PLUG-IN AND INSULATION DISPLACEMENT CONNECTORS

Insulation displacement connector IDC, insulated
Branch terminal IDC, insulated
Plug-in connector IDC, insulated
Connect easily in indoor areas

Thanks to the insulation-piercing contact, the IDCs are a convenient way of branching off cables. To form the connection, the cable is fed into the connector and pressed together using an ordinary pair of pliers without the need for any other special tools. The excess wire end is shortened, and the insulation on the wire is cut through by the sharp contacts in the metal cutting terminal. This provides an electrical connection.

4 benefits for you

- Easy assembly in a very short time
- Optimum connection thanks to the integrated automatic wire-cutting function.
- Tool-free connection for a wide range of wire sizes
- No soldering, screwing or wire-stripping are needed

Dimensional drawing
Technical data

Insulation displacement connector IDC, insulated

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Material</th>
<th>Nominal voltage</th>
<th>Current load capacity / max. insulation diameter</th>
<th>Temperature resistance</th>
<th>Contact</th>
<th>Conductor cross-section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3927a</td>
<td>Polycarbonate</td>
<td>230 V (AC/DC)</td>
<td>15 A (1.5 mm² / AWG 16)</td>
<td>up to max. 120° C</td>
<td>Tinned brass</td>
<td>1.5 mm²</td>
</tr>
<tr>
<td>3927b</td>
<td>Polycarbonate</td>
<td>230 V (AC/DC)</td>
<td>25 A (2.5 mm² / AWG 14)</td>
<td>up to max. 120° C</td>
<td>Tinned brass</td>
<td>2.5 mm²</td>
</tr>
</tbody>
</table>

Accessories

Flat connector, Art. Nr. 389908, 2.8 mm

Instructions

1. Insert the insulated wire.
2. Press and close the lid with flat-nosed pliers to connect the wires.
3. The flat plug can be inserted at the side.

Warning: Switch off the device or remove the plug before installation. Only use insulated cables. Do not strip the insulation off the strands.

Principle of operation

www.vogt.ch
Branch terminal IDC

Versatile connection options

Branch terminals for low-voltage power cables are suitable for establishing an electrical connection by mechanical fastening. The conduction of current through the main cable is ensured by compressing the conductors of the branch cable with a conventional pair of pliers. The main cable is positioned in such a way that the upper tooth edge in the housing cuts through the insulation of the cable when the connector is pressed together, so that the contacts embedded in the housing establish the electrical connection of the branch cables.

3 advantages for you

- Suitable for voltage tapping of main supply lines
- Easy branching without special tools
- No soldering, screwing or wire-stripping are needed
Instructions

1. Place insulated wires in the openings.
2. Connect with pliers held perpendicular to the wires.
3. Press the pliers together until the copper fasteners engage.
4. a) for strands:
   Close the cover.
   b) for tab connectors:
   Insert the tab connector fully into the slot.

**Warning:** Switch off the device or remove the plug before installation.

Only use insulated strands. Do not strip the insulation off the strands.

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### Technical data

#### Branch terminal IDC for strands

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Material / contact</th>
<th>Nominal voltage</th>
<th>Current load capacity / max. insulation diameter</th>
<th>Temperature resistance</th>
<th>UL</th>
<th>Conductor cross-section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3924</td>
<td>Polypropylene / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 22 20 18 AMP 3 4 7 to +105° C</td>
<td>E235797</td>
<td>AWG 22–18</td>
<td>0.3 mm²–1 mm²</td>
</tr>
<tr>
<td>3927</td>
<td>Polypropylene / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 18 16 14 AMP 17 18 30 to +105° C</td>
<td>E235797</td>
<td>AWG 18–14</td>
<td>1.5 mm²–2.5 mm²</td>
</tr>
<tr>
<td>3929</td>
<td>Polypropylene / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 12 10 AMP 35 50 to +105° C</td>
<td>E235797</td>
<td>AWG 12–10</td>
<td>4 mm²–6 mm²</td>
</tr>
</tbody>
</table>

#### Branch terminal IDC for tab connectors

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Material / contact</th>
<th>Nominal voltage</th>
<th>Current load capacity / max. insulation diameter</th>
<th>Temperature resistance</th>
<th>UL</th>
<th>Conductor cross-section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3924f</td>
<td>Polyamide / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 22 20 18 AMP 3 4 7 to +105° C</td>
<td>E235797</td>
<td>AWG 22–18</td>
<td>0.5 mm²–1 mm²</td>
</tr>
<tr>
<td>3927f</td>
<td>Polyamide / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 18 16 14 AMP 7 10 15 to +105° C</td>
<td>E235797</td>
<td>AWG 18–14</td>
<td>1.5 mm²–2.5 mm²</td>
</tr>
<tr>
<td>3929f</td>
<td>Polyamide / tinned brass</td>
<td>600 V (AC/DC)</td>
<td>AWG 12 AMP 20 to +105° C</td>
<td>E235797</td>
<td>AWG 12</td>
<td>4 mm²</td>
</tr>
</tbody>
</table>

