

## LED Tri-Proof



### Characteristics

High luminous efficiency of up to 150 lm/W  
 High grade of protection IP65/IP66  
 Easy and quick installation  
 Energy savings of up to 50 % (compared to luminaires that use fluorescent lamps)  
 Material of the body: flame retardant glass fibre reinforced polyester  
 Material of the diffuser: PMMA/PC on request  
 RFI conform up to 300MHz  
 Immunity according to standard  
 PF> 0.95

### Typical application

Manufacturing plants  
 Warehouse Lighting  
 Car parks  
 Under canopy lighting  
 Stations

### Electrical characteristics

|                |               |
|----------------|---------------|
| Supply voltage | 200-240VAC    |
|                | WW 100-240VAC |
| Frequency      | 50/60 Hz      |
| Power factor   | ≥0.95         |

### Protection

|                    |           |
|--------------------|-----------|
| Ingress protection | IP65/IP66 |
| Safety class       | Class I   |

### Body characteristics

|          |  |
|----------|--|
| Housing  | GRP (Glass fiber reinforced polyester) |
| Diffuser | PMMA/PC on request                     |

### Lighting characteristics

|                             |                         |
|-----------------------------|-------------------------|
| Efficiency                  | up to 151 lm/W          |
| Color rendering index (CRI) | >80, >85, >90           |
| Color temperature (CCT)     | 3000K/4000K/6500K       |
| Flicker                     | No Flicker/Flicker <30% |

### Warranty conditions

|                     |                            |
|---------------------|----------------------------|
| Lifespan            | 50 000 h                   |
| Warranty            | 5 Y                        |
| Ambient temperature | -20 ~ 35°C/on request 40°C |
| Storage temperature | -20 ~ 60°C                 |

### Standards

|                           |              |
|---------------------------|--------------|
| Harmonics                 | EN 61000-3-2 |
| EMC Immunity              | EN 61547     |
| Conducted Emission Test   | EN 55015     |
| Luminaires                | EN 60598-1   |
| LED Luminaire performance | EN 62722-2-1 |
| Photobiological safety    | EN 62471     |

