

# PRODUCT DATASHEET DR PC-PFM -13/220-240/350

LED DRIVER PHASE-CUT PERFORMANCE | Constant current LED driver with phase-cut dimming interface



### Areas of application

- Suitable for LED luminaires and LED modules
- Applicable for luminaires of protection classes I and II
- For indoor SELV installations
- Offices, shopping centers, hospitals, restaurants, hotels

### **Product benefits**

- Enables installation with commonly used leading-edge and trailing-edge dimmers
- 5 years guarantee
- Slim housing for narrow installations
- High efficiency and reliability

### **Product features**

- Available in 13 W, 18 W, 25 W and 35 W
- Independent installation with optional Cable Clamp Kit
- Dimmable on the leading edge and trailing edge
- Dimmable from 10...100 %
- Lifetime: up to 50,000 h (at max. tc temperature)
- Type of protection: IP20
- Dedicated, constant output current
- Low ripple current < 5%
- Supply voltage: 220...240 V
- Operating frequency: 50/60 Hz
- Operated with less than 60 V: Safety extra-low voltage (SELV)
- Reversible overtemperature, overload, short-circuit and open-circuit protection

### **TECHNICAL DATA**

### **Electrical data**

Nominal output power       13 W ¹)         Nominal voltage       220240 V         Nominal output voltage       1736 V ²)         Input voltage AC       198264 V ³)         U-OUT (working voltage)       60 V         Type of current       DC         Nominal current       70 mA         Nominal output current       350 mA ⁴)         Inrush current       5 A         Output current tolerance       ±5 %         Output ripple current (100 Hz)       < 5 %         Mains frequency       5060 Hz         Total harmonic distortion       18 % ⁵)         Power factor λ       0.95 €)         ECG efficiency       79 % ²)         Device power loss       2,6 W ®)         Max. ECG no. on circuit breaker 10 A (B)       81         Max. ECG no. on circuit breaker 16 A (B)       130         Max. ECG no. on circuit breaker 25 A (B)       203         Surge capability (L-N)       0.5 kV         Galvanic isolation       SELV	Nominal wattage	13.00 W
Nominal output voltage       1736 V ²)         Input voltage AC       198264 V ³)         U-OUT (working voltage)       60 V         Type of current       DC         Nominal current       70 mA         Nominal output current       350 mA ⁴)         Inrush current       5 A         Output current tolerance       ±5 %         Output ripple current (100 Hz)       < 5 %	Nominal output power	13 W <sup>1)</sup>
Input voltage AC	Nominal voltage	220240 V
U-OUT (working voltage)       60 V         Type of current       DC         Nominal current       70 mA         Nominal output current       350 mA 4)         Inrush current       5 A         Output current tolerance       ±5 %         Output ripple current (100 Hz)       < 5 %	Nominal output voltage	1736 V <sup>2)</sup>
Type of current  Nominal current  70 mA  Nominal output current  5 A  Output current tolerance  ±5 %  Output ripple current (100 Hz)  Ains frequency  5060 Hz  Total harmonic distortion  18 % 5)  Power factor λ  ECG efficiency  79 % 7)  Device power loss  2,6 w 8)  Max. ECG no. on circuit breaker 10 A (B)  Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  On mA  Storm A  90 mA  50 mA  90 mA  9	Input voltage AC	198264 V <sup>3)</sup>
Nominal current       70 mA         Nominal output current       350 mA 4)         Inrush current       5 A         Output current tolerance       ±5 %         Output ripple current (100 Hz)       < 5 %	U-OUT (working voltage)	60 V
Nominal output current 350 mA 4)   Inrush current 5 A   Output current tolerance ±5 %   Output ripple current (100 Hz) < 5 %	Type of current	DC
Inrush current  Output current tolerance  ±5 %  Output ripple current (100 Hz)  < 5 %  Mains frequency  Total harmonic distortion  18 % 5)  Power factor λ  ECG efficiency  Device power loss  Aax. ECG no. on circuit breaker 10 A (B)  Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  5 A  45 %  0.95 %  0.96 W8  81  130  Max. ECG no. on circuit breaker 25 A (B)  203  Surge capability (L-N)	Nominal current	70 mA
Output current tolerance±5 %Output ripple current (100 Hz)< 5 %	Nominal output current	350 mA <sup>4)</sup>
Output ripple current (100 Hz)< 5 %Mains frequency5060 HzTotal harmonic distortion18 % 5)Power factor λ0.95 6)ECG efficiency79 % 7)Device power loss2,6 W 8)Max. ECG no. on circuit breaker 10 A (B)81Max. ECG no. on circuit breaker 16 A (B)130Max. ECG no. on circuit breaker 25 A (B)203Surge capability (L-N)0.5 kV	Inrush current	5 A
Mains frequency5060 HzTotal harmonic distortion18 % 5)Power factor λ0.95 6)ECG efficiency79 % 7)Device power loss2,6 W 8)Max. ECG no. on circuit breaker 10 A (B)81Max. ECG no. on circuit breaker 16 A (B)130Max. ECG no. on circuit breaker 25 A (B)203Surge capability (L-N)0.5 kV	Output current tolerance	±5 %
Total harmonic distortion  18 % <sup>5)</sup> Power factor λ  0.95 <sup>6)</sup> ECG efficiency  79 % <sup>7)</sup> Device power loss  2,6 W <sup>8)</sup> Max. ECG no. on circuit breaker 10 A (B)  Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  0.5 kV	Output ripple current (100 Hz)	< 5 %
Power factor λ  ECG efficiency  79 % <sup>7)</sup> Device power loss  2,6 W <sup>8)</sup> Max. ECG no. on circuit breaker 10 A (B)  Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  0.5 kV	Mains frequency	5060 Hz
ECG efficiency 79 % 7)  Device power loss 2,6 W 8)  Max. ECG no. on circuit breaker 10 A (B) 81  Max. ECG no. on circuit breaker 16 A (B) 130  Max. ECG no. on circuit breaker 25 A (B) 203  Surge capability (L-N) 0.5 kV	Total harmonic distortion	18 % 5)
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Max. ECG no. on circuit breaker 10 A (B)  Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  0.5 kV	ECG efficiency	79 % <sup>7</sup> )
Max. ECG no. on circuit breaker 16 A (B)  Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  0.5 kV	Device power loss	2,6 W <sup>8)</sup>
Max. ECG no. on circuit breaker 25 A (B)  Surge capability (L-N)  0.5 kV	Max. ECG no. on circuit breaker 10 A (B)	81
Surge capability (L-N) 0.5 kV	Max. ECG no. on circuit breaker 16 A (B)	130
	Max. ECG no. on circuit breaker 25 A (B)	203
Galvanic isolation SFLV	Surge capability (L-N)	0.5 kV
SELY	Galvanic isolation	SELV

