

# FCP Non-Programmable and Programmable Fan Coil or PTAC Thermostat Product Bulletin

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#### Description

The FCP Non-Programmable and FCP 7-Day Programmable Fan Coil Unit (FCU) or Packaged Terminal Air Conditioner Unit (PTAC) Thermostats provide simple-to-use control of 2-pipe or 4-pipe FCU or PTAC. These thermostats provide on/off control, up to three speeds of fan control, and dry contact unoccupied or occupied control. Use the thermostats as stand-alone devices in commercial buildings, such as schools, offices, and hotels, and to provide access to parameters such as system mode, fan mode, and temperature setpoints.

The FCP Thermostats feature a quick setup menu, are prewired for fast installation, and are Johnson Controls® 10K ohm negative temperature coefficient (NTC) Type II and Type III remote sensor ready (order separately). You can equip the FCP Thermostats with a remote temperature sensor, remote pipe sensor, and a remote wired occupancy sensor to enable flexible options. Flexible options include 2-pipe FCU heat/cool switchover or pipe sensor for automatic switching. The large display with adjustable backlight makes it easy to optimize user preferences. In addition, both FCP Thermostat models include minimum and maximum temperature protection, key pad lockout, occupied and unoccupied modes.

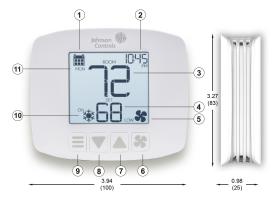
The FCP Programmable Fan Coil or PTAC Thermostat without Fan (FCP-PA-701-NF) is a new FCP model designed for 2-pipe or 4-pipe FCU with independent fan control, or radiant type under floor heat-only applications that do not require a fan control output from the thermostat.

Figure 1: FCP Thermostat



#### **Product overview**

Figure 2: FCP Thermostat with dimensions, in. (mm)



**Table 1: FCP Thermostat UI callouts** 

Feature	Description
1	Schedule, available only on FCP- PA- 701
2	Time, available only on FCP-PA-701
3	Room temperature
4	Temperature setpoint
5	Fan speed
6	Fan
7	Up
8	Down
9	Mode
10	Cool or heat indication
11	Day, available only on FCP-PA-701

Figure 3: FCP Thermostat no fan model (FCP-PA-701-NF) with dimensions, in. (mm)

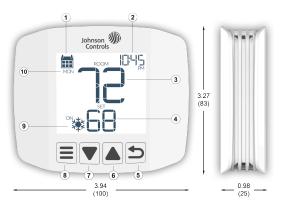


Table 2: FCP Thermostat no fan model UI callouts

Feature	Description	
1	Schedule	
2	Time	
3	Room temperature	
4	Temperature setpoint	
5	Back	
6	Up	
7	Down	
8	Mode	
9	Cool or heat status	
10	Day	

#### Features and benefits

- Compatible with 2-pipe and 4-pipe FCU with up to a 3-speed fan (except FCP-PA-701-NF), conventional PTAC, and heat pump PTAC with or without auxiliary heat
- Pre-installed lead wires for fast installation (except FCP-PA-701-NF)
- Pre-set installer and user configurations. Configure your thermostat easily with 20 pre-set installations
- Configurable normally open (N.O.)/normally closed (N.C.) contact to set the occupied or unoccupied mode
- Onboard and remote temperature sensor available
- White LED backlight with adjustable brightness for easy operation in the dark
- FCP-PA-701 features up to six programmable periods per day
- FCP-PA-701 features battery backup. RTC backup with a minimum backup time of 48 hours
- Temperature in °F or °C

# **Applications**

The FCP Thermostat is compatible with most 24 VAC FCU or PTAC applications.

