In many safety-related applications where relays with forcibly guided contacts (in accordance with DIN EN 61810-3) are used special attention is paid to a compact design, apart from the high switching reliability.

With the new safety relays OA 5642, OA 5643 and OA 5644 DOLD provides an extremely flat relay range setting new standards. Only 10.3 mm in height, these 2-, 3- and 4-pole relays are among the flattest safety relays on the market. They are ideal for the realisation of compact safety switching devices (only 15 mm in width) and for applications where little space in height is available. Besides compactness, the design of the relays also allows an arrangement of SMD components between board and relay.

For applications where the power consumption is critical, energy saving was particularly taken into account by nominal power values of only 0.4 W, 0.5 W and 0.65 W and a lowering of the holding power to about a third of the pickup power. The relay, which is wash-tight (RT III) and temperature-stable up to 85° C in its standard version, can be especially well processed in leadfree solder processes.

Advantages and customer benefit

- Smallest height of 10.3 mm while requiring a minimum of area
- Low nominal and holding power
- Protective separation between all circuits; for applications with pollution severity 2; and design insulation voltage of 250 V
- Relay range with consistent connection pinning
- Contact combinations for your specific application (on request)
- Wide temperature range
- High resistance to shock and vibration
- Wash-tight
- Low weight

Our experience. Your safety.
Safety relays OA 5642, OA 5643, OA 5644

Technical features

<table>
<thead>
<tr>
<th></th>
<th>OA 5642</th>
<th>OA 5643</th>
<th>OA 5644</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>10,3 mm</td>
<td>10,3 mm</td>
<td>10,3 mm</td>
</tr>
<tr>
<td>Area</td>
<td>26,6 x 25 mm</td>
<td>34,2 x 25 mm</td>
<td>41,7 x 25 mm</td>
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<tr>
<td>Nominal consumption</td>
<td>0,4 W</td>
<td>0,5 W</td>
<td>0,65 W</td>
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<tr>
<td>Breaking current</td>
<td>10 mA to 8 A</td>
<td>10 mA to 8 A</td>
<td>10 mA to 8 A</td>
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<tr>
<td>Contacts</td>
<td>2 1NO/1NC</td>
<td>3 2NO/1NC</td>
<td>4 2NO/2NC; 3NO/1NC</td>
</tr>
<tr>
<td>Contact material</td>
<td>AgSnO₂, AgNi, AgNi + hard gold plating</td>
<td></td>
<td></td>
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<tr>
<td>Temperature range</td>
<td>- 40 … + 85° C</td>
<td></td>
<td></td>
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<tr>
<td>Approvals</td>
<td>cRUus, TÜV</td>
<td></td>
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</tbody>
</table>

Notes on ordering

For all relay models, the contact materials AgSnO₂, AgNi and AgNi + 5 μm hard gold plating are possible. In combination with the proven mini-crown, currents from 10 mA up to 8 A can be reliably switched. As almost all coil voltages between 6 V and 110 V are available, the customer can get a safety relay tailored to his specific application.
Please ask us.

Applications

- Railway technology and signalling
- Automation
- Medical devices
- Radio technology and telecontrol
- Firing technology
- Process technology
- Elevators and hoists

The right relay for each safety-related application. Safety relays by DOLD are available in a wide variety of contact versions and designs. Also in custom designs.
What can we do for you?

Safety relays with high switching capacity

- OA 5601
- OA 5602
- OA 5603
- OA 5611
- OA 5612

Safety relays in compact design

- OA 5667
- OA 5669
- OA 5670
- OA 5621
- OA 5622

Further information

OA 5642

www.dold.com