

# LEDSPOTS CC

EVO 75 AND EVO 90  
LUGA GEN. 7



## EVO 75 / EVO 90

These light spots are ideal for integration in luminaires like tracks or downlights. The light engines are ideal for applications like retail, halls and public buildings.

The aluminium reflectors offer an homogeneous light distribution spot and it is possible to interchange the reflector easily. Four different beam angles for each versions (4+4).

### EVO series

- Interchangeable aluminium reflector for homogeneous light distribution
- Efficiency up to 150 lm/W

### Typical applications

- Integration in luminaires
- Retail lighting
- Downlights
- Light advertising
- Entertainment

### EVO 75 / EVO 90

- **MODULAR SYSTEM: ENGINE + OPTICS**
- **NARROW COLOUR TOLERANCES:  
2 STEP MACADAM**
- **EFFICIENCY UP TO 150 LM/W**
- **FOUR DIFFERENT BEAM ANGLES  
FOR EACH DIMENSION**
- **COLOUR RENDERING INDEX: CRI 85  
(CRI 95, PEARL WHITE, CLEAR WHITE  
AND FOOD ON REQUEST)**
- **LUMINOUS FLUX UP TO 3600 LM**

## EVO 75 / EVO 90

**Built-in LEDSpot equipped with a reflector, heat sink and leads**

### Technical notes

Interchangeable reflector: Ø 75 (EVO 75) or Ø 90 mm (EVO 90), aluminium, bayonet fixing (possible to use Ø 90 reflector on EVO 75 and viceversa)

Holder: PC, white

Heat sink material: aluminium

Lumen maintenance:

L90/B10; 50,000 hrs. at 70 °C (S126)

or 75 °C (S120) at  $t_p$  point

Temperature depends on installation situation and has to be checked by the luminaire manufacturer.

Colour accuracy initially: 2 SDCM

Use of external LED constant-current drivers

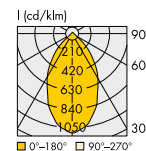
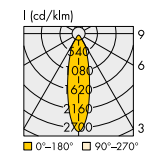
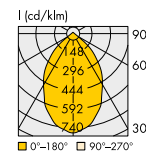
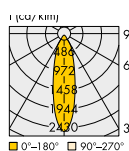
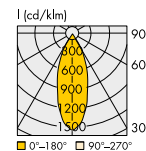
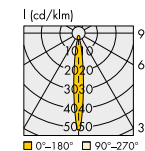
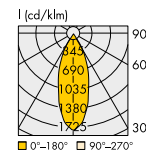
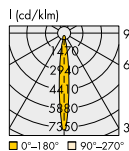
The ceramic PCB ensures optimum thermal management

Fixation

heat sink: lateral fixation with M4 screws for EVO 75 or M5 screws for EVO 90 and nuts or rear side fixation with self-tapping screws ST2.9

Leads: Cu tinned, stranded conductors AWG22, FEP-insulation and PVC sleeve, length: 600 mm

With integrated cord grip



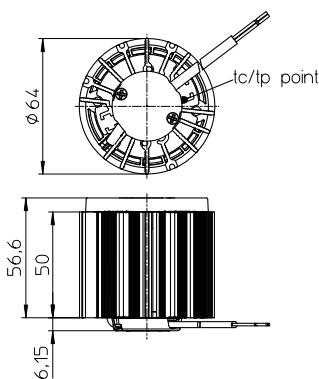
### Maximum ratings

Exceeding the maximum ratings can lead to deuction of service life or destruction of the modules.

