

# Where energy efficiency and easy installation come together

The Johnson Controls Series 10 single packaged unit combines superior efficiency ratings (up to a 12.4 energy efficiency ratio or EER) and ease of installation in a light commercial unit. You save time and money on installation, while reducing energy usage over the long run. In fact, it's designed to deliver the highest energy cost savings of any equipment of its kind.

The common footprint makes it easy to install on a curb, slab, or structural steel. A rigid, full perimeter base rail allows 3-way forklift access and overhead rigging which simplifies the installation process. Plus, each unit comes completely wired, piped, charged and tested from the factory.

# Field flexibility

This convertible air–flow feature helps reduce cutting sheet metal in the field. All indoor fan motors are belt driven and will handle your airflow requirements. Also, gas and electric knockouts are at the bottom and side of the unit for easy access.

The Series 10 is designed for ease of service as well. Quick access areas make inspection of components easier, including the control compartment, compressors, filters, and heating section. The motor and blower slide out as a single assembly for hassle-free serviceability.



## What's your application?

The Series 10 has more standard and optional features to meet your needs for flexible, efficient, and reliable cooling.

#### Choose from models that offer:

- cooling only
- cooling with electric heat
- · cooling with gas heat

In order to help you better maintain desired temperatures in the gas heating model, the first stage provides 60% of the heating; the second stage 40%.

Select from factory-installed options such as stainless steel heat exchanger, electric heating elements, supply and return air smoke detectors, disconnect switch, powered or non-powered GFI convenience outlet, single enthalpy economizer, power exhaust, high static drive blower motor, phase monitor, coil guard, and dirty filter switch.

Cooling capacity: 3 - 12 ½ tons

Rated up to 12.4 EER/80% SSE

Meets or exceeds ASHRAE 90.1 Energy Standards

Factory-packaged controls for easy set-up and programming

Foil-faced insulation for improved IAQ

Two compressors and independent refrigeration circuits ensure reliability\*

Corrosion-resistant heat exchangers

Energy recovery ventilators (ERV) for optimized energy use and comfort

Variable frequency drives (VFD) for superior efficiency and precise control; available on two stage units only

<sup>\*</sup>Two-stage cooling available on 6½-12½ ton models



A MAP Gateway allows you to monitor and adjust system settings from a mobile device.

### Faster, smarter start-up

The new integrated Smart Equipment Controls (SEC) from Johnson Controls will save you time and money during installation. This sophisticated, pre-packaged controls platform will also help deliver greater energy savings and reliability throughout the lifecycle of your rooftop unit.

To simplify start-up and configuration in the field, the SEC platform is installed at the factory and "arrives alive." An automatic Self Test Mode with a simple, local LED display allows you to configure, test, and view control information at installation. Plus, a Mobile Access Portal (MAP) Gateway lets you do all the commissioning, configuring and maintenance logs using a mobile device. Advanced, high-efficiency control has never been so convenient or easy.

#### With the SEC, you can take advantage of:

- Equipment protection, advanced direct digital and simple thermostat control
- A convenient USB interface that serves multiple purposes-history and trend data can be logged, and upgrades to the local or a remote controller can be installed
- Fault detection and diagnostics (FDD) with predictive failures assist with lifecycle management of the equipment, service awareness, and energy costs



The innovative SEC makes installation, start-up, and troubleshooting easier than ever.

You get total control with the following features that come either standard or factory/field installed. Talk with your Johnson Controls representative for details on which options are right for you.

