



Temperature Controller

**600-RR-0-0-1 □ CODE: F000052 □ S/N:
11020154**

URL: <https://www.sxplc.com/temperature-controller-600-rr-0-0-1-code-f000052-s-n-11020154>

Product data sheet

TECHNICAL DATA

Inputs

Accuracy 0,2% f.s. ± 1 digit.

Sampling time 120msec.

TC - Thermocouple

J 0...1000°C / 32...1832°F

K 0...1300°C / 32...2372°F

R 0...1750°C / 32...3182°F

S 0...1750°C / 32...3182°F

T -200...400°C / -328...752°F

B 44...1800°C / 111...3272°F

E -100...750°C / -148...1382°F

N 0...1300°C / 32...2372°F

L-GOST 0...600°C / 32...1112°F

U -200...400°C / -328...752°F

G 0...2300°C / 32...4172°F

D 0...2300°C / 32...4172°F

C 0...2300°C / 32...4172°F

(NI-Ni18Mo) 0...1100°C / 32...2012°F

custom -1999...9999

RTD 2/3 wires

PT100 -200...850°C / -328...1562°F

JPT100 -200...600°C / -328...1112°F

PTC

990Ω, 25°C -55...120°C / -67...248°F

NTC

1KΩ, 25°C -10...70°C / 14...158°F

FACEPLATE DESCRIPTION

DC - Linear

With scale settable from:

-1999...9999

0...60mV / 12...60mV

0...10V / 2...10V

0...5V / 1...5V

0...1V / 0,2...1V

0...20mA / 4...20mA

Input impedance:

Ri > 1MΩ for 60mV,1V

$R_i > 10\text{K}\Omega$ for 5V, 10V

$R_i = 50\Omega$ for 20mA

32-segment custom linearization can be
inserted.

Auxiliary input

(alternative to output out 3)

Input for current transformer

50mAac, 50/60Hz, $R_i=10\Omega$

Digital input

$R_i = 4,7\text{K}\Omega$ (24V, 5mA) insulation 1500V

or no-voltage contact.

Function configurable for man/auto

selection, local/remote (setpoint from

serial line, setpoint1/setpoint2; Set/reset

outputs, start/stop functions from tuning,

software on/off, reset alarms memory,

hold.

Outputs

4 configurable outputs:

- OUT1-OUT4: relay only
- OUT2: relay, logic, triac, digital insulated
- OUT3: relay, logic, digital insulated,

continuous or analog retransmission as

alternative to aux. input

Freely assignable to control functions and

single alarms in “OR” or “AND”.

Can be slaved to front panel key or aux.

digital input.

Relay

(indicated in code with R)

With contacts: 5A at 250Vac/30Vdc,

$\cos\phi=1$

Logic

(indicated in code with D)

24Vdc $\pm 10\%$ (10V min at 20mA)

Digital insulated (indicated in code with M)

optoinsulated MOS output 1500Vrms

equivalent to NO contact

Vmax 40Vac/Vdc I_{max} 100mA

Load ON max 0,8 Ω

Triac

(indicated in code with T)

20...240Vac $\pm 10\%$, 50/60Hz, 1A max.

I

2

t = 128A2

sec.

Leakage current 1,5mA max at 200Vac.

Continuous

(indicated in code with C)

0...10V Rload \geq 250K Ω

0/4...20mA Rload \leq 500 Ω

for heating/cooling control output only.

Analog retransmission

(indicated in code with W)

0...10V Rload \geq 250K Ω

0/4...20mA Rload \leq 500 Ω max resolution

12 bit, useful for retransmission of variable.

Serial line

Isolated 2/4 wires, RS422/485 interface

(1200, 2400, 4800, 9600, 19200 baud)

Prot.: GEFRA CENCAL or MODBUS

Power supply

Standard: 100...240Vac $\pm 10\%$

On request: 11...27Vac/dc $\pm 10\%$

50/60Hz, max. 10VA

Protection by internal fuse not serviceable

by user

Transmitter Power supply

24V $\pm 10\%$ non-stabilized, 30mA

15V for transmitter, 30mA

Short-circuit protection

Ambient Condition

Working temperature range: 0...50°C

Storage temperature range: -20...70°C

Humidity: 20...85%Ur non condensing

Control

On/Off, P, PD, PID for heating and cooling, with parameters settable from keys.

Cooling setpoint relative to heating setpoint.

- Manual reset -999...999 digit
- Power reset -100,0...100,0%
- Cycle time 0...200sec
- Softstart 0,0...500,0 min

For each action:

- Proportional band 0,0...999,9% f.s.
- Integral time 0,0...99,99 min
- Derivative time 0,0...99,99 min
- Max power limit 0,0...100,0%

Alarms

- 3 alarms settable as absolute, deviation,

symmetrical deviation to setpoint with

direct or reverse function.

- Alarm point can be set anywhere on

selected scale

- Alarms can be masked with exclusion at

power-on, with memory, with delayed trip

- LBA alarm for setting control

- Hysteresis settable for each alarm

- Alarm assigned to current input with different operating modes.

Weight

160g in complete version

