1539 U
Relay insert
1 Safety ........................................................................................................................................................................ 3
2 Intended use ............................................................................................................................................................ 3
3 Environment ............................................................................................................................................................. 3
4 Technical data .......................................................................................................................................................... 4
5 Setup and function ................................................................................................................................................... 4
  5.1 Features of function and equipment ........................................................................................................ 4
  5.2 Possible combinations .................................................................................................................................... 5
6 Installation and electrical connection ....................................................................................................................... 6
  6.1 Requirements for the electrician .................................................................................................................... 6
  6.2 Electrical connection ....................................................................................................................................... 7
  6.3 Mounting the device insert ............................................................................................................................ 8
1 Safety

Warning

Electric voltage!
Risk of death and fire due to electrical voltage of 230 V.
– Work on the 230V supply system may only be performed by authorised electricians!
– Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The device is to be used exclusively with the components that are supplied and licensed as described in chapter "Setup and function".

3 Environment

Consider the protection of the environment!
Used electric and electronic devices must not be disposed of with domestic waste.
– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.
The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.
(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)
4 Technical data

<table>
<thead>
<tr>
<th>General</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>230 V AC, ±10%, 50 / 60 Hz</td>
</tr>
<tr>
<td>Nominal current</td>
<td>10 A, 1.3 AX, cos φ 0.9</td>
</tr>
<tr>
<td>Nominal power</td>
<td>300 VA</td>
</tr>
<tr>
<td>Protective class</td>
<td>IP 20</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>5 ... 40 °C</td>
</tr>
</tbody>
</table>

Switching contacts (μ contact)

<table>
<thead>
<tr>
<th>Incandescent lamps, ohmic loads</th>
<th>2300 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorescent lamps</td>
<td>300 VA</td>
</tr>
</tbody>
</table>

5 Setup and function

The device is intended for the activation of the following types of loads:

<table>
<thead>
<tr>
<th>Load types:</th>
<th>Incandescent lamps, 230 V~</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fluorescent lamps</td>
</tr>
<tr>
<td></td>
<td>Ohmic loads</td>
</tr>
</tbody>
</table>

5.1 Features of function and equipment

Relay insert for the Busch moisture alarm for blocking the water supply using a solenoid valve or for switching other devices.
## 5.2 Possible combinations

<table>
<thead>
<tr>
<th>Relay insert</th>
<th>1539 U</th>
</tr>
</thead>
<tbody>
<tr>
<td>1511 U</td>
<td>X</td>
</tr>
<tr>
<td>1515 U-12</td>
<td>X</td>
</tr>
<tr>
<td>1531 U</td>
<td>X</td>
</tr>
<tr>
<td>1576 C-21X</td>
<td>X</td>
</tr>
<tr>
<td>1576 CN-84</td>
<td>X</td>
</tr>
</tbody>
</table>
6 Installation and electrical connection

**Warning**

**Electric voltage!**

Risk of death due to electrical voltage of 230 V during short-circuit in the low-voltage line.
- Low-voltage and 230 V lines must not be installed together in a flush-mounted socket!

6.1 Requirements for the electrician

**Warning**

**Electric voltage!**

Install the device only if you have the necessary electrical engineering knowledge and experience.
- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:
- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
  1. Disconnect from power;
  2. Secure against being re-connected;
  3. Ensure there is no voltage;
  4. Connect to earth and short-circuit;
  5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the supply network type (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
6.2 Electrical connection

Connection diagram

Fig. 1: Circuit diagram for relay insert

1 Relay insert | 2 Load (230 V AC) | 3 Device inserts with floating normally open contact | 4 Floating normally open contact

Terminal assignment

 Relay insert 1539 U

<table>
<thead>
<tr>
<th>Supply voltage / load</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Load (230 V AC)</td>
</tr>
<tr>
<td>N</td>
<td>Supply voltage (230 V AC)</td>
</tr>
<tr>
<td>N</td>
<td>Load (N)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control input</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>nc</td>
<td>Not occupied</td>
</tr>
<tr>
<td>2</td>
<td>External, floating normally open contact</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminal designation</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>-&gt;</td>
<td>Load (230 V AC)</td>
</tr>
</tbody>
</table>
6.3 Mounting the device insert

1. Mount the device in a flush-mounted box according to DIN 049073-1.
2. Fix the device in the flush-mounted box with screws.
3. Bundle the wires of the mains cable (230 V) with the cable binders included in the scope of supply (Fig. 2: b).
4. Push the low-voltage lines through the insulating tube included in the scope of supply (Fig. 2: a).
5. Mount the elements of the cover plate in the sequence shown in the illustration.

Fig. 2: Relay insert 1539 U

Fig. 3: Overview of installation
Operating Instructions

Busch-Infoline®

A member of the ABB Group

Busch-Jaeger Elektro GmbH
PO box
58505 Lüdenscheid

Freisenbergstraße 2
58513 Lüdenscheid
Germany

www.BUSCH-JAEGER.com
info.bje@de.abb.com

Central sales service:
Phone: +49 (0) 2351 956-1600
Fax: +49 (0) 2351 956-1700

Notice

We reserve the right to at all times make technical changes as well as changes to the contents of this document without prior notice. The detailed specifications agreed to at the time of ordering apply to all orders. ABB accepts no responsibility for possible errors or incompleteness in this document.

We reserve all rights to this document and the topics and illustrations contained therein. The document and its contents, or extracts thereof, must not be reproduced, transmitted or reused by third parties without prior written consent by ABB.

Copyright© 2012 Busch-Jaeger Elektro GmbH
All rights reserved