

STS 4 ELECTRIC POWER CONTROLLER

STS 4 is controlling electric power by using, one time proportional step via a solid state relay, and 0...3 contactor steps via relays. The function of STS 4 is controlled by a 0-10V input signal from the temperature controller.

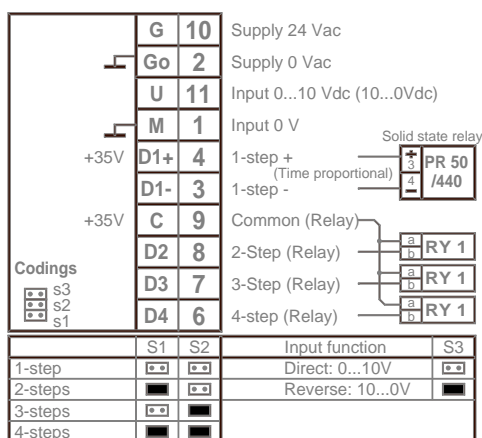
The number of the steps (1...4) is selected by S1 and S2 and the function (direct/ reverse) by S3 inside the device.

The growing input signal causes the growing output to the time proportional output (D1) and switches the relay outputs (D2...D4) ON as follows:

Input	1-step control	2-step control	3-step control	4-step control
0 - 2,5V	D1= 0-25%	D1= 0-50% D2=off	input=0-3,3V D1=0-100% D2=off D3=off	D1=0-100% D2=off D3=off D4=off
2,5 - 5V	D1= 25-50%	D1=50-100% D2=off	input = 3,3-6,6V D1=0-100% D2=on D3=off	D1=0-100% D2=on D3=off D4=off
5 - 7,5V	D1= 50-75%	D1= 0-50% D2=on	input = 6,6-10V D1=0-100% D2=on D3=on	D1=0-100% D2=on D3=on D4=off
7,5 - 10V	D1= 75-100%	D1=50-100% D2=on	---	D1=0-100% D2=on D3=on D4=on

To receive the best control results, the power of each step is to be identical, also with the time proportional step.

Wiring and settings:



Technical data:

Supply	24 Vac, < 1VA
Input (control signal)	0...10 V, < 40µA
Solid state relay output	35 Vdc, < 50 mA
Time proportional cycle	about 20 s
Relay outputs	35 Vdc, < 50 mA
Dimensions (w x h x d)	35 x 79 x 95 mm

Ordering guide:

Model	Product number	Description
STS 4	1140020	electric power controller
PR 50/440	1140030	solid state relay
RY 1	1183020	relay