

DCW114 120 14500lm 93W 840 I PMMA IP66 DALI EMG3W3H

Symmetric · 4000 K · IP65 · IK05 · RAL 7035



Length 99 mm

APPLICATION

The DCW114 Series is a high-performance waterproof LED luminaire engineered for demanding environments where durability, chemical resistance and reliable operation are essential. Delivering up to 19,000 lm, it combines a corrosion-resistant GRP (glass fibre reinforced polyester) housing with a PMMA diffuser to provide dependable illumination in aggressive industrial and agricultural environments. Designed for applications where conventional polycarbonate luminaires may not offer sufficient chemical resistance, the DCW114 withstands exposure to ammonia, detergents, disinfectants and humid atmospheres. This makes it an ideal solution for livestock buildings, dairy farms, food processing facilities, car washes, wastewater treatment plants and other demanding installations requiring long-term reliability. The robust GRP housing provides excellent mechanical strength, dimensional stability and resistance to corrosion, while the PMMA diffuser offers outstanding chemical resistance, high light transmission and long-term optical stability. The durable sealing system and stainless steel clips ensure reliable IP66 protection against dust and water, even in harsh operating conditions. With system efficacy of up to 170 lm/W, the DCW114 significantly reduces energy consumption while delivering powerful, uniform illumination. The luminaire is available in multiple lumen packages and can be equipped with DALI-2 control, emergency lighting with up to 3 hours of autonomy, integrated microwave motion sensors and through-wiring, making it suitable for both new installations and refurbishment projects. Backed by a 5-year warranty and manufactured using high-quality European LED modules and drivers, the DCW114 Series is designed for long service life with minimal maintenance. It is the ideal lighting solution for livestock buildings, poultry and dairy farms, food production facilities, chemical and pharmaceutical plants, industrial wash-down areas, warehouses and other environments where chemical resistance, high efficiency and dependable waterproof performance are required.

14500 lm SYSTEM FLUX	93 W INPUT POWER	156 lm/W EFFICACY	4000 K CCT	≥80 CRI	IP65 INGRESS	IK05 IMPACT	>100 000 h L90B10
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ELECTRICAL PARAMETERS

Nominal supply voltage	230 (220–240) V AC	Supply voltage range	198–264 V AC
Type of supply current	AC	Supply frequency	50–60 Hz
Rated input power	93W	Power factor (PF)	0.95
Driver efficiency at nominal load	92%	Total harmonic distortion (THDi)	< 10% @ full load
Protection class (electric shock)	I	Surge protection (CM / DM)	4/2 kV
Driver type	Philips Xitanium	Number of luminaires on MCB 16A type B	24

PHOTOMETRIC PARAMETERS

Luminous flux — system	14500lm	Luminous flux — LED module	16150lm
Luminous efficacy — system	156lm/W	Correlated colour temperature (CCT)	4000 K
Colour rendering index Ra (CRI)	≥80	Init. CRI tolerance	±3
Light distribution type	Symmetric	Luminaire beam spread	120.0°
Optic type	N/A	Light output ratio (LOR)	0,90
Photobiological safety class	RG0	Flicker — Output PstLM / SVM	≤0.1 / ≤0.2
Colour consistency (SDCM)	< 3 MacAdam steps	Upward light output ratio (ULOR)	N/A
Luminous flux tolerance	±5 %		

CONSTRUCTION & MATERIALS

Luminaire type	Dust/Waterproof	Light source type	LED
Light source replaceable	yes	Cap / base type	Integrated
Housing material	GRP	Reflector material	N/A
Housing coating	N/A	Optic material	PMMA
Optical cover material	N/A	Housing colour (RAL)	RAL 7035
Mounting type	Surface, suspended	Cutout size	N/A
Overall dimensions (H × W × L)	99x116x1277	Weight (net)	2.5kg
Effective projected area	N/A	Windage projection area (side / below)	N/A
Number of light sources	1 pcs	Number of gear units	1 pcs

PROTECTION & ENVIRONMENT

IP rating — enclosure	IP65	Impact resistance class IK	IK05
Operating temperature range	-40...+35 °C	Storage temperature range	-40...+65 °C
Glow-wire test	650 °C / 5 s	Relative humidity (max)	N/A

CONTROL & DIMMING

Dimmable	Yes	Control protocol / interface	DALI, Touch & Dim
Dimming range	10-100%	Built-in motion / presence sensor	on request

RELIABILITY & LIFETIME

Light source lifetime	>100000 @ L90 B10 h	Lumen maintenance @ 50 000 h	L98 B5
Lumen maintenance @ 100 000 h	L90 B10	Control gear failure rate @ 50 000 h	5 %
Control gear failure rate @ 100 000 h	10 %	Maximum case temperature Tc	75°C

CERTIFICATIONS

Warranty period	5 years	CE marking	Yes
ENEC mark	No	ENEC+ mark	No
UKCA marking	Yes	D4i certified (DALI)	No
EU RoHS compliant	Yes	Light source energy efficiency class	C

STANDARDS & SUSTAINABILITY

Applicable standard	EN-IEC 62722-2-1	ETIM Class	EC002892
Recyclable content ratio	Not determined	Non-virgin material ratio	Not determined
Sustainability rating	Not determined	EAN / UPC	Not determined
Application areas	Industry, warehouses, parkings, general lighting		

Environmental data. Embedded carbon, recyclable content and sustainability ratings are provided per article where determined.

Documents. Photometric files (IES / LDT) and installation instructions are available at takton.ee.