General Specifications

GS 33J50D10-01EN

GENERAL

These Bus Converters connect CENTUM VP Human Interface Stations (HIses) on the Vnet/IP to CENTUM VP/CENTUM CS 3000/CENTUM CS stations on the V net, CENTUM CS 1000 stations on the VL net in other domain.

To connect to CENTUM CS 3000/CENTUM CS System, VP6H4450 Multiple Project Connection Package and VP6E5450 Multiple Project Connection Builder are required. To connect to CENTUM CS 1000 System, an Ethernet, as well as these packages, is also required.

STANDARD SPECIFICATIONS

For the installation specifications and environmental conditions that are common to the systems, refer to the GS "Integrated Production Control System CENTUM VP System Overview" (GS 33J01A10-01EN).

Communication on the Vnet/IP Side
Communication Speed: 100 Mbps, Full Duplex
Connection: UTP cable (CAT5e or better), RJ45 connector
Interface: 100Base-TX compliance
Max. distance: 100 m (Distance between AVR10D and Layer 2 switch)

Communication on the V net Side
Communication Speed: 10 Mbps
Connection: Coaxial cable, BNC type
Dual-redundant or single
For CENTUM VP, CENTUM CS 3000 and CENTUM CS

Communication on the VL net Side
Communication Speed: 10 Mbps
Connection: Coaxial cable, BNC type
Dual-redundant or single
For CENTUM CS 1000

Configuration
Nest

Mounting
19-inch Rack Mounting:
Rack mount (4 x M5 screws)
Insulation bush (accessory)

Connection
Power Supply: M4 screw terminal connection
Grounding: M4 screw terminal connection
V net and VL net Side: T-junction BNC connection
Vnet/IP Side: UTP cable (CAT5e or better)

Power Supply
(Specify with Suffix Code)
Voltage: 100-120 V AC, Frequency: 50/60 Hz
Voltage: 220-240 V AC, Frequency: 50/60 Hz
Voltage: 24 V DC

Power Consumption
100-120 V AC: 80 VA
220-240 V AC: 110 VA
24 V DC: 1.7 A
Power supply method dual-line or single power line

Weight
Approx. 5.8 kg
**EXTERNAL DIMENSIONS**

![Diagram of external dimensions]

Unit: mm

**Note:** The above drawings are for AVR10D-100-20.

Nominal Tolerances:
- When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is ± 0.8 mm, while its combination of nominal tolerance is ± 1.5 mm.
- When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

**REQUIREMENTS FOR USING SEM (SEQUENCE OF EVENTS MANAGER)**

To use SEM for Vnet/IP, firmware revision of VI451 should be R6 or later. (Firmware revision No. is indicated under “F” on the revision sticker on the component)

For details, refer to "SEM Sequence of Events Manager (for Vnet/IP and FIO)" (GS 33K30D10-50E).
MODELS AND SUFFIX CODES

Duplexed V net Router

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR10D</td>
<td>Duplexed V net Router (Duplexed communication module, Duplexed power module)</td>
</tr>
</tbody>
</table>

**Suffix Codes**

- **A1** For Single VL net
- **A2** For Dual-Redundant VL net
- **Q1** For Single V net (10BASE-2)
- **Q2** For Dual-Redundant V net (10BASE-2)

<table>
<thead>
<tr>
<th>Suffix Codes</th>
<th>Description</th>
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<tbody>
<tr>
<td>-A1</td>
<td>Single Power Supply</td>
</tr>
<tr>
<td>-A2</td>
<td>Dual Power Supply</td>
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<tr>
<td>-Q1</td>
<td>Always 0</td>
</tr>
<tr>
<td>-Q2</td>
<td>100-120 V AC Power Supply</td>
</tr>
<tr>
<td>-Q2</td>
<td>220-240 V AC Power Supply</td>
</tr>
<tr>
<td>-Q2</td>
<td>24 V DC Power Supply</td>
</tr>
<tr>
<td>-Q2</td>
<td>Basic type</td>
</tr>
<tr>
<td>-Q2</td>
<td>With ISA Standard G3 option</td>
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</table>

Note: For compliance with EMC Standards, AVR10D must be installed in a keyed metallic cabinet.

ACCESSORIES AND SPARE PARTS

<table>
<thead>
<tr>
<th>Parts Names</th>
<th>Parts Numbers</th>
<th>Description</th>
<th>Quantity</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Insulating bush</td>
<td>S9049PM</td>
<td>—</td>
<td>4</td>
<td>Accessory</td>
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<tr>
<td>Accessory assembly</td>
<td>S9768UK</td>
<td>AVR10D-□1</td>
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<td>Accessory of VC401</td>
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<tr>
<td>Accessory assembly</td>
<td>S9768UK</td>
<td>AVR10D-□2</td>
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<td>Accessory of VC401</td>
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Content of S9768UK

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<thead>
<tr>
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<th>Parts Numbers</th>
<th>Description</th>
<th>Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaxial connector</td>
<td>A1120JA</td>
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<td>T junction</td>
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<tr>
<td>Cover</td>
<td>T9072MB</td>
<td>—</td>
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<tr>
<td>Cover</td>
<td>T9072MC</td>
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APPLICABLE STANDARDS

Refer to the GS “Integrated Production Control System CENTUM VP System Overview” (GS 33J01A10-01EN).

ORDERING INFORMATION

Specify model and suffix codes.

TRADEMARK

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