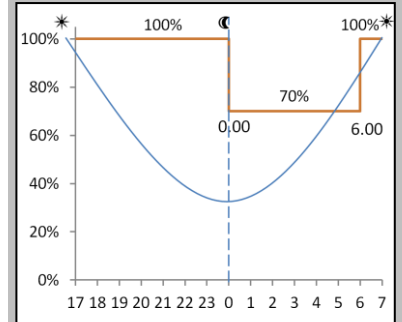
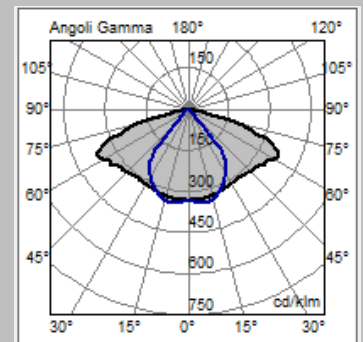
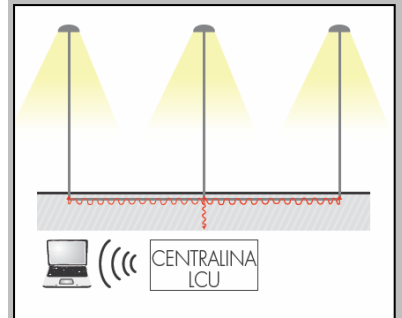


ARMONIA

DA Profile



PLM



TS Optic

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



ARMONIA TS LED TRIO	
MAIN CHARACTERISTICS	
Applications	Urban and street lighting.
Optic	TS: Asymmetrical optic for parking and urban areas. Colour temperature: 4000K (3000K, 5700K optional) CRI ≥ 70 Photobiological safety class: EXEMPT GROUP LED source efficiency: 168 lm/W @ 525mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66 IK08 Total
Tilt angle	Tilt angle and direction adjustable.
LED modules	Removable / Replaceable
Dimensions	See the drawing
Weight	16 Kg
Side surface	Side: 0.9m ² - Top: 0.31m ²
Mounting	On cable Ø6÷Ø12mm
Gear tray	Removable
Operating temperature	-40°C / +50°C (525mA), -40°C / +35°C (700mA)
Storage temperature	-40°C / +80°C
Main reference standards	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3
ELECTRICAL CHARACTERISTICS	
Rated voltage	220÷240V 50/60Hz
LED current	525mA, 700mA
Power factor	>0,9 (at full load)
On-load switch	Included, with integrated cable clamp.
Mains connection	Connector for cables max section 4mm ²
Surge protection	SPD integrated 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life. Pulse withstand: 10kV / 10kV CM/DM
Control system (options)	F: Fixed power not dimmable. DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. PLM: Power Line single point communication system.
Optical unit lifetime (Tq=25°C, 700mA)	>100.000hr L90B10 >100.000hr L90, TM-21
MATERIALS	
Fixing	Stainless steel AISI 316L
Body	Spun aluminum powder painted.
Heatsink	Extruded aluminum.
Lower frame	Die-cast aluminum UNI EN 1706 powder painted.
Optic	99.85% aluminum with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268)
Screen	Flat tempered glass, 4mm thickness high transparency.
Gasket	EPDM
Colour	Graphite (Cod. 01)

4000K

LUMINAIRE	LED Current (mA)	OPTICS	RATED LUMINAIRE FLUX ¹ (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER ¹ (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX ² (Tj=85°C, 4000K, lm)	RATED LED POWER ² (Tj=85°C, W)
ARMONIA TS 0F2H1 4.50-1M	525	TS	1760	15	117	2074	12
ARMONIA TS 0F2H1 4.5-2M			3620	30,5	119	4369	26
ARMONIA TS 0F2H1 4.5-3M			5420	44	123	6553	39
ARMONIA TS 0F2H1 4.5-4M			7010	57	123	8737	53
ARMONIA TS 0F2H1 4.7-1M	700	TS	2370	21,5	110	2765	18
ARMONIA TS 0F2H1 4.7-2M			4630	40	116	5530	36
ARMONIA TS 0F2H1 4.7-3M			6890	58	119	8295	53
ARMONIA TS 0F2H1 4.7-4M			8810	76	116	11060	71

3000K

LUMINAIRE	LED Current (mA)	OPTICS	RATED LUMINAIRE FLUX ¹ (Tq=25°C, 3000K, lm)	RATED LUMINAIRE POWER ¹ (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX ² (Tj=85°C, 3000K, lm)	RATED LED POWER ² (Tj=85°C, W)
ARMONIA TS 0F2H1 3.50-1M	525	TS	1640	15	109	1929	12
ARMONIA TS 0F2H1 3.5-2M			3370	30,5	110	4063	26
ARMONIA TS 0F2H1 3.5-3M			5040	44	115	6094	39
ARMONIA TS 0F2H1 3.5-4M			6520	57	114	8126	53
ARMONIA TS 0F2H1 3.7-1M	700	TS	2200	21,5	102	2571	18
ARMONIA TS 0F2H1 3.7-2M			4310	40	108	5143	36
ARMONIA TS 0F2H1 3.7-3M			6410	58	111	7714	53
ARMONIA TS 0F2H1 3.7-4M			8190	76	108	10286	71

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.

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 TS 0F2H1 4.50-1M	525	TS	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.5-2M			250	30	10 / 17 / 28	17 / 28 / 44	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.5-3M			230	55	7 / 12 / 20	12 / 20 / 32	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.5-4M			230	55	7 / 12 / 20	12 / 20 / 32	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.7-1M	700	TS	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.7-2M			250	30	10 / 17 / 28	17 / 28 / 44	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.7-3M			230	55	7 / 12 / 20	12 / 20 / 32	10 / 10	10 / 10
ARMONIA TS 0F2H1 4.7-4M			210	57	7 / 12 / 20	12 / 20 / 32	10 / 10	10 / 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.xxx.8250 (15A) or 77.31.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.

