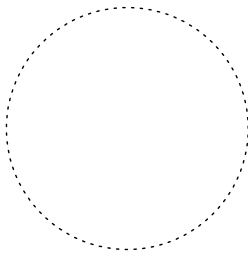
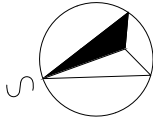


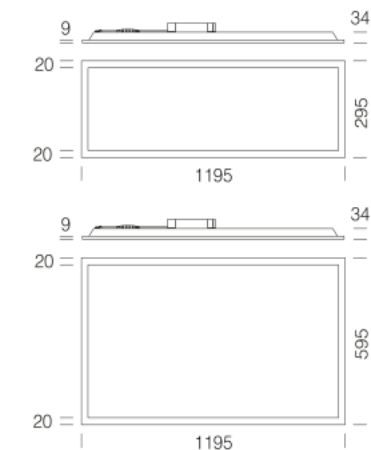
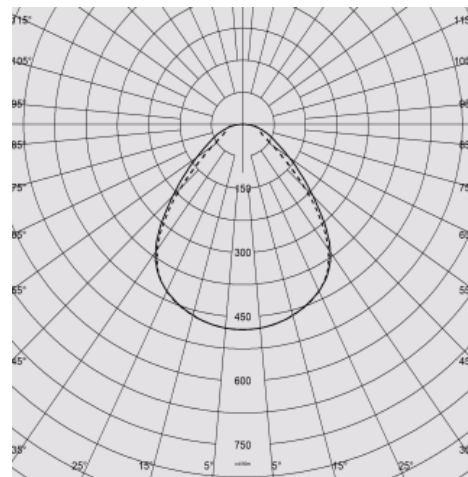
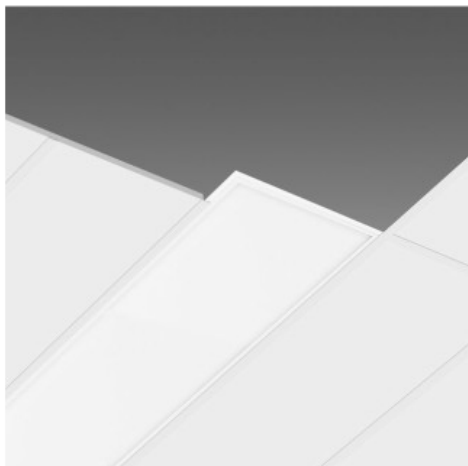
		Zodpovědný projektant: ING. PAVEL ZBRANEK		Číslo paré:
				
<u>Akce:</u>	ZŠ a MŠ Brno, Křenová 21, p.o. – rekonstrukce školní jídelny, výdejny			
<u>Objekt:</u>	S001 – č. p. 99, parc. č. 77, v kař. úz. Trnitá			
<u>Vypracoval:</u>	ING. PAVEL ZBRANEK	Stupeň PD:	DPS	
<u>Investor:</u>	Statutární město Brno, městská část Brno-střed, Dominikánská 264/2, 601 69 Brno	Datum:	Září 2023	
		Měřítko:	-	
<u>Název výkresu:</u>	Kniha svítidel	Formát:	8xA4	
		Číslo výkresu:	D.1.4.a-004	

**Projekt: ZŠ Křenová - jídelna**

**Zpracoval:**

**Datum: 24.8.2023**

A.



GENERAL INFORMATION

Article	832 - Rodi R UGR<22
Code	150233-00

DIMENSIONS AND WEIGHT

Length (mm)	1195 mm
Width (mm)	295 mm
Height (mm)	34 mm
Weight (Kg)	1.98 kg

INSTALLATION

Recessed dimensions - Length (mm)	1190 mm
Recessed dimensions - Width (mm)	290 mm

ELECTRICAL CHARACTERISTICS AND CONTROLS

Voltage (V)	230 V
Frequency (Hz)	50 Hz
Wiring	CLD
Power factor	≥0.95
Insulation class	Class II
Controllability	None

Lighting source	LED
CRI	80
Luminous flux (output) (lm)	4374 lm
Power absorption (total) (W)	39 W
CCT	4000 K
Luminous efficacy (lm/W)	112 lm/W
Unified glare rating UGR (EN 12464-1) (Reflectance coefficient: ceiling 0.7 - walls 0.5)	UGR<22 (in any situation). According to standard EN 12464.
Low Flicker	luminaire with very low flicker: evenly distributed light for greater visual safety.
Colour consistency	SDCM3
LED flux maintenance	50000 hr, L 80, B 20