| Ref. №          | Product                 | Rated Power | VAC     | Efficiency | Luminous Flux | CCT    | CRI | Flicker | Dimensions LxWxH |
|-----------------|-------------------------|-------------|---------|------------|---------------|--------|-----|---------|------------------|
| 983023143030120 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 400lm    | 148lm/W       | 3 000K | >80 | <30%    | 1185x85x88mm     |
| 983023134030345 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 100lm    | 134lm/W       | 3 000K | >85 | <30%    | 1185x85x88mm     |
| 983023148030131 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 400lm    | 148lm/W       | 3 000K | >80 | 0%      | 1185x85x88mm     |
| 983023134030353 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 100lm    | 134lm/W       | 3 000K | >85 | 0%      | 1185x85x88mm     |
| 983023148030128 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 400lm    | 148lm/W       | 3 000K | >80 | <30%    | 1185x85x88mm     |
| 983023134030350 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 100lm    | 134lm/W       | 3 000K | >85 | <30%    | 1185x85x88mm     |
| 983023148030125 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 400lm    | 148lm/W       | 3 000K | >80 | 0%      | 1185x85x88mm     |
| 983023134030347 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 100lm    | 134lm/W       | 3 000K | >85 | 0%      | 1185x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983029138030121 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 400lm    | 151lm/W       | 3 000K | >80 | <30%    | 1477x85x88mm     |
| 983029137030356 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 000lm    | 137lm/W       | 3 000K | >85 | <30%    | 1477x85x88mm     |
| 983029151030141 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 400lm    | 151lm/W       | 3 000K | >80 | 0%      | 1477x85x88mm     |
| 983029137030364 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 000lm    | 137lm/W       | 3 000K | >85 | 0%      | 1477x85x88mm     |
| 983029151030138 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 400lm    | 151lm/W       | 3 000K | >80 | <30%    | 1477x85x88mm     |
| 983029137030361 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 000lm    | 137lm/W       | 3 000K | >85 | <30%    | 1477x85x88mm     |
| 983029151030135 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 400lm    | 151lm/W       | 3 000K | >80 | 0%      | 1477x85x88mm     |
| 983029137030358 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 000lm    | 137lm/W       | 3 000K | >85 | 0%      | 1477x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983037130030122 | LED Tri-Proof 37W       | 37W         | 200-240 | 5 000lm    | 135lm/W       | 3 000K | >80 | <30%    | 1185x85x88mm     |
| 983037131030367 | LED Tri-Proof 37W       | 37W         | 200-240 | 4 850lm    | 131lm/W       | 3 000K | >85 | <30%    | 1185x85x88mm     |
| 983037135030322 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 5 000lm    | 135lm/W       | 3 000K | >80 | 0%      | 1185x85x88mm     |
| 983037131030375 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 4 850lm    | 131lm/W       | 3 000K | >85 | 0%      | 1185x85x88mm     |
| 983037135030147 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 5 000lm    | 135lm/W       | 3 000K | >80 | <30%    | 1185x85x88mm     |
| 983037131030372 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 4 850lm    | 131lm/W       | 3 000K | >85 | <30%    | 1185x85x88mm     |
| 983037135030144 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 5 000lm    | 135lm/W       | 3 000K | >80 | 0%      | 1185x85x88mm     |
| 983037131030369 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 4 850lm    | 131lm/W       | 3 000K | >85 | 0%      | 1185x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983050140030123 | LED Tri-Proof 50W       | 50W         | 200-240 | 7 200lm    | 144lm/W       | 3 000K | >80 | <30%    | 1477x85x88mm     |
| 983050132030378 | LED Tri-Proof 50W       | 50W         | 200-240 | 6 600lm    | 132lm/W       | 3 000K | >85 | <30%    | 1477x85x88mm     |
| 983050144030331 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 7 200lm    | 144lm/W       | 3 000K | >80 | <10%    | 1477x85x88mm     |
| 983050132030386 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 6 600lm    | 132lm/W       | 3 000K | >85 | <10%    | 1477x85x88mm     |
| 983050144030328 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 7 200lm    | 144lm/W       | 3 000K | >80 | <30%    | 1477x85x88mm     |
| 983050132030383 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 6 600lm    | 132lm/W       | 3 000K | >85 | <30%    | 1477x85x88mm     |
| 983050144030325 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 7 200lm    | 144lm/W       | 3 000K | >80 | <10%    | 1477x85x88mm     |
| 983050132030380 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 6 600lm    | 132lm/W       | 3 000K | >85 | <10%    | 1477x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983050140030132 | LED Tri-Proof 50WS      | 50W         | 200-240 | 7 000lm    | 140lm/W       | 3 000K | >80 | <30%    | 1185x85x88mm     |
| 983050132030390 | LED Tri-Proof 50WS      | 50W         | 200-240 | 6 400lm    | 128lm/W       | 3 000K | >85 | <30%    | 1185x85x88mm     |