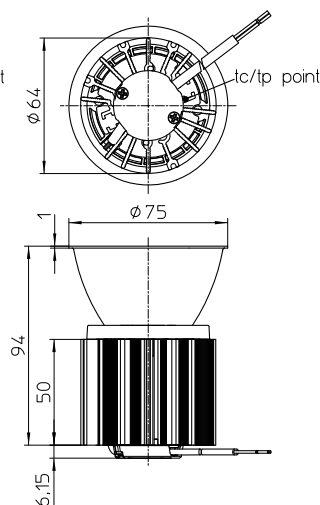
Type	Ambient temperature range ( $t_a$ )		Operation temperature range at $t_c$ -Point		Storage temperature range		Max. allowed repetitive peak current mA
	°C min.	°C max.	°C min.	°C max.	°C min.	°C max.	
S126	-25	+45	-25	+90	-40	+90	1200
S120	-25	+45	-25	+90	-40	+90	2000

Temperatures depend on installation situation and has to be checked by the luminaire manufacturer.

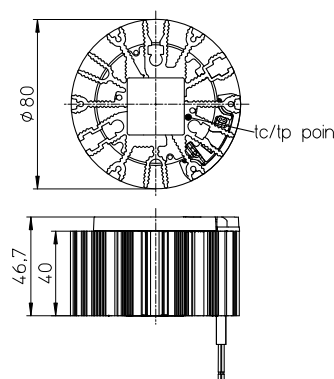
### Engine EVO 75



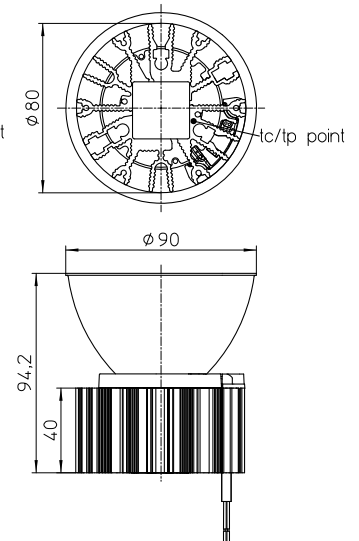
### EVO 75



### Engine EVO 90



### EVO 90



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

## LED Engine EVO

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. luminous flux and efficiency, typ. voltage (V <sub>f</sub> ) and power consumption (P <sub>el</sub> )*								CRI R <sub>a</sub>	Energy efficiency at max. current
				350 mA		500 mA		600 mA		700 mA			
				lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W		
<b>E.EVO 75 S126W</b>				P <sub>el</sub> = 11.7 W V <sub>f</sub> = 33.3 V		P <sub>el</sub> = 17.1 W V <sub>f</sub> = 34.2 V		–		–			
E.EVO 75 S126W	<b>569018</b>	warm white	3000	2010	172	2935	178	–	–	–	–	85	A++
E.EVO 75 S126W	<b>569019</b>	neutral white	4000	2075	177	3035	184	–	–	–	–	85	A++
<b>E.EVO 90 S120W</b>				P <sub>el</sub> = 16.5 W V <sub>f</sub> = 32.9 V		P <sub>el</sub> = 20.0 W V <sub>f</sub> = 33.3 V		P <sub>el</sub> = 23.6 W V <sub>f</sub> = 33.7 V					
E.EVO 90 S120W	<b>569020</b>	warm white	3000			2935	178	3465	173	3970	168	85	A++
E.EVO 90 S120W	<b>569021</b>	neutral white	4000			3035	184	3580	179	4105	174	85	A++

Versions with other colour temperature, CRI 95 or pearl white on request

\* Production tolerance of luminous flux, efficiency, voltage and power consumption: ±10%

