

**SRS6 EP Controller**


|                    |   |
|--------------------|---|
| <b>Application</b> | control of solar and heating systems  |
| <b>Purpose</b>     | It controls 5 outputs (3 mech. relays, 2 optional either 0-1V or PWM) and features 6 inputs for temper. sensors |
| <b>Code</b>        | <b>13 168</b>   |

|                       |                      |
|-----------------------|----------------------|
| <b>Electric data</b>  |                      |
| Power voltage         | 100 - 240 AVC        |
| Power frequency       | 50 - 60 Hz           |
| Power input           | 0.5 - 2.5 VA         |
| Internal fuse         | 2 A/250 V, slow-blow |
| IP rating             | IP40                 |
| Protection class      | II                   |
| Oversvoltage category | II by EN 60664-1     |
| Pollution degree      | II by IEC 60664-1    |

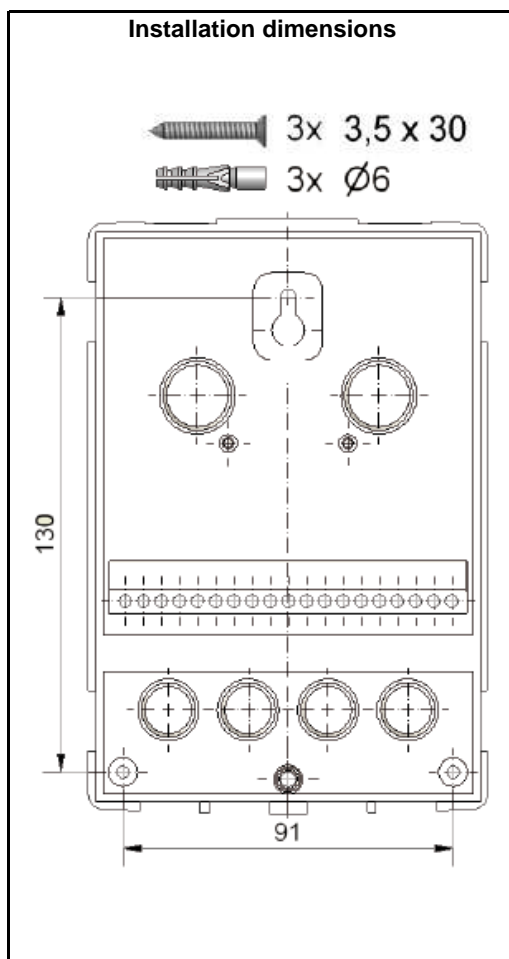
|                           |  |
|---------------------------|--|
| <b>Inputs and outputs</b> |  |
| Mechanical relay          | 460 VA pro AC1/460 W pro AC3             |
| 0-10 V                    | load 10 k $\Omega$ , tolerance 10%       |
| PWM                       | voltage 10 V, frequency 1 kHz            |
| Pt1000                    | temperature range -40 to 300 °C          |
| VFS/RFS                   | adjustable range, 1-200 l/min / 0-10 bar |
| Sítové připojení          | CAN Bus                                  |

|                                     |                  |
|-------------------------------------|------------------|
| <b>Number of inputs and outputs</b> |                  |
| Mechanical relay                    | 3 x (R1, R2, R3) |
| 0 -10 V or PWM                      | 2 x (V1 and V2)  |
| Pt1000                              | 6 x (S1 to S4)   |

|  |        |
|--|--------|
| <b>Permissible cable lengths for sensors and outputs</b> |        |
| Mechanical relay   | < 10 m |
| 0-10 V/PWM   | < 3 m  |
| Pt1000 (outdoor sens.)                                   | < 30 m |
| Pt1000 (other sensors)                                   | < 10 m |
| VFS/RFS, CAN Bus   | < 3 m  |

