Emitter failure control

An automatic monitoring for infrared emitter is useful if a visual check is not or only partly possible.

Our emitter failure control compares the load current which is running through the infrared emitter with a fixed value in a toroidal-core current transformer.
In case the current falls below the set value an alarm relay (switch contact) switches within 0.5 seconds.

Due to the fact that connected infrared emitter might not always run on a hundred percent of their power, but often are regulated from 0 to 100 % by a power controller, the set value should be only a fraction of the nominal power of the infrared emitter.

The emitter failure control is working reliable with setpoints down to 15 % of the nominal power.

Technical Data:

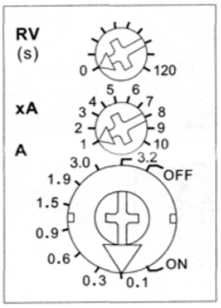
Supply voltage:	230 V
Max. load current:	16 A (230 V AC / 400 V AC)
Rated switch capacity:	16 A / 250 V AC
Contact material:	$AgSnO_2$
Contact gap:	0.5 mm
Standby loss:	0.8 W
Item no.:	E100252

The basis of current A will be set with the lower rotary switch **A**.

The multiplier will be set with the middle rotary switch **xA** and offers values between 1 and 10. So the switching threshold for the load current results from **A times xA.**

The OFF delay can be set with the upper rotary switch **RV** between 0 and 120 seconds. The hysteresis is defined as approx. 25%.

Settings for the emitter failure control



OFF delay 0 ... 120s

current muliplier

basis of current 0,1 ... 3,2 A

With the settings of the basis of current and the multiplier the switching sensitivity can be adjusted.
Pre defined set to:
xA = 4
A = 0,2

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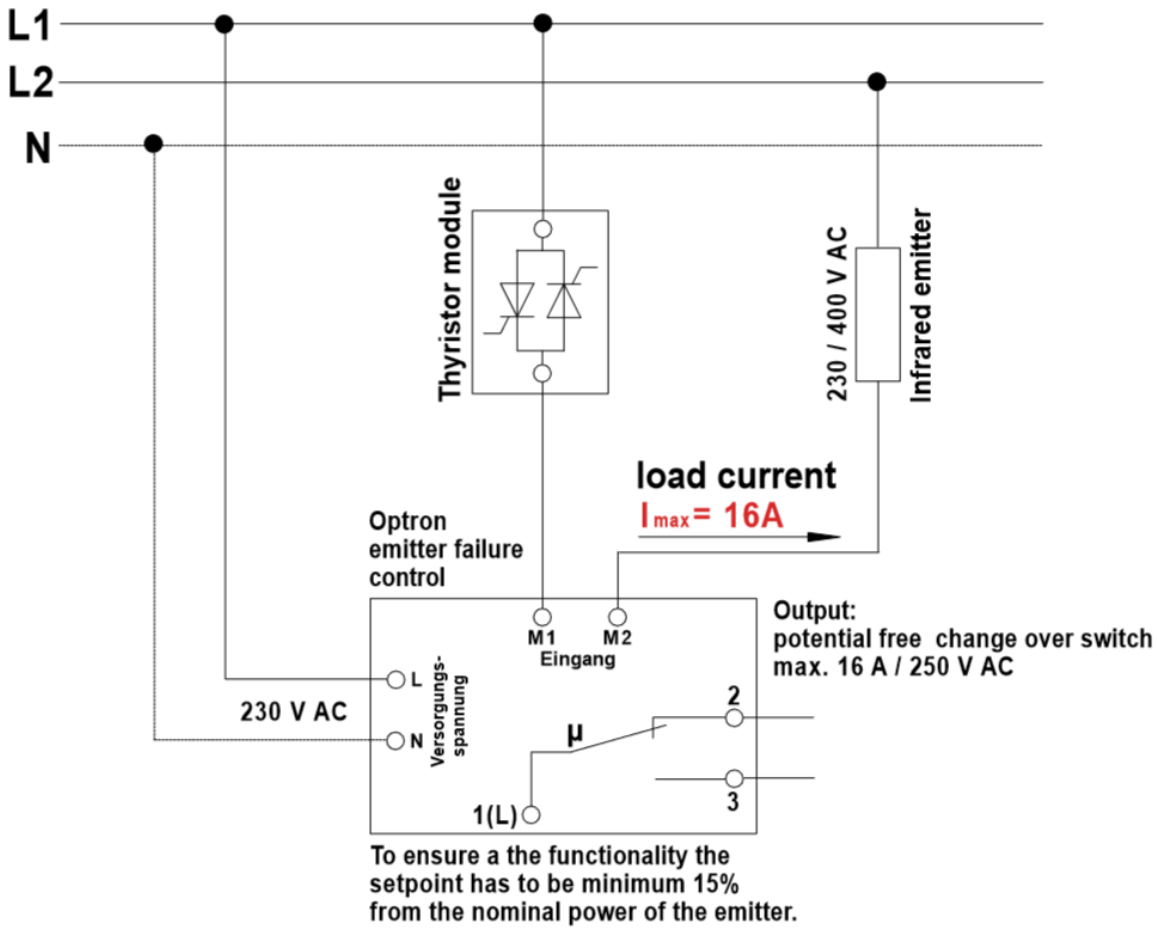
Connection scheme



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