



**DSP24N3/D is a display unit which shows the present temperature from temperature sensor type NTC. Up to three sensors can be connected. The set point can also be set on the unit.**

- \* Can be used together with a controller.
- \* Or independently with a temperature sensor.
- \* Selectable for different temperature ranges
- \* Built-in setpoint adjustment
- \* Distinct LED display
- \* Only NTC sensors from our TG-series can be used

## Function

DSP24N3/D is connected in parallel with the sensor to the controller's sensor input. Only NTC sensors from Regin's TG-series can be used. The unit has inputs for up to three sensors (three channels) and an output for external setpoint adjustment of a controller connected to it.

The value shown can be switched by means of the button on the front. The channel being shown is indicated by LEDs marked CH1, CH2, CH3 and SP (Setpoint).

DSP24N3/D can also be used without a controller. The sensors are then connected directly to the display unit.

The display unit is built into a standard casing for DIN rail mounting and has all settings easily accessible on the front.

### Connected sensors

The unit is supplied with a set of labels on which the position or name of the sensor connected to a particular channel can be written. The function for the setpoint adjustment can also be noted in the square marked SP, for example "Setpoint Roomtemp." or "Not connected" when the setpoint is not activated. The label can be placed on the top of the unit or nearby.

### Range

The range can be selected for each particular channel. Channel 1 can be set at 0...30, 20...50, 40...70 or 60...90° C, channel 2 at -30...+30 or 0...60°C and channel 3 at 0...30, 20...50, 40...70 or 60...90°C.

### Setpoint

DSP24N3/D also has an output for external setpoint adjustment of a connected controller. The selected setpoint is shown in the display when the LED SP is lit. The setpoint range is the same as for sensor channel 1 (CH1) which is normally connected to the controller's principle sensor. If an external setpoint is not used the setpoint knob should be turned as far left as possible (min). The display will then show "0" when the LED SP is on. A label can also be used to show that the setpoint is not active.

### Supply voltage

The unit is supplied with 24 V AC. When connecting to a controller it is important that 24 V system zero is correctly connected on the controller

**Technical data**

**General**

Supply voltage 24 V AC +/- 15 % 50-60 Hz  
 Power consumption 5 VA  
 Ambient temperature 0...50°C  
 Storage temperatur -40...50°C  
 Ambient humidity Max 90%RH  
 Form of protection IP20  
 Installation To be mount on a DIN-rail, in a cabinet or other enclosure.



This product conforms with the requirements of European EMC standards CENELEC EN 50081-1 and EN 50082-1 and carries the CE mark.

Temperature ranges  
 Chanel 1 (CH1) 0...30, 20...50, 40...70, 60...90°C  
 Chanel 2 (CH2) 0...60, -30...+30°C  
 Chanel 3 (CH3) 0...30, 20...50, 40...70, 60...90°C  
 Setpoint (SP) The range is governed by the range set for chanle 1

(CH1)

**Inputs**

Sensor

Up to three sensors can be connected. Only NTC sensors from Regin's TG-series can be used, see leaflet 6-100. DSP24N3 can either be used using its own sensors, or together with a controller.

separately

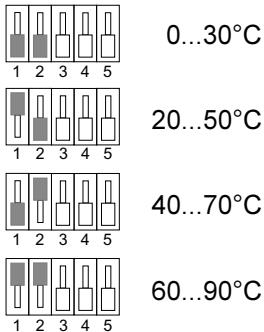
**Outputs**

Setpoint

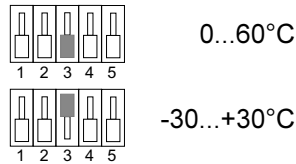
0...10 V to be connected to the input for external setpoint on the AQUA-controllers that have 0...10V outputs.

**Function switches**

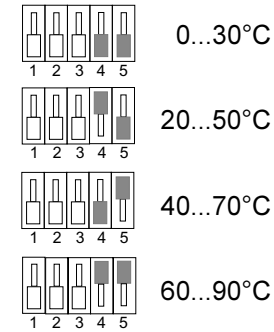
Chanel 1 (CH1) and setpoint (SP)



Chanel 2 (CH2)

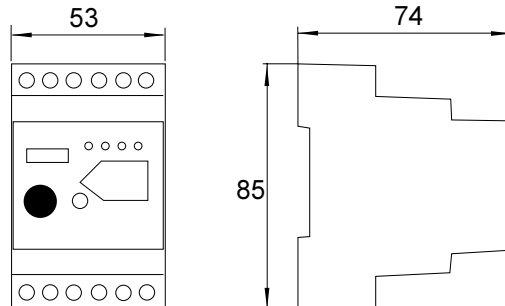


Chanel 3 (CH3)



**Wiring and dimensíons**

1	24V~ in	Supply voltage
2	Neutral	
3	CH1 in	
4	Signal neutral	
5	CH 2	
6	Signal neutral	
7	CH3 in	
8	Signal neutral	
9	0-10 VDC	Setpoint output
10	Neutral	
11	Not used	
12	Not used	



FOR INDOOR CLIMATE WITH OPTIMUM CONTROL

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