LEG Industrie-Elektronik **GmbH**

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

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Optocoupler with AC input voltage OK6

Characteristics:

- **Input voltage 115V, 230V, 400V AC/DC**
- **Output (PNP) or ground (NPN) switch or potential-free contact**
- **Switching current max. 500mA**
- **Mountable on 35mm cap rail TS35**
- **Stackable via plug-in jumpers**
- **Shape 6,2mm**
- **Tension spring connection**
- **High reliability, 5 years warranty**
- **Mountable on 35mm cap rail TS35**

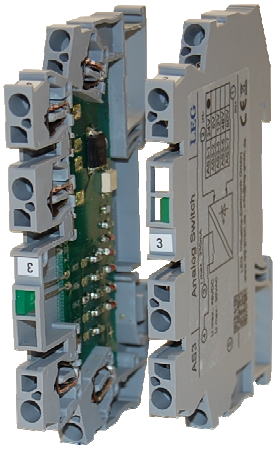

Illustration similar

Description:

The OK6 series optocouplers are controlled with an alternating voltage, depending on the device variant in the steps of 115V / 230V / 400V AC/DC. The optocouplers have a plus or earth-switching transistor output or a potential-free contact. It is suitable for switching DC signals with a maximum load of 500mA. The switching status is indicated by a green LED on the positive or earth-switching transistor output. This is not required for the device variant with potential-free contact.
The OK6 optocoupler series is supplied with a mounted end plate.

Application:

Decoupling AC/DC control circuits from 24VDC low voltage circuits
Detection of switching states in AC voltage networks
Alternative to mechanical relays.

Order Code:

Input:		Switching performance	
	OK6-	**-**	
115V AC/DC	**115**	plus switch / PNP	**8**
230V AC/DC	**230**	ground switch / NPN	**9**
400V AC/DC	**400**	potential free contact	**10**

Order example:

Optocoupler OK6:
Input = 230VAC/DC
Plus switch

Order code: OK6-230-8

* not for variant -10

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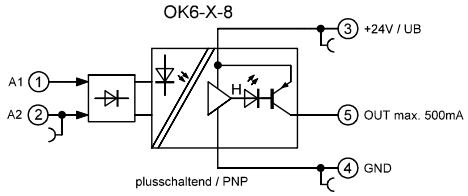

