

LED-driver in DC-design (DC converter)

The LED-driver-35/ -70 DC 24 are switchable devices with dimming function which are used for the power supply of Power LEDs with nominal currents of 350/700 mA..

The DC converter has an input voltage range of DC 12-30 V and supplies a maximum output of $U_{out}=0,8 \times U_{in}$.

Two types of devices suitable for dimming are available:

- control input 1-10 V DC:

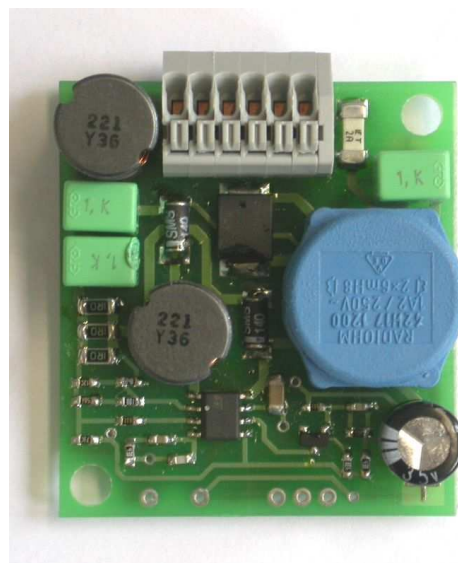
The brightness control of the LEDs works with the an integrated PWM module with a 1-10V control input. These control inputs may alternatively be operated with an electronic potentiometer (1-10 V), a conventional potentiometer or a DC control voltage 1-10 V.

- control input external PWM signal (rectangle):

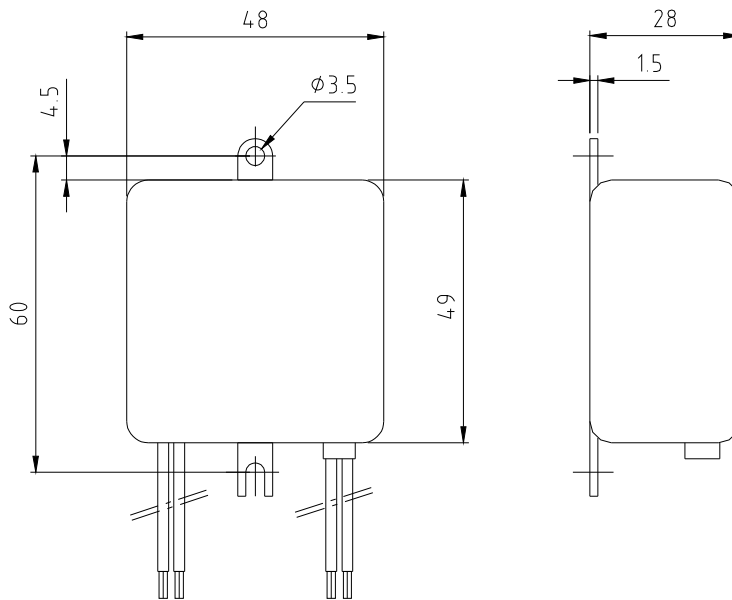
The brightness control works by feeding an external rectangular PWM signal (40 Hz...10 KHz, 3,5...10 V) to the control input +Ust.

The LED-driver in DC design (12-30V) is available both as housing device (closed with connecting leads) and as open-frame assembly (PCB version) (see range of products and order data).

The connection is made either via 4 lines or with clamps on the PCB.

