optimal light distribution, and a special microprismatic glass with very high light transmittance for greater visual comfort.

Acciaio Eco LED is suitable for heavy-duty use even in outdoor environments directly exposed to inclement weather: it is designed to resist mechanical vibrations and electromagnetic disturbances typical of industrial environments.



GENERAL CHARACTERISTICS

Equivalent Power* 1x 36, 2x 36, 1x 58, 2x 58, 2x 80 W (TOP, ATEX)

Power supply **SD Version:** Universal Multi Voltage 93–265 V_{AC} 50/60 Hz 176–250 V_{DC}
ED Version: 230 V_{AC} ±10 % 50 Hz

Standard EN 60598-1, EN 60598-2-1, EN 60598-2-22 (fundamental requirements), UNI9554:1989, DIN 18032-3:1997-04, EN 62471 (Photobiological hazard), ATEX 2014/34/UE

Protection grade IP66, IK09

Working temp. **SD Version:** -30 °C ÷ +50 °C (****)
E and ED Version: -20 °C ÷ +40 °C

Mounting ceiling, suspension, busbar trunking

Housing Polyester powder coated sheet steel RAL 7035 grey

Head Caps Technopolymer PC+PBT

Louvre Wide anti-glare aluminium

Driver **SD Version:** SELV electronic SD (cos φ ≥ 0.96) with intelligent dimming
ED Version: electronic ED (cos φ ≥ 0.95)

MTFB Control gear** 80 000 h

Luminous flux >60 000 h (version 2x) (L80B20)

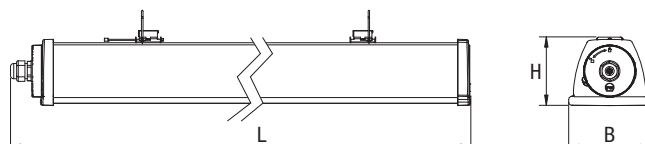
maintenance** >70 000 h (version 1x) (L80B20)

Colour deviation 3 SDCM

* Equivalent power for comparison with fluorescent tube fixtures

** At environmental reference temperature of 25 °C

**** At highest working temperature thermal protection may reduce the output power.



Power* W	• Dimensions (mm) •			Weight max. kg
	L	B	H	
1x 36	1 225	108	90	3.2
2x 36	1 225	108	90	3.2
1x 58	1 225	108	90	3.2
2x 58	1 225	108	90	3.2
2x 80	1 565	108	90	3.9

Accessories

supplied

Order code	Description
15040	OPTICOM PHOTOSENSOR ACCIAIO

Accessories

to be ordered separately

Building automation

to be ordered separately

Order code	Description
15019	INPUT DOUBLE COUPLING M20
15018	KIT ATEX ACCIAIO ECO (SUPPLIED WITH 2x80 VERSION)
20122	ORIENTABLE BRACKET
20082	MOD EM ACC LED/T5 TR SE1NRM
20085	MOD EM ACC LED/T5 AT/LG SE1/3H
20086	MOD EM ACC LED/T5 LGFM SE1/3H
418319000	CABLE GLAND M20 WITH VENTILATION VALVE

Order code	Description
20102	BUILDING AUTOMATION CENTRAL UNIT
20124	BUILDING AUTOMATION CENTRAL UNIT WIFI
20104	2 INPUT INTERFACE – RADIO TRANSMITTER
15022	BUILDING AUTOMATION RADIO MODULE
15024	DALI MODULE
15034	1-10V MODULE

SPECIAL VARIANTS: COLOUR RENDERING ≥90 – COLOUR TEMPERATURE ON REQUEST – WITH THREE-PHASE THROUGH WIRING – WITH POLYCARBONATE DIFFUSER (HACCP) – SICURO 24 (SLGS) Contact the Beggelli sales network

DOMOTIC RADIO MODULE

1÷10V MODULE

DALI MODULE

PLUG&LIGHT MODULE

OPTIONAL MODULES TO EXTEND BEGHELLI SD TO RADIO CONTROL OR DALI / 1-10V SYSTEMS AND EMERGENCY



INTELLIGENT PHOTOSENSOR

1. Autodimmer Natural Light

2. Autodimmer Dynamic Light

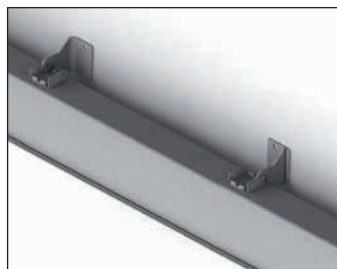
3. opticom TECHNOLOGY

Smartphone Interface to control and set up system



MODULE FOR EMERGENCY LIGHTING

WALL BRACKET



20082 to be ordered separately
20085 to be ordered separately
20086 to be ordered separately

