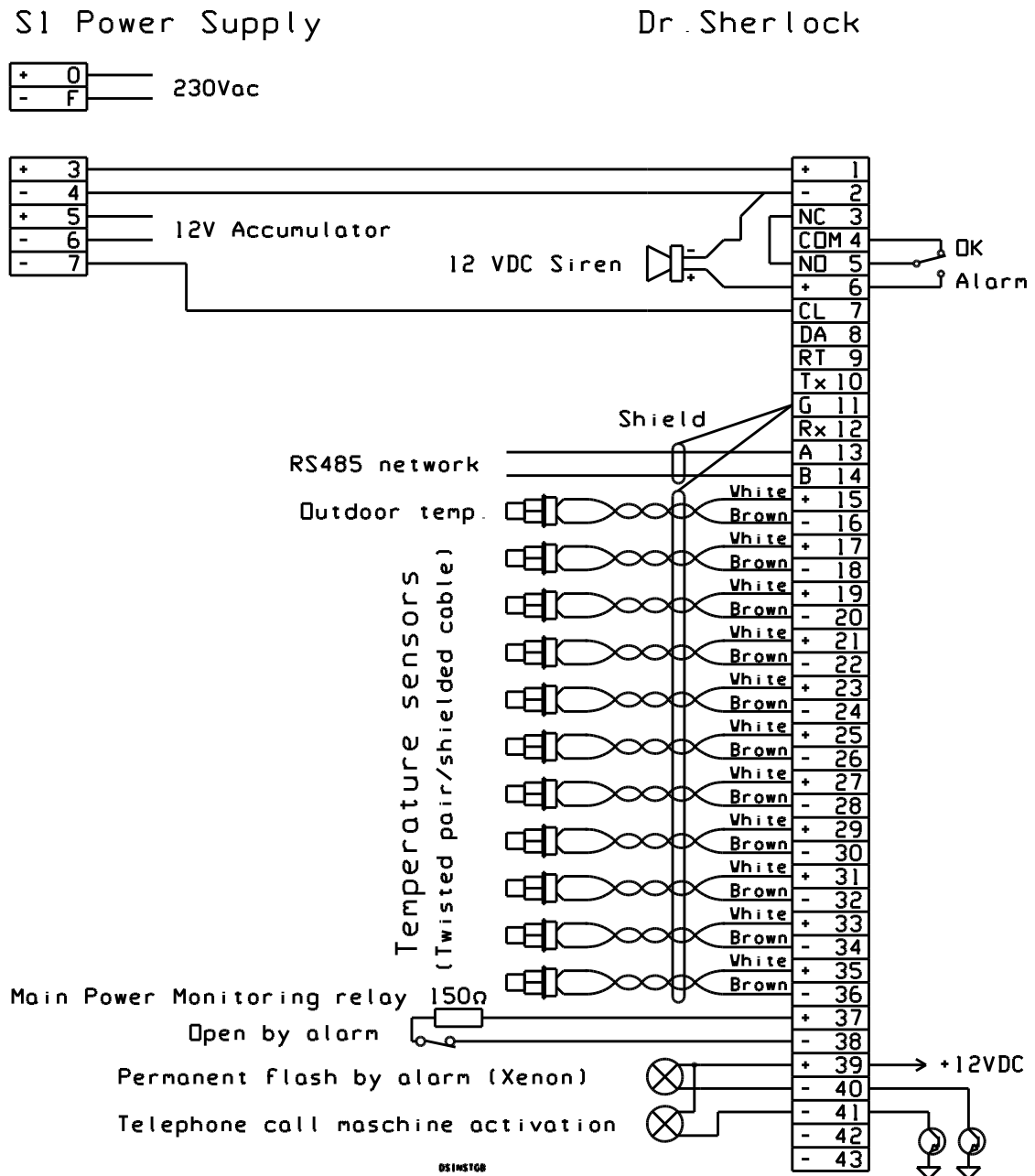


Dr.Sherlock

TEMPERATURE - MONITOR

INSTALLATION

1.0 Diagram, connection chart



Temperature sensors have a common + 12VDC supply. Avoid any shorting of temperature sensor to Ground (GND). Sensor cables must be kept isolated from mains supply by at least 10 cm to avoid noise. Preferring shielded to twisted pair. Telephone cable 0.6 mm² is sufficient.

1. Power supply 12 VDC from S1 connects to terminal 1 and 2. + and - must be connected properly.
2. Alarm siren AS-612 (12 VDC, max. 1 Amp) connects to terminal 5 and 6. The siren will sound for normally 2 minutes (adjustable 1-10 minutes) or until **START STOP** is pressed
3. Communication network may be connected at terminal 13 and 14 (A and B) + shield at terminal 11. Use twisted pair with shield. The Communication network is for use with optional Speech-computer/alarm caller Dr.Bell, and personal computer with software Professor Partyline.
4. Power monitor relay connects to terminal 37 and 38. In order to detect shortcut cable there must be fitted a 150Ω resistor in serial connection at the relay. Alarm condition is by open line. Use twisted pair with shield if more than 10 metres.
5. Xenon flash lamp may be connected to terminal 39 and 40 to indicate alarm situation also after the siren has ceased to sound. (12VDC, max 0.5 Amp). Note ! Terminal 39 is constant “live”, + 12 VDC and terminal 40 connects to ground (-) when activated.(“open collector”)
6. Terminal 39 and 41 activates (12VDC, max 0.5 Amp) at a 3 minutes delay (adjustable 1-10 minutes) in an alarm situation. This can be used to trigger a telephone-call-machine. Note ! Terminal 39 is constant “live”, + 12 VDC and terminal 41 connects to ground (-) when activated.(“open collector”)
7. Terminal 42 and 43 are activated reversed according to terminal 40 and 41, but are normally not used.