| Ref. №          | Product                 | Rated Power | VAC     | Efficiency | Luminous Flux | CCT   | CRI | Flicker | Dimensions LxWxH |
|-----------------|-------------------------|-------------|---------|------------|---------------|-------|-----|---------|------------------|
| 983029138040041 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 400lm    | 148lm/W       | 4000K | >80 | <30%    | 1185x85x88mm     |
| 983023143040300 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 100lm    | 134lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
| 983023148040132 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 400lm    | 148lm/W       | 4000K | >80 | 0%      | 1185x85x88mm     |
| 983023134040354 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 100lm    | 134lm/W       | 4000K | >85 | 0%      | 1185x85x88mm     |
| 983023148040129 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 400lm    | 148lm/W       | 4000K | >80 | <30%    | 1185x85x88mm     |
| 983023134040351 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 100lm    | 134lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
| 983023148040126 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 400lm    | 148lm/W       | 4000K | >80 | 0%      | 1185x85x88mm     |
| 983023134040348 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 100lm    | 134lm/W       | 4000K | >85 | 0%      | 1185x85x88mm     |
|                 |                         |             |         |            |               |       |     |         |                  |
| 983029138040042 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 400lm    | 151lm/W       | 4000K | >80 | <30%    | 1477x85x88mm     |
| 983029138040301 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 000lm    | 137lm/W       | 4000K | >85 | <30%    | 1477x85x88mm     |
| 983029151040142 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 400lm    | 151lm/W       | 4000K | >80 | 0%      | 1477x85x88mm     |
| 983029137040365 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 000lm    | 137lm/W       | 4000K | >85 | 0%      | 1477x85x88mm     |
| 983029151040139 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 400lm    | 151lm/W       | 4000K | >80 | <30%    | 1477x85x88mm     |
| 983029137040362 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 000lm    | 137lm/W       | 4000K | >85 | <30%    | 1477x85x88mm     |
| 983029151040136 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 400lm    | 151lm/W       | 4000K | >80 | 0%      | 1477x85x88mm     |
| 983029137040359 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 000lm    | 137lm/W       | 4000K | >85 | 0%      | 1477x85x88mm     |
|                 |                         |             |         |            |               |       |     |         |                  |
| 983037130040043 | LED Tri-Proof 37W       | 37W         | 200-240 | 5 000lm    | 135lm/W       | 4000K | >80 | <30%    | 1185x85x88mm     |
| 983037130040302 | LED Tri-Proof 37W       | 37W         | 200-240 | 4 850lm    | 131lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
| 983037135040323 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 5 000lm    | 135lm/W       | 4000K | >80 | 0%      | 1185x85x88mm     |
| 983037131040376 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 4 850lm    | 131lm/W       | 4000K | >85 | 0%      | 1185x85x88mm     |
| 983037135040148 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 5 000lm    | 135lm/W       | 4000K | >80 | <30%    | 1185x85x88mm     |
| 983037131040373 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 4 850lm    | 131lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
| 983037135040145 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 5 000lm    | 135lm/W       | 4000K | >80 | 0%      | 1185x85x88mm     |
| 983037131040370 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 4 850lm    | 131lm/W       | 4000K | >85 | 0%      | 1185x85x88mm     |
| 983040131040412 | LED Tri-Proof 40W       | 40W         | 200-240 | 5240lm     | 131lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
|                 |                         |             |         |            |               |       |     |         |                  |
| 983050140040044 | LED Tri-Proof 50W       | 50W         | 200-240 | 7 200lm    | 144lm/W       | 4000K | >80 | <30%    | 1477x85x88mm     |
| 983050140040304 | LED Tri-Proof 50W       | 50W         | 200-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <30%    | 1477x85x88mm     |
| 983050144040332 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 7 200lm    | 144lm/W       | 4000K | >80 | <10%    | 1477x85x88mm     |
| 983050132040387 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <10%    | 1477x85x88mm     |
| 983050144040329 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 7 200lm    | 144lm/W       | 4000K | >80 | <30%    | 1477x85x88mm     |
| 983050132040384 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <30%    | 1477x85x88mm     |
| 983050144040326 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 7 200lm    | 144lm/W       | 4000K | >80 | <10%    | 1477x85x88mm     |
| 983050132040381 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <10%    | 1477x85x88mm     |
|                 |                         |             |         |            |               |       |     |         |                  |
| 983048132040400 | LED Tri-Proof 48WS      | 48W         | 200-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |
| 983050140040134 | LED Tri-Proof 50WS      | 50W         | 200-240 | 7 000lm    | 140lm/W       | 4000K | >80 | <30%    | 1185x85x88mm     |
| 983050132040391 | LED Tri-Proof 50WS      | 50W         | 200-240 | 6 600lm    | 132lm/W       | 4000K | >85 | <30%    | 1185x85x88mm     |