## EVO 75

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. luminous flux and efficiency, typ. voltage (V <sub>f</sub> ) and power consumption (P <sub>el</sub> )*				Light intensity at max. current Candela	Beam angle °	CRI R <sub>a</sub>	Energy efficiency at max. current
				350 mA		500 mA					
				lm	lm/W	lm	lm/W				
<b>EVO 75 S126W</b>				P <sub>el</sub> = 11.7 W V <sub>f</sub> = 33.3 V		P <sub>el</sub> = 17.1 W V <sub>f</sub> = 34.2 V					
EVO 75 S126W	<b>569002</b>	warm white	3000	1770	151	2430	142	17860	14	85	A++
EVO 75 S126W	<b>569006</b>	neutral white	4000	1825	156	2510	147	18510	14	85	A++
EVO 75 S126W	<b>569003</b>	warm white	3000	1770	151	2430	142	5900	25	85	A++
EVO 75 S126W	<b>569007</b>	neutral white	4000	1825	156	2510	147	6120	25	85	A++
EVO 75 S126W	<b>569004</b>	warm white	3000	1790	153	2455	144	4240	32	85	A++
EVO 75 S126W	<b>569008</b>	neutral white	4000	1845	158	2535	148	4350	32	85	A++
EVO 75 S126W	<b>569005</b>	warm white	3000	1750	150	2400	140	1770	60	85	A++
EVO 75 S126W	<b>569009</b>	neutral white	4000	1805	154	2480	145	1830	60	85	A++

Versions with other colour temperature, CRI 95 or pearl white on request

\* Production tolerance of luminous flux, efficiency, voltage and power consumption: ±10%

## EVO 90

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. luminous flux and efficiency, typ. voltage (V <sub>f</sub> ) and power consumption (P <sub>el</sub> )*						Light intensity at max. current Candela	Beam angle °	CRI R <sub>a</sub>	Energy efficiency at max. current
				500 mA		600 mA		700 mA					
				lm	lm/W	lm	lm/W	lm	lm/W				
<b>EVO 90 S120W</b>				P <sub>el</sub> = 16.5 W V <sub>f</sub> = 32.9 V		P <sub>el</sub> = 20.0 W V <sub>f</sub> = 33.3 V		P <sub>el</sub> = 23.6 W V <sub>f</sub> = 33.7 V					
EVO 90 S120W	<b>569010</b>	warm white	3000	2555	155	3015	151	3455	146	17470	16	85	A++
EVO 90 S120W	<b>569014</b>	neutral white	4000	2640	160	3115	156	3570	151	17950	16	85	A++
EVO 90 S120W	<b>569011</b>	warm white	3000	2555	155	3015	151	3455	146	9420	25	85	A++
EVO 90 S120W	<b>569015</b>	neutral white	4000	2640	160	3115	156	3570	151	9740	25	85	A++
EVO 90 S120W	<b>569012</b>	warm white	3000	2580	156	3050	153	3495	148	5250	38	85	A++
EVO 90 S120W	<b>569016</b>	neutral white	4000	2670	162	3150	158	3610	153	5430	38	85	A++
EVO 90 S120W	<b>569013</b>	warm white	3000	2525	153	2980	149	3415	145	3590	50	85	A++
EVO 90 S120W	<b>569017</b>	neutral white	4000	2610	158	3080	154	3530	150	3740	50	85	A++

Versions with other colour temperature, CRI 95 or pearl white on request

\* Production tolerance of luminous flux, efficiency, voltage and power consumption: ±10%

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

## Reflectors for EVO

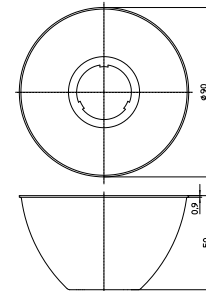
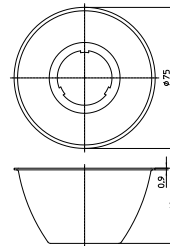
**Exchangeable aluminum reflectors for the EVO series**

### Technical notes

Reflectors made of aluminium with bayonet fixation  
 Surface: anodised  
 Weight: 17/27 g (D75/D90)  
 Packaging unit: 18 pcs.

### Usage and maintenance

If necessary clean reflectors with mild soap, water and soft cloth.  
 Never use any commercial cleaning solvents on reflectors, like alcohol.  
 Please handle or install reflectors with wearing gloves, skin oils may damage reflector or its optical characteristic.