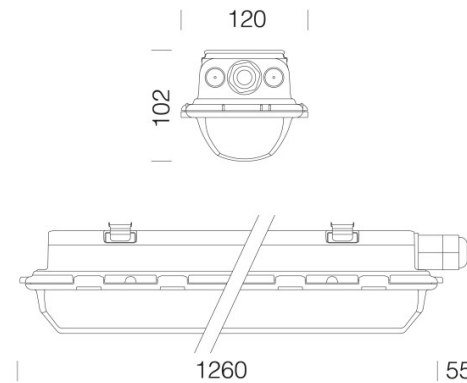
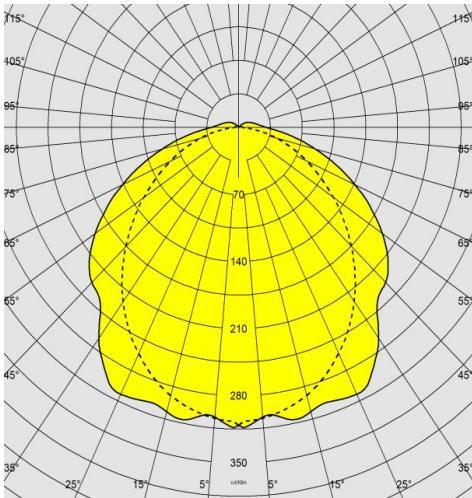
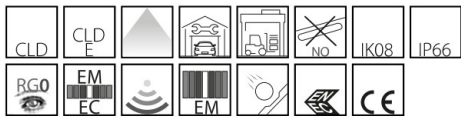
MECHANICAL CHARACTERISTICS

Impact resistance rating (IK)	IK06
IP (vl)	40
IP (va)	20



595 Frame 1200x300 h 70 mm

B.



GENERAL INFORMATION

Article	970 - Thema - LED
Code	164735-00

DIMENSIONS AND WEIGHT

Length (mm)	1260 mm
Width (mm)	120 mm
Height (mm)	102 mm
Weight (Kg)	1.865 kg

ELECTRICAL CHARACTERISTICS AND CONTROLS

Voltage (V)	230 V
Frequency (Hz)	50 Hz
Wiring	CLD
Power factor	≥0.95
Insulation class	Class I
Controllability	None

PHOTOMETRIC DATA

Lighting source	LED
CRI	≥80
Luminous flux (output) (lm)	6384 lm
Power absorption (total) (W)	49 W
CCT	4000 K
Low Flicker	luminaire with very low flicker: evenly distributed light for greater visual safety.
Colour consistency	SDCM3
LED flux maintenance	60000 hr, L 80, B 50

MECHANICAL CHARACTERISTICS

Impact resistance rating (IK)	IK08
IP	66
Ambient temperature - min	-30 °C
Ambient temperature - max	40 °C

C.



ELEKTRICKÉ VLASTNOSTI

Příkon	50 W
Napájecí napětí	198 - 264 V AC / 190 - 280 V DC
Účinník	0.98
Harmonické zkreslení	<10
Třída izolace	I
Energetická třída	D
Stmívání	-
Počet na jistič C 16A	30 ks
Nouzový zdroj	ano
Doba životnosti LED driveru	100 000 hod. @ t <sub>a</sub> =65°

OPTICKÉ VLASTNOSTI

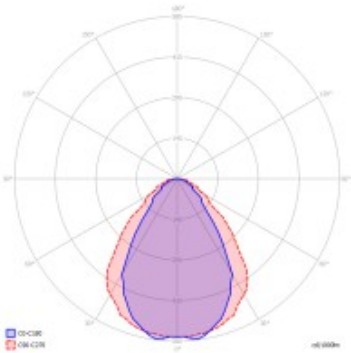
Světelný tok svítidla	6320 lm
Světelná účinnost	126 lm/W
Teplota chromatičnosti	3K / 4K / 5K
Index podání barev	80+
Tolerance barev	3 step MacAdam
Vyzařovací úhel	-
Činitel oslnění	-
Jas @65° < 3000 cd/m²	-
Doba životnosti LED	L80B20 = 110 000 hod.

