

# PRIMA LED Ex



... for explosion hazard environment group II, category 3 (zone 2, 22).

## USE

The light fitting is suitable for the environment with a danger of explosion of gas, dust and combustible fumes. The light fittings meet the requirements of Government Decree 116/2016 Coll. and European Community Directive No.2014/34/EU.

The light fitting is certified for the environment:

- Ⓜ II 3G Ex nR IIC T6 Gc
- Ⓜ II 3D Ex tc IIIC T70°C Dc

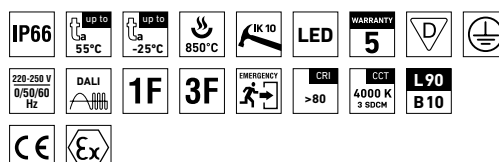
The basic requirements for safety and health protection are secured by the verification of conformity with the standards according to ČSN EN 60079-15, ČSN EN 60079-0 and ČSN EN 60079-31.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air reducing the usability of the plastic at installations in an aggressive environment, see also page 325.

## ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t<sub>a</sub> = 60°C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to fluorescent tubes
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- Clips: stainless steel + polyamide + 15 % glass fibre
- Through-wiring of up to 10 wires at body
- At request also versions according to the standard for EAC states (Russia, Kazakhstan, Belarus, Armenia)
- Certification: TÜV CY 22 ATEX 0206610 X Issue: 01

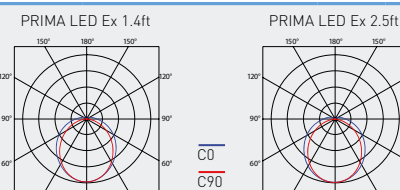
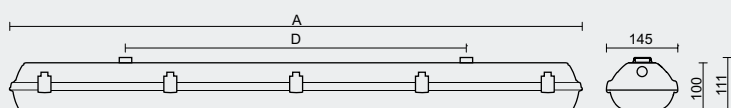


## PRIMA LED Ex PCc



## TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: from -25 to 60 °C
- Maximum temperature: from 0 to 50 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 157 lm/W
- The watt and lumen values can vary by  $\pm 7,5 \%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless steel + polyamide + 15 % glass fibre
- Ventilation plug steel, size M12  $\times$  1,5 ATEX (for version with emergency back-up source M1h, M3h)
- Cable glands: screwed M20  $\times$  1,5 ATEX
- Distance part: polyamide + 10 % glass fibre, serves to suspend the reflector during assembly
- Terminal block: screwless, five-pole (version 1.4ft and 1.5ft), three-pole incl. earthing tape & screw for a perfect connection (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver, halogen-free wires with higher temperature resistance



Code	Type	Minimal and maximal ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 60 \text{ °C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
10628	PRIMA LED Ex 1.2ft PCc 1600/840	-25/60	1840	1690	11	154	2,0	662	350
10629	PRIMA LED Ex 1.2ft PCc 2200/840	-25/55	2560	2350	16	147	2,0	662	350
14810	PRIMA LED Ex 1.4ft PCc 3200/840	-25/60	3620	3330	23	145	3,2	1272	700
14820	PRIMA LED Ex 1.4ft PCc 4400/840	-25/55	5070	4660	31	150	3,3	1272	700
63850	PRIMA LED Ex 1.4ft PCc 6400/840	-25/55	7300	6710	44	153	3,3	1272	700
14830	PRIMA LED Ex 1.5ft PCc 4000/840	-25/60	4520	4150	27	154	4,1	1572	940
14840	PRIMA LED Ex 1.5ft PCc 5500/840	-25/55	6320	5810	38	153	4,2	1572	940
63860	PRIMA LED Ex 1.5ft PCc 8000/840	-25/55	9030	8300	53	157	4,2	1572	940
10633	PRIMA LED Ex 2.2ft PCc 3200/840	-25/60	3620	3330	22	151	2,1	662	350
10637	PRIMA LED Ex 2.2ft PCc 4400/840	-25/55	5120	4710	31	152	2,1	662	350
14850	PRIMA LED Ex 2.4ft PCc 6400/840	-25/60	7300	6710	43	156	3,4	1272	700
14860	PRIMA LED Ex 2.4ft PCc 8800/840	-25/55	10160	9340	60	156	3,5	1272	700
63865	PRIMA LED Ex 2.4ft PCc 12800/840	-25/40	14490	13330	85	157	3,7	1272	700
14870	PRIMA LED Ex 2.5ft PCc 8000/840	-25/60	9040	8310	54	154	4,3	1572	940
14880	PRIMA LED Ex 2.5ft PCc 11000/840	-25/55	12050	11080	71	156	4,4	1572	940
63851	PRIMA LED Ex 2.5ft PCc 16000/840	-25/40	17960	16520	106	156	4,6	1572	940
63880	PRIMA LED Ex 2.5ft PCc 20000/840	-25/40	19200	17660	118	150	4,6	1572	940