Ref. No.	Beam characteristic	Beam angle (°)	
		S126H	S120H

#### Reflector D75 – H = 40

<b>557152</b>	narrow	14	18
<b>557153</b>	medium	25	24
<b>557154</b>	wide	32	36
<b>562157</b>	extra wide	60	60

#### Reflector D90 – H = 50

<b>557359</b>	narrow	14	16
<b>557360</b>	medium	24	25
<b>557361</b>	wide	35	38
<b>563446</b>	extra wide	50	50

It's possible to use all the reflectors on the same holder.

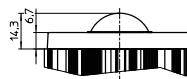
### LES protection

Material: PC, transparent  
 Fixation: click-in  
 Optical efficiency: 96%

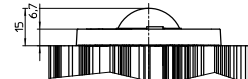
**Ref. No.: 604044** For EVO 75 – S126W

**Ref. No.: 604045** For EVO 90 – S120W

#### For EVO 75



#### For EVO 90



### LED Drivers

You will find more information about our LED drivers on our website: [www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)

Capacity range (W)	Output current	Output voltage DC	Mains voltage (V)	Ref. No.	Version	Current setting	Dimming	Max. service life	at t <sub>c</sub>	Dimensions (LxWxH)	For type		
											min.	max.	DC (mA)
<b>350 mA</b>													
3.5	18.9	350	10–54	220–240	<b>186762</b>	Primeline	DIP switch	DAI	100,000	75	97.2x43.2x30.1	x	x
3.5	18.9	350	10–54	220–240	<b>186763</b>	Primeline	DIP switch	DAI	100,000	75	146.5x43.2x30.1	x	x
5.25	16.1	350	15–46	220–240	<b>186719</b>	EasyLine	—	—	50,000	70	146.5x43.7x30	x	x
5.25	16.1	350	15–46	220–240	<b>186720</b>	EasyLine	—	—	50,000	70	97.1x42.6x30.3	x	x
6.3	19.95	350	18–57	220–240	<b>186431</b>	EasyLine	—	—	50,000	65	122x45x19	x	x
8.05	16.1	350	23–46	100–240	<b>186917</b>	EasyLine	—	—	30,000	75	122.8x45x19	x	x
8.75	15	350	25–43	220–240	<b>186650</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	x	x
8.75	15	350	25–43	220–240	<b>186664</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	x	x

Please ensure you choose the correct LED driver for the module in question and that the respective output parameters (current, voltage, wattage) are correct.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

## LED Drivers

You will find more information about our LED drivers on our website: [www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)

