

# FRAME 60 high lumen

trim

052-47M413GZ



Project / Type

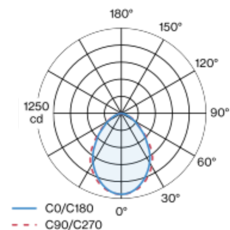
Notes

Count / Date



Luminaire housing made of extruded aluminium profile; recessed light with wrap around edge; suitable for ceiling thickness of 8-25 mm; surface grey powder coated; lighting profile (end cover and mounting bracket pre-assembled) available in advance for installation; remaining lamp components mounted without tools; LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 4000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; micro prismatic PMMA diffuser incl. diffuser film for homogeneous illumination and reduced luminance; degree of protection IP20; PC1; 220-240 V; internal wiring in light halogen free; incl. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling | Recessed

grey | RAL 9006 <sup>1</sup>

IP20

2240 lm

1910 lm/m

## LED

4000 K

CRI  $\geq 90$

L90 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 99 | R<sub>f</sub>: 92 | R<sub>i(1-15)</sub>: 90

MR 0.81 | MDER 0.74

## Optical

Microprismatic | microprismatic

PstLM  $\leq 1.0$  <sup>2</sup> | SVM  $\leq 0.4$  <sup>2</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 23.3 W

system 96 lm/W <sup>3</sup>

20 W/m

## Physical

trim

length 1193 mm | width 77 mm | height 78 mm

3.2 kg

## Cutout

length 1183 mm | width 66 mm

min. ceiling thickness 8 mm | max. ceiling thickness 25 mm

recessed depth 104 mm

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## Installation instructions



## Lighting calculator



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.92	0.9
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF <sup>a</sup>	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF <sup>a</sup>	Luminaire Maintenance Factor		LSF	Lamp Survival Factor	

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	18
B13	23
B16	28
B20	35
C10	30
C13	38
C16	46
C20	58

## Mounting accessories

### CONCRETE INSTALLATION HOUSING

L·W·H (MM)	ARTICLE NUMBER(S)
1235·75·88	035-04126