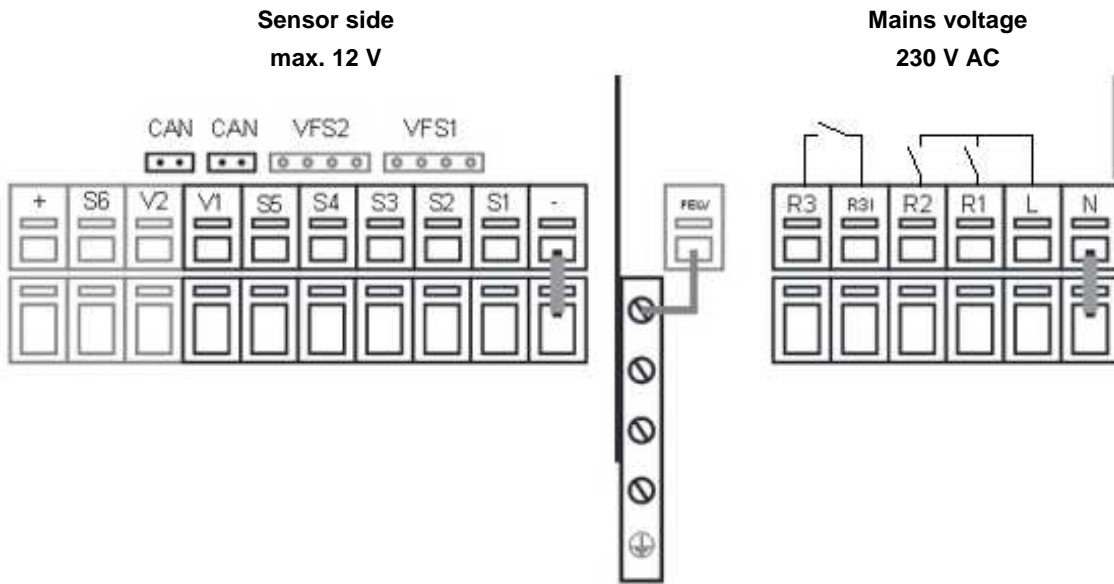
|   |  |
|---|--|
| <b>Permissible working and ambient conditions</b> |  |
| VFS/RFS   | 0 to 100 (-25 to 120 in short term) °C |
| Ambient temper. - operation                       | 0 to 40 °C                             |
| Ambient temper. - stock                           | 0 to 60 °C                             |
| Air humidity - operation                          | max. 85 % at 25 °C                     |
| Air humidity - stock                              | no condensation permitted              |

|                    |   |
|--------------------|---|
| <b>Other data</b>  |   |
| Housing material   | ABS (two-part)                                      |
| Installation       | wall mount  |
| Overall dimensions | 163 x 110 x 52 mm                                   |
| Display            | fully graphic, 128 x 128                            |
| Preset connections | 42 hydraulic variants for solar and heating systems |



**SRS6 EP Controller**

**Terminal block wiring diagram**



Board connection:

CAN1  
CAN2  
VFS2  
VFS1

Connection for:

CAN Bus connection  
CAN Bus connection  
VFS/RFS connection  
VFS/RFS connection

Terminal:

R3  
R3I  
R2  
R1  
L  
N

Connection for:

potential-free switching contact  
potential-free switching contact  
live  
live  
mains voltage - live  
mains voltage - neutral

Terminal:

+  
S6  
V1  
V2  
S5  
S4  
S3  
S2  
S1  
-

Connection for:

power supply 12 V  
sensor 6  
0-10 V/PWM  
0-10 V/PWM  
sensor 5  
sensor 4  
sensor 3  
sensor 2  
sensor 1  
ground

Neutral is wired to the lower (blue) terminal.

Protective PE lead shall be wired to PE terminal board!

Sensor grounds are wired to the lower (grey) terminals.

**Correlation between temperature and resistance for Pt 1000 sensors**

|    |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|
| °C | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| Ω  | 1000 | 1039 | 1077 | 1116 | 1155 | 1194 | 1232 | 1270 | 1308 | 1347 | 1385 |