**Expert Net Control 2312-1**

Remote I/O System with 3 switchable relay outputs and energy metering for DIN-rail mounting

**Features**

- 3 switchable, potential-free relay outputs, switching voltage 230 V AC 16 A
- Metering of energy, current, power factor, phase angle, frequency, voltage and active / apparent / reactive power per output
- 2 energy meters per output, one meter continuously, the other resettable
- A clearly visible LED display for total current, IP address, sensor data and error reports
- All relay outputs individually switchable directly on the device, via HTTP, command line tool and RS232 serial interface
- Status and Power-up delay (0...9999 seconds) adjustable individually for each output after power blackout
- Simultaneous power-up of multiple Power Ports prevented by latency time of 1 second
- Programmable turn-on/touch-off sequence
- 3-channel watchdog to monitor connected consumers (ICMP/TCP)
- Bicoloured LEDs on front panel display status information of relay outputs
- Interface for optional sensor for environmental monitoring (temperature and humidity)
- Power supply via external DIN rail unit 7902 (not included in delivery)
- Comfortable configuration by web browser, Windows or Linux tool
- Firmware update via Ethernet during operation
- HTTP 1.1, e-mail, DHCP, SNMPv1 (Traps), SNMPv2c (Traps), Syslog
- Access control via IP Access Control List
- Access control via optional HTTP password
- Android and iOS app Gude Control allows access from anywhere
- Low power consumption, max. 3 W
- Developed and manufactured in Germany

**Electrical Connections**

- Terminal clamps for power supply with 12-24 V AC/DC voltage
- 3 switchable outputs (terminal clamps for phases)
- Ethernet connector RJ45 (10/100 Mbit/s)
- Mini-DIN connector for optional sensor or serial interface (RS232)

**Technical Details**

- LxHxW: 10.5 x 7 x 9 cm
- Weight: ca. 280 g
- Operating temperature: 0-50 °C
- Storage temperature: -20 - 70 °C
- Relative humidity: 0 - 95 % (non-condensing environment)

**Highlights at a glance**

- 3 switchable relay outputs with LED display
- 3-phase metering of electrical dimensions

<table>
<thead>
<tr>
<th>Order code</th>
<th>Product</th>
<th>Feature</th>
<th>Power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>2312-1</td>
<td>Expert Net Control 2312-1</td>
<td>3 switchable outputs, 1 sensor or RS232 interface, 3-phase metering of electrical dimensions</td>
<td>External power supply unit 12-24 V AC/DC</td>
</tr>
<tr>
<td>7001</td>
<td>Temperature Sensor 7001</td>
<td>Cable sensor with splash-proof sensor head (IP64), Mini-DIN connector, -20°C to +80°C, cable ca. 2.3 m</td>
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<tr>
<td>7002</td>
<td>Temp., Humidity Sensor 7002</td>
<td>Cable sensor, Mini-DIN connector, -20°C to +80°C, 0-90% humidity, cable ca. 2.3 m</td>
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<tr>
<td>7902</td>
<td>DIN Rail Power Supply Unit 7902</td>
<td>Power supply unit for DIN rail, 230 VAC / 12 VDC 1250 mA (not included in delivery)</td>
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<tr>
<td>7990</td>
<td>RS232 Adapter Cable 7990</td>
<td>Connector cable for RS232 to mini-DIN 6, length ca. 2.3 m</td>
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