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|-----------------|-------------------------|-------------|---------|------------|---------------|--------|-----|---------|------------------|
| 983037130040116 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 400lm    | 148lm/W       | 6 500K | >80 | <30%    | 1185x85x88mm     |
| 983023134060346 | LED Tri-Proof 23W       | 23W         | 200-240 | 3 100lm    | 134lm/W       | 6 500K | >85 | <30%    | 1185x85x88mm     |
| 983023148060133 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 400lm    | 148lm/W       | 6 500K | >80 | 0%      | 1185x85x88mm     |
| 983023134060355 | LED Tri-Proof 23W FF    | 23W         | 200-240 | 3 100lm    | 134lm/W       | 6 500K | >85 | 0%      | 1185x85x88mm     |
| 983023148060130 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 400lm    | 148lm/W       | 6 500K | >80 | <30%    | 1185x85x88mm     |
| 983023134060352 | LED Tri-Proof 23W WW    | 23W         | 100-240 | 3 100lm    | 134lm/W       | 6 500K | >85 | <30%    | 1185x85x88mm     |
| 983023148060127 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 400lm    | 148lm/W       | 6 500K | >80 | 0%      | 1185x85x88mm     |
| 983023134060349 | LED Tri-Proof 23W WW FF | 23W         | 100-240 | 3 100lm    | 134lm/W       | 6 500K | >85 | 0%      | 1185x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983029138060117 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 400lm    | 151lm/W       | 6 500K | >80 | <30%    | 1477x85x88mm     |
| 983029137060357 | LED Tri-Proof 29W       | 29W         | 200-240 | 4 000lm    | 137lm/W       | 6 500K | >85 | <30%    | 1477x85x88mm     |
| 983029151060143 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 400lm    | 151lm/W       | 6 500K | >80 | 0%      | 1477x85x88mm     |
| 983029137060366 | LED Tri-Proof 29W FF    | 29W         | 200-240 | 4 000lm    | 137lm/W       | 6 500K | >85 | 0%      | 1477x85x88mm     |
| 983029151060140 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 400lm    | 151lm/W       | 6 500K | >80 | <30%    | 1477x85x88mm     |
| 983029137060363 | LED Tri-Proof 29W WW    | 29W         | 100-240 | 4 000lm    | 137lm/W       | 6 500K | >85 | <30%    | 1477x85x88mm     |
| 983029151060137 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 400lm    | 151lm/W       | 6 500K | >80 | 0%      | 1477x85x88mm     |
| 983029137060360 | LED Tri-Proof 29W WW FF | 29W         | 100-240 | 4 000lm    | 137lm/W       | 6 500K | >85 | 0%      | 1477x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983037130060118 | LED Tri-Proof 37W       | 37W         | 200-240 | 5 000lm    | 135lm/W       | 6 500K | >80 | <30%    | 1185x85x88mm     |
| 983037131060368 | LED Tri-Proof 37W       | 37W         | 200-240 | 4 850lm    | 131lm/W       | 6 500K | >85 | <30%    | 1185x85x88mm     |
| 983037135060324 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 5 000lm    | 135lm/W       | 6 500K | >80 | 0%      | 1185x85x88mm     |
| 983037131060377 | LED Tri-Proof 37W FF    | 37W         | 200-240 | 4 850lm    | 131lm/W       | 6 500K | >85 | 0%      | 1185x85x88mm     |
| 983037135060149 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 5 000lm    | 135lm/W       | 6 500K | >80 | <30%    | 1185x85x88mm     |
| 983037131060374 | LED Tri-Proof 37W WW    | 37W         | 100-240 | 4 850lm    | 131lm/W       | 6 500K | >85 | <30%    | 1185x85x88mm     |
| 983037135060146 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 5 000lm    | 135lm/W       | 6 500K | >80 | 0%      | 1185x85x88mm     |
| 983037131060371 | LED Tri-Proof 37W WW FF | 37W         | 100-240 | 4 850lm    | 131lm/W       | 6 500K | >85 | 0%      | 1185x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983050140060119 | LED Tri-Proof 50W       | 50W         | 200-240 | 7 200lm    | 144lm/W       | 6 500K | >80 | <30%    | 1477x85x88mm     |
| 983050132060379 | LED Tri-Proof 50W       | 50W         | 200-240 | 6 600lm    | 132lm/W       | 6 500K | >85 | <30%    | 1477x85x88mm     |
| 983050144060333 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 7 200lm    | 144lm/W       | 6 500K | >80 | <10%    | 1477x85x88mm     |
| 983050132060388 | LED Tri-Proof 50W FF    | 50W         | 200-240 | 6 600lm    | 132lm/W       | 6 500K | >85 | <10%    | 1477x85x88mm     |
| 983050144060330 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 7 200lm    | 144lm/W       | 6 500K | >80 | <30%    | 1477x85x88mm     |
| 983050132060385 | LED Tri-Proof 50W WW    | 50W         | 100-240 | 6 600lm    | 132lm/W       | 6 500K | >85 | <30%    | 1477x85x88mm     |
| 983050144060327 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 7 200lm    | 144lm/W       | 6 500K | >80 | <10%    | 1477x85x88mm     |
| 983050132060382 | LED Tri-Proof 50W WW FF | 50W         | 100-240 | 6 600lm    | 132lm/W       | 6 500K | >85 | <10%    | 1477x85x88mm     |
|                 |                         |             |         |            |               |        |     |         |                  |
| 983050140060136 | LED Tri-Proof 50WS      | 50W         | 200-240 | 7 000lm    | 140lm/W       | 6 500K | >80 | <30%    | 1185x85x88mm     |
| 983050132060392 | LED Tri-Proof 50WS      | 50W         | 200-240 | 6 400lm    | 128lm/W       | 6 500K | >85 | <30%    | 1185x85x88mm     |

**Lighting Curves**