14810 PRIMA LED Ex 1.4ft PCc 3200/840 = suitable replacement for PRIMA Ex 136 PCc E - 1  $\times$  36W

14830 PRIMA LED Ex 1.5ft PCc 4000/840 = suitable replacement for PRIMA Ex 158 PCc E - 1  $\times$  58W

14850 PRIMA LED Ex 2.4ft PCc 6400/840 = suitable replacement for PRIMA Ex 236 PCc E - 2  $\times$  36W

14870 PRIMA LED Ex 2.5ft PCc 8000/840 = suitable replacement for PRIMA Ex 258 PCc E - 2  $\times$  58W

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Version with emergency back-up source M1h, M3h								
PRIMA LED Ex 1.2ft PCc 1600/840 Mxh	0/45	1840	1690	11	154	2,5	662	350
PRIMA LED Ex 1.2ft PCc 2200/840 Mxh	0/45	2560	2350	16	147	2,5	662	350
PRIMA LED Ex 1.4ft PCc 3200/840 Mxh	0/50	3620	3330	23	145	3,7	1272	700
PRIMA LED Ex 1.4ft PCc 4400/840 Mxh	0/50	5070	4660	31	150	3,7	1272	700
PRIMA LED Ex 1.5ft PCc 4000/840 Mxh	0/50	4520	4150	27	154	4,6	1572	940
PRIMA LED Ex 1.5ft PCc 5500/840 Mxh	0/50	6320	5810	38	153	4,7	1572	940
PRIMA LED Ex 2.2ft PCc 3200/840 Mxh	0/40	3620	3330	22	151	2,6	662	350
PRIMA LED Ex 2.2ft PCc 4400/840 Mxh	0/35	5120	4710	31	152	2,6	662	350
PRIMA LED Ex 2.4ft PCc 6400/840 Mxh	0/45	7300	6710	43	156	3,9	1272	700
PRIMA LED Ex 2.4ft PCc 8800/840 Mxh	0/40	10160	9340	60	156	3,9	1272	700
PRIMA LED Ex 2.5ft PCc 8000/840 Mxh	0/45	9040	8310	54	154	4,8	1572	940
PRIMA LED Ex 2.5ft PCc 11000/840 Mxh	0/40	12050	11080	71	156	4,8	1572	940

Energy consumption of Mxh increased by 3 W until battery fully charged (max. 24 hours).

PRIMA LED Ex PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10628	PRIMA LED Ex 1.2ft PCc 1600/840	10638	10646	63853	63890	63863	63854
10629	PRIMA LED Ex 1.2ft PCc 2200/840	10639	10647	63882	63894	63868	63883
14810	PRIMA LED Ex 1.4ft PCc 3200/840	14811	14813	14814	14815	14817	14818
14820	PRIMA LED Ex 1.4ft PCc 4400/840	14821	14823	14824	14825	14827	14828
63850	PRIMA LED Ex 1.4ft PCc 6400/840	63888	63881	x	x	x	x
14830	PRIMA LED Ex 1.5ft PCc 4000/840	14831	14833	14834	14835	14837	14838
14840	PRIMA LED Ex 1.5ft PCc 5500/840	14841	14843	14844	14845	14847	14848
63860	PRIMA LED Ex 1.5ft PCc 8000/840	63892	63889	x	x	x	x
10633	PRIMA LED Ex 2.2ft PCc 3200/840	10642	10649	x	x	x	x
10637	PRIMA LED Ex 2.2ft PCc 4400/840	10643	10652	x	x	x	x
14850	PRIMA LED Ex 2.4ft PCc 6400/840	14851	14853	14854	14855	14857	14858
14860	PRIMA LED Ex 2.4ft PCc 8800/840	14861	14863	14864	14865	14867	14868
63865	PRIMA LED Ex 2.4ft PCc 12800/840	63861	63893	x	x	x	x
14870	PRIMA LED Ex 2.5ft PCc 8000/840	14871	14873	14874	14875	14877	14878
14880	PRIMA LED Ex 2.5ft PCc 11000/840	14881	14883	14884	14885	14887	14888
63851	PRIMA LED Ex 2.5ft PCc 16000/840	63866	63862	x	x	x	x
63880	PRIMA LED Ex 2.5ft PCc 20000/840	63852	63867	x	x	x	x

