

# Expansion Panels - Heating, Ventilating, and Air Conditioning (HVAC) Catalog Page

## Description

Expansion panels provide a platform for field built custom or standard panel solutions. Field assembly time is compressed by providing a pre-assembled panel containing a power supply, wire management hardware, DIN rails, a perforated sub-panel, and a 24 VAC distribution terminal block. Digital controllers and other required components are obtained and installed separately.

The components included with the expansion panel include a steel enclosure with perforated sub-panel, a pre-mounted DIN rail, power supply with convenience outlets (additional transformer with some models), wire ducts, and a 24 VAC distribution terminal block.

## Features

- flexibility to customize the expansion panel assembly to a wide variety of solutions using basic panel components
- additional items, such as digital controllers, input/output modules, relays, and contactors, which are sourced locally and field mounted
- five available sizes, all in a consistent layout
- distribution terminal block, which provides additional points for 24-volt supply
- available in NEMA/UL Type 1, NEMA/UL Type 3R, and NEMA/UL Type 4/4x/12

## Repair Information

If the expansion panel fails to operate within its specifications, replace the unit. For a replacement expansion panel, contact the nearest Johnson Controls® representative.



**Clockwise from top: Expansion Panels Type 1, Type 4/4x/12, and Type 3R**

## Selection Charts

### NEMA/UL Type 1 Expansion Panels

Product Code Number	Description	Weight
PA0000004GC0	Expansion panel, 12 x 16 x 6.5 in. panel, 40 VA power supply, and a 5 point 24 VAC distribution terminal block	22 lb
PA0000001FH0	Expansion panel, 16 x 20 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	25 lb
PA0000001AH0	Expansion panel, 20 x 24 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	35 lb
PA0000002AH0	Expansion panel, 20 x 24 x 6.5 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block, and additional 96 VA transformer	40 lb
PA0000001EH0	Expansion panel, 24 x 24 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	49 lb
PA0000002EH0	Expansion panel, 24 x 24 x 6.5 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	54 lb
PA0000001BH0	Expansion panel, 24 x 36 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	83 lb
PA0000002BH0	Expansion panel, 24 x 36 x 6.5 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	88 lb

### NEMA/UL Type 3R Expansion Panels

Product Code Number	Description	Weight
PA0000001FA0	Expansion panel, 16 x 20 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	25 lb
PA0000001AA0	Expansion panel, 20 x 24 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	35 lb
PA0000001EA0	Expansion panel, 24 x 24 x 8 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	49 lb
PA0000002AA0	Expansion panel, 20 x 24 x 8 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	34 lb
PA0000002EA0	Expansion panel, 24 x 24 x 8 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	53 lb

### NEMA/UL Type 4/4x/12 Expansion Panels

Product Code Number	Description	Weight
PA0000001FB0	Expansion panel, 16 x 20 x 6.5 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	24 lb
PA0000001AB0	Expansion panel, 20 x 24 x 8 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	32 lb
PA0000001EB0	Expansion panel, 24 x 24 x 8 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	38 lb
PA0000001BB0	Expansion panel, 24 x 36 x 8 in. panel, 96 VA power supply, and a 5 point 24 VAC distribution terminal block	49 lb
PA0000002AB0	Expansion panel, 20 x 24 x 8 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	37 lb
PA0000002EB0	Expansion panel, 24 x 24 x 8 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	43 lb
PA0000002BB0	Expansion panel, 24 x 36 x 8 in. panel, 96 VA power supply, 10 point 24 VAC distribution terminal block and additional 96 VA transformer	54 lb

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### Technical Specifications

Expansion Panels	
<b>Wire Size</b>	Ground wire: 14 AWG; Controller wires: 16 AWG
<b>Ambient Operating Condition</b>	32 to 122°F (0 to 50°C) 10 to 90% RH
<b>Ambient Storage Condition</b>	-40 to 176°F (-40 to 80°C) 5 to 95% RH
<b>Agency Compliance</b>	Expansion Panel: UL508A Listed (cULus) Enclosure: UL50 Listed, CSA Approved
<b>Material Type</b>	NEMA/UL Type 1: Steel NEMA/UL Type 3R: Steel NEMA/UL Type 4/4x/12: Aluminum
<b>Enclosure Finish</b>	NEMA/UL Type 1: Grey powder coat paint NEMA/UL Type 3R: Grey powder coat paint NEMA/UL Type 4/4x/12: Brushed
<b>Door Type</b>	NEMA/UL Type 1: Lift off NEMA/UL Type 3R: Lift off NEMA/UL Type 4/4x/12: Stainless steel hinge
<b>Latch Type</b>	NEMA/UL Type 1: Keyed lock NEMA/UL Type 3R: Draw pull latches NEMA/UL Type 4/4x/12: Stainless steel door clamps and a hasp and staple for padlocking
<b>Miscellaneous</b>	NEMA/UL Type 4/4x/12: Oil resistant gasket and a door mounted data pocket