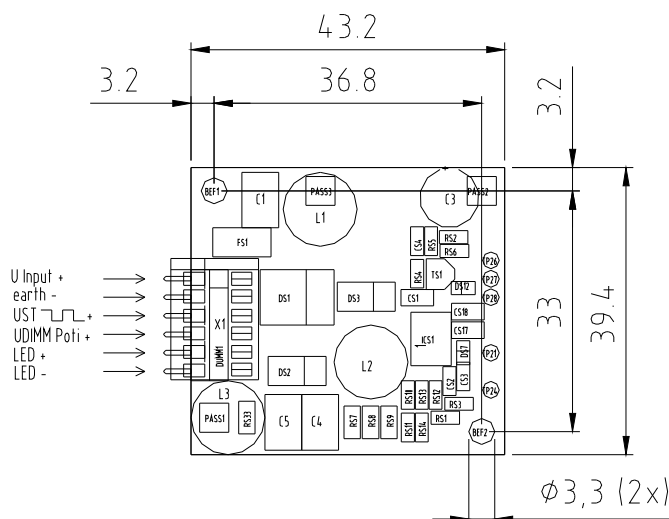


Dimensions



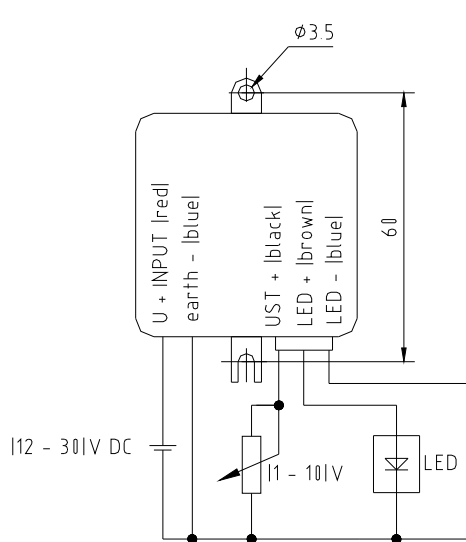
Closed housing with connecting leads

total-height ca. 18mm

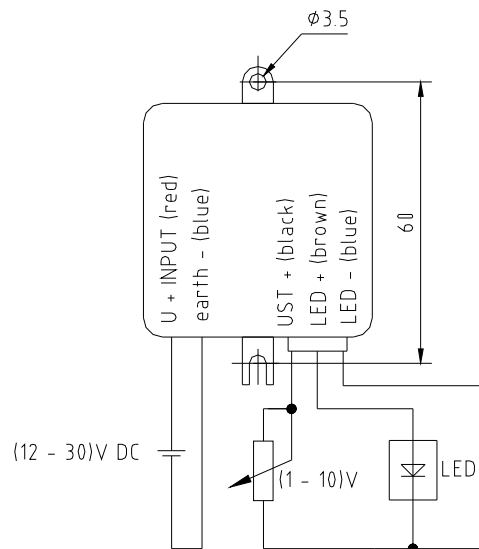


Pin assignment of the DC converter (LED-driver-... DC 24, PCB version)

Basic Circuit Diagram



Connecting diagram LED *driver-35 / 70* DC



Connecting diagram LED *driver-100* DC

Technical data

Input voltage:	12 ... 30 V DC
Power range:	0 – 9 W with 350 mA 0 – 17 W with 700 mA 0 – 17 W with 1000 mA
No-load voltage	24 V ± 10%
Output voltage:	0,8 x U _{in}
Output current::	350 mA (LED- <i>driver-35</i>) 700 mA (LED- <i>driver-70</i>)
Constant current in the output voltage range:	2 V - 24 V 2 V – 17 V (with 1000 mA)
Length of secondary line:	max. 15 m
Protection class:	III
Number of LEDs with maximum input voltage 30V (example)	1...7 x 1 W in series (350 mA) 1...3 x 5 W in series (700 mA) 1...6 x 3 W in series (1000 mA) 1...6 x 3 W in series (700 mA)
Ambient temperature:	0 - 40 °C
Control voltage	0 - 0,7V Lamp OFF 1-10V Dimming 5 % to 100 %
Max. control current:	1 mA (source)
Dimming range PWM rectangle **	0 – 100 %
Dimming range 1-10 V DC ***	0 – 100 %
Dimensions (LxBxH) / mm:	49 x 48 x 28 (housing, closed) 43x40x18 (PCB version)

* Depending on the installation location, sufficient cooling is to be provided.

** External PWM signal (rectangle) required (40Hz ... 10kHz), 3,5 ... 10V

*** External Dim Input (Ust 1-10V DC) required

LED-driver in DC-design

Range of products and order data

DC-Housing devices	Output current and colour coding on PCB	Article Number
With dimming function: External potentiometer (mechanical / electronic) or Dim input 1-10V DC (closed housing with connecting leads)		
LED <i>driver-35</i> DC 24 RU	350 mA (yellow)	32 805 1352
LED <i>driver-70</i> DC 24 RU	700 mA (red)	32 805 1020
LED <i>driver-100</i> DC 24 RU *	1000 mA (blue)	planned

DC-PCB version	Output current and colour coding on PCB	Article Number
With dimming function: External potentiometer (mechanical / electronic) or Dim input 1-10V DC		
LED <i>driver-35</i> DC 24 D	350 mA (yellow)	32 810 1350
LED <i>driver-70</i> DC 24 D	700 mA (red)	32 810 1000
LED <i>driver-100</i> DC 24 D *	1000 mA (blue)	32 811 1000
With dimming function: External PWM-signal (rectangle)		
LED <i>driver-35</i> DC 24	350 mA (yellow)	32 800 1350
LED <i>driver-70</i> DC 24	700 mA (red)	32 800 1000

Subject to technical changes without prior notice.

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