



# PSK Series Refrigeration Controllers

For Low and Medium Temperature Applications



ENGINEERING YOUR SUCCESS.



SPORLAN

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For Low and Medium Temperature Applications



Sporlan's PSK Series electronic controllers **manage low and medium temperature refrigeration units** by controlling compressors, defrost, lights and fans.

There are several models to choose from starting with the PSK201 with **simple logic and wiring** (for base compressor and defrost control) to the PSK214 with **multiple I/Os and evaporator fan management** (for complex compressor, defrost and fan control).

A quick glance at the **3-1/2 digit display panel** during operation shows the refrigerator status; which includes an alarm icon and temperature of the controlled space. Depending on the model, **defrost control** is handled by compressor stop or time/temperature based off of a real time clock.



The PSK Series is a perfect fit for refrigerated display cabinets and cold rooms wh

Easy to understand, color display icons quickly show system status and active temperature alarms

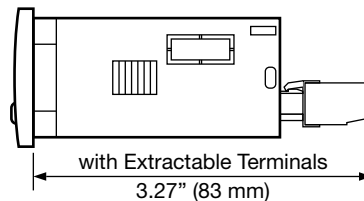
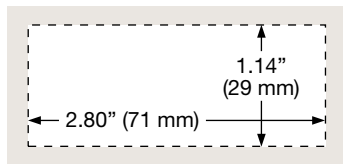
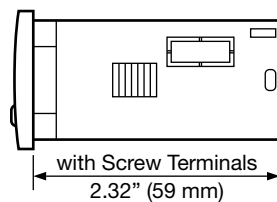
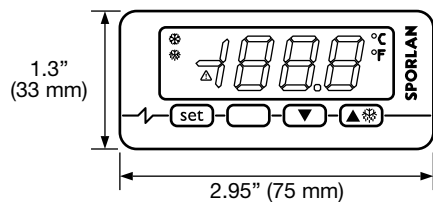
Easy to read, 3-1/2 digit display shows decimal value down to -99.9°C



IP65 Front Panel Protection

Built-in buzzer to alert new temperature alarms (available on most models)

Serial communications port for networking and easy setup with Programming Key (available on most models)



Small compact design offers multiple configuration options without using up excessive real estate.

### PSK 201 / 221 / 231

- Single Relay Output
- Ideal for medium temperature applications, controlling compressor and off-cycle defrost (time or temperature terminated)
- Available in 8A-30A output (1/3HP - 2HP)
- Available with 1-2 inputs
- Energy-Save mode available on 221 / 231

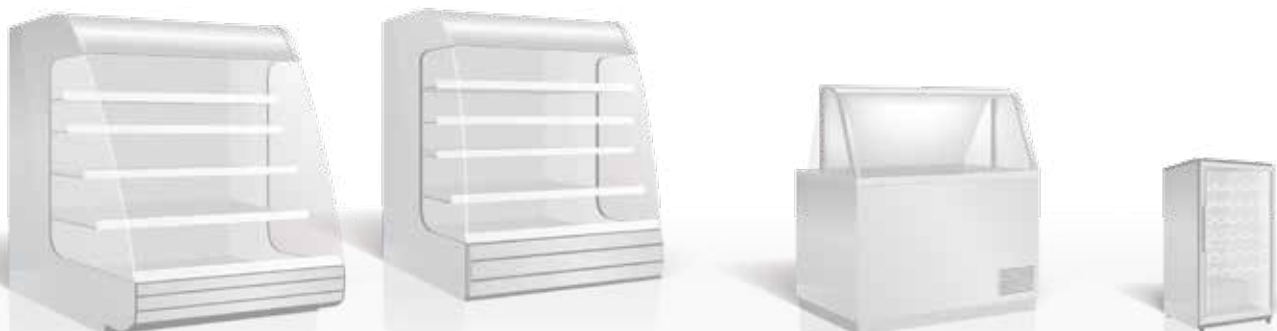
### PSK 203 / 223 / 233

- Three Relay Outputs
- Ideal for low temperature applications, controlling compressor, evaporator fan(s), and electric/hot gas defrost
- Available in 8A-30A output (1/3HP - 2HP)
- Available with 2-3 inputs
- Energy-Save mode available on 223 / 233

### PSK 204 / 214

- Four Relay Outputs
- Offers entire system management by controlling compressor, evaporator fan(s), electric/hot gas defrost, and auxiliary (light, anti-sweat heater, etc.)
- HACCP compliant data logging
- Available with 3-4 inputs
- Real Time Clock (RTC) for added control

All models are UL and CE approved.



