

COMBO 450

trim

064-1041637K



Project / Type

Notes

Count / Date



IP 40

220-240V

X-PERT

X-PERT

General

Ceiling / Wall , Recessed

white , RAL9010 ¹

IP40

2180 lm

LED

4000 K

CRI ≥ 80

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam ≤ 3 SDCM

MR 0.72

MDER 0.66

Optical

Microprismatic

UGR < 19 , ≥65° <3000 cd/m²

PstLM ≤ 1.0 ²

SVM ≤ 0.4 ²

Electrical

DALI-2

16.7 W

PC1 220-240V

131 lm/W

1 DALI Addr.

Physical

trim

diameter 466 mm

height 72 mm

3.1 kg

Cutout

diameter 455 mm

min. ceiling thickness 10 mm

max. ceiling thickness 25 mm

recessed depth 100 mm

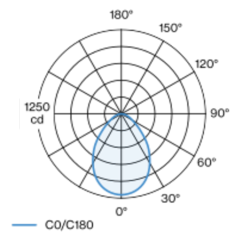
¹ RAL code ² Value of containing product at full load (undimmed)

Installation instructions

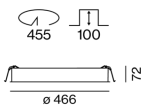


Round light fitting in aluminium; recessed light with wrap around edge; suitable for ceiling thickness of 10-25 mm; surface white powder coated; installation without tools using snap spring closure; external converter for ceiling insertion, through-wiring suitable; electrical connection by means of reverse polarity protected plug system; LED board highly reflective lacquered for higher efficiency; light colour 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 80; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; flush ceiling light level; micro prismatic PMMA cover; absolutely homogeneous illumination by using a diffuser film on polycarbonate base; improved ratio of scattering effect to light transmission; same luminance for all size versions; UGR ≤ 19; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above 65° ≤ 3000 cd/m²; degree of protection IP40; PC1 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; 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



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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	0.91	0.9
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	Lamp Survival Faktor	

^a 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	21
B13	28
B16	35
B20	44
C10	35
C13	46
C16	58
C20	73

Mounting accessories

MOUNTING RING

TYPE
for acoustic ceiling

ARTICLE NUMBER(S)
064-1906400

