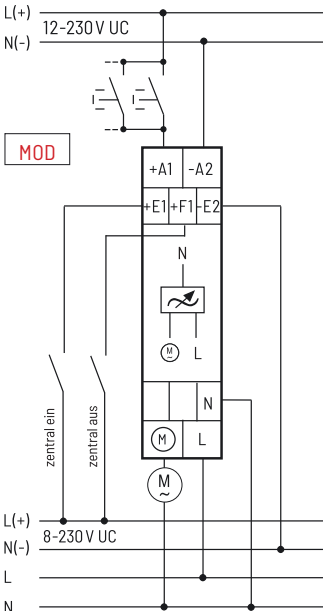


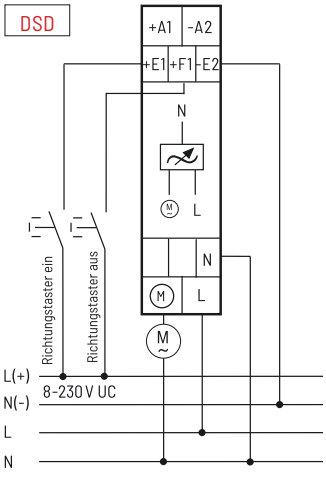
MOD12D-UC

Power MOSFET up to 300 W. Standby loss 0.3 watt only. Minimal speed, maximum speed and dimming speed are adjustable.

Modular device for DIN EN 60715 TH35 rail mounting.
1 module = 18 mm wide, 58 mm deep.
Motor dimmer with phase control for L loads up to 300 W, depending on ventilation conditions. Only 1 fan motor should be connected.
Universal control voltage 12 to 230 V UC and additionally the universal voltage control inputs 8 to 230 V UC central ON and central OFF. The control inputs are electrically isolated from the 230 V supply voltage and switching voltage.
Switching in zero crossing and switch-on at increased speed.
If there is a power failure, the switch position and the speed level are saved. The device can be switched on when the power supply is restored.
Automatic electronic overload protection and over-temperature switch-off.
Enter the 6 functions and times using the MODE and SET keys as described in the operator manual.
The functions and times are indicated in the LC display. Other features include language selection and keylock.
The total switch-on time is added and indicated in the bottom line of the display. It can be reset to zero.
The top line shows the parameters during the setting procedure and the active function in service. The left arrow indicates the switch position 'ON' and the right arrow shows the keylock function when applied.
During the setting procedure, the middle line shows the parameters set. In service, the middle line indicates the speed between 10 and 99 for the MOD and DSD functions or the remaining time in minutes for the Udo and ODT functions.
MOD = Motor dimmer with settings for dimming speed DSP, minimum speed MI%, maximum speed MA%, memory function MEM+ and selection of the central control inputs ON and/or OFF when activated or deactivated. Short commands switch on/off, permanent activation changes speed. An interruption in activation changes the dimming direction.
DSD = Motor dimmer with activation with two direction buttons for dimming direction. Setting the dimming speed DSP, minimum speed MI%, maximum speed MA% and memory function MEM+. When activation takes place via +E1, a short command switches on. Permanent activation dims up to maximum speed. A double-click immediately dims to maximum speed. When activation takes place via +F1, a short command switches off. Permanent activation dims down to minimum speed. No central control function.
Udo = Motor dimmer as for MOD function with manual on/off. In addition, a time delay time TIM can be set from 1 to 99 minutes. When the time delay expires, the device switches off. Central ON has priority over Central OFF.
ODT = Motor dimmer with run-on switch function with adjustable speed SP%, response lag AV adjustable from 1 to 99 minutes and time delay RV adjustable from 1 to 99 minutes. When the control voltage is applied, the device switches on after the AV time expires. When the control voltage cuts off, the RV time begins. When the RV time expires, the device switches off.
No central control function.
ON = Permanent ON at maximum speed, **OFF** = Permanent OFF.
Press MODE and SET briefly and simultaneously to activate the keylock. Then press SET to confirm the flashing LCK. Press MODE and SET simultaneously for 2 seconds to deactivate keylock. Then press SET to confirm the flashing UNL.