The following table shows the compatible configurations of the equipment:

**Table 3: Applications** 

Application	Model
2-pipe with up to a 3-speed fan	FCP-PA-701/FCP-NA-701

**Table 3: Applications** 

Application	Model
4-pipe with up to a 3-speed fan	FCP-PA-701/FCP-NA-701
Conventional PTAC	FCP-PA-701/FCP-NA-701
Heat pump PTAC with or without auxiliary heat	FCP-PA-701/FCP-NA-701
2-pipe without fan	FCP-PA-701-NF
4-pipe without fan	FCP-PA-701-NF
Radiant floor heating	FCP-PA-701-NF

#### Ordering information

Table 4: FCP digital room thermostat for fan coil or PTAC selection chart

Product code number	programmable/	Backup battery for RTC	Johnson Controls logo	Color
FCP-NA-701-N	Non- programmable	No	No	White
FCP-NA-701-B	Non- programmable	No	Yes	White
FCP-PA-701-N	7-day programmable	Yes	No	White
FCP-PA-701-B	7-day programmable	Yes	Yes	White
FCP-PA-701-NF	7-day programmable	Yes	Yes	White

The FCP Thermostat ships from the factory with a quick start guide, four mounting screws, one lock screw, seven pre-installed terminal wires, and one wire label. The FCP-PA-701 also includes one coin cell battery.

Note: The FCP-PA-701-NF FCP guide, *Programmable Fan Coil or PTAC Thermostat without Fan Quick Start Guide (12013797)*, does not ship with the product but is available on Knowledge Exchange.

# Technical specifications

Table 5: FCP non-programmable and programmable FCU or PTAC Thermostats technical specifications

Specification		Description
Models		Non-programmable: FCP-NA-701-N, FCP-NA-701-B
		Programmable: FCP-PA-701-N, FCP-PA-701-B, FCP-PA-701-NF
Power requirements		20 VAC to 30 VAC, 60 Hz, max. 3 A (3 VA at 24 V nominal)
Output rating	Valve and fan outputs	1 A maximum per each relay channel
		(Max. relays ON combination: 3 relays), 20 VAC to 30 VAC

Table 5: FCP non-programmable and programmable FCU or PTAC Thermostats technical specifications

Specification		Description
Analog inputs	Remote sensor	10K ohm at 77°F (25°C) NTC sensor
	Pipe sensor	10K ohm at 77°F (25°C) NTC sensor
	Set back	NC/NO dry contact switch
Local temperature sensor ty	ре	NTC temperature sensor, accurate to ±1°F (±0.6°C) at 77°F (25°C)
Remote temperature sensor	type	NTC temperature sensor, accurate to ±2°F (±1.2°C) at 70°F (21°C)
Wire size		18 AWG (100 ft [30.5 m] maximum) to 24 AWG (36 ft [11 m] maximum)
Temperature adjustment	Heat mode	45°F to 90°F (7°C to 32°C)
range	Cool mode	60°F to 95°F (15°C to 35°C)
Accuracy	Local temperature sensor	±1°F (±0.6°C)
	Remote temperature sensor	±2°F (±1.2°C) at 70°F (21°C)
	Remote pipe sensor	±5°F (±3.0°C)
Deadband	<u>'</u>	2°F to 5°F (1°C to 3°C)
Ambient conditions	Operating	14°F to 122°F (-10°C to 50°C); 5% RH to 90% RH, noncondensing
	Storage	-4°F to 140°F (-20°C to 60°C); 5% RH to 90% RH, noncondensing
Disconnection means		Type 1B
Pollution degree		2
Rated impulse voltage		330 V
Automatic Action		100,000 cycles
Ratings for supply and loadi	ng	20 VAC to 30 VAC
Dimensions H x W x D		3.27 in. x 3.94 in. x 0.98 in. (83 mm x 100 mm x 25 mm)
Shipping weight		Product with packing and accessories: 10.1 oz (285 g)
		Thermostat only: 4.9 oz (138 g)
		Trim plate: 1.2 oz (33 g)
Compliance		ETL/cETL Listed, Mexico NOM
		CONFORMS TO UL STD. 60730-1 & 60730-2-9
		CERTIFIED TO CSA STD. E60730-1 & E60730-2-9
	LISTED	CERTIFIED TO Mexico NOM-001-SCFI-2018 and NOM-024-SCFI-2013
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The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.

# Repair information

If the FCP Thermostat fails to operate within its specifications, replace the unit. For a replacement thermostat, contact the nearest Johnson Controls representative.

# **Product warranty**

This product is covered by a limited warranty, details of which can be found at <a href="https://www.johnsoncontrols.com/buildingswarranty">www.johnsoncontrols.com/buildingswarranty</a>.

#### **Patents**

Patents: <a href="https://jcipat.com">https://jcipat.com</a>

#### Contact information

Contact your local branch office: www.johnsoncontrols.com/locations

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