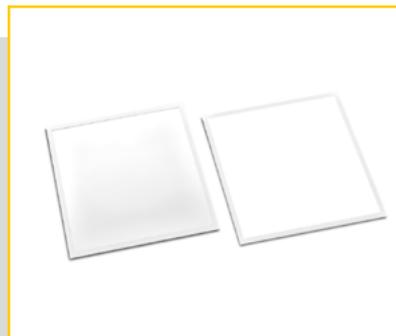


## LED BackLight Panel EasyLine

OFFICE LIGHTING



## LED Backlight Panel EasyLine

### LED Recessed Mounted Backlight Panels

The use of state-of-the-art LED technology in conventional office and hall illumination provides a lot of advantages like an optimal light distribution and an increased lifetime all at an affordable price. LED Backlight Panels are fully compatible with existing conventional lighting infrastructure, and are the perfect choice for both new and replacement markets.

#### ■ LED BackLight Panel

- With integrated LED driver or without operating device
- High efficiency of up to 130 lm/W
- Flat design for easy installation in low false ceiling
- High colour rendering index CRI:  $\geq 80$



### LED Backlight Panel EasyLine

- **100% INSTANT LIGHT**
- **WITH OR WITHOUT LED DRIVER**
- **3 SHAPES: 595X595 MM, 620X620 MM AND 1195X295 MM**
- **STANDARD, TP $\alpha$  AND UGR19 VERSION**
- **5 YEARS GUARANTEE**
- **ENEC, DEKRA APPROVED**



## LED Backlight Panel EasyLine

### Built-in LED light panel

Dimensions (LxWxH):

- BP-6060: 595x595x34 mm
- BP-6262: 620x620x34 mm
- BP-12030: 1195x295x34 mm

Frame colour: white (RAL 9003)

Material:

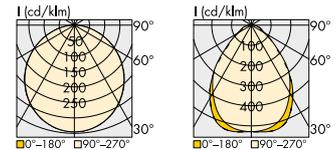
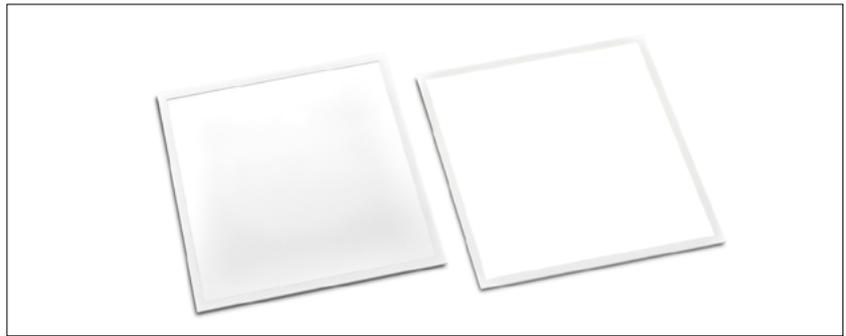
- Frame: aluminium
- Casing: SPCC
- Light diffuser: PC / PC (TPa)
- LED lens: PMMA

