LED COMPACT HIGH-BAY EASYLINE

INDUSTRY LIGHTING

LED COMPACT HIGH-BAY EASYLINE

Industry lighting

The use of state-of-the-art LED technology in conventional industry lighting provides a lot of advantages like an optimal light distribution and an increased lifetime all at an affordable price.

The LED Compact High-bay EasyLine is fully compatible with existing conventional lighting infrastructure, and are the perfect choice for both new and replacement markets.

LED COMPACT HIGH-BAY EASYLINE

- Incl. integrated LED driver
- High efficiency of up to 157 lm/W
- High colour rendering index CRI: ≥ 70

AC | IP | IP65 | IK08

LED Compact High-bay EasyLine

- **100 % INSTANT LIGHT**
- **INTEGRATED LED DRIVER**
- **HIGH SYSTEM EFFICIENCY: UP TO 157 LM/W**
- **LONG SERVICE LIFE TIME: > 50,000 hrs. (L70/B10)**
- **5 YEARS GUARANTEE**
- **ENEC AND DEKRA APPROVED**

LIGHTING SOLUTIONS

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LED Compact High-bay EasyLine

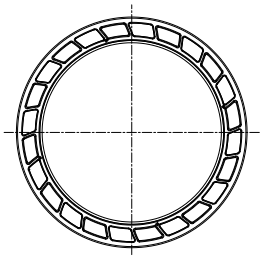
Dimension (ØxH):
- HB-E-260: Ø 260 x 164 mm
- HB-E-305: Ø 305 x 171 mm
- HB-E-343: Ø 343 x 178 mm

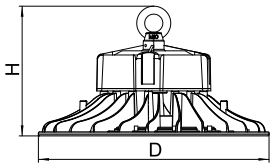
Casing colour: aluminium, black
Optics material: PC
Degree of protection: IP65
Impact rating: IK08
Glow wire test: 650 °C
Typ. colour accuracy initially: 4 SDCM
With connection lead: 300 mm
Fastening: fixing eye
Weight: 2/2.5/3.5 kg

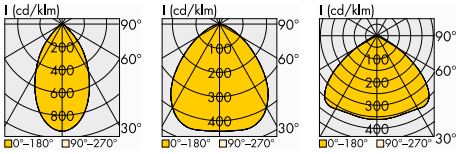
Applied standards
- EN 60598-1:2015 + A1:2018
- EN 60598-2-1:1989
- EN 62471:2008
- EN 62493:2010
- EN 55015:2013
- EN 61000-3-2:2019
- EN 61000-3-3:2013 + A1:2019
- EN 61547:2009
- EN 62778-TR (RG2/RG1>6m)

Dimensions

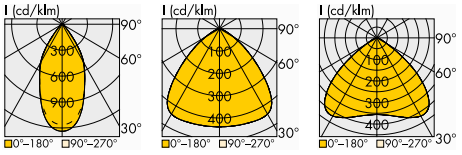
Type	Ø D mm	H mm
HB-E-260	260	164
HB-E-305	305	171
HB-E-343	343	178



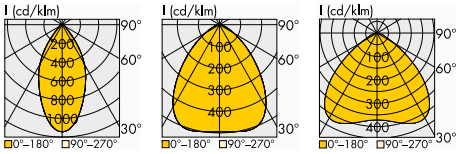




HB-E-260 – 60° | HB-E-260 – 90° | HB-E-260 – 110°



HB-E-305 – 60° | HB-E-305 – 90° | HB-E-305 – 110°



HB-E-343 – 60° | HB-E-343 – 90° | HB-E-343 – 110°

Electrical characteristics

Type	Voltage AC 50–60 Hz V	Power factor	Ripple 100 Hz %	Flicker index	SVM	P_{ST}	THD at full load % (230 V)
All types	120–277	> 0.95	15	0.05	< 0.3	< 0.08	< 20

Maximum ratings
Exceeding the maximum ratings can lead to reduction of service life or destruction of the luminaire.

Type	Allowed voltage range V	Ambient temperature range (t_a) °C min.	°C max.	Storage temperature range °C min.	°C max.
All types	100–277	–40	+50	–40	+70

