LEG Industrie-Elektronik **GmbH**

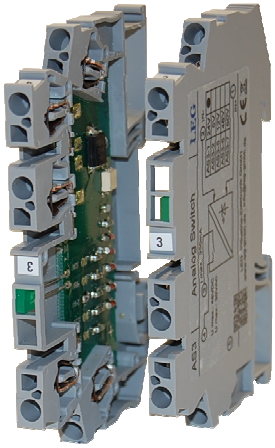
D- 41751 Viersen-Dülken · Textilstr.2
☎ +49 (0) 2162-5030621 ✉ +49 (0) 2162-5030629

LEG
www.LEG-GmbH.de
info@LEG-GmbH.de

Optocoupler with transistor output OK5

Characteristic:

- **Optocoupler with free transistor output**
- **Input voltage 5V, 12V, 24V, 48V, 60VDC**
- **Transmission frequency max. 500Hz**
- **Output 0…250VDC / 100mA**
- **Status display**
- **Switching time 2,5µs / 100µs**
- **Mountable on 35 mm cap rail TS35**
- **Tension spring connection**
- **Shape 6,2mm**
- **High reliability, 5 years warranty**



Description:

The devices of the optocoupler series OK5 provide the user with a free transistor output, which can be used as a NPN or PNP output. It is suitable for switching DC signals in the range of 0…250VDC with a maximum load of 100mA. Furthermore there is the possibility, by a suitable wiring, to create a „Wired-OR" linkage.
The driving, depending on the device type, is operating with a DC voltage in the range 5 to 60V DC. It can be configured by the user with soldering jumpers in the module or can be ordered preconfigured from us by using our order code.

Application:

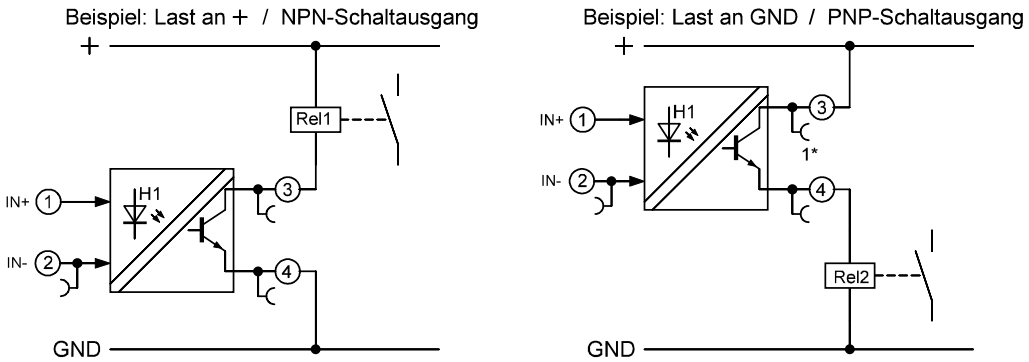
Switching of control- and norm signals
Substitute for mechanical relays
Galvanic isolation of switch signals

Order code:

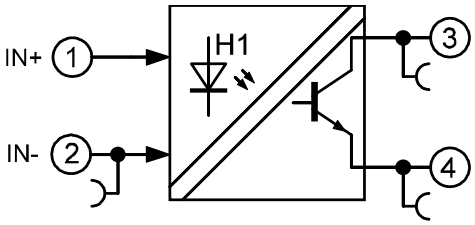
	Input:	Output:
OK5-0	self-configurable	0…250 VDC / 100mA
OK5-1	24 V DC	0…250 VDC / 100mA
OK5-2	5 V DC	0…250 VDC / 100mA
OK5-5	12 V DC	0…250 VDC / 100mA
OK5-6	48 V DC	0…250 VDC / 100mA
OK5-7	60 V DC	0…250 VDC / 100mA

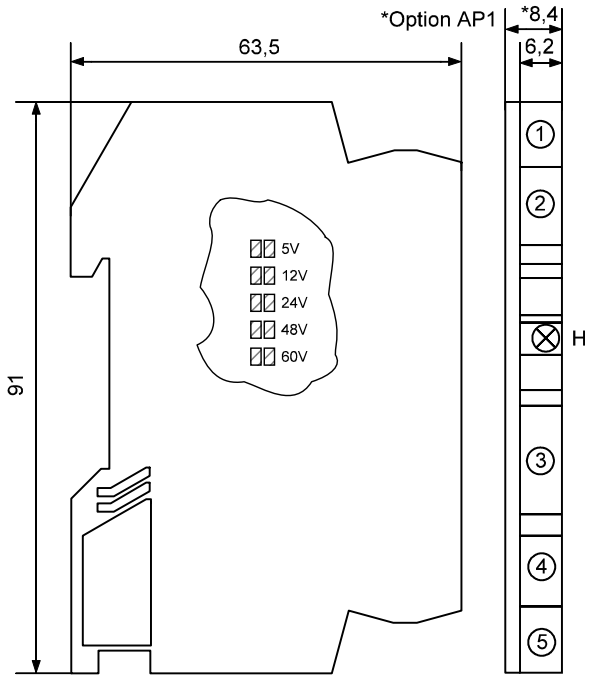
LEG Industrie-Elektronik **GmbH**
D- 41751 Viersen-Dülken · Textilstr.2
☎ +49 (0) 2162-5030621 ✉ +49 (0) 2162-5030629

