Description of product
The device is intended for the installation in the floor heating distribution and includes 6 valve outputs for the control of analog (0–10 V) or thermoelectric (24 V) valve drives (e.g. TSA/K 24.2).

Additionally it includes a relay output for the switching of a heating circulation pump. The device has an integrated power supply for the supply of the valve drives. Connected thermoelectric 24 V DC valve drives are directly supplied through the connection terminals. For the supply of 0–10 V DC drives the device has an additional 24 V DC power supply outlet.
LEGEND

1 Power LED for operating status:
   green = ok; red = error
2 Programming button and LED
   for the physical address
3 LED and button for manual operation
   of the outputs
   (manual mode and channel selection)
4 LED and button for manual operation and
   channel mode: on = 0 – 10 V
5 LED shows the status of the integrated
   pump relay
6 LED shows the status of the respective output
<table>
<thead>
<tr>
<th>Technical data</th>
<th>Bus voltage</th>
<th>$I_{bus} \leq 7.5 \text{ mA}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KNX operating voltage</strong></td>
<td>Bus</td>
<td>$I_{bus} \leq 7.5 \text{ mA}$</td>
</tr>
<tr>
<td><strong>Operating voltage</strong></td>
<td>Bus</td>
<td>$I_{bus} \leq 7.5 \text{ mA}$</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>230 – 240 V AC</td>
<td>50 – 60 Hz</td>
</tr>
<tr>
<td><strong>Standby output</strong></td>
<td>Bus</td>
<td>$&lt; 1 \text{ W}$</td>
</tr>
<tr>
<td><strong>Drives</strong></td>
<td>2 per channel</td>
<td></td>
</tr>
<tr>
<td><strong>Valve output</strong></td>
<td>24 V DC ... SELV; 0.4 A peak; 0.12 A permanent or 0 – 10 V at least 1250 ohm</td>
<td></td>
</tr>
<tr>
<td><strong>Switch output (pump)</strong></td>
<td>5 A, 240 V AC floating, μ contact</td>
<td></td>
</tr>
<tr>
<td><strong>24 V output terminal</strong></td>
<td>Max. 1.4 A</td>
<td></td>
</tr>
<tr>
<td><strong>Max. wire cross-sections</strong></td>
<td>0.2 – 1.5 mm²</td>
<td></td>
</tr>
<tr>
<td><strong>Ambient temperature</strong></td>
<td>– 5 °C ... + 50 °C</td>
<td></td>
</tr>
<tr>
<td><strong>Type of installation</strong></td>
<td>DIN-rail</td>
<td></td>
</tr>
<tr>
<td><strong>Protection rating</strong></td>
<td>IP 20 in accordance with EN 60529</td>
<td></td>
</tr>
<tr>
<td><strong>Protection class</strong></td>
<td>II in accordance with EN 60730-1 subject to designated installation</td>
<td></td>
</tr>
</tbody>
</table>

---

**NOTE**
Comment concerning the installed 24 V power unit:
The 24 V output terminal supplies the operating voltage for 0 – 10 V valves, which are connected to the device.
The current available at this terminal is reduced by approx. 0.1 A per connected 24 V/2 W actuator, if thermal actuators (24 V switching) are connected at the same time.

---

**NOTE**
In order to reduce the inrush peaks typical for thermal actuators, the power unit can supply 2.7 A for a short time.
The power unit is inherently short-circuit proof and over temperature resistant. However, a permanent operation outside the specified characteristics can reduce the service life of the device.
**Temperature range**

- Operation: -5...+45 °C
- Transport: -25...+70 °C
- Storage: -25...+55 °C

**Ambient conditions**

- Maximum air humidity: 93 %, no condensation allowed
- Atmospheric pressure: Atmosphere up to 2,000 m

**Design**

- Surface mounting (SM): Modular installation device
- Housing/color: Plastic, gray

**Dimensions**

- Dimensions: 76 x 290 x 52 (H x W x D)
- Mounting: 35 mm mounting rail
- Weight: 0.5 kg

**Approvals**

- KNX certification: To EN 50491
- CE conformity: In accordance with the EMC directive and low voltage directive

---

**Software**

<table>
<thead>
<tr>
<th>Device type</th>
<th>Application</th>
<th>Max. number of group objects</th>
<th>Max. number of group addresses</th>
<th>Max. number of associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAA/A 6.24.2</td>
<td>Floor heating-Controller/<em>...</em></td>
<td>92</td>
<td>254</td>
<td>255</td>
</tr>
</tbody>
</table>

*...* = Current version number of the application. Please refer to the software information on our website for this purpose.

---

**Ordering details**

<table>
<thead>
<tr>
<th>Device type</th>
<th>Product Name</th>
<th>Order No.</th>
<th>bbn 40 16779 EAN</th>
<th>Weight 1 pcs. [kg]</th>
<th>Packaging [pcs.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAA/A 6.24.2</td>
<td>Floor heating Controller</td>
<td>2CDG120061R0011 06371 5</td>
<td>0.5</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

---

**NOTE**

Please refer to the VAA/A 6.24.2 Floor heating-Controller, 6-fold, MDRC product manual for a detailed description of the application. It is available free of charge at www.abb.com/knx.

ETS and the current version of the device application are required for programming.

The latest version of the application and corresponding software information is available for download from www.abb.com/knx.

After import into ETS, it appears in the Catalogs window under Manufacturers/ABB/Heating, ventilation, air conditioning/Valve drive controller.

The device does not support the locking function of a KNX device in ETS. Using a BCU code to inhibit access to all the project devices has no effect on this device. Data can still be read and programmed.