**Anti-short cycle delay:** Prevents energy wasting due to frequent stop/start cycles with a 5-minute delay

Gas monitor: Ensures safe heat operation

**365-day real time clock:** Automatic daylight savings time adjustment keeps your unit running on schedule year round

Occupancy schedule: Allows for two different occupied schedules per day, seven days a week

**20 holiday schedules:** Covers up to 99 days per schedule, each with flexible start times

Low and high ambient lockout: Prevents cooling below or heating above a programmable setpoint of outside air temperature

**Multiple zones:** Adjusts for constant- or variable-air volume per zone

**Energy-saving economizer operation:** Allows you to select setpoints for outside and/or supply air temperature, and small and/or large space cooling demand using either a dry bulb, outside enthalpy, or differential enthalpy

**Demand-based ventilation control:** Improves the quality of the air inside your facility with controls that detect CO<sub>2</sub>

**Dirty filter switch:** Activates the fault light on the unit thermostat, indicating the filter needs attention

**Temperature and humidity algorithm:** Programmable limits control humidity by allowing the unit to offset the operating setpoint based on high humidity in the space (feature available only on models with "hot gas reheat.")

**Comfort ventilation control:** Tempers the ventilation air when heating or cooling is not required – saving energy

**Space temperature alarm:** Sounds an alarm if the temperature exceeds the programmable limits

**Intelligent recovery:** "Learns" how much runtime is required to bring the temperature to the desired setpoint before occupants arrive

SERIES 10 GAS/ELECTRIC ULTRA HIGH-EFFICIENCY SINGLE PACKAGED UNITS (J**ZJ)							
Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Heating MBH Output	% SSE	LBS	
JA3ZJN05	36	12.2	(15)	49	80	740	
JA3ZJN07	36	12.2	(15)	65	80	740	
JA3ZJN09	36	12.2	(15)	97	80	740	
JA4ZJN05	48	12.2	(15)	49	80	762	
JA4ZJN07	48	12.2	(15)	65	80	762	
JA4ZJN09	48	12.2	(15)	97	80	762	
JA5ZJN07	60	12.2	(15)	65	80	770	
JA5ZJN09	60	12.2	(15)	97	80	770	
JA5ZJN13	60	12.2	(15)	129	80	770	
J06ZJN10	78	12.2	14.9	96	80	1030	
JO6ZJN15	78	12.2	14.9	144	80	1030	
J07ZJN10	90	12.2	14.44	96	80	1081	
JO7ZJN15	90	12.2	14.44	144	80	1081	
J08ZJN10	102	12.2	13.2	96	80	1060	
J08ZJN15	102	12.2	13.2	144	80	1060	
J10ZJN15	120	12.2	12.9	144	80	1070	
J10ZJN20	120	12.2	12.9	192	80	1070	
J12ZJN15	150	12.2	12.9	144	80	1280	
J12ZJN20	150	12.2	12.9	192	80	1280	

SERIES 10 COOLING ONLY & ELECTRIC/ELECTRIC ULTRA HIGH-EFFICIENCY SINGLE PACKAGED UNITS (J**ZJ)								
Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Electric Heat	LBS			
JA3ZJC/E	36	12.2	(15)	3, 6, 9, 15	740			
JA4ZJC/E	48	12.2	(15)	6, 9, 15, 20	762			
JA5ZJC/E	60	12.2	(15)	6, 9, 15, 20, 24	770			
J06ZJC/E	78	12.2	14.9	9, 18, 24, 36	1030			
J07ZJC/E	90	12.2	14.44	9, 18, 24, 36	1081			
J08ZJC/E	102	12.2	13.2	9, 18, 24, 36	1060			
J10ZJC/E	120	12.2	12.9	18, 24, 36, 54	1070			
J12ZJC/E	150	12.2	12.9	18, 24, 36, 54	1280			

JC models are cooling only with optional field installed electric heat. Model JE includes factory installed electric heat

SERIES 10 COOLING ONLY & ELECTRIC/ELECTRIC MID-EFFICIENCY SINGLE PACKAGED UNITS (J**ZF)							
Model Number	Net ARI Cooling MBH	EER	IEER	Electric Heat	LBS		
J06ZFC/E	78	11.2	13	9, 18, 24, 36	860		
J07ZFC/E	88	11.2	12.1	9, 18, 24, 36	880		
J08ZFC/E	101	11.2	12.5	9, 18, 24, 36	1020		
J10ZFC/E	120	11.2	12.5	18, 24, 36, 54	1060		
J12ZFC/E	150	11.2	12.7	18, 24, 36, 54	1253		