Operating Life

Type	t_a = 25 °C	t_a = 50 °C
L70/B10	55,000 hrs	50,000 hrs

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Optical Characteristics

at t_a = 25 °C

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. power consumption* W	Luminous flux* and efficiency typ.. lm	lm/W	max. lm	lm/W	Beam angle °	Typ. CRI R_a	Energy efficiency
HB-E-260											
HB-E-260-100-740-60	**570253**	neutral white	4000	100	15000	150	15400	154	60	70	A++
HB-E-260-100-740-90	**570254**	neutral white	4000	100	15000	150	15400	154	90	70	A++
HB-E-260-100-840-90**	**571729**	neutral white	4000	100	14000	140	14400	144	90	80	A++
HB-E-260-100-740-110	**570255**	neutral white	4000	100	15000	150	15400	154	110	70	A++
HB-E-260-100-750-60	**571264**	cool white	5000	100	15200	152	15600	156	60	70	A++
HB-E-260-100-750-90	**571265**	cool white	5000	100	15200	152	15600	156	90	70	A++
HB-E-260-100-750-110	**571266**	cool white	5000	100	15200	152	15600	156	110	70	A++
HB-E-260-100-765-60	**570256**	cool white	6500	100	15300	153	15700	157	60	70	A++
HB-E-260-100-765-90	**570257**	cool white	6500	100	15300	153	15700	157	90	70	A++
HB-E-260-100-765-110	**570258**	cool white	6500	100	15300	153	15700	157	110	70	A++
HB-E-305											
HB-E-305-150-740-60	**570259**	neutral white	4000	150	22500	150	22900	153	60	70	A++
HB-E-305-150-740-90	**570260**	neutral white	4000	150	22500	150	22900	153	90	70	A++
HB-E-305-150-840-90**	**571730**	neutralweiß	4000	150	21000	140	21400	143	90	80	A++
HB-E-305-150-740-110	**570261**	neutral white	4000	150	22500	150	22900	153	110	70	A++
HB-E-305-150-750-60	**571267**	cool white	5000	150	22700	151	23100	154	60	70	A++
HB-E-305-150-750-90	**571268**	cool white	5000	150	22700	151	23100	154	90	70	A++
HB-E-305-150-750-110	**571274**	cool white	5000	150	22700	151	23100	154	110	70	A++
HB-E-305-150-765-60	**570262**	cool white	6500	150	22900	153	23300	155	60	70	A++
HB-E-305-150-765-90	**570263**	cool white	6500	150	22900	153	23300	155	90	70	A++
HB-E-305-150-765-110	**570264**	cool white	6500	150	22900	153	23300	155	110	70	A++
HB-E-343											
HB-E-343-200-740-60	**570265**	neutral white	4000	200	30000	150	30400	152	60	70	A++
HB-E-343-200-740-90	**570266**	neutral white	4000	200	30000	150	30400	152	90	70	A++
HB-E-343-200-840-90**	**571731**	neutralweiß	4000	200	28000	140	28400	142	90	80	A++
HB-E-343-200-740-110	**570267**	neutral white	4000	200	30000	150	30400	152	110	70	A++
HB-E-343-200-750-60	**571275**	cool white	5000	200	30200	151	30600	153	60	70	A++
HB-E-343-200-750-90	**571278**	cool white	5000	200	30200	151	30600	153	90	70	A++
HB-E-343-200-750-110	**571280**	cool white	5000	200	30200	151	30600	153	110	70	A++
HB-E-343-200-765-60	**570268**	cool white	6500	200	30400	152	30800	154	60	70	A++
HB-E-343-200-765-90	**570269**	cool white	6500	200	30400	152	30800	154	90	70	A++
HB-E-343-200-765-110	**570270**	cool white	6500	200	30400	152	30800	154	110	70	A++

* Production tolerance of luminous flux and power consumption: ±10% / **CRI80 MOQ 200 pcs.

Logistic details

Type	Packaging dimensions LxWxH (mm)	Packaging unit / weight pcs.	kg	Minimum order quantity / Pieces per euro pallet pcs.
HB-260-xxx-xxx-xx	310x310x170	1	2.55	108
HB-305-xxx-xxx-xx	360x360x180	1	3.15	90
HB-343-xxx-xxx-xx	400x400x190	1	4.20	90

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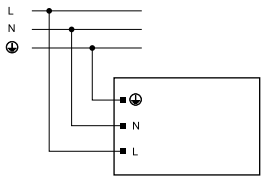
Safety functions

- Transient mains peaks protection:
  Values are in compliance with EN 61547 (interference immunity).
  Surges between L–N–PE: up to 10 kV / L-N: 5 kV
- Short-circuit protection: The control gear is protected against permanent short-circuit with automatic restart function.
- Overload protection: The control gear only works in range of rated output power and voltage problemfree. Please check before switch-on mains power supply that the selected LED load is suitable.
- No load operation: The control gear is protected against no load operation (open load).
- If any of the above mentioned safety functions will be triggered, disconnect the control gear from the power supply then find and eliminate the cause of the problem.

