

# ELEKTRA M

## DATASHEET | SPECIFICATIONS



### TECHNICAL SPECIFICATIONS

ELECTRICAL PARAMETERS	
Light source	» LED
AC voltage	» AC 220–240 V / 50–60 Hz
Connection	» leading out cable » leading out cable with connector (G) » without cable (WO)
Driver	» electronic driver with surge protection L/N-Ground 10 kV
Surge protection	» additional surge protection 10 kV (S)
Fuse	» fuse 6,3 A (J)
Dimming	» non-dimmable (not labeled) » DALI (DALI) » night dimming (A) » preparation for wireless communication NEMA (N) » Zhaga (Z) or 2× Zhaga (Z2)
Constant lumen output	» CLO (C)
LIGHT PARAMETERS	
Optical system	» roads (Mxx) » roads (Lxx) » directional (Pxx) » area (Uxx) » pedestrian crossing (ZLx/ZPx) » combined optics (Kxx) » BACK Light shades (BL1/BL2) » FRONT Light shades (FL1/FL2)
Light distribution	» direct
Color rendering index	» Ra > 70 » Ra > 80
Color temperature	» BLUE FREE (AMBER) » 2 200 K » 2 700 K » 3 000 K » 4 000 K » 5 000 K » 5 700 K » TW
Service life	» > 120 000 hrs. (L90)
CONSTRUCTION	
Housing	» aluminum cast
Color	» RAL 7015/9006 » other RAL (on request)
Surface	» matte
Cover	» tempered glass
SAFETY	
Protection class	» I » II
Ambient operating temperature	» max. -40 / +55 °C
Ingress protection	» IP 66
Impact protection	» IK 09 » IK 10
EMC	» YES
Vibration test	» YES
Static load test	» YES
Corrosion test – Salty spray	» YES (1 500 hours)
Life test	» YES
Certification	» ENEC » ENEC+ » Zhaga-D4i » IDA Dark Sky Approved
CB mark	» YES
RoHS	» YES
REACH	» YES
MOUNTING	
Method	» pole or outrigger (48–60 mm) » adapter (60–76) (on request) » adjustable joint ± 20°
Recommended height	» up to 12 m
Additional equipment	» external shades (CPZ) - on order

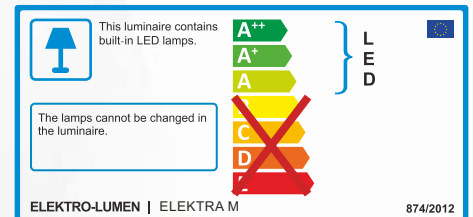
### CHARACTERISTIC

Modern outdoor LED luminaire with integrated surge protection and adjustable joint ± 20°.

### USE

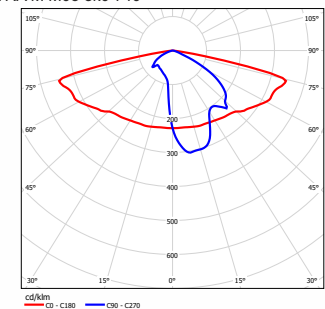
Road classes I., II. and III.

Outdoor areas



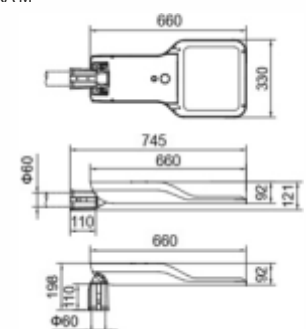
### LIGHT DISTRIBUTION CURVE

ELEKTRA M M03 8k0 740



### DIMENSIONS

ELEKTRA M



# VARIANTS

## DATASHEET ELEKTRA M

VARIANTS (chip 3535)	POWER (W)				LUMINAIRE OUTPUT FLUX (lm)		LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
	Color temperature (K)				min	max	Up to	L90B10	kg*
Catalog name	2200K (Ra 70)	2700K (Ra 70)	3000K (Ra 70)	4000K (Ra 70)					
ELEKTRA M Mxx 7k0	50,9	44,2	41,6	39,2	5 772	6 742	172,0	> 120 000	7.9
ELEKTRA M Mxx 8k0	59,5	51,4	48,2	45,4	6 596	7 706	169,7	> 120 000	7.9
ELEKTRA M Mxx 9k0	68,2	59	55,4	52,3	7 421	8 669	165,8	> 120 000	7.9
ELEKTRA M Mxx 10k0	71,3	66,6	62,5	58,9	8 245	9 632	163,5	> 120 000	7.9
ELEKTRA M Mxx 12k0	88,3	76,2	71,3	67,3	9 894	11 558	171,7	> 120 000	7.9
ELEKTRA M Mxx 14k0	100,6	91,3	85,5	80,7	11 543	13 485	167,1	> 120 000	7.9
ELEKTRA M Mxx 15k0	-	98,9	92,6	87,3	12 368	14 448	165,5	> 120 000	7.9
ELEKTRA M Mxx 16k0	-	101,3	99,6	94,1	13 192	15 411	163,8	> 120 000	7.9
ELEKTRA M Mxx 18k0	-	-	109,5**	103,5**	14 841	17 338	167,5	> 120 000	7.9

