

PUSH DIM Function with MGL Drivers

The Pushdim function is a price attractive solution for smaller installations of LED luminaires. However, the following points have to be taken into account during the installation, in order to avoid subsequent claims or misunderstandings.

MGL LICHT offers the following drivers with „Pushdim“ option:

MGL0027 leading-edge/trailing-edge phase dimming /Pushdim 230V 50/60Hz 17W 350mA
MGL0028 leading-edge/trailing-edge phase / Pushdim 230 50/60Hz 24W 500mA
MGL0064 leading-edge/trailing-edge phase dimming /Pushdim 230V 50/60Hz 32W 700mA
MGL 0025 1-10V / Pushdim 230V 50/60Hz 15W 350mA
MGL0026 1-10V / Pushdim 230V 50/60Hz 20W 500mA
MGL 0046 1-10V/ Pushdim 230V 50/60Hz 15W 350mA
MGL0047 1-10V/ Pushdim 230V 50/60Hz 24W 500mA
MGL0037 1-10V/ Pushdim 230V 50/60HZ 32W 700mA
MGL0011 DALI / 1-10V/ Pushdim 230V 50/60Hz 50W/1050mA (switchable via DIP-Switch)

Installation

- The driver is contacted on the primary side at L1 and N input, i.e. mains voltage is always connected and there is no complete disconnection from mains.
- A second phase is connected with the „Push“ input via a standard pushbutton.
- Briefly press the pushbutton: „ON/OFF“
- Longer pressing of the button: dim either up or down
- Only pushbuttons without signal function (LED / glow lamp) can be used
- When dimming up or down, the regulation happens in timed steps that are visible during the dimming process.
- Due to the fact that mains voltage is always connected and to a very long discharge process when switching off, the light points can appear to be “glowing” minimally in complete darkness (not at all bright or really disturbing / minimal effect only visible with a closer look). This is no defect, but the consequence of the continuously connected mains voltage and the subsequent physical processes and effects.
- In order to be able to operate the combined drivers MGL0027, MGL0028, MGL0064, MGL0011 in the „Pushdim Mode“, the corresponding jumper has to be removed on the secondary side of the driver with the aid of long-nose-pliers.
- The luminaires are contacted toolless on the secondary side by means of the plug-in connector, the triple multiplug connector (MGL0049) and the extension cables 2000mm (MGL0050), same as in case of all the other drivers..

Using several “Push Dim“ drivers with one pushbutton

The following points are very important and must be strictly followed in order to guarantee a trouble-free operation:

- In case of a group of drivers, only one driver is to be connected by means of the push dim input with the pushbutton.
- All other drivers must be connected by means of the synchronization line 500 mm (MGL0065) or the synchronization line 4000 mm (MGL0066).

- Thus, the driver connected to the “Pushdim“ contact is the master and controls the other drivers connected via the synchronization lines.
- The contacting of the connected drivers is toolless, i.e. via the sockets marked with “SYNC” with the corresponding plug connectors of the cables.
- It is possible to connect max. 8 drivers in one series to one pushbutton according to the a.m. configuration (1Master +7 Slaves)
- The max. length of all control lines in one group is 12m.
- The drivers MGL0025 and MGL0026 can only be used as single unit and not as synchronized group (no SYNC sockets). The corresponding alternative drivers with SYNC sockets are MGL 0046 and MGL0047.

Please note: Consequences of wrong installation

In case the drivers are not properly contacted (i.e. not in the Master Slave Mode via the “SYNC” sockets by using the synchronization lines) but are all connected in parallel on the primary side and switched via push button, the following malfunctions may occur sooner or later:

- The luminaire groups connected to the corresponding drivers show different dimming behaviours
- The drivers fail, e.g. at one touch of a button some may dim up and some may dim down
- Some groups of luminaires (with the same driver) start to flicker.

The „Pushdim Signal“, that is given on the primary side to the connected driver group, is a purely manual process that does not allow a proper control of the connected group of luminaires when all individual drivers are connected on the primary side via the pushdim button. This is no malfunction but the consequence of an installation that does not correspond with the instructions.

MGL LICHT GmbH does neither accept any liability nor take over any costs for necessary rework of the used drivers and connected luminaires!

For a safe and precise control of larger groups of drivers and the related luminaire groups over longer distances, the control via a digital bus signal (DALI) is recommended.