Typical connections





Manuals and documents in further languages:
https://eltako.com/redirect/M0D12D-UC

Technical data page 9-22.
Housing for operating instructions GBA14 page 1-48 chapter 1.

MOD12D-UC	Digitally adjustable motor dimmer, Power MOSFET up to 300 W	**Art. No. 21100906**	

Recommended retail prices excluding VAT.

UNIVERSAL DIMMER SWITCHES, CAPACITY ENHANCERS AND 1-10 V CONTROLLERS

Type	ELD61[a)]	SDS12 SUD12	SDS61	MOD12D
Spacing of control connections/load	6 mm	6 mm	3 mm	6 mm
Incandescent and halogen lamps 230 V (R)	–	–	–	–
Inductive transformers (L)[2)3)]	–	–	–	–
Motor (L)	–	–	–	up to 300 W [7)]
Capacative transformers (C)[3)8)]	–	–	–	–
Dimmable 230 V LED lamps[5)6)9)]	–	–	–	–
Dimmable LED lamps 12-36 V DC	ELD61: 7,5 A	–	–	–
1-10 V EVG	–	40 mA 600 VA	40 mA 600 VA	–
Maximum conductor cross-section (3-fold terminal)	4 mm^2	6 mm^2 (4 mm^2)	4 mm^2	6 mm^2 (4 mm^2)
Two conductors of same crosssection (3-fold terminal)	1,5 mm^2	2.5 mm^2 (1.5 mm^2)	1.5 mm^2	2.5 mm^2 (1.5 mm^2)
Screw head	slotted/crosshead	slotted/crosshead, pozidriv	slotted/crosshead	slotted/crosshead, pozidriv
Type of enclosure/terminals	IP30/IP20	IP50/IP20	IP30/IP20	IP50/IP20
Time on	100%	100%	100%	100%
Max./min. temperature at mounting location [4)]	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Standby loss (active power)	0.1 W	0.5 W	0.5 W	0.3 W
Control voltage	12..230 V UC	8..230 V UC	230 V	12..230 V UC
Glow lamp current	–	–	–	–
Control current 230 V-control input (<5 s)	–	–	0.5 mA	–
Control current universal control voltage all control voltages (<5 s) 8/12/24/230 V (<5 s)	– 2/3/7/4(100) mA	– 3/5/10/4(100)mA	– –	2/3/8/5(100)mA –
Control current central 8/12/24/230 V (<5 s)	–	3/5/10/4(100)mA	–	2/3/8/5(100)mA
Max. parallel capacitance (approx. length) of single control lead at 230 V AC	0.3 µF (1000m)	0.3 µF (1000 m)	0.06 µF (200 m)	0.9 µF (3000 m)
Max. parallel capacitance (approx. length) of central control lead at 230 V AC	–	0.3 µF (1000 m)	–	0.9 µF (3000 m)

* EVG = electronic ballast units; KVG = conventional ballast units [a)] Secondary cable length with a maximum of 2 m. [1)] For loads exceeding half the respective rated load, a ventilation distance of ½ module must be maintained from adjacent devices. For the EUD61, the switching capacity also depends on the ventilation conditions. [2)] Per dimmer or capacity enhancer 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 capacative (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)] In the settings LED and ESL no wound (inductive) transformer must be dimmed. [6)] Increase of capacity for dimmable 230 V LED lamps and dimmable energy saving lamps ESL see page 9-10. [7)] Only 1 fan motor may be connected. [8)] For LED and 12 V halogen lamps. [9)] Usually applies to 230 V LED lamps. Different lamp electronics may result in restricted dimming areas, on/off problems and a limited maximum number of lamps (up to 10 units), especially if the connected load is very low (e.g. with 5 W LEDs). The comfort positions of the dimmer switches 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.

According to DIN VDE 0100-443 and DIN VDE 0100-534, the installation of a surge arrester (SPD) is mandatory.
ELTAKO offers suitable, standard-compliant surge arresters of types 1, 2, and 3 – see Chapter 8, "Surge Arresters."

Compliance with: EN 61000-6-3, EN 61000-6-1 and EN 60 669