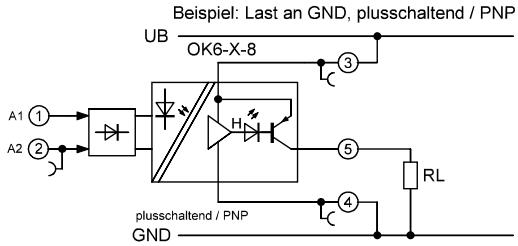

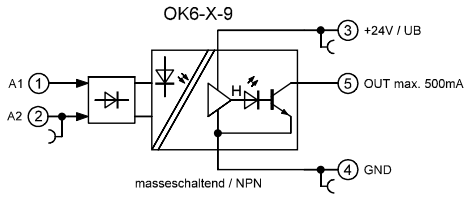

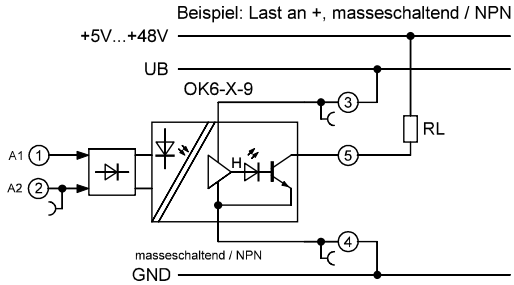

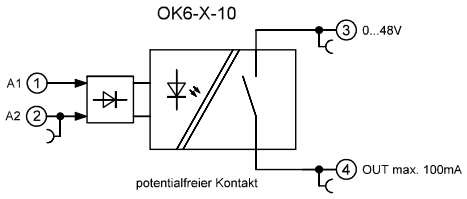

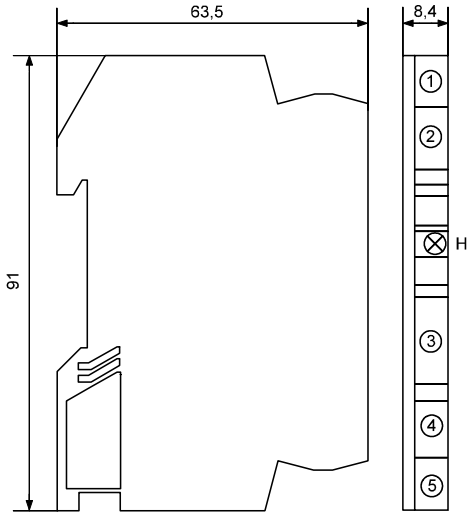

Data sheet OK6 revison: 01-2026

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Technical data:

Supply:

Power supply	:	UB = 19,2V...30Vdc
Current consumption	:	OK6-xxx-x max. 8mA+Load current
	:	OK6-xxx-10 omitted, potential-free contact

Input:

		Norminal voltage AC/DC	working voltage AC/DC	current consumtion	Low	High
OK6-115-x	:	U_N = 115 V	90… 127 V	0,7…1,4 mA	< 50 V	> 90 V
OK6-230-x	:	U_N = 230 V	180… 253 V	0,7…2,0 mA	< 120 V	> 180 V
OK6-400-x	:	U_N = 400 V	350… 440 V	1,0…2,5 mA	< 240 V	> 350 V
OK6-115-10	:	U_N = 115 V	90… 127 V	1,8…2,6 mA	< 50 V	> 90 V
OK6-230-10	:	U_N = 230 V	180… 253 V	1,7...2,7 mA	< 120 V	> 180 V
OK6-400-10	:	U_N = 400 V	360… 440 V	1,7…2,8 mA	< 240 V	> 360 V
Überlastbar	:	Nennspannung x 1,15 (ED = 100%)				

Output OK6-xxx-8 bzw. OK6-xxx-9:

Contact type	:	open transistor PNP or NPN
Switching voltage	:	PNP: 19,2...30Vdc; NPN: 5V...48Vdc
Switching current	:	PNP / NPN max. 500mA
U_{CE}	:	max. 1V at I_{Load}=10mA; 1,2V at I_{Load} =500mA
Leakage current	:	< 10µA (applied switching voltage of 30VDC, load 50mA)
Switching times	:	t_{ON} <110ms, t_{OFF} <90ms
Switching frequency	:	max. 1 Hz
Switching cycles	:	unlimited
Over voltage protection	:	Surge voltage diode 38V (PNP); 52V (NPN)
Reverse polarity protection	:	no
Short circuit proof	:	no

Output OK6-xxx-10:

Contact type	:	Potential-free contact
Switching voltage	:	0…48 VDC / 0...30 VAC
Switching current	:	max. 100mA
Contact resistor	:	Typ 1 Ω / max. 2 Ω
Leakage current	:	< 1µA (applied switching voltage of 48VDC)
Switching times	:	t_{ON} <110ms, t_{OFF} <90ms
Switching frequency	:	max. 1 Hz
Switching cycles	:	unlimited
Over voltage protection	:	Surge voltage diode 38V (PNP); 52V (NPN)
Short circuit proof	:	no

General data:

Operating temperature	:	0...50°C
Storage temperature	:	-25...+85°C, condensation before putting into operation is not allowed
CE conformity	:	EN 61326-1, EN 61000-4-2/3*/4/5/6*, EN 61000-6-4 * during measurements are small deviations possible
Test voltage	:	2,5kVAC / 50Hz / 60 seconds / between input / output Rated insulation voltage:: 300V AC/DC Basic insulation, Overvoltage category 2, Degree of soiling 2 toDIN EN61010-1.
MTBF	:	722 years Mean Time Between Failures according to EN 61709 (SN 29500). Requirements: Stationary operation in well-maintained rooms, average ambient temperature 40 °C, no ventilation, continuous operation

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Body:

Dimension	:	See drawing, 6,2mm terminal block body, 6,2x63,5x91mm
Material	:	PA 6, 6 / V2
Protection category	:	IP00, 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
Fixing	:	Snap-on mounting for norm rail TS35
Weight	:	21g
Mounting position	:	As you like / Mountable side by side

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.