

TECHNICAL DATA

Anodising	10 colours
Assembly	directly on column with ø 60 x 180 mm ending or on extension arm with ø 60 x 100 mm ending
Application	urban roads, residential roads (internal), pedestrians, parkings
Colour	inox / black
Ingress protection	IP 66 for the optical part and the driver
Optical system	PMMA optics, interchangeable LED module
Material	anodised aluminium alloy, diffuser – tempered glass
Unit volume	0,013 m³
Operating temperature range	from -40°C to +40°C
Expected useful lifetime	L90B10 - 100 000 h
CRI	>70
Inrush current	24,6 A / 195,5 µs (12 W - 36 W) 98 A / 120 µs (48 W - 60 W)
Input voltage frequency	50 - 60Hz
Power factor	≥0,95
Number of LED	16
Control system	Luminaire can be connected to an external control system and / or sensors via socket compatible with Zhaga Book 18



TABLE OF VARIANTS

Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature (CCT)	LEDs luminous flux¹	Luminaire luminous flux¹	Luminous efficacy¹	D4i socket	Net weight
2228227/A/1/...²	CUDDLE MINI LED ALFA REG D4i 12	12 W	15 W	140 mA	2700 K	2450 lm	2050 lm	137 lm/W	1 ↑	5 kg
2228227/A/3/...²	CUDDLE MINI LED ALFA REG D4i 12	12 W	15 W	140 mA	3500 K	2600 lm	2150 lm	143 lm/W	1 ↑	5 kg
2228227/A/4/...²	CUDDLE MINI LED ALFA REG D4i 12	12 W	15 W	140 mA	4000 K	2650 lm	2200 lm	147 lm/W	1 ↑	5 kg
2228227/A/6/...²	CUDDLE MINI LED ALFA REG D4i 12	12 W	15 W	140 mA	5000 K	2600 lm	2150 lm	143 lm/W	1 ↑	5 kg
2228230/A/1/...²	CUDDLE MINI LED ALFA REG D4i 24	24 W	26 W	250 mA	2700 K	4250 lm	3550 lm	137 lm/W	1 ↑	5 kg
2228230/A/3/...²	CUDDLE MINI LED ALFA REG D4i 24	24 W	26 W	250 mA	3500 K	4450 lm	3700 lm	142 lm/W	1 ↑	5 kg
2228230/A/4/...²	CUDDLE MINI LED ALFA REG D4i 24	24 W	26 W	250 mA	4000 K	4600 lm	3800 lm	146 lm/W	1 ↑	5 kg
2228230/A/6/...²	CUDDLE MINI LED ALFA REG D4i 24	24 W	26 W	250 mA	5000 K	4500 lm	3750 lm	144 lm/W	1 ↑	5 kg
2228232/A/1/...²	CUDDLE MINI LED ALFA REG D4i 36	36 W	39 W	375 mA	2700 K	6200 lm	5150 lm	132 lm/W	1 ↑	5 kg
2228232/A/3/...²	CUDDLE MINI LED ALFA REG D4i 36	36 W	39 W	375 mA	3500 K	6500 lm	5400 lm	138 lm/W	1 ↑	5 kg
2228232/A/4/...²	CUDDLE MINI LED ALFA REG D4i 36	36 W	39 W	375 mA	4000 K	6650 lm	5500 lm	141 lm/W	1 ↑	5 kg
2228232/A/6/...²	CUDDLE MINI LED ALFA REG D4i 36	36 W	39 W	375 mA	5000 K	6550 lm	5450 lm	140 lm/W	1 ↑	5 kg
2228233/A/1/...²	CUDDLE MINI LED ALFA REG D4i 48	48 W	54 W	500 mA	2700 K	7950 lm	6600 lm	122 lm/W	1 ↑	5 kg
2228233/A/3/...²	CUDDLE MINI LED ALFA REG D4i 48	48 W	54 W	500 mA	3500 K	8300 lm	6900 lm	128 lm/W	1 ↑	5 kg
2228233/A/4/...²	CUDDLE MINI LED ALFA REG D4i 48	48 W	54 W	500 mA	4000 K	8550 lm	7100 lm	131 lm/W	1 ↑	5 kg
2228233/A/6/...²	CUDDLE MINI LED ALFA REG D4i 48	48 W	54 W	500 mA	5000 K	8450 lm	7000 lm	130 lm/W	1 ↑	5 kg
2228234/A/1/...²	CUDDLE MINI LED ALFA REG D4i 60	60 W	67 W	625 mA	2700 K	9650 lm	8000 lm	119 lm/W	1 ↑	5 kg
2228234/A/3/...²	CUDDLE MINI LED ALFA REG D4i 60	60 W	67 W	625 mA	3500 K	10100 lm	8400 lm	125 lm/W	1 ↑	5 kg
2228234/A/4/...²	CUDDLE MINI LED ALFA REG D4i 60	60 W	67 W	625 mA	4000 K	10350 lm	8600 lm	128 lm/W	1 ↑	5 kg
2228234/A/6/...²	CUDDLE MINI LED ALFA REG D4i 60	60 W	67 W	625 mA	5000 K	10250 lm	8500 lm	127 lm/W	1 ↑	5 kg
2228627/A/1/...²	CUDDLE MINI LED ALFA REG D4i D 12	12 W	15 W	140 mA	2700 K	2450 lm	2050 lm	137 lm/W	1 ↓	5 kg
2228627/A/3/...²	CUDDLE MINI LED ALFA REG D4i D 12	12 W	15 W	140 mA	3500 K	2600 lm	2150 lm	143 lm/W	1 ↓	5 kg
2228627/A/4/...²	CUDDLE MINI LED ALFA REG D4i D 12	12 W	15 W	140 mA	4000 K	2650 lm	2200 lm	147 lm/W	1 ↓	5 kg
2228627/A/6/...²	CUDDLE MINI LED ALFA REG D4i D 12	12 W	15 W	140 mA	5000 K	2600 lm	2150 lm	143 lm/W	1 ↓	5 kg
2228630/A/1/...²	CUDDLE MINI LED ALFA REG D4i D 24	24 W	26 W	250 mA	2700 K	4250 lm	3550 lm	137 lm/W	1 ↓	5 kg
2228630/A/3/...²	CUDDLE MINI LED ALFA REG D4i D 24	24 W	26 W	250 mA	3500 K	4450 lm	3700 lm	142 lm/W	1 ↓	5 kg
2228630/A/4/...²	CUDDLE MINI LED ALFA REG D4i D 24	24 W	26 W	250 mA	4000 K	4600 lm	3800 lm	146 lm/W	1 ↓	5 kg
2228630/A/6/...²	CUDDLE MINI LED ALFA REG D4i D 24	24 W	26 W	250 mA	5000 K	4500 lm	3750 lm	144 lm/W	1 ↓	5 kg