Capacity range (W)		Output current	Output voltage DC	Mains voltage (V)	Ref. No.	Version	Current setting	Dimming	Max. service life	at t <sub>c</sub>	Dimensions (LxWxH)	For type	
min.	max.	DC (mA)	V	50–60 Hz					hrs.	°C	mm	DMS 126	DMS 120
<b>350 mA</b>													
8.75	15	350	25–43	220–240	<b>186831</b>	ComfortLine	Terminals	—	50,000	70	97x43x30	x	x
8.75	14.7	350	25–42	220–240	<b>186843</b>	ComfortLine	DIP switch	—	50,000	70	97x43x29.5	x	x
8.75	18.2	350	25–52	220–240	<b>186913</b>	ComfortLine	LEDSet	—	60,000	80	103.6x67.4x31	x	x
9.73	13.58	350	27.8–38.8	220–240	<b>186924</b>	EasyLine	—	—	30,000	75	97x43x25	x	x
10.15	14	350	29–40	220–240	<b>186909</b>	EasyLine	—	Phase-cut	50,000	70	100x50x19	x	x
10.5	15	350	30–43	220–240	<b>186591</b>	EasyLine	—	—	30,000	75	115x45x25	x	x
<b>500 mA</b>													
5	27	500	10–54	220–240	<b>186762</b>	PrimeLine	DIP switch	DAI	100,000	75	97.2x43.2x30.1	x	x
5	27	500	10–54	220–240	<b>186763</b>	PrimeLine	DIP switch	DAI	100,000	75	146.5x43.2x30.1	x	x
7.5	23	500	15–46	220–240	<b>186721</b>	EasyLine	—	—	50,000	75	146.5x43.7x30	x	x
7.5	23	500	15–46	220–240	<b>186722</b>	EasyLine	—	—	50,000	70	97.1x42.6x30.3	x	x
10.5	21	500	21–42	100–240	<b>186918</b>	EasyLine	—	—	30,000	75	115x45x29	x	x
11.5	21	500	23–42	220–240	<b>186842</b>	ComfortLine	DIP switch	—	50,000	70	97x43x29.5	x	x
12.5	21	500	25–42	220–240	<b>186843</b>	ComfortLine	DIP switch	—	50,000	70	97x43x29.5	x	x
12.5	21.5	500	25–43	220–240	<b>186650</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	x	x
12.5	21.5	350	25–43	220–240	<b>186664</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	x	x
12.5	22	500	25–43	220–240	<b>186846</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	x	x
12.5	22	500	25–43	220–240	<b>186851</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	x	x
12.5	26	500	25–52	220–240	<b>186913</b>	ComfortLine	LEDSet	—	60,000	80	103.6x67.4x31	x	x
12.5	28.5	500	25–57	220–240	<b>186531</b>	EasyLine	Terminals	—	50,000	65	103.6x67.4x31	x	x
14	21	500	28–42	220–240	<b>186505</b>	EasyLine	—	Phase-cut	50,000	65	153x41.4x32	x	x
15	20.3	500	30–40.6	220–240	<b>186925</b>	EasyLine	—	—	30,000	75	97x43x25	x	x
15	21.5	500	30–43	220–240	<b>186592</b>	EasyLine	—	—	50,000	65	115x45x25	x	x
<b>600 mA</b>													
6	32.4	600	10–54	220–240	<b>186762</b>	PrimeLine	DIP switch	DAI	100,000	75	97.2x43.2x30.1	—	x
6	32.4	600	10–54	220–240	<b>186763</b>	PrimeLine	DIP switch	DAI	100,000	75	146.5x43.2x30.1	—	x
13.8	25.2	600	23–42	220–240	<b>186842</b>	ComfortLine	DIP switch	—	50,000	70	97x43x29.5	—	x
15	34.2	600	25–57	220–240	<b>186531</b>	EasyLine	Terminals	—	50,000	65	103.6x67.4x31	—	x
15	25.8	600	25–43	220–240	<b>186650</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	—	x
15	25.8	600	25–43	220–240	<b>186664</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	—	x
15	26	600	25–43	220–240	<b>186847</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	—	x
15	26	600	25–43	220–240	<b>186851</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	—	x
15	31.2	600	25–52	220–240	<b>186913</b>	ComfortLine	LEDSet	—	60,000	80	103.6x67.4x31	—	x
18	24	600	30–40	220–240	<b>186926</b>	EasyLine	—	—	30,000	75	97x43x25	—	x
<b>700 mA</b>													
7	37.8	700	10–54	220–240	<b>186762</b>	PrimeLine	DIP switch	DAI	100,000	75	97.2x43.2x30.1	—	x
7	37.8	700	10–54	220–240	<b>186763</b>	PrimeLine	DIP switch	DAI	100,000	75	146.5x43.2x30.1	—	x
10.5	31.5	700	15–45	220–240	<b>186723</b>	EasyLine	—	—	50,000	65	146.5x43.7x30	—	x
10.5	31.5	700	15–45	220–240	<b>186724</b>	EasyLine	—	—	50,000	65	97.1x42.6x30.3	—	x
14.7	30.1	700	21–43	100–240	<b>186920</b>	EasyLine	—	—	30,000	75	105x68x32	—	x
16.1	29.4	700	23–42	220–240	<b>186842</b>	ComfortLine	DIP switch	—	50,000	70	97x43x29.5	—	x
17.5	30	700	25–43	220–240	<b>186847</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	—	x
17.5	30	700	25–43	220–240	<b>186850</b>	ComfortLine	Terminals	—	50,000	75	97x43x30	—	x
17.5	30.1	700	25–43	220–240	<b>186650</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	—	x
17.5	30.1	700	25–43	220–240	<b>186664</b>	ComfortLine	LEDSet	—	100,000	70	97x43x30	—	x
17.5	36.4	700	25–52	220–240	<b>186913</b>	ComfortLine	LEDSet	—	60,000	80	103.6x67.4x31	—	x
17.5	39.9	700	25–57	220–240	<b>186531</b>	EasyLine	Terminals	—	50,000	65	103.6x67.4x31	—	x
21	28	700	30–40	220–240	<b>186927</b>	EasyLine	—	—	30,000	75	97x43x25	—	x
21	30.1	700	30–43	220–240	<b>186593</b>	EasyLine	—	—	30,000	80	103x67x30	—	x
21	31.5	700	30–45	220–240	<b>186501</b>	EasyLine	—	—	50,000	65	171x41x32	—	x

