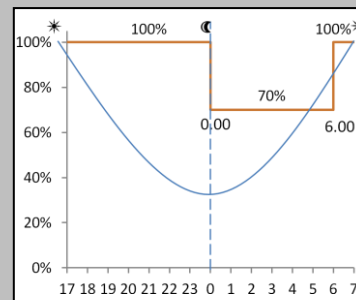


ARMONIA

DA Profile



ARMONIA MINI LED TRIO

MAIN CHARACTERISTICS

<b>Applications</b>	Street and urban lighting.
<b>Optic</b>	STU-M/S: Asymmetrical optic for street lighting (urban). STE-M/S: Asymmetrical optic for street lighting (suburban). STW: Asymmetrical optic for wide roads and wet asphalts lighting. S05: Asymmetrical optic for urban and street lighting. Colour temperature: 4000K (optional 3000K, 5700K)   CRI ≥ 70 Photobiological safety class: EXEMPT GROUP LED source efficiency: 168 lm/W @ 525mA, Tj=85°C, 4000K
<b>Insulation class</b>	II, I
<b>Protection degree</b>	IP66   IK08
<b>LED modules</b>	Removable/Replaceable
<b>Tilt angle</b>	0°
<b>Dimensions</b>	See the drawing
<b>Weight</b>	11 kg
<b>Side surface</b>	Side: 0.8m <sup>2</sup> – Top: 0.24m <sup>2</sup>
<b>Mounting</b>	Installation on brackets MA – MK/S – MP – MG (1/2" GAS)
<b>Gear tray</b>	Removable
<b>Operating temperature</b>	-40°C / +25°C
<b>Storage temperature</b>	-40°C / +80°C
<b>Main reference standards</b>	EN 60598-1, EN 60598-2-3, EN 62471 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3

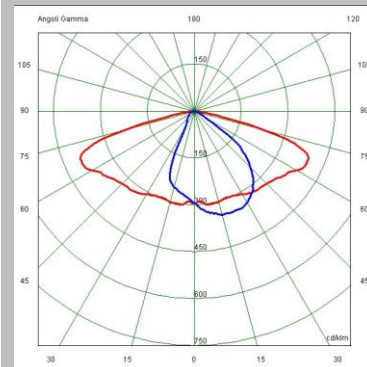
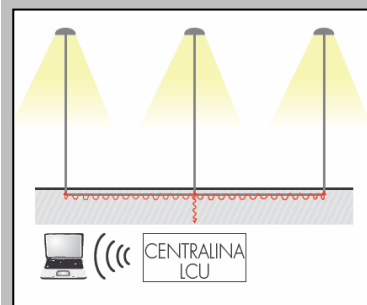
ELECTRICAL CHARACTERISTICS

<b>Rated voltage</b>	220÷240V 50/60Hz
<b>LED current</b>	525mA , 700mA
<b>Power factor</b>	>0,9 (at full load)
<b>On-load switch</b>	Included, with integrated cable clamp.
<b>Mains connection</b>	For cables max section 4mm <sup>2</sup>
<b>Surge protection</b>	SPD integrated 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life.
<b>Control system (options)</b>	F: Fixed power not dimmable. DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. PLM: Power Line single point communication system.
<b>Optical unit lifetime (Tq=25°C, 700mA)</b>	>100.000hr L90B10 >100.000hr L90, TM-21

MATERIALS

<b>Fixing</b>	Aluminum powder painted.
<b>Body</b>	Aluminum powder painted.
<b>Heatsink</b>	Extruded aluminum.
<b>Lower frame</b>	Die-cast aluminum UNI EN 1706 powder painted.
<b>Optic</b>	99.85% aluminum with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268)
<b>Screen</b>	Flat tempered glass, 4mm thickness high transparency.
<b>Gasket</b>	EPDM
<b>Colour</b>	Graphite (Cod.01)