<sup>1)</sup> Partial load 6...13 W

# Dimensions & Weight

<sup>2)</sup> Maximum 60 V

<sup>3)</sup> Permitted voltage range

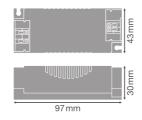
<sup>4) ±10%</sup> 

<sup>5)</sup> At full load, 220...240 V, 50 Hz

<sup>6)</sup> Full load at 230 V

<sup>7)</sup> At full load and 230  $\rm V$ 

<sup>8)</sup> At maximum LED load of 13 W



Length	97.00 mm
Mounting hole spacing, length	88,0 mm
Width	43.00 mm
Height	30.00 mm
Cable cross-section, input side	0.751.5 mm <sup>2</sup>
Cable cross-section, output side	0.51.5 mm <sup>2</sup>
Prewired	No
Wire preparation length, input side	8,0 mm
Wire preparation length, output side	8,0 mm
Product weight	98.00 g

### Colors & materials

Product color	White
Casing material	Plastic
Body material	Plastic

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	95 °C
Temperature range in operation	-20+50 °C
Permitted rel. humidity during operation	1090 % <sup>1)</sup>

<sup>1)</sup> Maximum 56 days/year at 90%

# Lifespan

Ī	ECG lifetime	50000 h <sup>1)</sup>

<sup>1)</sup> At maximum  $T_c = 75$ °C / 10% failure rate

### Additional product data

Encapsulated	No
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# **Capabilities**

Dimmable	Yes
Dimming interface	Phase Cut
Dimming range	10100 %
Overheating protection	No
Overload protection	Yes
Short-circuit protection	Yes
Max. cable length to lamp/LED module	2,0 m
Suitable for fixtures with prot. class	1/11
Suitable for emergency lighting	No
Type of connection, output side	Push terminal

### Certificates & Standards

Approval marks – approval	TUV / CE
Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 / Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384
Protection class	П
Type of protection	IP20

### **LOGISTICAL DATA**

Temperature range at storage	-20+75 °C

### **EQUIPMENT / ACCESSORIES**

- Cable Clamp Kit to ensure propper strain relief

### **DOWNLOAD DATA**

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE

### **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075239814	Folding box 1	46 mm x 34 mm x 100 mm	104.00 g	0.16 dm <sup>3</sup>
4058075239821	Shipping box 10	247 mm x 118 mm x 91 mm	1198.00 g	2.65 dm³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075254800	Shipping box 60	372 mm x 262 mm x 205 mm	7678.00 g	19.98 dm³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

### References / Links

- For Guarantee see www.ledvance.com/guarantee

### **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.