MECHANICKÉ VLASTNOSTI

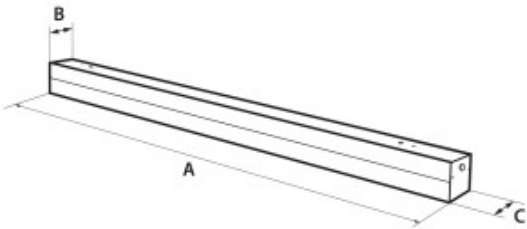
Rozměry	1720 x 62 x 90 mm
Hmotnost	3.9 kg
Provozní teplota	- 25 ~ + 25 °C
Stupeň krytí	IP 40
Materiál tělesa	Al profil
Materiál reflektoru	-
Materiál difuzoru	PMMA
Způsob montáže	závěsná



POLÁRNÍ DIAGRAM



ROZMĚRY



NA OBJEDNÁVKU

- CCT 2700K, 3500K, 5700K, 6500K
- CRI > 90Ra
- Jiný příkon
- Průběžné zapojení
- Přívodní kabel
- Konektory Gesis GST, RST
- Sada lankových závěsů
- Libovolná barva RAL
- Nouzový zdroj 1 h/3 h

## D. verze DALI



### ELEKTRICKÉ VLASTNOSTI

Příkon	50 W
Napájecí napětí	198 - 264 VAC / 190 - 280 VDC
Účink	0.98
Harmonické zkreslení	<10
Třída izolace	I
Energetická třída	D
Stmívání	-
Počet na jistič C 16A	30 ks
Nouzový zdroj	ano
Doba životnosti LED driveru	100 000 hod. @ t <sub>a</sub> =65°

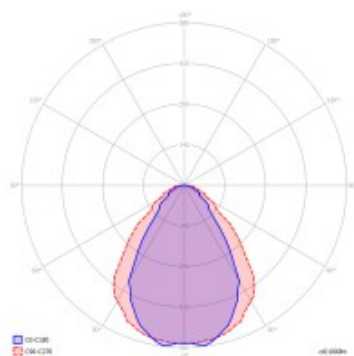
## OPTICKÉ VLASTNOSTI

Světelný tok svítidla	6320 lm
Světelná účinnost	126 lm/W
Teplota chromatičnosti	3K / 4K / 5K
Index podání barev	80+
Tolerance barev	3 step MacAdam
Vyzařovací úhel	-
Činitel oslnění	-
Jas @65° < 3000 cd/m²	-
Doba životnosti LED	L80B20 = 110 000 hod.

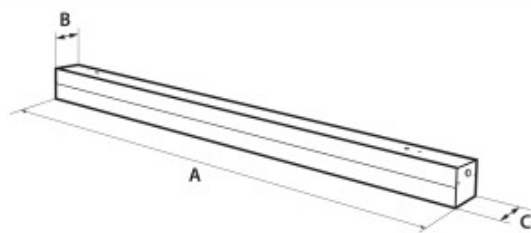
## MECHANICKÉ VLASTNOSTI

Rozměry	1720 x 62 x 90 mm
Hmotnost	3.9 kg
Provozní teplota	- 25 ~ + 25 °C
Stupeň krytí	IP 40
Materiál tělesa	Al profil
Materiál reflektoru	-
Materiál difuzoru	PMMA
Způsob montáže	závěsná

### POLÁRNÍ DIAGRAM



## ROZMĚRY



## NA OBJEDNÁVKU

CCT 2700K, 3500K, 5700K, 6500K

CRI > 90Ra

### Jiný příkon

### Průběžné zapojení

Přívodní kabel

Konektory Gesis GST, RST

Sada lankových závěsů

Libovolná barva RAL

Nouzový zdroj 1 h/3 h

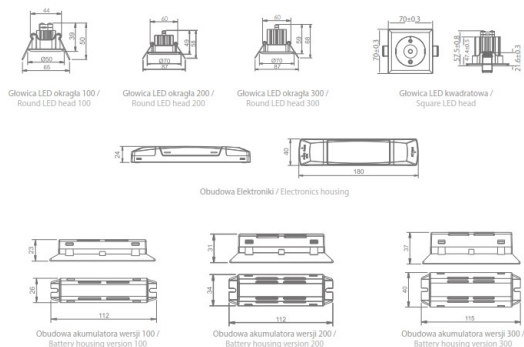
NB.