PLM



STU-M Optic

All the published photometrical data has been obtained according to EN 13032-1



LUMINAIRE	LED Current (mA)	OPTICS	RATED LUMINAIRE FLUX <sup>1</sup> (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER <sup>1</sup> (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX <sup>2</sup> (Tj=85°C, 4000K, lm)	RATED LED POWER <sup>2</sup> (Tj=85°C, W)
ARMONIA MINI 0F2H1 4.50-1M	525	STU-S	1760	15	117	2074	12
ARMONIA MINI 0F2H1 4.5-2M		STU-M S05	3620	30,5	119	4369	26
ARMONIA MINI 0F2H1 4.7-1M	700	STU-S	2370	21,5	110	2765	18
ARMONIA MINI 0F2H1 4.7-2M		STU-M S05	4630	40	116	5530	36
ARMONIA MINI 0F3 4.50-1M	525	STE-S	2460	20,5	120	2801	17
ARMONIA MINI 0F3 4.5-2M		STE-M STW	5060	39	130	5901	35
ARMONIA MINI 0F3 4.7-1M	700	STE-S	3200	28	114	3735	24
ARMONIA MINI 0F3 4.7-2M		STE-M STW	6400	52	123	7470	47

The tables above describe the flux and output power of the available versions. These parameters are necessary in order to guarantee a correct comparison of the luminaire performance.

In particular, the luminaire efficiency (expressed in lm/W) must be calculated as the ratio between the output luminous flux of the luminaire and the power absorbed by the input power supply unit.

For the sake of completeness the tables also show the data of the nominal flux and power of the used LED.

Note: 1: Rated data obtained in laboratory | 2: Rated data extrapolated from LED manufacturer datasheet.

Multiplier to obtain flux and power in function of Tq		
Tq (°C)	Flux multiplier	Power multiplier
50	0,94	0,99
40	0,96	-
25	1	1
15	1,02	-
5	1,05	-
0	1,05	1,01

Multiplier to obtain flux and power in function of Tk		
Tk (K)	Flux multiplier	Power multiplier
3000	0,88	1
4000	1	1
5700	1,02	1
CRI	Flux multiplier	Power multiplier
70	1	1
80	0,8	1,01

The characteristics of the product listed above are subjected to change without notice.

They will have to be confirmed in case of order.

Values indicated in this technical sheet are to be considered rated values subject to a tolerance of +/-5%.

LUMINAIRE	LED Current (mA)	OPTICS	INRUSH CURRENT Duration 50%pk (µs)	INRUSH CURRENT Peak (A)	MCB B-Type 10A / 16A / 25A	MCB C-Type 10A / 16A / 25A	SURGE PROTECTION CL.I (CM / DM, kV)	SURGE PROTECTION CL.II (CM / DM, kV)
ARMONIA MINI 0F2H1 4.50-1M	525	STU-S	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	9 / 10
ARMONIA MINI 0F2H1 4.5-2M		STU-M S05	250	30	10 / 17 / 28	17 / 28 / 44	10 / 10	9 / 10
ARMONIA MINI 0F2H1 4.7-1M	700	STU-S	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	9 / 10
ARMONIA MINI 0F2H1 4.7-2M		STU-M S05	250	30	10 / 17 / 28	17 / 28 / 44	10 / 10	9 / 10
ARMONIA MINI 0F3 4.50-1M	525	STE-S	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	9 / 10
ARMONIA MINI 0F3 4.5-2M		STE-M STW	230	55	7 / 12 / 20	12 / 20 / 32	10 / 10	9 / 10
ARMONIA MINI 0F3 4.7-1M	700	STE-S	250	30	10 / 17 / 28	17 / 28 / 44	10 / 10	9 / 10
ARMONIA MINI 0F3 4.7-2M		STE-M STW	230	55	7 / 12 / 20	12 / 20 / 32	10 / 10	9 / 10

NOTE 1: The number of luminaires under a three-phase MCB is calculated multiplying by 3 the number in the table. These values are based on data declared by power supply manufacturer and tested on worst case MCB model. An inrush current limiter (i.e. Finder SSR 77.11.x.xxx.8250 (15A) or 77.31.x.xxx.8050 model (30A)) can improve the max.number of luminaire under the MCB

NOTE 2: Power supply manufacturer never did any considerations about 50A or 63A MCB. So we can't declare anything about using of MCB higher than 25A.