Please ensure you choose the correct LED driver for the module in question and that the respective output parameters (current, voltage, wattage) are correct.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

## LEDSpot EVO 75 / EVO 90

### General information

Performance acc. to IEC 62717:  $t_p = 90\text{ }^\circ\text{C}$ ; 100,000 hrs.

### Packaging unit

Type	Packaging unit pcs.	Box dimensions (LxWxH) mm	Weight single (g)	Gross weight packaging unit (g)
E.EVO 75	28	600x400x80	170	5180
E.EVO 90	18	600x400x80	240	6960
EVO 75	6	380x260x220	190	1350
EVO 90	6	380x260x220	265	1800
Reflector 75	18	118x118x160	20	360
Reflector 90	18	118x118x160	25	540

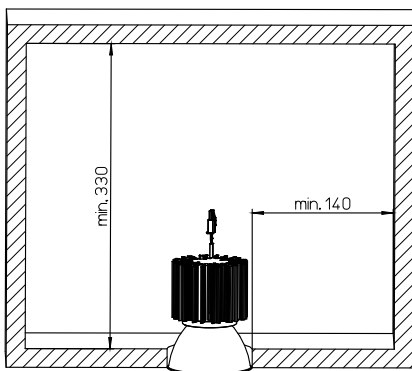
### Product guarantee

- 5 years
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage ([www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)). We will be happy to send you these conditions upon request.

### General safety and installation instructions

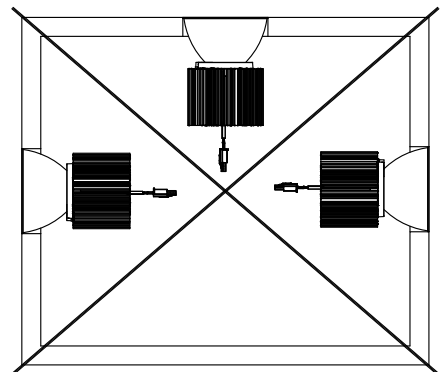
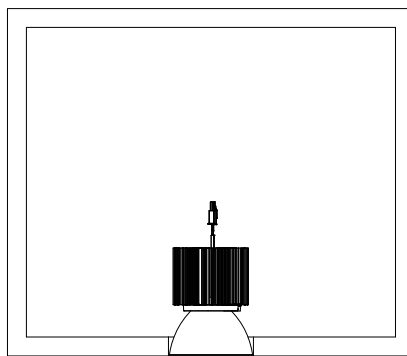
- VS product may only be installed and commissioned by authorised and fully qualified staff.
- These instructions must be carefully read before installing and commissioning the system, as this is the only way to ensure safe and correct handling.
- An external constant-current driver is required.
- Before any work is carried out on the equipment, it must be disconnected from the mains.
- All valid safety and accident-prevention regulations must be observed.
- The products should never be inexpertly opened. Repairs may only be undertaken by the manufacturer.

### Built-in



### Correct position

OK



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.