LEG
www.LEG-GmbH.de
info@LEG-GmbH.de



Connecting examples





Dimension drawing and position of the soldering jumpers

LEG Industrie-Elektronik **GmbH**

D- 41751 Viersen-Dülken · Textilstr.2

☎ +49 (0) 2162-5030621 ✉ +49 (0) 2162-5030629

LEG

www.LEG-GmbH.de

info@LEG-GmbH.de

Technical data

Inputs:

			Nominal voltage	Low	High
OK5-1	:	18… 30 VDC / 1, 6…9, 1 mA /	U_N = 24 VDC	< 12 V	> 18 V
OK5-2	:	3, 5… 6 VDC / 1, 5...7, 4 mA /	U_N = 5 VDC	< 2 V	> 3, 5 V
OK5-5	:	10… 15 VDC / 2, 9…8, 5 mA /	U_N = 12 VDC	< 5 V	> 10 V
OK5-6	:	40… 60 VDC / 3, 1…8, 4 mA /	U_N = 48 VDC	< 25 V	> 40 V
OK5-7	:	50… 72 VDC / 2, 6…8, 1 mA /	U_N = 60 VDC	< 35 V	> 50 V

Outputs:

Contact type	:	open NPN transistor
Switching voltage	:	0…250VDC
Switching power	:	max. 100mA
U_{CE}	:	Typical 0,7V at I_{load}=10mA; 0,9V at I_{load}=100mA
Leakage current	:	< 20µA (with an applied voltage of 250VDC)
Switching times	:	t_{ON} < 2, 5µs, t_{off} < 100µs
Switching frequency	:	max. 500 Hz
Switching cycles	:	unlimited
Over voltage protection	:	Suppressor diode >260V
Reverse voltage Protection	:	no
Short circuit proof	:	no

General data:

Operating temperature	:	0...50°C
Storage temperature	:	-25...+85°C, condensation before putting into operation is not allowed
MTBF	:	2200 years Mean Time Between Failures – according to EN 61709 (SN 29500). Requirements: Stationary operation in clean rooms, average ambient temperature 40 ° C, no forced ventilation, continuous operation
CE conformity	:	EN 61326-1, EN 61000-4-2/3*/4/5/6*, EN 61000-6-4 * during measurements small deviations are possible

Body:

Dimension	:	See drawing, 6,2mm terminal block body, 6,2x63,5x91mm
Material	:	PA 6, 6 / V2
Protection category	:	IP20 with side cover/end cover plate
Connection	:	Spring force connection 0, 2 - 4mm², inflexible, 0, 2 – 2,5mm, flexible Contact load with link plugs max. 24A
Mounting position	:	As you like / Mountable side by side
Fixing	:	Snap-on mounting for norm rail TS35
Weight	:	22g

LEG Industrie-Elektronik **GmbH**

D- 41751 Viersen-Dülken · Textilstr.2
☎ +49 (0) 2162-5030621 ✉ +49 (0) 2162-5030629

LEG

www.LEG-GmbH.de
info@LEG-GmbH.de

Note on safety:

Disconnect the power supply before attempting to open the unit.

During the operation of this module it is possible that parts of the module, even there is extra-low voltage, (for example shunt measurement) are under dangerous voltage! Therefore a non-observance of this caution may cause damage of property or physical injury.
Only trained qualified personnel should install or operate the unit. Before installation the qualified personnel should read the documentation and should familiarize themselves with the unit.
If there is visible damage to the body of the unit it should be immediately replaced and not put into operation.

Please ensure that there is a sufficient prevention against electrostatic discharge during installation of the unit.

Installation Information:

Pay attention and make sure the unit is far away from mounted sources that may disturb the device such as magnetic coils, transformers, frequency converters etc.

Wiring advise:

Use only shielded cables. The shield is to be connected extensively to ground. Do not mix power- and signal-wires/cables in the same cable tray.

Limited guarantee:

The LEG Industrie-Elektronik GmbH warranted that the product does not have any material or processing defects in a period of 5 years after date of delivery.
It is up to the choice of LEG to repair or to exchange an inoperative unit.
Subsequent damages or any claim for indemnification above the functionality of the unit are excluded.
This limited warranty is only valid if …

1. the product was installed and put into operation according to the LEG operation documentation;
2. the technical configuration of the power supply was abided;
3. the product was not used for unintended purposes;
4. there were no unauthorized modifications or manipulations, misuse or repairs without previous agreement from LEG .

Our Terms of Trade are based on the “General Conditions for the supply of products and services of the Electrical and Electronics Industry” including the “Complementary Clause: Extended Reservation of Property” of the ZVEI e.V. (German Association of Electrical Manufacturers).

Miscellaneous:

We expressly reserve the right, without previous notice, to correct errors contained in any data of this information brochure, and to make alterations to the program and technical modifications.