2228632/A/1/... ²	CUDDLE MINI LED ALFA REG D4i D 36	36 W	39 W	375 mA	2700 K	6200 lm	5150 lm	132 lm/W	1 ↓	5 kg
2228632/A/3/... ²	CUDDLE MINI LED ALFA REG D4i D 36	36 W	39 W	375 mA	3500 K	6500 lm	5400 lm	138 lm/W	1 ↓	5 kg
2228632/A/4/... ²	CUDDLE MINI LED ALFA REG D4i D 36	36 W	39 W	375 mA	4000 K	6650 lm	5500 lm	141 lm/W	1 ↓	5 kg
2228632/A/6/... ²	CUDDLE MINI LED ALFA REG D4i D 36	36 W	39 W	375 mA	5000 K	6550 lm	5450 lm	140 lm/W	1 ↓	5 kg
2228633/A/1/... ²	CUDDLE MINI LED ALFA REG D4i D 48	48 W	54 W	500 mA	2700 K	7950 lm	6600 lm	122 lm/W	1 ↓	5 kg
2228633/A/3/... ²	CUDDLE MINI LED ALFA REG D4i D 48	48 W	54 W	500 mA	3500 K	8300 lm	6900 lm	128 lm/W	1 ↓	5 kg
2228633/A/4/... ²	CUDDLE MINI LED ALFA REG D4i D 48	48 W	54 W	500 mA	4000 K	8550 lm	7100 lm	131 lm/W	1 ↓	5 kg
2228633/A/6/... ²	CUDDLE MINI LED ALFA REG D4i D 48	48 W	54 W	500 mA	5000 K	8450 lm	7000 lm	130 lm/W	1 ↓	5 kg
2228634/A/1/... ²	CUDDLE MINI LED ALFA REG D4i D 60	60 W	67 W	625 mA	2700 K	9650 lm	8000 lm	119 lm/W	1 ↓	5 kg
2228634/A/3/... ²	CUDDLE MINI LED ALFA REG D4i D 60	60 W	67 W	625 mA	3500 K	10100 lm	8400 lm	125 lm/W	1 ↓	5 kg
2228634/A/4/... ²	CUDDLE MINI LED ALFA REG D4i D 60	60 W	67 W	625 mA	4000 K	10350 lm	8600 lm	128 lm/W	1 ↓	5 kg
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2228427/A/1/... ²	CUDDLE MINI LED ALFA REG D4i x2 12	12 W	15 W	140 mA	2700 K	2450 lm	2050 lm	137 lm/W	1 ↑ / 1 ↓	5 kg
2228427/A/3/... ²	CUDDLE MINI LED ALFA REG D4i x2 12	12 W	15 W	140 mA	3500 K	2600 lm	2150 lm	143 lm/W	1 ↑ / 1 ↓	5 kg
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2228432/A/4/... ²	CUDDLE MINI LED ALFA REG D4i x2 36	36 W	39 W	375 mA	4000 K	6650 lm	5500 lm	141 lm/W	1 ↑ / 1 ↓	5 kg
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2228434/A/6/... ²	CUDDLE MINI LED ALFA REG D4i x2 60	60 W	67 W	625 mA	5000 K	10250 lm	8500 lm	127 lm/W	1 ↑ / 1 ↓	5 kg

