GKN Series
Safety Interlock Switch

DESCRIPTION
The MICRO SWITCH™ GKN Series safety interlock switches provide superior reliability in a compact, cost-effective package size. Six different types of actuator keys are available.

The GKN Series conforms to IEC 60947-5-1 and carries cULus, CE, and CCC approvals.

FEATURES
• Positive opening safety contacts
• Choice of six actuators
• Double insulated per IEC 60947-5-1
• Global approvals (cULus, CE, CCC)
• Three cable entries
• Large wiring cavity
• Large M20 cable entry
• Four-entry head

BENEFITS
• Meets global safety standards
• Wide application coverage
• No additional earthing requirements
• Final equipment may be sold worldwide
• Cable-to-switch orientation flexibility
• Wiring simplified
• No need to reconfigure head orientation

POTENTIAL APPLICATIONS
• Woodworking machinery
• Printing/paper finishing equipment
• Plastic molding equipment
• Packaging machinery
• Bailing and pumping equipment
• Semiconductor manufacturing equipment
• Packaging wrapping
• Specialty equipment
GKN Series

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Designation and Utilization Category</th>
<th>Rated Operational Current $I_e$ (A) at Rated Operational Voltage $U_e$ (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 Vac 125 Vdc 240 Vac/250 Vdc 600 Vac</td>
<td>3 A 1,2 A</td>
</tr>
<tr>
<td>AC15 A600</td>
<td>6 A –</td>
</tr>
<tr>
<td>DC13 Q300</td>
<td>– 0,55 A 0,27A –</td>
</tr>
<tr>
<td>Rated thermal current ($I_{th}$)</td>
<td>10 A</td>
</tr>
<tr>
<td>Sealing</td>
<td>IP67; NEMA 1, 4, 12, 13</td>
</tr>
<tr>
<td>Rated impulse withstand ($U_{imp}$)</td>
<td>2500 V</td>
</tr>
<tr>
<td>Pollution degree</td>
<td>2 (micro-environment, inside enclosure); 3 (macro-environment, installation environment)</td>
</tr>
<tr>
<td>Rated insulation voltage ($U_{i}$)</td>
<td>600 V</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-25 °C to 70 °C [-13 °F to 158 °F]</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-40 °C to 85 °C [-40 °F to 185 °F]</td>
</tr>
<tr>
<td>Short-circuit protective device (type/maximum rating)</td>
<td>Class J fuse (10 A/690 V)</td>
</tr>
<tr>
<td>Expected mechanical life</td>
<td>500,000 cycles</td>
</tr>
<tr>
<td>Conditional short-circuit current</td>
<td>1000 A</td>
</tr>
</tbody>
</table>

Complies with:
Low Voltage Directive 73/23/EEC, as amended by directive 93/68/EEC.
Machinery Directive 98/37/EEC only as the directives relate to the components being used in a safety function.
IEC/EN60947-5-1.

MOUNTING DIMENSIONS

CIRCUIT AND TRAVEL DIAGRAMS

Switch Code 21 – 2NC/1NO (BBM)

<table>
<thead>
<tr>
<th>11</th>
<th>12</th>
<th>21</th>
<th>22</th>
<th>33</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-12</td>
<td>11-12</td>
<td>21-22</td>
<td>21-22</td>
<td>31-32</td>
<td>31-32</td>
</tr>
</tbody>
</table>

Switch Code 30 – 3NC

<table>
<thead>
<tr>
<th>11</th>
<th>12</th>
<th>21</th>
<th>22</th>
<th>31</th>
<th>32</th>
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</thead>
<tbody>
<tr>
<td>11-12</td>
<td>11-12</td>
<td>21-22</td>
<td>21-22</td>
<td>33-34</td>
<td>33-34</td>
</tr>
</tbody>
</table>

ORDER GUIDE

Series
3 Contacts Door Interlock Safety Limit Switch

Conduit
A = 1/2 in NPT
C = M20 x 1.5

Contact
21 = 2NC/1NO (BBM)
30 = 3NC

www.honeywell.com/sensing
# KEY DIMENSIONS

<table>
<thead>
<tr>
<th>GKZ41 (M4 Screw)</th>
<th>GKZ42 (M5 Screw)</th>
<th>GKZ43 (M5 Screw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 [0.08]</td>
<td>2.0 [0.08]</td>
<td>4.0 [0.16]</td>
</tr>
<tr>
<td>39.0 [1.54]</td>
<td>16.0 [0.63]</td>
<td>40.0 [1.57]</td>
</tr>
<tr>
<td>5.0 [0.20]</td>
<td>27.5 [1.08]</td>
<td>31.0 [1.22]</td>
</tr>
<tr>
<td>24.0 [0.94]</td>
<td>24.0 [0.94]</td>
<td>24.0 [0.94]</td>
</tr>
</tbody>
</table>

**GKZ44 (M5 Screw)**

- Ø 5.5 [0.22] max. insertion distance
- 15.0 [0.59] min. insertion distance
- 4.0 [0.16] max. insertion distance
- 7.1 [0.28] min. insertion distance

**GKZ45 (M5 Screw)**

- Ø 5.5 [0.22] max. insertion distance
- 10.0 [0.39] max. insertion distance

**GKZF1 (M5 Screw)**

- 10.0 [0.39] max. insertion distance
- 14.0 [0.55] max. insertion distance

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Honeywell Sensing and Control
## ORDER GUIDE (ACTIVE LISTINGS)

<table>
<thead>
<tr>
<th>Catalog Listing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GKNA21</td>
<td>3 contact door interlock safety limit switch; 1/2 in NPT conduit; 2NC/1NO (BBM)</td>
</tr>
<tr>
<td>GKNA30</td>
<td>3 contact door interlock safety limit switch; 1/2 in NPT conduit; 3NC</td>
</tr>
<tr>
<td>GKNC21</td>
<td>3 contact door interlock safety limit switch; M20 x 1.5 conduit; 2NC/1NO (BBM)</td>
</tr>
<tr>
<td>GKNC30</td>
<td>3 contact door interlock safety limit switch; M20 x 1.5 conduit; 3NC</td>
</tr>
<tr>
<td>GKZ41</td>
<td>Straight key</td>
</tr>
<tr>
<td>GKZ42</td>
<td>90° key</td>
</tr>
<tr>
<td>GKZ43</td>
<td>Left-right adjustable key</td>
</tr>
<tr>
<td>GKZ44</td>
<td>Up-down adjustable key</td>
</tr>
<tr>
<td>GKZ45</td>
<td>Multidirectional key</td>
</tr>
<tr>
<td>GKZF1</td>
<td>Funnel key</td>
</tr>
</tbody>
</table>

### WARNING

**PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell’s standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer’s sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

### MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

### SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

- **E-mail:** info.sc@honeywell.com
- **Internet:** [www.honeywell.com/sensing](http://www.honeywell.com/sensing)
- **Phone and Fax:**
  - Asia Pacific: +65 6355-2828
  - Europe: +44 (0) 1698 481481
  - Latin America: +1-305-805-8188
  - USA/Canada: +1-800-537-6945
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