HC Models are cooling only with optional field installed electric heat. Model HE includes factory installed electric heat

#### SERIES 10 GAS/ELECTRIC HIGH EFFICIENCY SINGLE PACKAGE UNITS W/HOT GAS REHEAT(J\*\*ZR)

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Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Heating MBH Output	% SSE	LBS
JA3ZRA/B05	35.5	12.2	(15)	49	81.5	957
JA3ZRA/B07	35.5	12.2	(15)	65	81	957
JA3ZRA/B09	35.5	12.2	(15)	97	81	957
JA3ZRN/S05	35.5	12.2	(15)	49	81.5	957
JA3ZRN/S07	35.5	12.2	(15)	65	81	957
JA3ZRN/S09	35.5	12.2	(15)	97	81	957
JA4ZRA/B05	47.5	12.2	(15)	49	81.5	970
JA4ZRA/B07	47.5	12.2	(15)	65	81	970
JA4ZRA/B09	47.5	12.2	(15)	97	81	970
JA4ZRN/S05	47.5	12.2	(15)	49	81.5	970
JA4ZRN/S07	47.5	12.2	(15)	65	81	970
JA4ZRN/S09	47.5	12.2	(15)	97	81	970
JA5ZRA/B07	60	12.2	(14.7)	65	81	970
JA5ZRA/B09	60	12.2	(14.7)	97	81	970
JA5ZRA/B13	60	12.2	(14.7)	129	80.5	970
JA5ZRN/S07	60	12.2	(14.7)	65	81	970
JA5ZRN/S09	60	12.2	(14.7)	97	81	970
JA5ZRN/S13	60	12.2	(14.7)	129	80.5	970

A=1 stage heat  $\cdot$  N=2 stage heat  $\cdot$  B= 1 stage heat with stainless steel heat exchanger S= 2 stage with stainless steel heat exchanger

JO6ZRN/S15         78         11.2         13         144         80         860           JO7ZRN/S10         88         11.2         11.5         96         80         880           JO7ZRN/S15         88         11.2         11.5         144         80         880           J08ZRN/S10         101         11.2         12.3         96         80         1020           J08ZRN/S15         101         11.2         12.3         144         80         1020           J10ZRN/S15         120         11.2         11.5         144         80         1060           J10ZRN/S20         120         11.2         11.5         192         80         1060	J06ZRN/S10	78	11.2	13	96	80	860
JO7ZRN/S15         88         11.2         11.5         144         80         880           J08ZRN/S10         101         11.2         12.3         96         80         1020           J08ZRN/S15         101         11.2         12.3         144         80         1020           J10ZRN/S15         120         11.2         11.5         144         80         1060           J10ZRN/S20         120         11.2         11.5         192         80         1060	J06ZRN/S15	78	11.2	13	144	80	860
J08ZRN/S10         101         11.2         12.3         96         80         1020           J08ZRN/S15         101         11.2         12.3         144         80         1020           J10ZRN/S15         120         11.2         11.5         144         80         1060           J10ZRN/S20         120         11.2         11.5         192         80         1060	J07ZRN/S10	88	11.2	11.5	96	80	880
J08ZRN/S15         101         11.2         12.3         144         80         1020           J10ZRN/S15         120         11.2         11.5         144         80         1060           J10ZRN/S20         120         11.2         11.5         192         80         1060	J07ZRN/S15	88	11.2	11.5	144	80	880
J10ZRN/S15         120         11.2         11.5         144         80         1060           J10ZRN/S20         120         11.2         11.5         192         80         1060	J08ZRN/S10	101	11.2	12.3	96	80	1020
J10ZRN/S20 120 11.2 11.5 192 80 1060	J08ZRN/S15	101	11.2	12.3	144	80	1020
	J10ZRN/S15	120	11.2	11.5	144	80	1060
MOZDINGE ASS ASS ASS ASS	J10ZRN/S20	120	11.2	11.5	192	80	1060
J12ZRN/S15 150 11.2 11.1 144 80 1253	J12ZRN/S15	150	11.2	11.1	144	80	1253
J12ZRN/S20         150         11.2         11.1         192         80         1253	J12ZRN/S20	150	11.2	11.1	192	80	1253