### Applications

**Insulation displacement connector IDC, insulated**

<table>
<thead>
<tr>
<th>Lighting</th>
<th>Electronics</th>
<th>Mechanical engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Light bulb" /></td>
<td><img src="image" alt="Gears" /></td>
<td><img src="image" alt="Computer" /></td>
</tr>
</tbody>
</table>

**Contact us**

Telephone +41 62 285 75 75

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![Principle of operation](image)
Plug-in connector
IDC, insulated

Easy connection without special tools

Instead of having to strip the insulation off each individual wire, the user can simply insert the cable into the IDC connector. The connector has its own cutting tool. The blades are positioned so that the sharp sections are aligned precisely to the position of the various cables. The components in the robust polycarbonate housing allow a wide range of applications in the low-voltage range from 100 V to 300 V (AC/DC) and 1A to 8A. For multiple lines, too, they enable a convenient and safe mechanical grouping of the connectors by means of the connection plates.

4 benefits for you

- UL-certified connection without special tools
- No soldering, screwing or wire-stripping are needed
- Pluggable, fast, safe and fault-free electrical installation
- Detachable connection, tool-free assembly
**Technical data**

**IDC plug-in connector for cables**

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Material/contact</th>
<th>Nominal voltage</th>
<th>Current load capacity/max. insulation diameter</th>
<th>Temperature resistance</th>
<th>UL</th>
<th>Conductor cross-section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3924p</td>
<td>Polycarbonate/tinned bronze</td>
<td>100 V (AC/DC)</td>
<td>AWG 28 26 24 AMP 1 1 2</td>
<td>~20°C to +75°C</td>
<td>E136883</td>
<td>AWG 28–24 0.08 mm²–0.2 mm²</td>
</tr>
<tr>
<td>3924n</td>
<td>Polycarbonate/tinned bronze</td>
<td>100 V (AC/DC)</td>
<td>AWG 24 20 AMP 2 3</td>
<td>~20°C to +75°C</td>
<td>E136883</td>
<td>0.2 mm²–0.5 mm²</td>
</tr>
<tr>
<td>3924r</td>
<td>Polycarbonate/tinned bronze</td>
<td>300 V (AC/DC)</td>
<td>AWG 20 18 AMP 6 8</td>
<td>~20°C to +120°C</td>
<td>---------</td>
<td>AWG 20–18 0.5 mm²–0.75 mm²</td>
</tr>
</tbody>
</table>

**Accessories for 3924n/3924 p**

Connecting plate, Art. Nr. 3924n.10

**Accessories for 3924r**

Connecting plate, Art. Nr. 3924r.1

**Dimensional drawing**

Dimension a: before fastening the IDC (8.1 mm), after fastening the IDC (5.8 mm)

Dimension b: 3924p = 1.7 mm / 3924n = 2.2 mm / 3924r = 2.8 mm

RoHS compliant | dimensions in mm

**Applications**

**IDC plug-in connector for cables**

<table>
<thead>
<tr>
<th>Lighting</th>
<th>Indoor electronics</th>
<th>Do-it-yourself &amp; model-making</th>
</tr>
</thead>
</table>

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**Instructions**

Insert the cable into the connector.

By pressing and closing the connector with a conventional pair of pliers, the blade comes into contact with the cable.

These blades cut through the insulation and form a connection with the cable. Only use the connector for standard cables.

Use the connector with the specified rated voltage, rated current, temperature resistance and operating temperature.

The work with cables and contacts must only be carried out when the device is switched off.

The connector is not suitable for outdoor use.

The insulation displacement connector may only be used once.

**Operating Guide**
Facts & Figures

Vogt AG produces single parts and components for electromagnetic applications. It employs more than 100 workers in the fabrication of stamped and fine-tube parts and the manufacture of plastic and wire items, producing around 2 billion articles every year. Vogt AG is an internationally renowned supplier of the electric and electronics industry and is recognised as a reliable, competent, and long-term partner. More than 20,000 parts can be delivered off the shelf from the standard items division. Customised production including design and our own toolmaking completes our sales program. We have been ISO 9001 certified since 1994. Meanwhile, we also hold the ISO 14001, OHSAS 18001, and AEO certificates. Our customers appreciate our fast and reliable global delivery service.

Standard Products

The product range of Vogt AG consists of standard products from the areas of mechanical components and riveting technology, contact parts for printed circuit boards and solder terminals, cable connections as well as associated processing tools. The range is constantly being adapted to market requirements and therefore new technologies such as SMD are automatically being introduced into our product range.

Customer requirements such as the renowned reliable product quality are a matter of course for us, with our high warehouse availability giving us a clear competitive edge. Our professional customer consultancy is as individual and precise as the requirements themselves.

Special Products

In the areas of tube and wire manufacture, stamping and injection moulding, we work with you to create the appropriate product. We specialise in complex hybrid components (plastic/metal components), tube and wire parts and stamped products.

Our products are designed and the associated tools made in-house; this ensures that they can be manufactured reliably using machinery, some of which we have developed or upgraded ourselves. The range of services we provide extends to labelling, packaging, inland and overseas delivery, etc.

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