Where temperature control, regulation, alarm or monitoring functions are essential.

## Product Features

### Temperature Probes

The PSK controllers are compatible with both NTC and PTC type temperature sensors. While the default is NTC, the PSK unit can be easily installed into an existing system using PTC sensors.

### Configurable Input

The multipurpose input on select PSK models can be configured for an additional temperature probe (e.g.: condenser over-heat sensor), a door switch (a second door switch on the 204 and 214 models), or as a digital input. The digital input can be used to synchronize defrosts, activate energy saving mode, activate an alarm, or to turn the controller off.

### Extractable Terminals

The plug-in terminal block is available on select PSK models and allows for quick, easy installation.

### Configurable Relay Output

The PSK204 and PSK214 models offer an additional relay output, which is configurable for any of the following:

- General purpose, auxiliary output
- Cabinet light
- 2nd compressor
- External alarm
- Defrost synchronization
- Anti-sweat heater
- Door frame heater
- Evaporator Valve

## Product Selection

	PSK Models							
	PSK201N5 PSK201N7	PSK221N5EXBS PSK221N7EXBS	PSK231N5EXBS PSK231N7EXBS	PSK203N5 PSK203N7	PSK223N5EXBS PSK223N7EXBS	PSK233N5EXBS PSK233N7EXBS	PSK204N9	PSK214N9EXBS
✓ standard								
<b>Inputs</b>								
NTC/PTC Temperature Sensor	1	1	1	2	2	2	2	2
Door Switch	-	-	-	-	1	1	1	1
Multipurpose <sup>1</sup>	-	1	1	-	-	-	1	1
<b>Relay Outputs</b>								
Compressor	16A	16A	30A	16A	8A	30A	16A	16A
Evaporator Fan	-	-	-	8A	5A	5A	8A	8A
Defrost Solenoid	-	-	-	8A	8A	8A	8A	8A
Multipurpose <sup>1</sup>	-	-	-	-	-	-	8A	8A
<b>Features</b>								
IP65 Rated Front Panel	✓	✓	✓	✓	✓	✓	✓	✓
Extractable Terminals	-	✓	✓	-	✓	✓	-	✓
TTL Serial Communication Port	-	✓	✓	-	✓	✓	-	✓
Built-In Alarm Buzzer	-	✓	✓	-	✓	✓	-	✓
Energy Saving Mode	-	✓	✓	-	✓	✓	✓	✓
HACCP Data Logging	-	-	-	-	-	-	✓	✓
Real Time Clock (RTC)	-	-	-	-	-	-	-	✓
<b>Power</b>								
115 VAC, 50/60 Hz	N5	N5	N5	N5	N5	N5	-	-
230 VAC, 50/60 Hz	N7	N7	N7	N7	N7	N7	-	-
115-230 VAC, 50/60 Hz	-	-	-	-	-	-	N9	N9

1. See "Product Features" for details.

## Accessories

Item	Part Number
NTC Temperature Probe with 5 ft. (1.5 m) cable	952899
NTC Temperature Probe with 10 ft. (3 m) cable	952898
PSK Programming Key	PSKey
PSKey Power Supply	PSPS01
TTL to RS485 Adaptor	PSIF20TSX

## Technical Specifications

**Connections:** Screw terminal block or extractable terminal block (power supply, inputs, outputs); 6-pin connector (serial communications port)

**Sensor Probes:** NTC or PTC (must be configured)

**Sensor Range:** -40 to 105°C (-40 to 220°F) for NTC;  
-50 to 150°C (-50 to 300°F) for PTC

**Operating Temperature:** 0 to 55°C (32 to 131°F)