Starlet White II SC



- Stopień ochrony IP20
- Obudowa elektroniki i akumulatora oraz ramka głowicy LED z poliwęglanu, radiator z aluminium
- Ramka głowicy LED: okrągła lub kwadratowa
- Napięcie zasilania: 230V 50Hz
- Źródło światła: LED
- Funkcje: A (NM) – awaryjna, SA (M) – sieciowo-awaryjna
- Optyka: SO – do stref otwartych, SC – korytarzowa lub SOH – do pomieszczeń wysokich
- Test ręczny MT lub autotest AT
- Akumulatory: LiFePO4
- Autonomia: 1h, 3h
- Montaż w sufitach podwieszanych
- Do oświetlania dróg i wyjść ewakuacyjnych w budynkach użyteczności publicznej
- Temperatura barwowa 5000K
- Współczynnik oddawania barw: Ra>=70
- Zakres temperatury pracy: t<sub>a</sub> 10°C + 40°C
- IP 20 protection rating
- Electronics and battery housing and LED head frame made of polycarbonate, heatsink made of aluminium
- LED head frame: round or square
- Power supply voltage: 230V 50Hz
- Light source: LED
- Functions: A (NM) – non-maintained version or SA (M) – maintained version
- Optics: SO – for open spaces, SC – for corridors or SOH – for high areas
- Manual test MT or autotest AT
- Batteries: LiFePO4
- Autonomy: 1h, 3h
- Installation in recessed ceilings
- For illuminating evacuation directions and designating evacuation exits in public utility buildings
- Colour temperature 5000K
- CRI index: Ra>=70
- Temperature working range: t<sub>a</sub> 10°C + 40°C

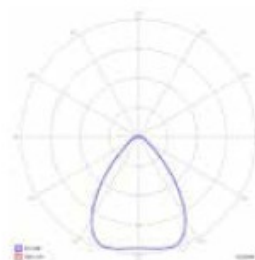


Starlet White II LED SO									
Model / Model	Numer katalogowy / Catalogue number	Źródło światła / Light source	Typ soczewki / Type of lens	Strumień świetlny / Luminous flux	Funkcja / Function	Autonomia / Autonomy	Akumulator / Battery pack	Test / Test	
Starlet White II LED SO 100 A 3H MT	92209	LED 1W	SO	110 lm	A (NM)	3h	LiFePO4 3.2V/1500mAh	MT	
Starlet White II LED SO 200 SA 3H MT	92234	LED 2W	SO	200 lm	SA (M)	3h	LiFePO4 3.2V/3000mAh	MT	
Starlet White II LED SO 200 SA 3H AT	92236	LED 2W	SO	200 lm	SA (M)	3h	LiFePO4 3.2V/3000mAh	AT	
Starlet White II LED SO 300 SA 3H MT	92264	LED 3W	SO	300 lm	SA (M)	3h	LiFePO4 3.2V/5500mAh	MT	
Starlet White II LED SO 300 SA 3H AT	92266	LED 3W	SO	300 lm	SA (M)	3h	LiFePO4 3.2V/5500mAh	AT	

Starlet White II LED SC									
Model / Model	Numer katalogowy / Catalogue number	Źródło światła / Light source	Typ soczewki / Type of lens	Strumień świetlny / Luminous flux	Funkcja / Function	Autonomia / Autonomy	Akumulator / Battery pack	Test / Test	
Starlet White II LED SC 100 A 3H MT	92209	LED 1W	SC	110 lm	A (NM)	3h	LiFePO4 3.2V/1500mAh	MT	
Starlet White II LED SC 200 SA 3H MT	92234	LED 2W	SC	180 lm	SA (M)	3h	LiFePO4 3.2V/3000mAh	MT	
Starlet White II LED SC 200 SA 3H AT	92236	LED 2W	SC	180 lm	SA (M)	3h	LiFePO4 3.2V/3000mAh	AT	
Starlet White II LED SC 300 SA 3H MT	92264	LED 3W	SC	290 lm	SA (M)	3h	LiFePO4 3.2V/5500mAh	MT	
Starlet White II LED SC 300 SA 3H AT	92266	LED 3W	SC	290 lm	SA (M)	3h	LiFePO4 3.2V/5500mAh	AT	

Starlet White II LED SOH									
Model / Model	Numer katalogowy / Catalogue number	Źródło światła / Light source	Typ soczewki / Type of lens	Strumień świetlny / Luminous flux	Funkcja / Function	Autonomia / Autonomy	Akumulator / Battery pack	Test / Test	
Starlet White II LED SOH 300 SA 3H AT	92166	LED 3W	SOH	310 lm	SA (M)	3h	LiFePO4 3.2V/5500mAh	AT	