1.1 Dip Switch on rear side of panel

Nr.	OFF (=OPEN)	ON (Pressed down at battery side)
1	Normal	Outdoor temperature will be send through RS485 network every 1 minute. To be used for additional Dr.Sherlock panels, allowing these to work on the same outdoor temperature sensor.
2	Not in use	
3	Must be OFF	
4	RS485 network, e.g. Dr.Bell Speech-computer	RS232, may not be used in connection with Dr.Bell
5	Normal	Detects telephone line fault, Dr.Bell Speech-computer only
6		Daily (from 8.00 to 8.10 o'clock) test of accumulator voltage-drop with charging circuit (S1-unit) at idle. Terminal 7 at S1 power supply must be connected to Dr.Sherlock terminal 7. Only one Dr.sherlock unit may be set to this function !
7	Not in use	
8	Normal	<ol style="list-style-type: none"> 1. Temperature values are displayed without filtering. Use this only to test cable noise etc. 2. At power-on memory is deleted and all values (including clock) are reset to factory settings. Remember to switch it back to OFF. (Display will remain off for a few seconds)

1.2 Daily test of battery

Set dip switch no.6 **ON** to activate this function.

Daily (from 8.00 to 8.10 o'clock) Dr.Sherlock will test the accumulator, measuring the voltage-drop while charging circuit S1-power supply is at idle. Terminal 7 at S1 power supply must be connected to Dr.Sherlock terminal 7.

Alarm codes:

If the voltages drops below 11.7 a warning will occur and alarm code will be set to "9"

If the voltages drops below 11.5 an alarm situation will occur and alarm code will be set to "10", and the test will stop.

Only one unit may be set to this function !

1.3 Power supply voltage

The voltage of the power supply can be displayed by pressing:

SHIFT ARROW UP²

2.0 User settings

The inputs and alarm timers may set According to user requirements.

If keyboard are locked, please press **SHIFT** and then both **ARROW UP** and **ARROW DOWN** at the same time.

2.1 Set input to "soft" alarming

"Soft" alarm means that the siren will not sound. Alarm is shown on the front panel by flashing lamp "ALARM" and a double-beep sound.

1. Press **SHIFT** and then **START STOP**, display shows "- - -1"
2. Toggle soft-alarm-mode by pressing any of the keys **1-10**. Normal alarming is by light on and "soft" alarming is by light off.

2.2 Set input to no alarm calls

When input is set to no alarm calls, terminal 41 will not activate for this input.

1. Press **SHIFT** and then **START STOP**, display shows "- - -1"
2. Press **SHIFT** and then **START STOP**, display shows "- - -2"
3. Toggle no-alarm-calls-mode by pressing any of the keys **1-10**. Normal alarming is by light on and "no-alarm-calls" is by light off.

2.3 Set input to digital (“on/off”) mode

1. Press **SHIFT** and then **START STOP** 3 times, display shows "- - -3"
2. Toggle digital/temperature-mode by pressing any of the keys **1-10**. Temperature input is by light on and “on/off”/digital mode is by light off.

Note ! Alarm situation is by broken wire

2.4 Alarm timers

Press **SHIFT** and then **DATE**, 1, 2 or 3 times: (Display shows 1,2,3 in first position)

Press DATE	Timer	Range	Factory setting
1 time	Filter, fault approval time	1-60 sec	5 sec
2 times	Delay for terminal 41, telephone call machine	1-10 minutes	3 minutes
3 times	Siren activating timer	1-10 minutes	2 minutes

2.5 Test of siren

Press **SHIFT** and then **ALARM SETTINGS**. “Alarm” lamp flashes.
Press once more and the test will stop.

3.1 Adjustment of the temperature sensors

The temperature sensors are calibrated at factory, and the value on the label of each sensor should be entered at the specific input.

Press	- and then any of the number keys	Display shows
SHIFT	1, 2, 3, 4, 5, 6, 7, 8, 9,10 + OUTDOOR	Offset value for sensor number 1-10

3.2 Station Numbers, Installation with More Panels



The station numbers are used to determine which inputs to be monitored, in that way trigger an alarm if a station do not answer (power failure or faulty hardware).

Station numbers should be considered if the installation consist of more panels or controllers on the same network.

Default setting "100" is OK for one panel.

If more than 1 unit are installed, the System Station number should be "100", "101", "102" and so on.

The inputs each have a station number too, but they are automatically numbered 1-10, 11-20, 21-30 and so on, which are linked to the System station number, see table:

Push   , **2 times** to access station number, default is "100"

SYSTEM Station number	Inputs will automatically be numbered
Main or single unit 100	1-10 (default)
2 nd unit 101	11-20
3 rd unit 102	21-30
.and so on 103	31-40
104	41-50
105	51-60
106	61-70
107	71-80
108	81-90
200	101-110
201	111-120
202	121-130
203	131-140
204	141-150
205	151-160
206	161-170
207	171-180
208	181-190

(installation where 1-10 has already been engaged by controllers on the same network)

3.3 Sharing the Outdoor Temperature

To ease installation you may have only one outdoor temperature sensor. On the panel with the outdoor sensor you may set dip switch #1 to ON, also see chapter 1.1. Then the panel will send the outdoor temperature value out on the RS485 network to be used by the other panels automatically.