VARIANTS (chip 5050)	POWER (W)					LUMINAIRE OUTPUT FLUX (lm)		LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
	BLUE FREE (AMBER)	2200K (Ra 70)	2700K (Ra 70)	3000K (Ra 70)	4000K (Ra 70)	min	max	Up to	L90B10	kg*
Catalog name										
ELEKTRA M Lxx 7k0	46,6	46,2	42,3	39	37,2	5 933	6 617	177,9	> 120 000	7.9
ELEKTRA M Lxx 8k0	54,1	53,7	48,4	44,7	42,5	6 781	7 562	177,9	> 120 000	7.9
ELEKTRA M Lxx 9k0	61,9	60,6	55,4	51,2	48,3	7 628	8 508	176,1	> 120 000	7.9
ELEKTRA M Lxx 10k0	66,3	65,2	62,3	57,4	54,3	8 476	9 453	174,1	> 120 000	7.9
ELEKTRA M Lxx 12k0	81	79,6	76,9	70,8	66,7	10 171	11 344	170,1	> 120 000	7.9
ELEKTRA M Lxx 14k0	92	93,8	85,3	78,8	74,5	11 866	13 234	177,6	> 120 000	7.9
ELEKTRA M Lxx 15k0	99,3	98	92,3	85	80,4	12 714	14 180	176,4	> 120 000	7.9
ELEKTRA M Lxx 16k0	106,7**	105**	99,4	91,7	86,4	13 562	15 125	175,1	> 120 000	7.9
ELEKTRA M Lxx 18k0	-	-	109,2**	101,1	98,9	15 257	17 015	172,0	> 120 000	7.9