SO – strefy otwarte / open spaces  
SC – soczewka korytarzowa / corridor lens type  
SOH – strefy otwarte wysokie / high open spaces  
A (NM) – tryb awaryjny / non-maintained mode  
SA (M) – tryb sieciowo-awaryjny / maintained mode  
MT – test ręczny / manual test  
AT – test automatyczny / auto test







- Stopień ochrony IP65 lub IP44\*

➤ Elementy konstrukcyjne oprawy wykonane z wysokiej jakości materiałów: korpus z PC/ABS, klosz z PC, płyta kierunkowa z PMMA

➤ Napięcie zasilania: 230V AC 50Hz (dla MT, AT i CT) lub 230V AC 50Hz / 220V DC (dla CB)

➤ Źródło światła: diody LED

➤ Funkcje: A (NM) – awaryjna lub SA (M) – sieciowo-awaryjna

➤ Akumulatory LiFePO4 i NiCd (tylko wersja ECO) z czasami autonomii 1h, 2h lub 3h \*, ładowanie 24h

➤ Opcje testowania: test ręczny MT, auto test AT lub test centralny CT (system WELLS)

➤ Montaż: ścienny/sufitowy natynkowy lub podtynkowy, sufitowy - z opcją zwieszania

➤ Do oświetlania dróg ewakuacyjnych, wskazywania kierunków ewakuacji oraz oznaczania wyjść ewakuacyjnych w budynkach użyteczności publicznej

➤ Widoczność: 24m

➤ Temperatura barwowa 5000K

➤ Współczynnik oddawania barw: Ra>=70

➤ Zakres temperatury pracy: t<sub>a</sub> 10°C > 50°C/

\* - zależnie od wersji
- IP65 or IP44 protection rating\*

➤ Luminaire's housing elements made of high quality materials: PC/ ABS body, PC diffuser, PMMA light guide plate

➤ Supply voltage: 230V AC 50Hz (for MT, AT and CT) or 230V AC 50Hz / 220V DC (for CB)

➤ Light source: LED diodes

➤ Functions: A (NM) – non-maintained version or SA (M) – maintained version

➤ LiFePO4 and NiCd (only version ECO) batteries with autonomy times 1h, 2h or 3h \*, charging 24h

➤ Test options: manual test MT, auto test AT or central test CT (WELLS system)

➤ Installation: wall/ceiling surface or recessed, ceiling - optionally suspended

➤ For illuminating evacuation paths, indicating its directions and marking evacuation exits in public utility buildings