N=2 stage heat  $\cdot$  S=stainless steel heat exchanger 2 stage

# SERIES 10 COOLING ONLY & ELECTRIC/ELECTRIC HIGH-EFFICIENCY SINGLE PACKAGED UNITS (J\*\*ZH)

Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Electric Heat	LBS
JA3ZHC/E	36	11.8	(14)	3, 6, 9, 15	723
JA4ZHC/E	48	11.8	(14)	6, 9, 15, 20	763
JA5ZHC/E	60	11.8	(14)	6, 9, 15, 20, 24	772
J06ZHC/E	78	11.7	13.6	9, 18, 24, 36	910
J07ZHC/E	90	11.7	13.1	9, 18, 24, 36	910
J08ZHC/E	102	11.7	13	9, 18, 24, 36	1060
J10ZHC/E	120	11.7	12.6	18, 24, 36, 54	1090
J12ZHC/E	150	11.7	14.1	18, 24, 36, 54	1215

HC models are cooling only with optional field installed electric heat. Model HE includes factory installed electric heat

SERIES 10 GAS/ELECTRIC HIGH-EFFICIENCY SINGLE PACKAGED UNITS (J**ZH)								
Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Heating MBH Output	% SSE	LBS		
JA3ZHA05	36	11.8	(14)	49	80	740		
JA3ZHA07	36	11.8	(14)	65	80	740		
JA3ZHA09	36	11.8	(14)	97	80	740		
JA4ZHA05	48	11.8	(14)	49	80	762		
JA4ZHA07	48	11.8	(14)	65	80	762		
JA4ZHA09	48	11.8	(14)	97	80	762		
JA5ZHA07	60	11.8	(14)	65	80	770		
JA5ZHA09	60	11.8	(14)	97	80	770		
JA5ZHA13	60	11.8	(14)	129	80	770		
J06ZHN10	78	11.7	13.6	96	80	1030		
J06ZHN15	78	11.7	13.6	144	80	1030		
J07ZHN10	90	11.7	13.1	96	80	1081		
J07ZHN15	90	11.7	13.1	144	80	1081		
J08ZHN10	102	11.7	13	96	80	1060		
J08ZHN15	102	11.7	13	144	80	1060		
J10ZHN15	120	11.7	12.6	144	80	1070		
J10ZHN20	120	11.7	12.6	192	80	1070		
J15ZHN15	150	11.7	14.1	144	80	1280		
J15ZHN20	150	11.7	14.1	192	80	1280		

SINGLE PACKAGE UNITS W/HOT GAS REHEAT (J**ZR)								
Model Number	Net ARI Cooling MBH	EER	IEER (SEER)	Electric Heat	LBS			
JA3ZRC00	36	12.2	(15)	3, 6, 9, 15	740			
JA4ZRC00	48	12.2	(15)	6, 9, 15, 20	762			
JA5ZRC00	60	12.2	(15)	6, 9, 15, 20, 24	770			

SERIES 10 COOLING ONLY & ELECTRIC/ELECTRIC HIGH EFFICIENCY

J06ZRC00 78 12.2 13 9, 18, 24, 36 1030 J07ZRC00 88 11.2 12.1 9, 18, 24, 36 1081 J08ZRC00 102 11.2 12.5 9, 18, 24, 36 1060 J10ZRC00 120 11.2 12.5 18, 24, 36, 54 1070 J12ZRC00 11.2 150 12.7 18, 24, 36, 54 1280

RC models are cooling only with optional field installed electric heat. Model RE includes factory installed electric heat

