

Electronic Lux-Instrument transformer for 3-channels, type LM 3,

Order-No.: 50.14.102

The LM 3 acquires for each circuit from a light sensor the brightness and transforms it into a linear D/C in parallel to the brightness. To each circuit an individual light sensitivity (measuring range) can be assigned. Ex works a working range of 0-20000 lux has been set. The light levels are being transformed into a voltage of 0-10V.

Setting of measuring ranges

If the settings (ex works) shall be changed first of all the housing has to be removed from the base of the control by twisting off the screw at the bottom of the housing and taking it off from the base plate with the terminals.

Important: before taking the housing off from the base plate the control must be voltage-free.

Modes of operation

The Lux instrument transformer type LM3 can be operated in 2 modes:

Mode A:

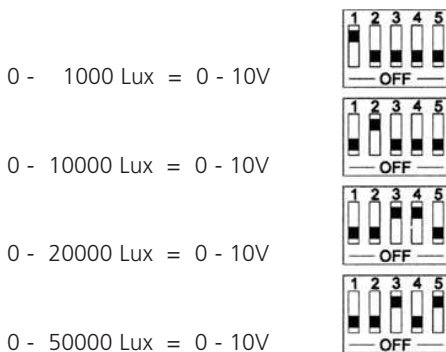
Each control circuit is operated individually, each voltage input has a voltage output. To each circuit one of the 4 Lux-value ranges can be assigned.

Mode B:

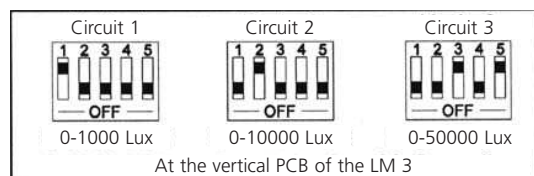
In this case all circuits are getting the same light level setting. The voltage outputs are interconnected. The circuit which acquires the highest light level is responsible for all circuits (see wiring diagrams).



Setting of the Dip-Switches



Example for light level settings:



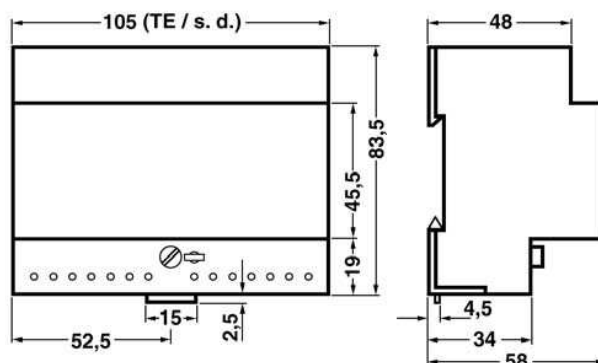
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Technical data:

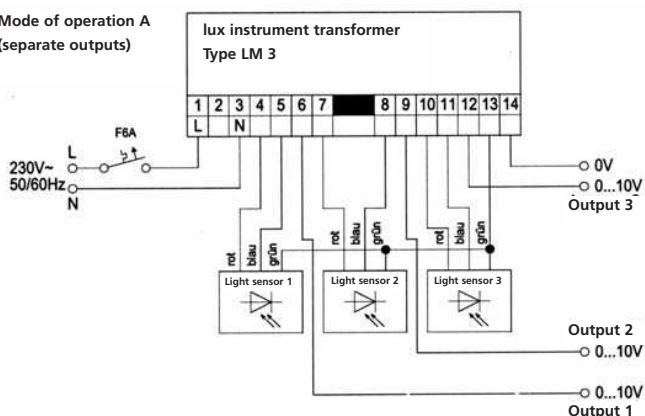
Characterization	Lux instrument transformer type LM3
Type	: LM 3
Order-no.	: 50.14.102
Operational voltage	: 230V, 50/60 Hz
output voltage	: 0...10V, linear for the brightness at the sensor No protective low-voltage (Basic isolation according to IEC 664, 10/92)
Output current	: max. 3mA
Protection	: with an external MCB max. 6 A
Own consumption	: approx. 2W
Ambient temperature	: max. 45°C with natural air-convection (at vertical mounting position)
Terminals	: 0,5 – 2,5 mm ² , solid wire or litz wire with sleeve
Wire length	: max. 100 m
Housing	: plastic for DIN rail systems
Dimensions	: WxHxD = 105x83,5x58 mm
Mounting of sensors	: depending on the required places for the daylight or mixed light level acquisition
Weight	: approx. 380gr
Protective type	: IP 20
Contamination grade	: 2 (dry, non-conductive according IEC 664, 10/92)
Requirements	: EMC met accord. to EN 50082-1(03/93) Low-voltage met acc. to IEC 669-2-1 11/94
Accessory	: 3 x light sensor, wall-mounted, swivelling, protective type IP 55 Type LF/w/D, order-No.: 51.21.010 or 3 x light sensors wall-recessed, suitable for DIN or BS-boxes, type LF/c/D order-no.: 51.21.009

Dimensional drawing LM 3



Wiring diagrams LM 3

Mode of operation A
(separate outputs)



Mode of operation B
(common outputs)