➤ Visibility: 24m

➤ Colour temperature 5000K

➤ CRI Index: Ra>=70

➤ Temperature working range: t<sub>a</sub> 10°C > 50°C

\* - depending on version

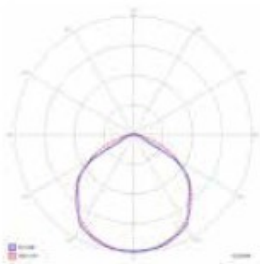
Model / Model	Numer katalogowy / Catalogue number	Optyka / Optics	Strumień świetlny / Luminous flux	Tryb / Mode	Autonomia / Autonomy	Test / Test	Stopień ochrony / Protection level	Moc / Power	Akumulator / Battery Pack
		Biała / White	Czarna / Black						
VELLA LED ECO SO 125 A 1H MT IP44	93678 93696	SO	157 lm	A (NM)	1h	MT	IP44	1,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 1H MT IP44	93677 93694	SO	157 lm	SA (M)	1h	MT	IP44	3,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 3H MT IP44	93669 93681	SO	157 lm	SA (M)	3h	MT	IP44	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 A 1H MT IP65	93676 93660	SO	157 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 1H MT IP65	93675 93658	SO	157 lm	SA (M)	1h	MT	IP65	3,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 A 3H MT IP65	93668 93642	SO	157 lm	A (NM)	3h	MT	IP65	1,5W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 SA 3H MT IP65	93667 93672	SO	157 lm	SA (M)	3h	MT	IP65	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 SA 8H MT IP65	93673 93593	SO	157 lm	SA (M)	8h	MT	IP65	4,5W	NiMH3,6V 1200mAh
VELLA LED ECO SO 125 CB IP65	93665 93565	SO	157 lm	-	-	-	IP65	2,5W	-
VELLA LED ECO SO 250 A 1H MT IP44	93664 93692	SO	314 lm	A (NM)	1h	MT	IP44	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SO 250 SA 3H MT IP44	93655 93683	SO	314 lm	SA (M)	3h	MT	IP44	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SO 250 A 1H MT IP65	93662 93646	SO	314 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SO 250 SA 1H MT IP65	93661 93644	SO	314 lm	SA (M)	1h	MT	IP65	6W	NiCd 3,6V 1000mAh
VELLA LED ECO SO 250 SA 3H MT IP65	93653 93638	SO	314 lm	SA (M)	3h	MT	IP65	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SO 250 CB IP65	93651 93556	SO	314 lm	-	-	-	IP65	5W	-
VELLA LED SO 150 SA 3H MT IP65	93504 93632	SO	190 lm	SA (M)	3h	MT	IP65	6W	LiFePO4 6,4V 1500mAh
VELLA LED SO 150 A 1H AT IP65	93547 93625	SO	190 lm	A (NM)	1h	AT	IP65	3,5W	LiFePO4 6,4V 600mAh
VELLA LED SO 150 SA 3H AT IP44	93506 93628	SO	190 lm	SA (M)	3h	AT	IP44	6W	LiFePO4 6,4V 1500mAh
VELLA LED SO 150 SA 3H AT IP65	93508 93622	SO	190 lm	SA (M)	3h	AT	IP65	5W	LiFePO4 6,4V 1500mAh
VELLA LED SO 250 SA 3H MT IP65	93516 93630	SO	331 lm	SA (M)	3h	MT	IP65	7W	LiFePO4 6,4V 3000mAh
VELLA LED SO 250 SA 3H AT IP44	93518 93592	SO	331 lm	SA (M)	3h	AT	IP44	8W	LiFePO4 6,4V 3000mAh
VELLA LED SO 250 SA 3H AT IP65	93520 93615	SO	331 lm	SA (M)	3h	AT	IP65	7W	LiFePO4 6,4V 3000mAh
VELLA LED SO 350 SA 3H AT IP65	93525 93607	SO	368 lm	SA (M)	3h	AT	IP65	8W	LiFePO4 6,4V 3000mAh
VELLA LED SO 350 P SA 3H AT IP65	93529 93599	SO	446 lm	SA (M)	3h	AT	IP65	9W	LiFePO4 6,4V 3000mAh
VELLA LED SO 650 SA 2H AT IP65	93527 93594	SO	732 lm	SA (M)	2h	AT	IP65	12W	LiFePO4 6,4V 3000mAh
VELLA LED ECO SO 650 CB IP65	93550 93555	SO	732 lm	-	-	-	IP65	12W	-

VELLA LED SC

Model / Model	Numer katalogowy / Catalogue number	Optyka / Optics	Strumień świetlny / Luminous flux	Tryb / Mode	Autonomia / Autonomy	Test / Test	Stopień ochrony / Protection level	Moc / Power	Akumulator / Battery Pack
		Biała / White	Czarna / Black						
VELLA LED ECO SC 125 A 1H MT IP65	93808 93659	SC	159 lm	A (NM)	1h	MT	IP65	1W	NiCd 3,6V 600mAh
VELLA LED ECO SC 125 SA 3H MT IP65	93799 93671	SC	159 lm	SA (M)	3h	MT	IP65	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SC 250 SA 3H MT IP65	93785 93789	SC	286 lm	SA (M)	3h	MT	IP65	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SC 250 A 1H MT IP65	93794 93645	SC	286 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SC 250 SA 1H MT IP65	93793 93643	SC	286 lm	SA (M)	1h	MT	IP65	6W	NiCd 3,6V 1000mAh
VELLA LED SC 250 CB IP65	93700 93591	SC	331 lm	-	-	-	IP65	5W	-
VELLA LED SC 150 SA 3H AT IP65	93702 93621	SC	188 lm	SA (M)	3h	AT	IP65	7W	LiFePO4 6,4V 1500mAh
VELLA LED SC 250 SA 3H AT IP65	93706 93614	SC	287 lm	SA (M)	3h	AT	IP65	8W	LiFePO4 6,4V 3000mAh

SO - strefy otwarte / open spaces  
SC - soczewka korytarzowa / corridor lens type  
350-P - strefy otwarte (Power LED) / open spaces (Power LED)  
A (NM) - tryb awaryjny / non-maintained mode

SA (M) - tryb sieciowo-awaryjny / maintained mode  
MT - test ręczny / manual test  
AT - test automatyczny / auto test  
CB - bateria centralna / central battery







