



SPS5.7 Kiln Temperature Controller

FEATURES

- Simple to use with large alphabetic display
- 10 fully adjustable programs
- 9 segments per program
- 1 ramp + dwell (soak) per segment
- Temperatures from 0 to 1310°C
- Dwell times up to 100 hours
- Ramp rates from 1 to 998°C/hour + full
- Controlled ramps for heating & cooling
- Delayed start facility (up to 100 hours)
- Up to 9 programs can be linked
- Program check facility
- Power failure recovery
- Power consumption display
- Optional internal over-temperature trip
- Optional multi-function control relay



DESCRIPTION

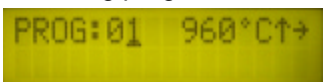
GENERAL The SPS5.7 is a program controller designed for pottery, ceramics & glass firing. Its large illuminated 32 character display makes it easy to set up & use. Setting up is performed using an on-screen menu system and during firing full status information is displayed.

PROGRAMS 10 programs are provided. The programs are fully adjustable and each can contain from 1 to 9 ramp/dwell (soak) segments. Controlled heating & cooling ramps are possible. Program linking is possible where up to 9 programs can be linked (in any order) for long complex firings such as are used in glass making.

For convenience the controller is provided with pre-loaded programs. These programs cover the majority of common firing requirements and have been chosen to give safe repeatable results over a wide range of sizes, sections & material types. These programs can be altered or deleted as required.

TYPICAL DISPLAYS

selecting program...



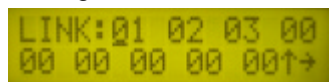
firing...



status...



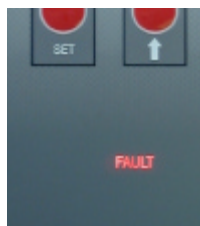
linking...



OPTIONS

INTERNAL TRIP

This is an adjustable safety device which cuts off heating power in the event of over-firing. A normally hidden FAULT legend illuminates.



AUXILIARY RELAY

The auxiliary relay can be user configured as either a damper control, set point alarm or event relay.

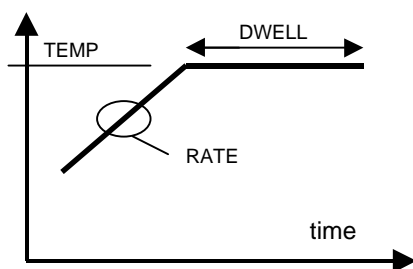
CABLE & CONNECTOR

This is a 2m or 3m cord fitted with a standard Harting style HAN 7D connector. Mating pre-wired kiln connectors can also be supplied.

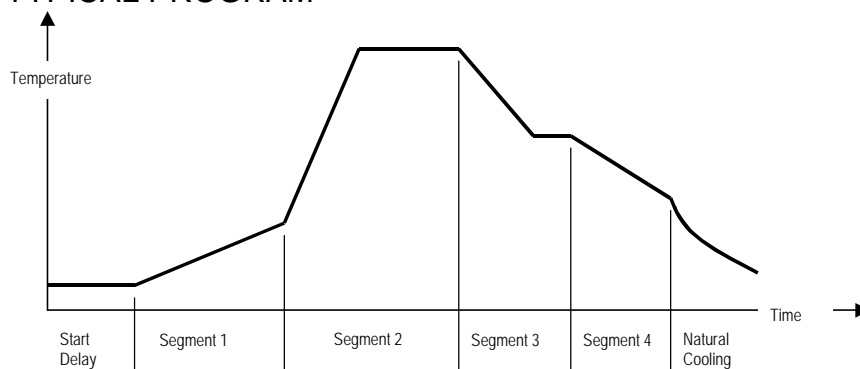
PRE-LOADED PROGRAMS

No	Name	Seg 1	Seg 2	Seg 3
1	Low Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 960°C dwell 00:15
2	Normal Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 1000°C dwell 00:15
3	High Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 1160°C dwell 00:15
4	Earthenware Low Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 960°C dwell 00:30
5	Earthenware Mid Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1040°C dwell 00:30
6	Earthenware High Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1140°C dwell 00:30
7	Stoneware Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1250°C dwell 00:30
8	On Glaze Enamel	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 780°C dwell 00:30
9	Heavy Sculpture	20°C/hr to 150°C dwell 00:30	50°C/hr to 300°C dwell 00:30	70°C/hr to 1000°C dwell 00:30
10	Lustre	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 750°C dwell 00:00

SEGMENT



TYPICAL PROGRAM



SPECIFICATION

Electrical

Power supply

Voltage range: 216.2 - 253V
 Frequency: 50Hz (nom)
 Phases: 1
 Power: Controller 3VA (max)
 Switched outputs 75VA
 Fuse: 1.0A slow-blow

Control Relay(s)

Contact type: SPST NO
 Switched Live -
 nominal 230VAC output
 @300mA max.

Thermocouple

Types: K,N,R & S
 (User selectable)

Connectors

2-part connectors -
 Max. wire size 2.5mm²

Temperature

Temperature setting

Range: 0 to 1310°C
 Resolution: 1°C

Control Accuracy

P.I.D. Control
 Reading accuracy: ±0.25% FSD ±1 digit

Time

Time settings

Range: 00:00 to 99hr 59min
 Resolution: 1 min

Programs

10 programs
 9 segments per program
 Ramp rate 1 to 998°C/hour + full

Program Linking

Up to 9 programs can be linked to give a maximum firing complexity of 81 segments

Environmental

Operating temperature range: 0 to +40°C
 Storage temperature range: -10° to +55°C

Enclosure

Material: ABS Size: 120x160x92mm
 Sealing: IP65 Fixings: 88x148mm
 Colour: Light Grey (4 off)
 RAL 7035

Error Handling

Thermocouple failure detection
 Thermocouple reversal detection
 Heater failure detection
 Over-temperature detection

FURTHER DETAILS

Complete operating & installation instruction handbooks can be downloaded from our web site at <http://www.stanton-kilns.co.uk>

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