SERIES 10 HIGH EFFICIENCY SINGLE PACKAGED UNIT HEAT PUMPS (XP)								
Model Number	Net ARI Cooling MBH	EER	IPLV	Heating MBH Output	СОР	Electric Heat	LBS	
J06XPC/E	78	11	12.4	78	3.5	9, 18, 24, 36	920	
J07XPC/E	90	11	12.4	90	3.3	9, 18, 24, 36	920	
J08XPC/E	100	11	12.4	94	3.5	9, 18, 24, 36	1135	
J10XPC/E	118	11	12.4	110	3.5	9, 18, 24, 36, 54	1135	
J12XPC/E	150	11	11.9	144	3.2	9, 18, 24, 36, 54	1400	

PC models are cooling only with optional field installed electric heat. Model PE includes factory installed electric heat

Heating output is heat pump net capacity at 47 F.

SERIES 10 GAS/ELECTRIC MID-EFFICIENCY SINGLE PACKAGED UNITS (J**ZF)							
Model Number	Net ARI Cooling MBH	EER	IEER	Heating MBH Output	% SSE	LBS	
J06ZFN10	78	11.2	13	96	80	860	
J06ZFN15	78	11.2	13	144	80	860	
J07ZFN10	88	11.2	12.1	96	80	880	
J07ZFN15	88	11.2	12.1	144	80	880	
J08ZFN10	101	11.2	12.5	96	80	1020	
J08ZFN15	101	11.2	12.5	144	80	1020	
J10ZFN15	120	11.2	12.5	144	80	1060	

HIGHEST EFFICIENCY IN THE INDUSTRY PREDATOR® 3-5 TON ULTRA HIGH EFFICIENCY GAS/ELECTRIC PACKAGED UNIT							
COOLING MBH	SEER	EER	LBS				
39	18.1	14.15	922				
54	18.0	14.35	960				
	° 3-5 TON UL' COOLING MBH 39	COOLING MBH SEER  39 18.1	COOLING MBH SEER EER  39 18.1 14.15				

13.85

12.5

127

12.7

192

144

192

80

80

80

968

1060

1253

1253

Meets ENERGY STAR® efficiencies

J10ZFN20

J12ZFN15

J12ZFN20

JA5ZTC00

120

150

150

11.2

11.2

11.2

17.5

Meets ENERGT 3	TAR efficient	lies			
Model Number	COOLING MBH	SEER	EER	ELECTRIC HEAT (kW)	LBS
JA3ZTE03	39	18.1	14.15	3	971
JA3ZTE06	39	18.1	14.15	6	971
JA3ZTE08	39	18.1	14.15	9	971
JA3ZTE15	39	18.1	14.15	15	971
JA4ZTE06	54	18.0	14.35	6	1009
JA4ZTE08	54	18.0	14.35	9	1009
JA4ZTE15	54	18.0	14.35	15	1009
JA4ZTE20	54	18.0	14.35	20	1009
JA5ZTE06	66	17.5	13.85	6	1017
JA5ZTE08	66	17.5	13.85	9	1017
JA5ZTE15	66	17.5	13.85	15	1017
JA5ZTE20	66	17.5	13.85	20	1017
JA5ZTE23	66	17.5	13.85	24	1017

ASHRAE 90.1-2010 Compliant ASHRAE 189.1 Compliant

Single zone VAV requirement – LEED Credit 1

Model Number	COOLING MBH	SEER	EER	"HEATING MBH INPUT"	% SSE	LBS
JA3ZTN/A05	39	18.1	14.15	60	81.5	1032
JA3ZTN/A07	39	18.1	14.15	80	81.0	1032
JA3ZTN/A09	39	18.1	14.15	120	81	1032
JA4ZTN/A05	54	18.0	14.35	60	81.5	1070
JA4ZTN/A07	54	18.0	14.35	80	81.0	1070
JA4ZTN/A09	54	18.0	14.35	120	81.0	1070
JA5ZTN/A07	66	17.5	13.85	80	81.0	1078
JA5ZTN/A09	66	17.5	13.85	120	81.0	1078
JA5ZTN/A13	66	17.5	13.85	160	80.5	1078

Note: Gas/electric models with an "A" designator are single stage heating. Gas/electric models with an "N" designator are two stage heating.



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