## ➤ Stopień ochrony IP65 lub IP44\*

➤ Elementy konstrukcyjne oprawy wykonane z wysokiej jakości materiałów: korpus z PC/ABS, klosz z PC, płyta kierunkowa z PMMA

➤ Napięcie zasilania: 230V AC 50Hz (dla MT, AT i CT) lub 230V AC 50Hz / 220V DC (dla CB)

## ➤ Źródło światła: diody LED

➤ Funkcje: A (NM) – awaryjna lub SA (M) – sieciowo-awaryjna

➤ Akumulatory LifePO4 i NiCd (tylko wersja ECO) z czasami autonomii 1h, 2h lub 3h \*, ładowanie 24h

➤ Opcje testowania: test ręczny MT, auto test AT lub test centralny CT (system WELLS)

➤ Montaż: ścienny/sufitowy natynkowy lub podtynkowy, sufitowy - z opcją zwieszania

➤ Do oświetlania dróg ewakuacyjnych, wskazywania kierunków ewakuacji oraz oznaczania wyjść ewakuacyjnych w budynkach użyteczności publicznej

## ➤ Widoczność: 24m

➤ Temperatura barwowa 5000K

➤ Współczynnik oddawania barw: Ra&gt;=70

➤ Zakres temperatury pracy: t<sub>a</sub> 10°C + 50°C/

\* - zależnie od wersji

## ➤ IP65 or IP44 protection rating\*

➤ Luminaire's housing elements made of high quality materials: PC/ABS body, PC diffuser, PMMA light guide plate

➤ Supply voltage: 230V AC 50Hz (for MT, AT and CT) or 230V AC 50Hz / 220V DC (for CB)

## ➤ Light source: LED diodes

➤ Functions: A (NM) – non-maintained version or SA (M) – maintained version

➤ LifePO4 and NiCd (only version ECO) batteries with autonomy times 1h, 2h or 3h \*, charging 24h

➤ Test options: manual test MT, auto test AT or central test CT (WELLS system)

➤ Installation: wall/ceiling surface or recessed, ceiling - optionally suspended

➤ For illuminating evacuation paths, indicating its directions and marking evacuation exits in public utility buildings