Degree of protection Backlight Panel: IP40

Degree of protection LED driver: IP20

Impact rating: IK02

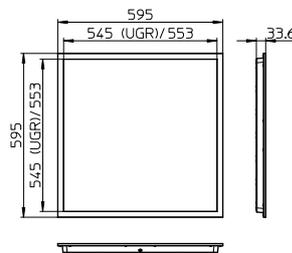
Colour accuracy initially: typ. 4 SDCM



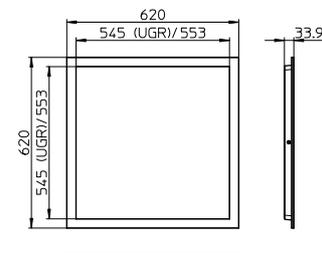
Standard

UGR19

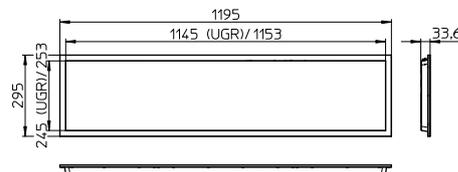
### 595x595 mm



### 620x620 mm



### 1195x295 mm



### Applied standards

- EN 60598-1:2015
- EN 60598-2-2:1989
- EN 60598-2-2:2012
- EN 62471:2008
- EN 62493:2010
- EN 55015:2013
- EN 61000-3-2:2014
- EN 61000-3-3:2013
- EN 61547:2009

### Electrical characteristics

Type	Voltage AC 50–60 Hz (V)	Power factor	Flicker (100 Hz) %	Flicker index	SVM	Pst	THD at full load % (230 V)
All types with LED driver	220–240	> 0.9	< 5	< 0.01	< 0.01	0.02	< 15

### Maximum ratings

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

Values are only for the Backlight Panel.

Type	Max. operating current for versions without LED driver mA	Typ. voltage DC for versions without LED driver V	Allowed operating temperature = $t_a$		Allowed storage temperature = $t_a$	
			min. °C	max. °C	min. °C	max. °C
All types	750	37–45	-10	+45	-20	+60

### Operating Life

Type	L70/B50	
	at $t_a$ 25 °C hrs.	at $t_a$ 45 °C hrs.
With driver	50,000	30,000
Without driver	50,000	50,000

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

# LED Backlight Panel EasyLine

## Standard version – with integrated LED driver

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. power consumption* W	Luminous flux* and efficiency				Typ. UGR 4H-8H	Beam angle °	Typ. CRI Ra	Energy efficiency
					typ. lm	lm/W	max. lm	lm/W				
<b>595x595 mm</b>												
BP-6060-34-830	<b>570086</b>	warm white	3000	34	3910	115	4200	124	22	120	80	A+
BP-6060-34-840	<b>570087</b>	neutral white	4000	34	4080	120	4400	130	22	120	80	A+
<b>620x620 mm</b>												
BP-6262-34-830	<b>570088</b>	warm white	3000	34	3910	115	4200	124	22	120	80	A+
BP-6262-34-840	<b>570089</b>	neutral white	4000	34	4080	120	4400	130	22	120	80	A+
<b>1200x300 mm</b>												
BP-12030-34-830	<b>570090</b>	warm white	3000	34	3910	115	4200	124	22	120	80	A+
BP-12030-34-840	<b>570091</b>	neutral white	4000	34	4080	120	4400	130	22	120	80	A+

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

## UGR19 version – with integrated LED driver

Low glare, especially suitable for office illumination

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. power consumption* W	Luminous flux* and efficiency				Typ. UGR 4H-8H	Beam angle °	Typ. CRI Ra	Energy efficiency
					typ. lm	lm/W	max. lm	lm/W				
<b>595x595 mm</b>												
BP-6060-34-830-U	<b>570092</b>	warm white	3000	34	3860	114	4100	121	19	90	80	A+
BP-6060-34-840-U	<b>570093</b>	neutral white	4000	34	4070	120	4300	127	19	90	80	A+
BP-6060-34-840-U-TPα**	<b>571770</b>	neutral white	4000	34	4070	120	4300	127	19	90	80	A+
<b>620x620 mm</b>												
BP-6262-34-830-U	<b>570094</b>	warm white	3000	34	3860	114	4100	121	19	90	80	A+
BP-6262-34-840-U	<b>570095</b>	neutral white	4000	34	4070	120	4300	127	19	90	80	A+
<b>1200x300 mm</b>												
BP-12030-34-830-U	<b>570096</b>	warm white	3000	34	3860	114	4100	121	19	90	80	A+
BP-12030-34-840-U	<b>570097</b>	neutral white	4000	34	4070	120	4300	127	19	90	80	A+