Example of type marking: 14853 = PRIMA LED Ex 2.4ft PCc 6400/840 **3F**

PRIMA LED Ex PCc DALI

Digital dimmable driver DALI - stainless clips (c)

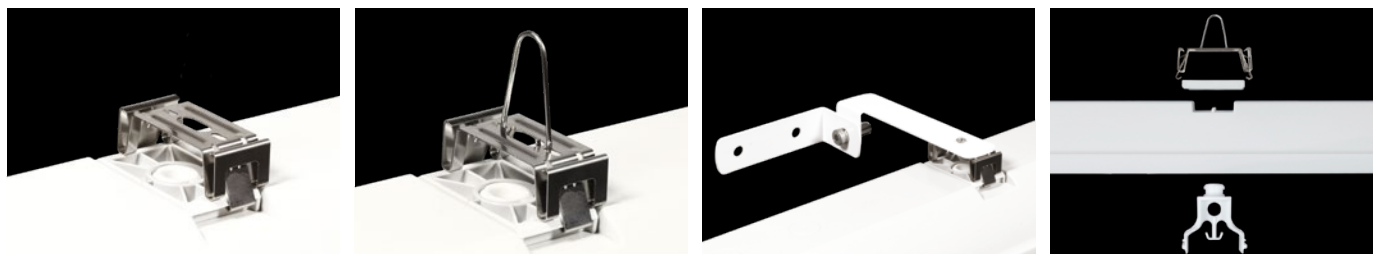
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10658	PRIMA LED Ex 1.2ft PCc 1600/840 DALI	10672	x	63897	63872	x	x
10659	PRIMA LED Ex 1.2ft PCc 2200/840 DALI	10678	x	63901	63877	x	x
14910	PRIMA LED Ex 1.4ft PCc 3200/840 DALI	14911	14913	14914	14915	14917	14918
14920	PRIMA LED Ex 1.4ft PCc 4400/840 DALI	14921	14923	14924	14925	14927	14928
63891	PRIMA LED Ex 1.4ft PCc 6400/840 DALI	63870	63900	x	x	x	x
14930	PRIMA LED Ex 1.5ft PCc 4000/840 DALI	14931	14933	14934	14935	14937	14938
14940	PRIMA LED Ex 1.5ft PCc 5500/840 DALI	14941	14943	14944	14945	14947	14948
63895	PRIMA LED Ex 1.5ft PCc 8000/840 DALI	63875	63871	x	x	x	x
10668	PRIMA LED Ex 2.2ft PCc 3200/840 DALI	10682	x	x	x	x	x
10669	PRIMA LED Ex 2.2ft PCc 4400/840 DALI	10684	x	x	x	x	x
14950	PRIMA LED Ex 2.4ft PCc 6400/840 DALI	14951	14953	14954	14955	14957	14958
14960	PRIMA LED Ex 2.4ft PCc 8800/840 DALI	14961	14963	14964	14965	14967	14968
63864	PRIMA LED Ex 2.4ft PCc 12800/840 DALI	63856	63876	x	x	x	x
14970	PRIMA LED Ex 2.5ft PCc 8000/840 DALI	14971	14973	14974	14975	14977	14978
14980	PRIMA LED Ex 2.5ft PCc 11000/840 DALI	14981	14983	14984	14985	14987	14988
63869	PRIMA LED Ex 2.5ft PCc 16000/840 DALI	63884	63857	x	x	x	x
63855	PRIMA LED Ex 2.5ft PCc 20000/840 DALI	63896	63885	x	x	x	x

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
  - 3F** 3-phase 5 core through-wiring in the luminaire
  - M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
  - M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
  - 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
  - DALI 1F** 1-phase 5 core through-wiring in the luminaire
  - DALI 3F** 3-phase 7 core through-wiring in the luminaire
  - DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED Ex