20122 to be ordered separately

Efficiency and dimming

The increase in luminous efficacy (lm/W) and the useful life of the device may vary significantly according to the degree to which it is dimmed. Assuming an average level of 50% of the luminous flux, the following results are obtained with the Acciaio Eco LED:

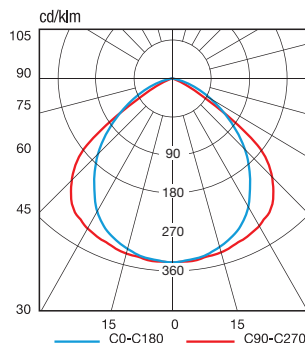
Dimming SD 50 %
Device duration +40 %
Luminous efficiency +10 %

EMERGENCY WITH LED INVERTER

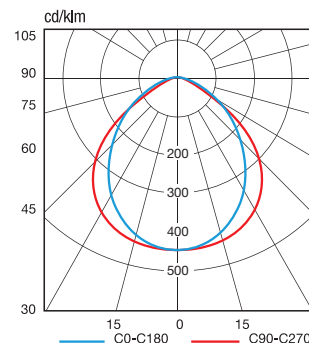
TR AT LG LGFM

INVERTER	19358	INVERTER PLUG&LIGHT LED SE/SA 1H 20-60 V	to be ordered separately (version SD only)
	19359	INVERTER PLUG&LIGHT LED SE/SA 3H 20-60 V	to be ordered separately (version SD only)
	19367	INVERTER PLUG&LIGHT LED SE/SA 1H 60-120 V	to be ordered separately (version ED only)
	19355	INV LED AT/LG 6 W 55 V 123H (addressable)	to be ordered separately
	19356	INV LED LGFM 6 W 55 V 123H (addressable)	to be ordered separately

Polar Diagram SD



Polar Diagram ED



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SmartDriver **SD**

	Power* W	Order code	Description	LED Power W	Colour Temp. K	Colour rendering	Power consumption max. W	N°LEDs	Flux of LEDs lm (Tj=25 °C)	Flux of fixture lm*	Energy Class	lm/W	Packaging
SD	2x 18	A218ESD	ACCIAIO E LED 2x18 SD 4000K	11	4 000	>80	12	32	1 850	1 600	A++	135	1
SD	1x 36	A136ESD	ACCIAIO E LED 1X36 SD 4000K	15	4 000	>80	20	48	3 150	2 700	A++	135	1
SD	2x 36	A236ESD	ACCIAIO E LED 2X36 SD 4000K	30	4 000	>80	35	96	5 570	4 700	A++	135	1
SD	1x 58	A158ESD	ACCIAIO E LED 1X58 SD 4000K	23	4 000	>80	29	72	4 400	3 800	A++	131	1
SD	2x 58	A258ESD	ACCIAIO E LED 2X58 SD 4000K	46	4 000	>80	52	144	8 350	7 000	A++	135	1
SD	2x 80	A280ESD	ACCIAIO TOP LED 2X80 SD 4K	68	4 000	>80	74 (56***)	180	11 800	9 900	A++	135	1
**	1x 36	A136E	ACCIAIO E LED 1X36 D 4000K	17	4 000	>80	22	48	3 150	2 700	A++	120	1
**	2x 36	A236E	ACCIAIO E LED 2X36 D 4000K	35	4 000	>80	40	96	5 570	4 700	A++	120	1
**	1x 58	A158E	ACCIAIO E LED 1X58 D 4000K	26	4 000	>80	32	72	4 400	3 800	A++	120	1
**	2x 58	A258E	ACCIAIO E LED 2X58 D 4000K	52	4 000	>80	58	144	8 350	7 000	A++	120	1

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Eco Driver **ED**

	Power* W	Order code	Description	LED Power W	Colour Temp. K	Colour rendering	Power consumption max. W	N°LEDs	Flux of LEDs lm (Tj=25 °C)	Flux of fixture lm*	Energy Class	lm/W	Packaging
	2x 36	A236ED	ACCIAIO ED LED 2X36 4000K	34	4 000	>80	36	96	5 400	4 400	A++	124	1
	2x 58	A258ED	ACCIAIO ED LED 2X58 4000K	50	4 000	>80	52	144	8 050	6 400	A++	122	1

** Version with electronic Driver with traditional technology

*** The power consumption has an auto derating to the power indicated in parenthesis if the product is powered by voltage less than 150 V_{AC}.

LED power, LED Flux and output Flux from the device will be reduced in proportion to the power derating.