\* Production tolerance of luminous flux and power consumption: ±10% | \*\* Material TPα-tested; BS 2782-0: 2004 (TÜV)/FlatPanel carries CE mark

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# LED Backlight Panel EasyLine

## Standard version – without LED driver

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. power consumption* W	Luminous flux* and efficiency				Typ. UGR 4H-8H	Beam angle °	Typ. CRI R <sub>a</sub>	Energy efficiency
					typ. lm	lm/W	max. lm	lm/W				
<b>595x595 mm</b>												
BP-6060-30-830-ND	<b>570074</b>	warm white	3000	30	3910	130	4200	140	22	120	80	A+
BP-6060-30-840-ND	<b>570075</b>	neutral white	4000	30	4080	136	4400	147	22	120	80	A+
<b>620x620 mm</b>												
BP-6262-30-830-ND	<b>570076</b>	warm white	3000	30	3910	130	4200	140	22	120	80	A+
BP-6262-30-840-ND	<b>570077</b>	neutral white	4000	30	4080	136	4400	147	22	120	80	A+
<b>1200x300 mm</b>												
BP-12030-30-830-ND	<b>570078</b>	warm white	3000	30	3910	130	4200	140	22	120	80	A+
BP-12030-30-840-ND	<b>570079</b>	neutral white	4000	30	4080	136	4400	147	22	120	80	A+

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

## UGR19 version – without LED driver

Low glare, especially suitable for office illumination

Type	Ref. No.	Colour	Correlated colour temperature K	Typ. power consumption* W	Luminous flux* and efficiency				Typ. UGR 4H-8H	Beam angle °	Typ. CRI R <sub>a</sub>	Energy efficiency
					typ. lm	lm/W	max. lm	lm/W				
<b>595x595 mm</b>												
BP-6060-30-830-U-ND	<b>570080</b>	warm white	3000	30	3860	129	4100	137	19	90	80	A+
BP-6060-30-840-U-ND	<b>570081</b>	neutral white	4000	30	4070	136	4300	143	19	90	80	A+
BP-6060-34-840-U-TPα-ND**	<b>571768</b>	neutral white	4000	30	4070	136	4300	143	19	90	80	A+
<b>620x620 mm</b>												
BP-6262-30-830-U-ND	<b>570082</b>	warm white	3000	30	3860	129	4100	137	19	90	80	A+
BP-6262-30-840-U-ND	<b>570083</b>	neutral white	4000	30	4070	136	4300	143	19	90	80	A+
<b>1200x300 mm</b>												
BP-12030-30-830-U-ND	<b>570084</b>	warm white	3000	30	3860	129	4100	137	19	90	80	A+
BP-12030-30-840-U-ND	<b>570085</b>	neutral white	4000	30	4070	136	4300	143	19	90	80	A+

\* Production tolerance of luminous flux and power consumption: ±10% | \*\* Material TPα-tested; BS 2782-0: 2004 (TÜV)/FlatPanel carries CE mark

## LED constant-current drivers

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

Backlight Panel: Max. operating current: 750 mA, voltage range: 37–45 V DC

Max. output W	Ref. No.	Type	Version	Output current mA	Output voltage DC V	Dimensions LxVxH (mm)	Max. service life hrs.
30	<b>186842*</b>	ECXe 700.345	DIP switch	500–750	23–45	97x43x29.5	50,000
38	<b>186763</b>	ECXd 1050.299	DALI / DIP switch	300–750	10–51	146.5x43.2x30.1	100,000
40	<b>187217</b>	ECXd 1050.560	DALI / PUSH / DIP switch	300–1050	10–54	141.6x79x30	100,000

\* Cord grip 186845 for protection class II required

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

## Accessories

### Suspension kit

Length: 1.5 m

Consisting of

- 4 fixation brackets
- 8 fixing screws M3
- 6 screws M4, incl. pegs

Minimum order quantity: 50 pcs.

