

ARMONIA TRIO

MAIN CHARACTERISTICS

| | |
|---------------------------------|--|
| Applications | Street and urban lighting. |
| Optic | STE-M/S: Asymmetrical optic for suburban street lighting. STU-M/S: Asymmetrical optic for street, urban and cycle-path lighting. STW: Asymmetrical optic for wide urban and suburban road lighting, specific for wet asphalts. S05: Asymmetrical optic for street, urban and green areas lighting. Colour temperature: 4000K (3000K optional) CRI ≥ 70 Photobiological safety class: EXEMPT GROUP LED source efficiency: 168 lm/W @ 525mA, Tj=85°C |
| Insulation class | II, I |
| Protection degree | IP66 IK08 total |
| Tilt angle | 0° |
| Mounting | Installation on brackets MA - MK/S - MP - MG (1/2" GAS) |
| Gear tray | Removable |
| LED modules | Removable/Replaceable |
| Dimensions and weight | Armonia 1: Ø626x227mm – 11kg Armonia 2: Ø626x334mm – 11.5kg |
| Exposed surface | Side: Armonia 1: 0.9m ² - Armonia 2: 0.14m ² Top: 0.31m ² |
| 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 |



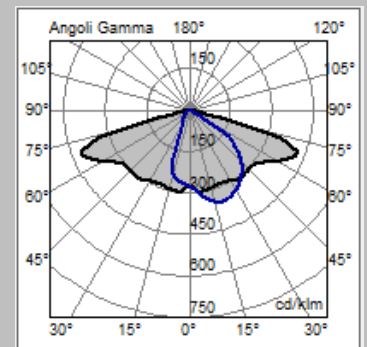
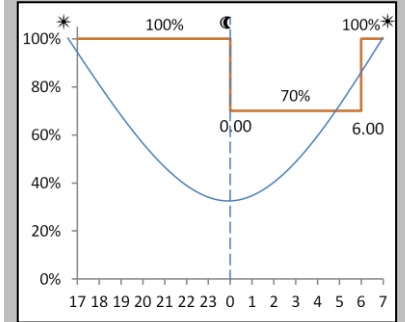
ELECTRICAL CHARACTERISTICS

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|---|---|
| Rated voltage | 220÷240V 50/60Hz |
| 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 | Up to 10kV With SPD (optional) 10kV / 10kV CM/DM |
| SPD (optional) | 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life. |
| Control system (options) | F: Fixed power not dimmerable. DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. FLC: Constant light flux. DALI: Digital dimming interface DALI. |
| Optical unit lifetime (Tq=25°C, 700mA) | >100.000hr L90B10 >100.000hr L90, TM-21 |

MATERIALS

| | |
|--------------------|---|
| Fixing | Aluminum powder painted. |
| Body | 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 |

DA Profile



STU-M Optic

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





| LUMINAIRE | OPTIC | RATED LUMINAIRE FLUX* (Tq=25°C, 4000K, lm) | RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W) | LUMINAIRE EFFICACY (Tq=25°C, lm/W) | RATED LED FLUX* (Tj=85°C, 4000K, lm) | RATED LED POWER* (Tj=85°C, W) |
|----------------------|-----------------------|---|--|---------------------------------------|---|----------------------------------|
| ARMONIA 0F2H1 4.5-1M | S05 STU-M STU-S | 1840 | 16 | 115 | 2184 | 13 |
| ARMONIA 0F2H1 4.5-2M | | 3620 | 30.5 | 118 | 4368 | 26 |
| ARMONIA 0F2H1 4.5-3M | | 5420 | 44 | 123 | 6552 | 39 |
| ARMONIA 0F2H1 4.5-4M | | 7010 | 57 | 122 | 8736 | 52 |
| ARMONIA 0F2H1 4.7-1M | S05 STU-M STU-S | 2370 | 21.5 | 110 | 2765 | 18 |
| ARMONIA 0F2H1 4.7-2M | | 4630 | 40 | 115 | 5530 | 36 |
| ARMONIA 0F2H1 4.7-3M | | 6890 | 58 | 118 | 8295 | 54 |
| ARMONIA 0F2H1 4.7-4M | | 8810 | 76 | 115 | 11060 | 72 |
| ARMONIA 0F3 4.5-1M | STE-M STE-S STW | 2560 | 21.5 | 119 | 2950 | 17 |
| ARMONIA 0F3 4.5-2M | | 5060 | 39 | 129 | 5900 | 34 |
| ARMONIA 0F3 4.5-3M | | 7340 | 57 | 128 | 8850 | 51 |
| ARMONIA 0F3 4.5-4M | | 9750 | 76 | 128 | 11800 | 68 |
| ARMONIA 0F3 4.7-1M | STE-M STE-S STW | 3200 | 28 | 114 | 3735 | 24 |
| ARMONIA 0F3 4.7-2M | | 6400 | 52 | 123 | 7470 | 48 |
| ARMONIA 0F3 4.7-3M | | 9230 | 76 | 121 | 11205 | 72 |
| ARMONIA 0F3 4.7-4M | | 12300 | 102 | 120 | 14940 | 96 |

*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: $\pm 7\%$. Power tolerance: $\pm 5\%$.

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



| LUMINAIRE | OPTIC | RATED LUMINAIRE FLUX* (Tq=25°C, 3000K, lm) | RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W) | LUMINAIRE EFFICACY (Tq=25°C, lm/W) | RATED LED FLUX* (Tj=85°C, 3000K, lm) | RATED LED POWER* (Tj=85°C, W) |
|----------------------|-----------------------|---|--|---------------------------------------|---|----------------------------------|
| ARMONIA 0F2H1 3.5-1M | S05 STU-M STU-S | 1720 | 16 | 107 | 1990 | 13 |
| ARMONIA 0F2H1 3.5-2M | | 3360 | 30.5 | 110 | 3980 | 26 |
| ARMONIA 0F2H1 3.5-3M | | 5040 | 44 | 114 | 5970 | 39 |
| ARMONIA 0F2H1 3.5-4M | | 6520 | 57 | 114 | 7960 | 52 |
| ARMONIA 0F2H1 3.7-1M | S05 STU-M STU-S | 2210 | 21.5 | 102 | 2520 | 18 |
| ARMONIA 0F2H1 3.7-2M | | 4300 | 40 | 107 | 5040 | 36 |
| ARMONIA 0F2H1 3.7-3M | | 6410 | 58 | 110 | 7560 | 54 |
| ARMONIA 0F2H1 3.7-4M | | 8190 | 76 | 107 | 10080 | 72 |
| ARMONIA 0F3 3.5-1M | STE-M STE-S STW | 2380 | 21.5 | 110 | 2701 | 17 |
| ARMONIA 0F3 3.5-2M | | 4700 | 39 | 120 | 5402 | 34 |
| ARMONIA 0F3 3.5-3M | | 6830 | 57 | 119 | 8103 | 51 |
| ARMONIA 0F3 3.5-4M | | 9070 | 76 | 119 | 10804 | 68 |
| ARMONIA 0F3 3.7-1M | STE-M STE-S STW | 2980 | 28 | 106 | 3420 | 24 |
| ARMONIA 0F3 3.7-2M | | 5950 | 52 | 114 | 6840 | 48 |
| ARMONIA 0F3 3.7-3M | | 8580 | 76 | 112 | 10260 | 72 |
| ARMONIA 0F3 3.7-4M | | 11440 | 102 | 112 | 13680 | 96 |

*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±5%.

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