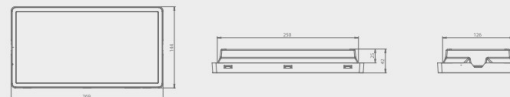
## ➤ Visibility: 24m

➤ Colour temperature 5000K

➤ CRI Index: Ra&gt;=70

➤ Temperature working range: t<sub>a</sub> 10°C + 50°C

\* - depending on version



Model / Model	Numer katalogowy / Catalogue number	Optyka / Optics	Strumień świetlny / Luminous flux	Tryb / Mode	Autonomia / Autonomy	Test / Test	Stopień ochrony / Protection level	Moc / Power	Akumulator / Battery Pack
		Biała / White	Czarna / Black						
VELLA LED ECO SO 125 A 1H MT IP44	93678 93696	SO	157 lm	A (NM)	1h	MT	IP44	1,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 1H MT IP44	93677 93694	SO	157 lm	SA (M)	1h	MT	IP44	3,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 3H MT IP44	93669 93681	SO	157 lm	SA (M)	3h	MT	IP44	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 A 1H MT IP65	93676 93660	SO	157 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 SA 1H MT IP65	93675 93658	SO	157 lm	SA (M)	1h	MT	IP65	3,5W	NiCd 3,6V 600mAh
VELLA LED ECO SO 125 A 3H MT IP65	93668 93642	SO	157 lm	A (NM)	3h	MT	IP65	1,5W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 SA 3H MT IP65	93667 93672	SO	157 lm	SA (M)	3h	MT	IP65	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SO 125 SA 8H MT IP65	93673 93593	SO	157 lm	SA (M)	8h	MT	IP65	4,5W	NiMH3,6V 1200mAh
VELLA LED ECO SO 125 CB IP65	93665 93565	SO	157 lm	-	-	-	IP65	2,5W	-
VELLA LED ECO SO 250 A 1H MT IP44	93664 93692	SO	314 lm	A (NM)	1h	MT	IP44	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SO 250 SA 3H MT IP44	93655 93683	SO	314 lm	SA (M)	3h	MT	IP44	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SO 250 A 1H MT IP65	93662 93646	SO	314 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SO 250 SA 1H MT IP65	93661 93644	SO	314 lm	SA (M)	1h	MT	IP65	6W	NiCd 3,6V 2500mAh
VELLA LED ECO SO 250 SA 3H MT IP65	93653 93638	SO	314 lm	SA (M)	3h	MT	IP65	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SO 250 CB IP65	93651 93556	SO	314 lm	-	-	-	IP65	5W	-
VELLA LED SO 150 SA 3H MT IP65	93504 93632	SO	190 lm	SA (M)	3h	MT	IP65	6W	LIFEPO4 6,4V 1500mAh
VELLA LED SO 150 A 1H AT IP65	93547 93625	SO	190 lm	A (NM)	1h	AT	IP65	3,5W	LIFEPO4 6,4V 600mAh
VELLA LED SO 150 SA 3H AT IP44	93506 93628	SO	190 lm	SA (M)	3h	AT	IP44	6W	LIFEPO4 6,4V 1500mAh
VELLA LED SO 150 SA 3H AT IP65	93508 93622	SO	190 lm	SA (M)	3h	AT	IP65	5W	LIFEPO4 6,4V 1500mAh
VELLA LED SO 250 SA 3H MT IP65	93516 93630	SO	331 lm	SA (M)	3h	MT	IP65	7W	LIFEPO4 6,4V 3000mAh
VELLA LED SO 250 SA 3H AT IP44	93518 93592	SO	331 lm	SA (M)	3h	AT	IP44	8W	LIFEPO4 6,4V 3000mAh
VELLA LED SO 250 SA 3H AT IP65	93520 93615	SO	331 lm	SA (M)	3h	AT	IP65	7W	LIFEPO4 6,4V 3000mAh
VELLA LED SO 350 SA 3H AT IP65	93525 93607	SO	368 lm	SA (M)	3h	AT	IP65	8W	LIFEPO4 6,4V 3000mAh
VELLA LED SO 350 P SA 3H AT IP65	93529 93599	SO	446 lm	SA (M)	3h	AT	IP65	9W	LIFEPO4 6,4V 3000mAh
VELLA LED SO 650 SA 2H AT IP65	93527 93594	SO	732 lm	SA (M)	2h	AT	IP65	12W	LIFEPO4 6,4V 3000mAh
VELLA LED ECO SO 650 CB IP65	93550 93555	SO	732 lm	-	-	-	IP65	12W	-

## VELLA LED SC

Model / Model	Numer katalogowy / Catalogue number	Optyka / Optics	Strumień świetlny / Luminous flux	Tryb / Mode	Autonomia / Autonomy	Test / Test	Stopień ochrony / Protection level	Moc / Power	Akumulator / Battery Pack
		Biała / White	Czarna / Black						
VELLA LED ECO SC 125 A 1H MT IP65	93808 93659	SC	159 lm	A (NM)	1h	MT	IP65	1W	NiCd 3,6V 600mAh
VELLA LED ECO SC 125 SA 3H MT IP65	93799 93671	SC	159 lm	SA (M)	3h	MT	IP65	4W	NiCd 3,6V 1200mAh
VELLA LED ECO SC 250 SA 3H MT IP65	93785 93789	SC	286 lm	SA (M)	3h	MT	IP65	7W	NiCd 3,6V 2500mAh
VELLA LED ECO SC 250 A 1H MT IP65	93794 93645	SC	286 lm	A (NM)	1h	MT	IP65	1,5W	NiCd 3,6V 1000mAh
VELLA LED ECO SC 250 SA 1H MT IP65	93793 93643	SC	286 lm	SA (M)	1h	MT	IP65	6W	NiCd 3,6V 1000mAh
VELLA LED SC 250 CB IP65	93700 93591	SC	331 lm	-	-	-	IP65	5W	-
VELLA LED SC 150 SA 3H AT IP65	93702 93621	SC	188 lm	SA (M)	3h	AT	IP65	7W	LIFEPO4 6,4V 1500mAh
VELLA LED SC 250 SA 3H AT IP65	93706 93614	SC	287 lm	SA (M)	3h	AT	IP65	8W	LIFEPO4 6,4V 3000mAh

SO - strefy otwarte / open spaces  
SC - soczewka korytarzowa / corridor lens type  
350-P - strefy otwarte (Power LED) / open spaces (Power LED)  
A (NM) - tryb awaryjny / non-maintained modeSA (M) - tryb sieciowo-awaryjny / maintained mode  
MT - test ręczny / manual test  
AT - test automatyczny / auto test  
CB - bateria centralna / central battery