

Rotary dimmer
DTD55-230V-wg



Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

Rotary dimmer for single mounting
80x80x25 mm or mounting into the
FT55 switching system. Installation depth
33 mm. Universal dimmer switch with
rotary knob, Power MOSFET up to 300 W.
Automatic lamp detection. With adjust-
able minimum and maximum bright-
ness. Standby loss 0.14 watt only.
Universal dimmer switch for lamps up
to 300 W, depending on the ventilation
conditions, dimmable energy saving
lamps (ESL) and dimmable 230 V LED
lamps also depending on the lamp
electronics.

Zero passage switching with soft start and soft OFF to protect lamps.

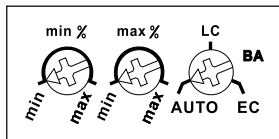
Control voltage, supply voltage and
switching voltage 230 V. No minimum
load required.

The setting of the brightness level is
stored after switching off (Memory).
In case of a power failure the switching
position and the brightness level are
stored. If applicable the dimmer will be
switched on at the stored brightness level
after the supply voltage is recovered.
Automatic electronic overload protection
and over-temperature switch-off.

Mounting: screw mounting plate.
After the rotary switch setting, pull the
red insulating cap and attach the knob.
The insulating cap should be remained
for future use in the DTD55. Then put up
the frame and attach the front panel.

Important! Before mounting and removal, always disconnect the power supply!

Function rotary switches



Minimum brightness (fully dimmed
down) is adjustable **using the left %
rotary switch.**

Use the middle % rotary switch to set
the maximum brightness (fully dimmed
up).

The right rotary knob sets the operating
mode:

AUTO allows the dimming of all lamp
types.

LC is a comfort position for LED lamps
which are not being dimmed down
enough when set to AUTO (trailing phase
angle) dependent on the construction and
must therefore be forced to leading phase
angle.

EC is a comfort position for energy saving
lamps which must be switched on with
increased power dependent on the con-
struction, so they will also switch on
again safely in cold condition when
dimmed down.

Operation:

Press the middle of the rotary knob to
switch on with memory value and to
switch off and save the current dimming
value.

Turn to the right (clockwise) to dim up.
The turning speed determines the dim-
up speed.

If the dimming actuator was switched
off to the right at the start of dimming,
switch-on is at minimum brightness
followed by gradual dim-up. **This is the
children's room circuit.**

**When the rotary knob is turned jerkily
to the right** – with the dimmer knob
previously switched on or off – dim-up
is rapid to the maximum brightness ad-
justed.

**Turn to the left (anticlockwise) to dim-
down** to the minimum brightness adjusted.
The turning speed determines the dim-
down speed.

**When the rotary knob is turned jerkily
to the left**, dim-down is rapid to the
minimum brightness adjusted.

If the dimming switch was switched off
to the left at the start of turning, switch-on
is at minimum brightness followed by
gradual dim-up by turning to the right.

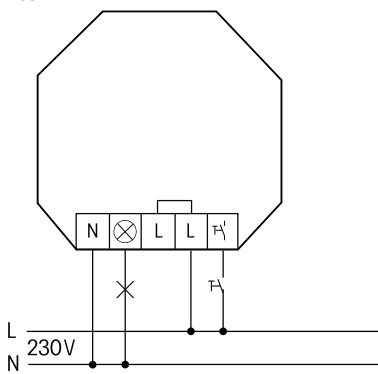
**Control is also possible using a 230 V
control pushbutton in addition to the
rotary knob:** Short commands switch
on/off, continuous activation changes
brightness up to maximum or minimum
value. If you interrupt activation, it
changes the dimming direction.

**Children's room circuit with control
pushbutton:** Press the control pushbutton
for a long time to switch on at minimum
brightness, then continue pressing the
pushbutton to dim up the lights slowly
without changing the last dimming value
stored.

Sleep time with control pushbutton:
A double pulse dims down and switches
off the lighting from the current dimming
position through to minimum brightness.

The maximum dimming time of 60 minutes
is dependent on the current dimming
position and the adjusted minimum
brightness and can therefore be short-
ened as required. Tap briefly at any time
during dim-down process to switch off.
Press long during the dimming-down
process to dim up and end the sleep
timer.

Typical connection



Technical data

Incandescent and halogen ¹⁾ lamps 230 V (R)	up to 300 W
Inductive transformers (L) up to 300 W ²⁾³⁾	
Electronic transformers (C) up to 300 W ²⁾³⁾	
Dimmable energy saving lamps ESL	up to 300 W ⁵⁾
Dimmable 230 V LEDs	up to 300 W ⁵⁾
Max./min. temperature at mounting location	+50°C/-20°C ⁴⁾
Standby loss (activ power)	0.14 W

- ¹⁾ For lamps with 150 W max.
- ²⁾ Per dimmer it is only allowed to use max. 2 inductive (wound) transformers of the same type, furthermore no-load operation on the secondary part is not permitted. The dimmer might be destroyed. Therefore do not permit load breaking on the secondary part. Operation in parallel of inductive (wound) and capacitive (electronic) transformers is not permitted!
- ³⁾ **When calculating the load a loss of 20% for inductive (wound) transformers and a loss of 5% for capacitive (electronic) transformers must be considered in addition to the lamp load.**
- ⁴⁾ Affects the max. switching capacity.
- ⁵⁾ Usually applies for dimmable energy saving lamps and dimmable 230 V LED lamps. Due to differences in the lamps electronics, there may be limited dimming range, switch on and off problems dependent on the manufacturer and a restriction on the maximum number of lamps; especially if the connected load is very low (for 5 W-LEDs). The comfort positions EC and LC optimize the dimming range, which, however, only gives a maximum power up to 100 W. No inductive (wound) transformers may be dimmed in these comfort positions.

Must be kept for later use!

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