VARIANTS PEDESTRIAN CROSSINGS (chip 3535)	POWER (W)					LUMINAIRE OUTPUT FLUX	LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
	2700K (Ra 70)	3000K (Ra 70)	4000K (Ra 70)	5000K (Ra 70)	5700K (Ra 70)	lm	Up to	L90B10	kg*
Catalog name									
ELEKTRA M Mxx ZL03 6k0	36,3	34,9	33	31,5	33,5	5 360	170,2	> 120 000	7.9
ELEKTRA M Mxx ZL04 6k0	36,3	34,9	33	31,5	33,5	5 307	168,5	> 120 000	7.9
ELEKTRA M Mxx ZL06 6k0	36,3	34,9	33	31,5	33,5	5 234	166,2	> 120 000	7.9
ELEKTRA M Mxx ZP01 6k0	36,3	34,9	33	31,5	33,5	5 385	171,0	> 120 000	7.9
ELEKTRA M Mxx ZP02 6k0	36,3	34,9	33	31,5	33,5	5 387	171,0	> 120 000	7.9
ELEKTRA M Mxx ZP03 6k0	36,3	34,9	33	31,5	33,5	5 360	170,2	> 120 000	7.9
ELEKTRA M Mxx ZP06 6k0	36,3	34,9	33	31,5	33,5	5 567	176,7	> 120 000	7.9
ELEKTRA M Mxx ZL03 9k0	54,6	51,3	48,4	47,8	49	8 041	168,2	> 120 000	7.9
ELEKTRA M Mxx ZL04 9k0	54,6	51,3	48,4	47,8	49	7 961	166,5	> 120 000	7.9
ELEKTRA M Mxx ZL06 9k0	54,6	51,3	48,4	47,8	49	7 851	164,2	> 120 000	7.9
ELEKTRA M Mxx ZP01 9k0	54,6	51,3	48,4	47,8	49	8 078	169,0	> 120 000	7.9
ELEKTRA M Mxx ZP02 9k0	54,6	51,3	48,4	47,8	49	8 080	169,0	> 120 000	7.9
ELEKTRA M Mxx ZP03 9k0	54,6	51,3	48,4	47,8	49	8 041	168,2	> 120 000	7.9
ELEKTRA M Mxx ZP06 9k0	54,6	51,3	48,4	47,8	49	8 350	174,7	> 120 000	7.9
ELEKTRA M Mxx ZL03 12k0	76,2	71,3	67,3	66,3	67,7	10 721	161,7	> 120 000	7.9
ELEKTRA M Mxx ZL04 12k0	76,2	71,3	67,3	66,3	67,7	10 614	160,1	> 120 000	7.9
ELEKTRA M Mxx ZL06 12k0	76,2	71,3	67,3	66,3	67,7	10 468	157,9	> 120 000	7.9
ELEKTRA M Mxx ZP01 12k0	76,2	71,3	67,3	66,3	67,7	10 770	162,4	> 120 000	7.9
ELEKTRA M Mxx ZP02 12k0	76,2	71,3	67,3	66,3	67,7	10 774	162,5	> 120 000	7.9
ELEKTRA M Mxx ZP03 12k0	76,2	71,3	67,3	66,3	67,7	10 721	161,7	> 120 000	7.9
ELEKTRA M Mxx ZP06 12k0	76,2	71,3	67,3	66,3	67,7	11 134	167,9	> 120 000	7.9
ELEKTRA M Mxx ZL03 15k0	98,9	92,6	87,3	86,7	87,5	13 401	154,6	> 120 000	7.9
ELEKTRA M Mxx ZL04 15k0	98,9	92,6	87,3	86,7	87,5	13 268	153,0	> 120 000	7.9
ELEKTRA M Mxx ZL06 15k0	98,9	92,6	87,3	86,7	87,5	13 085	150,9	> 120 000	7.9
ELEKTRA M Mxx ZP01 15k0	98,9	92,6	87,3	86,7	87,5	13 463	155,3	> 120 000	7.9
ELEKTRA M Mxx ZP02 15k0	98,9	92,6	87,3	86,7	87,5	13 467	155,3	> 120 000	7.9
ELEKTRA M Mxx ZP03 15k0	98,9	92,6	87,3	86,7	87,5	13 401	154,6	> 120 000	7.9
ELEKTRA M Mxx ZP06 15k0	98,9	92,6	87,3	86,7	87,5	13 917	160,5	> 120 000	7.9

\* The weight may vary slightly depending on the luminaire variant.

\*\* Can not be produced under ENEC licence.

Luminaire ambient temperature TQ 25 °C
Initial color consistency: ≤ 5 SDCM
IDA Dark Sky fixture seal of approval relates to ≤ 3 000 K
To meet IDA requirements, the luminaires must be installed horizontally with the road
Optical and electrical parameters tolerance ± 10 %

When using the CLO function, the initial power and luminous flux is 10 % lower than the value shown in the table. LDT curves with CLO function have the letter "C" at the end of their marking.

The term BLUE FREE (AMBER) in lighting technology refers to light with a minimum amount of the blue part of the light spectrum (< 2%).

## CODE DESCRIPTION

ELEKTRA M II M01BL2 8k0 730 B124 45CAZ2 SJG H3S ENEC	
Name	
Class	
Without marking	Class I
II	Class II
Luminaire generation	
M01	Roads
L01	Roads
P01	Directional
U01	Area
ZP1/ZL1	Pedestrian crossings
K01	Combined optics
BL1/BL2	BACK Light shades
Luminous flux marking (source)	
Ra 70 / 3 000 K	
LED module marking	
B	TYP LED module
1	
2	
4	Mask type
Driver type	
43	DALI driver + 3 pole terminal block
45	DALI driver + 5 pole terminal block
45P	DALI driver + 5 pole terminal block + presence detection
4	DALI driver
1	on/off driver
D	D4i driver (for Zhaga connector)
C	Constant luminous flux (CLO)
A	AstroDim
Z	Zhaga konektor, 4 pin (D4i driver )
Z2	2x Zhaga konektor, 4 pin (D4i driver )
N	NEMA connector, 7 pin (DALI driver)
S	Surge protection
J	Fuse 6,3 A
G	Gesis connector
H	H05(07)RN-F cable (1 mm <sup>2</sup> )
C	CYKY cable (1,5 mm <sup>2</sup> )
WO	Without cable
2	2 core cable
3	3 core cable
5	5 core cable
S	Standard – 25 cm length of cable (led out of the luminaire)
1	1 meter (length in whole meters)
ENEC certification	