

VARIODYN® D1 Watchdog Relay Switchover WRS-D1

- ✓ **Automatic power-on delay after a PC has been switched on**
- ✓ **Automatic alive signal to the RS232 DSR line to both PCs**
- ✓ **Easy to use**
- ✓ **Large number of connections**
- ✓ **USB power supply**



Application

The Watchdog Relay Switchover WRS-D1 is intended as watchdog circuitry for two PCs. In case of a failure of one PC the WRS-D1 will switch over the following signals to the other PC:

- VGA signal
- RS422/RS485 signal (for control equipment)

The switchover is performed with high reliable relays with gold contacts. In case of complete power loss the relays will switch to PC A per default (fail safe).

Function

The WRS-D1 will receive heartbeat signals from both PCs via the RS232 DTR Modem Control Signals. Typically the main control application will generate the watchdog signals. When the heartbeat signal is lost for more than 15 seconds and the heartbeat signal is present for the other PC, the WRS-D1 will switch to the other PC.

There is an automatic power on delay after a PC has been switched on. Within 5 minutes after power on the watchdog is disabled, allowing the Operating System and applications to start properly.

The selection state is signalled to the selected PC by a connection between the DTR and CD signals of the RS232 interface.

The WRS-D1 will send an alive signal to the RS232

DSR line to both PCs. This signal will be 8 seconds high and 2 seconds low. This signal may be used by the control application in the PCs to prove that the WRS-D1 watchdog circuitry is healthy and working.

Connections

- 2 VGA connectors
- 2 cables with 9pin female connectors for connection
- 2 9pin female connectors

Displays

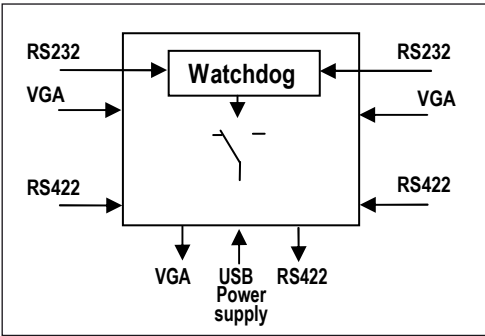
2 green Power LEDs for indicating Power of PC A and PC B.

2 yellow Select LEDs indicating to which PC the Watchdog has switched over. The Select LED of the selected PC will flash during power on delay (1sec on / 1 sec off). Valid watchdog pulses will be indicated by a short pulse (100ms) of the corresponding Select LED.

Manual Switch

A rotary switch allows switching manually to PC A or PC B. In the mid position (Auto) the switchover is controlled by the watchdog circuitry.

*Note 1) All cables are fixed mounted on the rear side and have a length of app. 70 cm.
Note 2) VGA cables are optional and may be not assembled if VGA switchover is not required*



Connections

Specifications

Power Supply via USB:

Voltage	5 V
Current	250 mA max.

Contact Rating

Voltage	30 V
Switching Current	1 A

Trigger Signal (RS232 / DTR / Pin 4)

High Voltage	4 Volt min.
Low Voltage	0.5 Volt max.
Input current	1 mA max.

Alive Signal (RS232 / DSR / Pin 6)

High Voltage	5 Volt min.
Low Voltage	0.5V Volt max.
Load Resistance	3 kOhm min.

Ambient temperature range	-5 °C ... +55 °C
Relative humidity	15 % ... 90 %
Dimensions (H x W x D)	40 mm, 180 mm , 140 mm
Weight	approx. 1 kg

Order information

Part No.

Watchdog Relay Switchover WRS-D1	583532
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