Electrical Installation

- Connection leads: 3x1 mm²; length: 300 mm
- Stripped length: 4 mm
- Polarity: Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the luminaire.
- Wiring diagram:



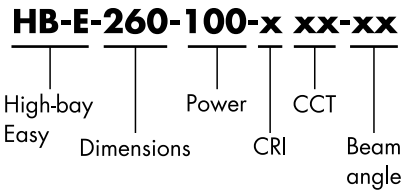
Selection of automatic cut-outs for VS LED drivers

- Dimensioning automatic cut-outs
  High transient currents occur when an LED driver is switched on because the capacitors have to load. Ignition of LED modules occurs almost simultaneously. This also causes a simultaneous high demand for power. These high currents when the system is switched on put a strain on the automatic conductor cut-outs. which must be selected and dimensioned to suit.
- Release reaction
  The release reaction of the automatic conductor cut-outs comply with VDE 0641. part 11. for B. C characteristics. The values shown in the following tables are for guidance purposes only and are subject to system-dependent change.
- No. of LED drivers
  The maximum number of VS LED drivers applies to cases where the devices are switched on simultaneously. Specifications apply to single-pole fuses. The number of permissible drivers must be reduced by 20% for multi-pole fuses. The considered circuit impedance equals 400 mΩ (approx. 20 m [2.5 mm²] of conductor from the power supply to the distributor and a further 15 m to the luminaire).

Type	Automatic cut-out type and possible no. of VS drivers pcs.	
	C 10 A	C 16 A
HB-260-xxx-xxx-xx	16	25
HB-305-xxx-xxx-xx	11	17
HB-343-xxx-xxx-xx	8	12

– To limit capacitive inrush currents the current carrying capacity of each circuit breaker (fuse) can be increased by a factor of 2.5 with the help of our ESB (Ref. No.: 149820, 149821, 149822) inrush current limiters.

Product code description



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Safety and Installation Instructions

General safety and installation Instructions for luminaires

The following instructions must be observed. Non-observance can result in personal injury and damage to property or can damage both luminaires and control gear. In such cases, the manufacturer's warranty as well as liability will be invalidated.

General Instructions

- Please read these instructions prior to installation/commissioning and keep them safe for future use.
- Any improper use or modification will invalidate the manufacturer's warranty and liability as well as any warranty claims.
- The luminaire contains integrated and non-exchangeable LED light sources. The light source of this luminaire cannot be replaced. When the light source has reached the end of its service life, the entire luminaire must be replaced.
- Care must be taken to ensure the luminaire is operated only using the supplied Vossloh-Schwabe control gear and accessories or using an alternative brand of approved control gear.
- If the luminaire is marked with SELV, only control gear with SELV characteristics may be used.
- Children must be prevented from playing with or near the luminaire.

Installation and operating instructions

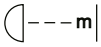
- Installation of this luminaire may be undertaken only by authorised and suitably trained staff in accordance with any country-specific regulations.
- Installation must be carried out only after disconnecting the device from mains voltage, i.e. in a voltage-free state.
- Depending on the site of operation, the degree of protection (IPxx) will have to be observed during installation.
- Please ensure that the correct supply voltage is applied by checking it against the voltage requirements of the luminaire and the driver.
- For the purpose of commissioning, please ensure the correct polarity of the connecting leads. Incorrect polarity can destroy the modules.
- For trouble-free operation, it is important to ensure that the permissible ambient temperature range (t_a) as stipulated in the datasheet is not exceeded. Exposure to sunlight can increase the ambient temperature.
- Only ever operate the luminaire with all protective covers in place.
- Given functional problems, please contact your Vossloh-Schwabe representative. Should the power supply cable be damaged, please scrap the luminaire and/or contact your VS representative.
- On contact with moisture or condensation, any resulting corrosive damage will not be recognised as a product flaw or manufacturer's defect.
- Connecting luminaires (LED modules) to supply units that are already connected to the mains can result in long-term damage. Secondary switching is not permissible.
- Touchable luminaire parts can reach high temperatures (risk of burning/injury).
- Highly flammable materials (e.g. cladding or insulation material) must be kept away from the luminaire.
- Please ensure protective ESD (electrostatic discharge) measures are taken when handling and installing the luminaire – see VS "ESD Protection" application notes.
- Measurement tolerances:
  - Luminous flux: ± 10%
  - Power consumption / voltage: ± 10%
  - CCT: max. 6 SDCM

Cleaning instructions

- Depending on the conditions on site, the luminaire must be cleaned on a regular basis.
- Never use any flammable, abrasive, harsh or corrosive cleaning liquids.
- Prior to cleaning the luminaire, please ensure it is disconnected from the mains and is given time to cool down.
- Once it has cooled down, the luminaire can be cleaned with a damp cloth.
- Let the luminaire dry fully before switching it back on.

Answers to technical questions can be found on our website at **www.vossloh-schwabe.com** or ask your Vossloh-Schwabe representative.

Safety symbols



Specifies the minimum clearance to flammable materials in the direction of radiation.

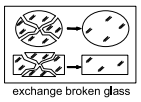

Indoor operation


Please ensure that the way the luminaire is positioned means there is no reason to expect anyone could look into it for a longer period of time with less clearance than stated in the datasheet.


Caution: risk of electric shock.

Caution: components with a risk of electrostatic charge.


Luminaire/voltage supply unit must not be covered with any thermally insulating materials or similar.



Any cover with damage must be replaced.

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).
  We will be happy to send you these conditions upon request.

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