iGuzzini

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#### Product configuration: ML21+LED

ML21: rectangular recessed luminaire with 2 optical assemblies - warm white active dissipation - integrated electronic control gear - medium

## Product code

ML21: rectangular recessed luminaire with 2 optical assemblies - warm white active dissipation - integrated electronic control gear - medium Attention! Code no longer in production

## Technical description

Multiple recessed adjustable removable luminaire for LED lamp with active heat dissipation system. Sheet steel perimeter frame. Main structure and lamp body made of die-cast aluminium. Steel rotation hinges. Chrome-plated aluminium lamp body closing rings. Forced heat dissipation using fans with magnetic anti-friction operation guaranteeing lasting efficiency and quietness, keeping LED lamps performance unchanged. The fans have an anti-dust protection system; safety thermal breaker and are set up for fast, easy replacement. Reflectors with high efficiency super-pure aluminium optic - medium beam angle. Body adjusted using manually operated device: internal 29° - external 75° - rotation about axis 355°. During adjustment and rotation the lamp bodies are subject to some limitations. Consult the instruction sheet. Supplied with electronic control gear units connected to the luminaire. Warm white high efficiency LED.

### Installation

Colour

recessed: preparation slot 138 x 270 mm; perimeter frame preliminary fixing on false ceiling (min. thickness 1 mm) with adjustable metal brackets; main structure inserted and mechanically locked on the frame

# 282x151

154



Mounting ceiling recessed

Notes

Wiring on control gear box with quick-coupling connections; each lamp body has a specific ballast, allowing separate switch ons

the configuration of the lamp bodies causes some limitations during angling and rotation; consult the instruction leaflet



White / Aluminium (39) | Grey / Black / Aluminium (E1)

| Complies | with | EIN00288- | and | pertinent | regulations |
|----------|------|-----------|-----|-----------|-------------|
|          |      |           |     |           |             |

| Technical data                      |      |                             |                               |  |  |
|-------------------------------------|------|-----------------------------|-------------------------------|--|--|
| Im system:                          | 6320 | CRI:                        | 80                            |  |  |
| W system:                           | 77   | Colour temperature [K]:     | 3000                          |  |  |
| Im source:                          | 4000 | MacAdam Step:               | 3                             |  |  |
| W source:                           | 34   | Life Time LED 1:            | 50.000h - L80 - B10 (Ta 25°C) |  |  |
| Luminous efficiency (Im/W,          | 82,1 | Lamp code:                  | LED                           |  |  |
| real value):                        |      | Number of lamps for optical | 1                             |  |  |
| Im in emergency mode:               | -    | assembly:                   |                               |  |  |
| Total light flux at or above        | 0    | ZVEI Code:                  | LED                           |  |  |
| an angle of 90° [Lm]:               |      | Number of optical           | 2                             |  |  |
| Light Output Ratio (L.O.R.)<br>[%]: | 79   | assemblies:                 |                               |  |  |
| Beam angle [°]:                     | 22°  |                             |                               |  |  |
|                                     |      |                             |                               |  |  |

#### Polar

|         | Imax=10630 cd         | CIE  | Lux |     |      |      |
|---------|-----------------------|--|-----|-----|------|------|
|         | 90° 180° 90°          | nL 0.79<br>95-100-100-100-79                                     | h   | d   | Em   | Emax |
|         |                       | DIN<br>A.61<br>UTE<br>0.79A+0.00T                                | 2   | 0.8 | 2099 | 2658 |
|         | $K \times T \times I$ | F"1=954<br>F"1+F"2=997   | 4   | 1.6 | 525  | 664  |
| 38,5 W  |                       | F*1+F*2+F*3=1000<br>CIBSE<br>LG3 L<1500 cd/m <sup>2</sup> at 65* | 6   | 2.3 | 233  | 295  |
| LED - / | α=22°                 |  | 8   | 3.1 | 131  | 166  |

Utilisation factors

| R    | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 70 | 66 | 63 | 61 | 65 | 62 | 62 | 59 | 75  |
| 1.0  | 73 | 70 | 67 | 65 | 69 | 66 | 66 | 63 | 80  |
| 1.5  | 77 | 75 | 72 | 71 | 74 | 72 | 71 | 68 | 87  |
| 2.0  | 80 | 78 | 76 | 75 | 77 | 75 | 74 | 72 | 91  |
| 2.5  | 81 | 80 | 79 | 78 | 79 | 78 | 77 | 75 | 94  |
| 3.0  | 82 | 81 | 80 | 80 | 80 | 79 | 78 | 76 | 96  |
| 4.0  | 84 | 83 | 82 | 81 | 81 | 81 | 80 | 78 | 98  |
| 5.0  | 84 | 83 | 83 | 83 | 82 | 82 | 80 | 78 | 99  |

# Luminance curve limit