1) tolerance +/- 5% due to LEDs accuracy

2) symbol of chosen optical system eg. 2228233/A/6/T3 is CUDDLE MINI LED ALFA REG D4i 48 5000K with T3 optical system

*For the CUDDLE MINI LED ALFA REG D4i luminaire with P2 and PL optics it is possible to choose an additional light colour temperature: 5700K. The product code is then supplemented with the designation '/7'. Example: 2228223/A/7/P2 -CUDDLE MINI LED ALFA REG D4i 48W 5700K luminaire with P2 optics

DIRECTIVES AND STANDARDS

DIRECTIVES: 2014/35/UE (Official Journal of the UE L 96/357 29.03.2014), 2014/30/UE (Official Journal of the UE L 96/79 29.03.2014), 2011/65/UE RoHS (Official Journal of the UE L 174/88 01.07.2011), 2009/125/EC(Official Journal of the UE L 285/10 31.10.2009)

STANDARDS: PN-EN IEC 60598-1: 2021-7, PN-EN 60598-2-3: 2006, PN-EN 60529: 2003, PN-EN 62262: 2003, PN-EN 62471:2010, PN-EN 55015: 2019, PN-EN 61547: 2009, PN-EN 61000-3-2: 2019 , PN-EN 61000-3-3: 2014

Lighting parameters presented based on laboratory tests according to IESNA LM-79-19

REMOVING ELECTROSTATIC CHARGE FROM LED LUMINAIRE BODY

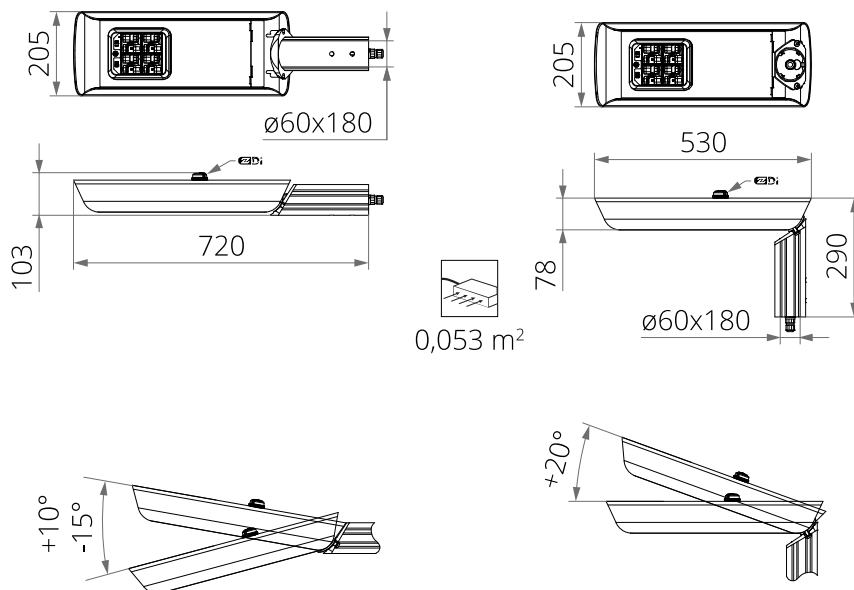
In order to efficient discharge the electrostatic charge from the housing of LED fitting installed on the pole from dielectric material (non-conductive) one of the following solutions is required:

