



## POWERSWITCH

### Hybrid relay IK 3070/200 - Perfectly combined

**DOLD** 

Hybrid relays combine the advantages of robust relay technology with wear-resistant semiconductor technology in a perfect way. Classic electromechanical relays offer a significant advantage over solid-state relays. While solid-state relays generate heat permanently due to the forward voltage, which must be dissipated by heat sinks at higher load currents, the current-carrying relay contact has a very low contact resistance and thus generates hardly any heat loss.

Solid-state relays are insensitive to shock and vibration. Their strengths lie above all in the switch-on and switch-off processes. No bouncing, no electric arcs, no mechanical wear - and thus an almost unlimited electrical service life.

The **hybrid relay IK 3070/200** from DOLD perfectly combines the advantages of both worlds. When switched on, the solid-state first switches in the zero crossing of the alternating voltage. A few milliseconds later, the relay contact takes over the continuous current and ensures low power dissipation. When the relay is switched off, the current is first transferred from the relay to the solid-state, which then switches off at zero current. In this way, surge voltages and currents in the load circuit are minimized.

Due to the combination of the different switching technologies, the IK 3070/200 is particularly suitable for applications that require a high switching capacity and a long service life at the same time. It shows its strength in systems in which a standstill leads to high costs. Applications can be found in automation technology and the process industry as well as in offshore wind turbines.

#### Advantages and customer benefits

- ▶ Long service life thanks to hybrid technology
- ▶ Space-saving with an overall width of only 17.5 mm
- ▶ For loads with very high inrush currents

**Our experience. Your safety.**

# Hybrid relay IK 3070/200

## Technical features

- ▶ According to IEC/EN 60 947-4-3
- ▶ Rated operational current 20 A
- ▶ Long electrical life of  $>10^6$  switching operations with AC 15, 10 A inductive
- ▶ Low-noise switching
- ▶ For switching resistive, inductive and capacitive loads
- ▶ Zero voltage switching
- ▶ 1 NO contact
- ▶ 17.5 mm width



Hybrid relay  
IK 3070/200

## Order information

Standard type:  
IK 3070.01/200 AC 220 ... 240 V 50 / 60 Hz  
Item number: 0054593

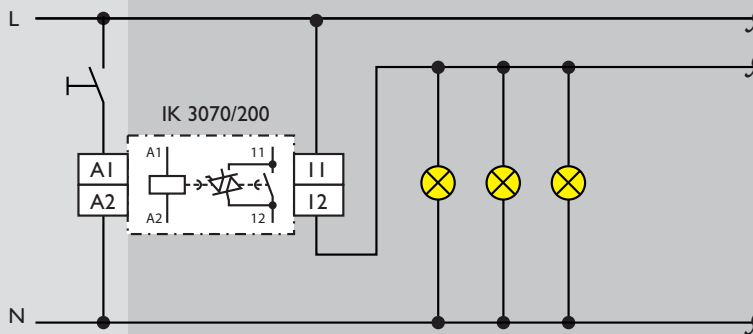
## Fields of application

- ▶ Automation and process technology
- ▶ Heating, air-conditioning, ventilation and lighting technology
- ▶ Energy saving and LED lamps
- ▶ Offshore wind turbines

## Structure

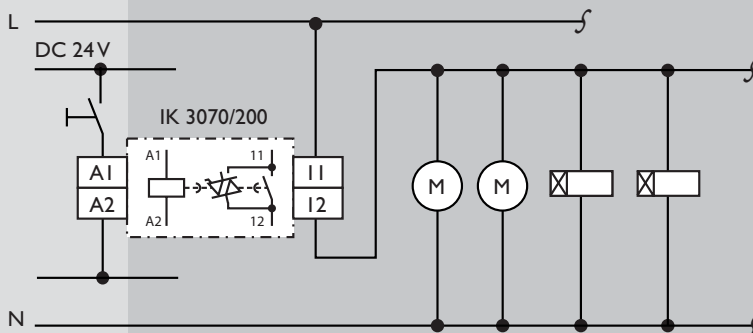
### Switch on:

Triac precedes contact. It switches on at zero voltage crossing and takes over the high inrush currents, e.g. for incandescent lamps (PTC thermistors), electronic ballasts for fluorescent lamps or devices with a high capacitive load.



### Switch off:

Triac follows the contact. It switches off at zero crossing of the current and thus prevents a strong spark formation and thus an early failure of the contact with inductive loads.



## Further information

IK 3070/200

Start

[www.dold.com](http://www.dold.com)

**DOLD**

**E. DOLD & SÖHNE KG**  
P.O. Box 1251 • 78114 Furtwangen • Germany  
Tel. +49 7723 6540 • Fax +49 7723 654356  
dold-relays@dold.com • www.dold.com