

# 20 PQ / 20 Q / 7EK / 7SL

20PQ programmable and 20Q non-programmable series 7EK relay/current or slide-wire, 7SL hi-limit



## Temperature Controllers & Hi-Limit

### 20 PQ Main features:

- 1/4 DIN, Universal inputs (P/N 31090)
- Wide range of outputs (Relay, SSR, Triac, Servo)
- Programmable (200 segments, up to 90 programs)
- 11 logic inputs, 14 digital outputs, Clock / Calendar
- Smart tuning function
- Modbus™ communications
- 3 row, 4 digit LED, 2 bar graph LED display
- IP65, NEMA 4X
- 4 digital outputs
- 2 isolated mA outputs
- Remote setpoint input
- UL, cUL Approved, CE marked

### 20Q Main features:

- Same as 20PQ without the programmability (P/N 31091)

### 7EK Series Main features:

- 1/8 DIN, Universal inputs
- 1 Current (4-20mA) and 3 relay outputs (P/N 31081)
- 1 Slide-wire and 2 relay outputs (P/N 31082)
- Smart tuning function
- Modbus™ communications
- UL and cUL approved CE marked

### 7SL High-Limit Main features:

- 1/16 DIN, Universal inputs (P/N 31302 & 31042 with Modbus)
- 1 Alarm
- Auto / Manual Reset
- Available with Modbus™ communications
- UL, FM approved, CE marked.

### Applications:

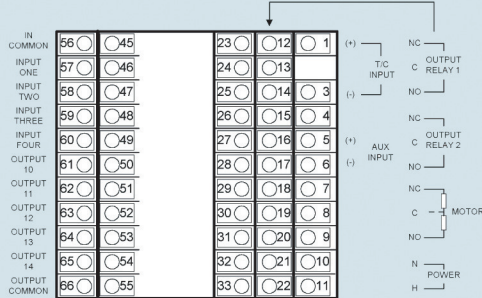
- Batch furnace temperature control
- quench oil
- temper furnace
- generator temperature control

### Compatible with:

- 4-20ma actuators
- Solenoid valves
- On/Off control valves

# Back Terminals

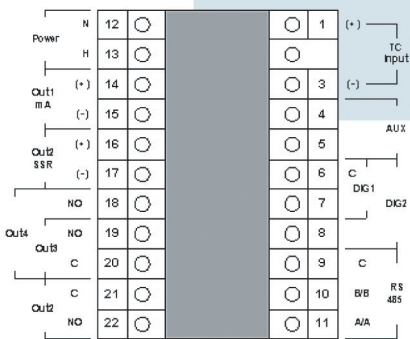
Series 20 PQ D Programmable (P/N 31090), 20Q Non-programmable (P/N 31091)



**Display:** Three rows 4-digit LED, 2 bar-graph LED display (20PQ / 20Q), UL approved.

**Programmer:** Clock calendar function for the automatic start, daily or weekly, 200 segments available, Up to 90 programs, each program can be composed by a different number of segments. Up to 9 linked programs (each one can encompass up to 9 independent programs).

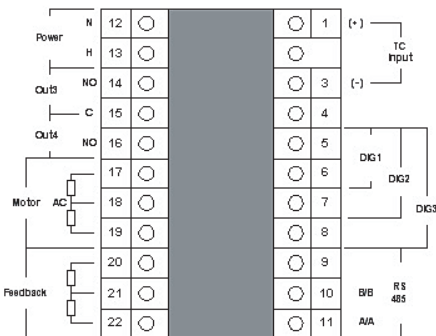
## Relay / Current Output



Part No. 31081

Series 7EK

## Slide-wire Output



Part No. 31082

All of These Temperature Units are  
FM Approved,  
UL Listed 2N66  
CE Marked

## Specifications

### Cut-out Dimensions:

Series 20PQ: 3.63W X 3.63H X 4.06D In  
& 20Q: 92W X 92H X 103D mm  
Series 7EK: 1.78W X 3.63H X 4.06D In  
45W X 92H X 103D mm  
Series 7SL: 1.78W X 1.78H X 4.06D In  
45W X 45H X 103D mm

### Control Modes:

PID or On/Off, motorized valve

### Power:

100 ÷ 240 VAC, 50/60Hz

### Operating ambient:

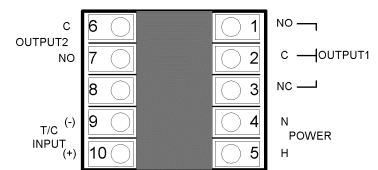
32°F to 130°F (0°C to 55°C),  
20 - 85% RH non-condensing

### Inputs:

Universal thermocouple

### Output ratings:

Relay: 2A, 264VAC resistive  
Logic: 18VDC, 20mA  
Triac: 1A, 264VAC resistive  
DC: Isolated 0-20mA, at 12VDC



Part No. 31302

Series 7SL, Hi-Limit



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incorporated

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