



SmartForm – top-class lighting in a fresh, appealing design

SmartForm LED BCS460

We all feel and perform better in a pleasant, comfortable working environment. Designed for use in offices, shops and schools, the SmartForm family of surface-mounted luminaires combines best-in-class lighting with a clean, distinctive design. These ultra-flat luminaires are available with a choice of MASTER TL5, TL5 ECO or LED light sources in rectangular and square versions. They can also be used to form light-lines and structures. With its wide choice of very efficient and comfortable micro-optics and covers, SmartForm surface-mounted provides the ideal solution for every situation. Lighting controls can be added for further energy saving.

Benefits

- Top-class lighting performance meets all project requirements
- Fresh-looking design
- Energy-efficient

Features

- Very slim housing – only 47 mm deep
- State-of-the-art LED lighting
- High-efficiency optical covers
- Possibility to add lighting controls

Application

- Offices
- Shops
- Schools

Specifications

SmartForm LED BCS460

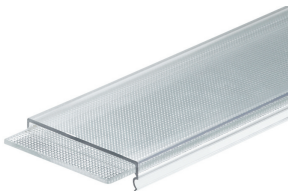
Type	BCS460
Light source	Philips Fortimo LED Line 3R
Power (steady state in W, +/- 10%)	LED24: 25 W LED48: 47 W
Beam angle	80-100° (depending on configuration)
Luminous flux	1650-4300 lm (depending on configuration)
Correlated Color	4000 K
Temperature	
Color Rendering Index	≥ 80
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Driver failure rate	1% per 5000 hours
Average ambient temperature	+25 °C
Operating temperature range	+10 to +40 °C

Driver	Built-in
Mains voltage	230 or 240 V / 50-60 Hz
Material	Housing: zinc-coated steel
Color	White, RAL 9016 based Optional white RAL 9010 or silver grey RAL 9006 based
Optical cover	1, 2-lamp version: - OLC micro-lens optic in polycarbonate cover (MLO-PC) - Linear lens array optic in polycarbonate cover (LIN-PC) 3-lamp version: - OLC micro-lens optic made of acrylate (AC-MLO)
Connection	Push-in connection with pull relief (PIP) Cable, length 200 cm, with plug CEE7 (CCE)
Installation	Individual; clicking the luminaire into pre-screwed ceiling brackets Through-wiring possible Installation without removing LED module and optic/cover
Remarks	Protection foil to protect the optic during installation

Versions



Product details



SmartForm LED BCS460

Application Conditions

Ambient temperature range	+10 to +40 °C
Average ambient temperature	25 °C
Maximum dim level	1%

Approval and Application

Mech. impact protection code	IK07
Ingress protection code	IP40

Controls and Dimming

Dimmable	Yes
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Operating and Electrical

Input Voltage	220 to 240 V
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General Information

CE mark	CE mark
Parts colour	-
Protection class IEC	Safety class I
Driver included	Yes
ENEC mark	ENEC mark
Embedded control	No
Light source replaceable	No
Number of light sources	1
Product Family Code	BCS460
Standard RAL colour	Traffic white (9016)
Top reflector	No
Internal wiring	Standard

Initial Performance (IEC Compliant)

Init. Corr. Colour Temperature	4000 K
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Mechanical and Housing

Colour	White
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Over Time Performance (IEC Compliant)

Driver failure rate at 5000 h	1 %
Median useful life L80B50	50000 h
Median useful life L90B50	25000 h

Application Conditions

Order Code	Full Product Name	Suitable for random switching
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	No
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	No
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	No
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	No
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	Yes (relates to presence/ movement detection and daylight harvesting)
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	No

General Information (1/2)

Order Code	Full Product Name	Beam angle		Optical		Emergency lighting
		of light source	Cap-Base	cover/lens type		
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	- °	-	MLO-PC		No
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	- °	-	LIN-PC		No
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	- °	-	MLO-PC		No

Order Code	Full Product Name	Beam angle		Optical		Emergency lighting
		of light source	Cap-Base	cover/lens type		
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	- °	-	MLO-PC		No
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	-	-	MLO-PC		EL3
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	- °	-	AC-MLO		No

General Information (2/2)

SmartForm LED BCS460

Order Code	Full Product Name	Flammability mark	Glow-wire test	Lamp family code	Number of gear units	Optic type	UL mark
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	F	Temperature 850 °C, duration 5 s	LED24	1 unit	No	No
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	F	Temperature 850 °C, duration 5 s	LED24	1 unit	No	No
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	F	Temperature 850 °C, duration 5 s	LED24	1 unit	No	-
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	F	Temperature 850 °C, duration 5 s	LED48	1 unit	No	-
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	-	Temperature 850 °C, duration 5 s	LED24	-	-	-
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	F	Temperature 650 °C, duration 5 s	LED48	1 unit	No	-

Initial Performance (IEC Compliant) (1/2)

Order Code	Full Product Name	Initial chromaticity	Init. Colour Rendering Index	Initial LED luminaire efficacy	Initial luminous flux
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	(0.38, 0.38) SDCM <3	≥80	81 lm/W	1750 lm
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	(0.38, 0.38) SDCM <3	≥80	102 lm/W	2200 lm
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	(0.38, 0.38) SDCM <3	≥80	93 lm/W	2000 lm
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	(0.38, 0.38) SDCM <3	≥80	93 lm/W	3500 lm

Order Code	Full Product Name	Initial chromaticity	Init. Colour Rendering Index	Initial LED luminaire efficacy	Initial luminous flux
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	(0.38, 0.38) SDCM <3.5	-	82 lm/W	2000 lm
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	(0.38, 0.38) SDCM <3	≥80	97 lm/W	3700 lm

Initial Performance (IEC Compliant) (2/2)

Order Code	Full Product Name	Luminous flux tolerance	Initial input power
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	+/-10%	21.5 W
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	+/-10%	21.5 W
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	+/-10%	21.5 W
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	+/-10%	37.5 W

Order Code	Full Product Name	Luminous flux tolerance	Initial input power
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	-	24.5 W
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	+/-10%	38 W

Mechanical and Housing

Order Code	Full Product Name	Geometry
91547700	BCS460 LED24/840 PSD W16L124 MLO-PC	Width 0.16 m, length 1.24 m
91548400	BCS460 LED24/840 PSD W16L124 LIN-PC	Width 0.16 m, length 1.24 m
91549100	BCS460 LED24/840 PSD W22L124 MLO-PC	Width 0.22 m, length 1.24 m

Order Code	Full Product Name	Geometry
91557600	BCS460 LED48/840 PSD W22L124 MLO-PC	Width 0.22 m, length 1.24 m
60093600	BCS460 LED24/840 PSD W22L124 MLO-PC EL3	Width 0.22 m, length 1.24 m
91551400	BCS460 LED48-/840 PSD W33L124 AC-MLO	Width 0.33 m, length 1.24 m