- functional grounding
- LED luminaire with an additional protection device

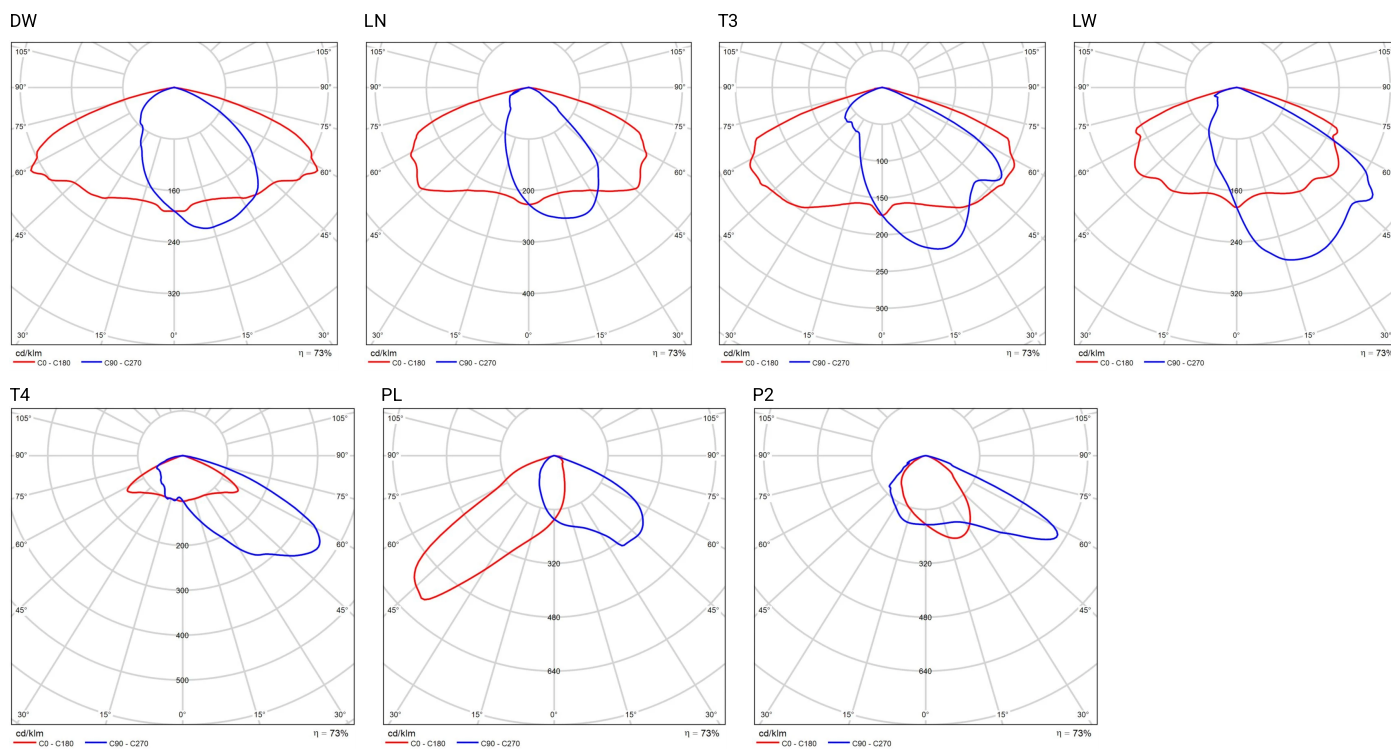
CUDDLE MINI LED ALFA REG D4I



TECHNICAL DRAWING



PHOTOMETRIC CURVES



POWER SYSTEM FUNCTIONS

Luminaire in standard has following functions of intelligent power supply:

- Possibility of programming multistage dimming of luminaire, up to 5 intervals in the range of from 10 to 100% of nominal power,
- LED module equipped with thermal protection implemented via an NTC thermistor,
- Regulation of power / luminous flux – the option of setting another value than the catalogue in the range of 30-100% of nominal one,

CUDDLE MINI LED ALFA REG D4I



ACCETABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Overcurrent switches MCB type B or C

Luminaire	Typ	2A	4A	6A	10A	16A	20A	25A
CUDDLE MINI LED ALFA REG D4i 12 W, 24 W, 36 W	B	4	7	12	18	30	37	46
	C	4	10	16	27	43	54	68
CUDDLE MINI LED ALFA REG D4i 48 W	B	1	2	4	6	10	12	15
	C	1	4	6	10	17	20	26
CUDDLE MINI LED ALFA REG D4i 60 W	B	1	2	4	6	10	12	15
	C	1	4	6	10	17	20	26

Fuse – type gG and GL

Luminaire	2A	4A	6A	10A	16A	20A	25A
CUDDLE MINI LED ALFA REG D4i 12 W, 24 W, 36 W	1	10	20	26	52	71	101
CUDDLE MINI LED ALFA REG D4i 48 W	1	10	16	26	43	54	68
CUDDLE MINI LED ALFA REG D4i 60 W	0	2	4	5	10	14	20