**Ref. No.: 570320**



### Surface mounting frames for LED Backlight Panel EasyLine with integrated LED driver

Material: aluminium

Colour: white (RAL 9003)

Magnetic catch

Minimum order quantity: 5 pcs.

Type: 6060

**Ref. No.: 567820** For LED Backlight Panel 595x595x60 mm

Type: 6262

**Ref. No.: 567821** For LED Backlight Panel 620x620x60 mm



### Mounting clips

Set of 4 mounting clips

For ceiling with thickness: max. 20 mm

Minimum order quantity: 50 pcs.

**Ref. No.: 570321**



### Safety rope kit

Length: 1.5 m

- 1 fixing bracket
- 2 fixing screws M3

Minimum order quantity: 50 pcs.

**Ref. No.: 570322**

## Logistic details

Type	Packaging white			Packaging brown			Minimum order quantity	
	Dimensions LxWxH (mm)	Pack. unit pcs.	Weight kg	Dimensions LxWxH (mm)	Pack. unit pcs.	Weight kg	Pieces per euro pallet	container 40 ft
BP-6060-xx-xx-ND	600x645x35	1	1.7	615x255x665	6	10.2	90	2160
BP-6262-xx-xx-ND	625x670x35	1	1.9	640x255x690	6	11.4	90	2160
BP-12030-xx-xx-ND	1210x305x35	1	1.7	1260x175x320	4	6.8	48	on request
BP-6060-xx-xx	600x645x35	1	1.9	615x255x665	6	11.4	90	2160
BP-6262-xx-xx	625x670x35	1	2.1	640x255x690	6	12.6	90	2160
BP-12030-xx-xx	1210x305x35	1	1.9	1260x175x320	4	7.6	48	on request
Surface mounting frame for 6060	610x62x610	1	2.2	625x335x625	5	12	5	—
Surface mounting frame for 6262	640x62x640	1	2.4	650x335x650	5	12.5	5	—
Surface mounting frame for 12030	310x62x122	1	2.6	325x335x1225	5	13.6	5	—

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# LED Backlight Panel EasyLine

## Comparison with Compact Fluorescent Lamps

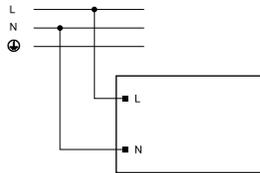


Type	LED	Fluorescent
Service lifetime	50,000 hrs.	10,000 hrs.
Backlight Panel EasyLine	34 W	4 x 18 W or 4 x 14 W

## Safety and assembly information for LED drivers

### Electrical installation

- Wiring:** The mains conductor within the luminaire must be kept short (to reduce the induction of interference). Mains and lamp conductors must be kept separate and if possible should not be laid in parallel to one another. Max. secondary side lead length: 0.8 m
- Polarity:** Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Through-wiring:** Is not allowed.
- Parallel wiring:** Parallel connection of LED loads is not allowed.
- Wiring diagram:**



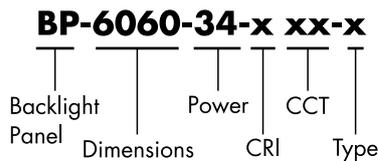
## Selection of automatic cut-outs for VS LED drivers

- 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 mm<sup>2</sup>] 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.	
	B 16 A	C 16 A
BP with driver	37	56

- 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



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

## 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:  $\pm 10\%$
  - Power consumption / voltage:  $\pm 10\%$
  - Colour: max. 6 SDCM
- For square Backlight Panels, light input is effected via two sides.
- The photobiological safety must be classified into risk groups in accordance with EN 62471. Rating in accordance with IEC/TR 62778: risk group 1

### 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.



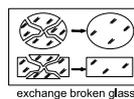
Caution: risk of electric shock.



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](http://www.vossloh-schwabe.com)). We will be happy to send you these conditions upon request.

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