Digital Scroll and Inverter Commercial Condensing Units

ACCURATE TEMPERATURE CONTROL
FOR ENERGY SAVINGS

J&E Hall
International

Benefits

- Energy efficient
- Accurate cooling demand match
- Low noise
- Reliable
- Multi refrigerant options
- Packaged
- Easy to install and maintain
- Robust
- Quality components
- 3 year warranty

Digital Scroll and Inverter Commercial Condensing Units

TYPICALLY 20-30% ENERGY SAVINGS

Whether your preference is digital or inverter technology, we have a complete range to suit your needs

To further increase efficiencies offered by our standard range, we also provide a comprehensive range of DIGITAL scroll and INVERTER condensing units.

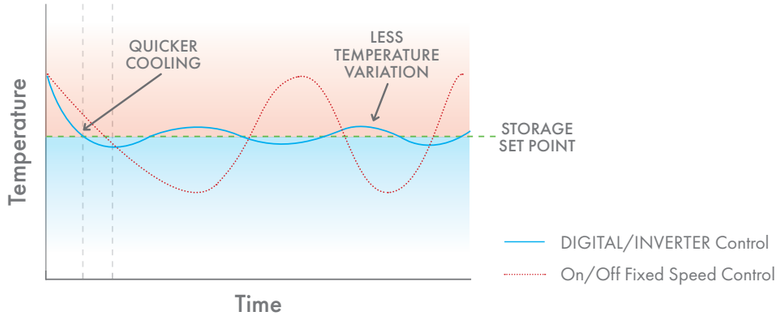
DIGITAL/INVERTER units benefit from the same continuous load matching and both typically giving 20-30% energy savings.

DIGITAL Scroll units use compressor capacity modulation and INVERTER units use variable compressor speed to achieve both high energy efficiencies and constant close control of storage temperatures.

Temperature Control Comparison

Standard Technology vs DIGITAL/INVERTER Technology

DIGITAL/INVERTER units benefit from continuous load matching which means they use significantly less energy, typically giving 20-30% energy savings.



Single and Twin Digital Scroll Range

A comprehensive range of single and twin digital scroll commercial condensing units with capacities up to 46kW

Digital scroll compressor capacity control matches varying display case loads and provides an energy efficient solution for commercial refrigeration applications.

Single digital scroll units are an ideal solution for convenience stores, small supermarkets and petrol forecourts.

Twin digital scroll condensing units are suitable for larger convenience stores and supermarkets, and are a packaged alternative to multi-compressor racks.

TYPICALLY 20-30% ENERGY SAVINGS

Features

- Copeland digital compressor
- Variable capacity control giving accurate stable storage conditions for longer product life
- Fully packaged unit including receiver, oil separator, fan speed controller, liquid line sight glass and drier, mains isolator
- External service valves for ease of installation
- OM3 oil management system and phase protection module (twin compressor models)
- Advanced programmable control with LCD display
- Volt free relay for remote alarm
- Manual bypass circuit to electronic controller for continuous operation
- BACnet and Modbus protocol feature (additional serial card required)
- Operates with R407A/R407F/R448A or R449A

Single and Twin Digital Scroll Range

Part Number	Unit Model	Refrigerant	SEPR	Cooling Capacity (Watts) @ Te							20°C RGT Cooling Capacity (Watts)*	SPL @ 10m dB(A)	Unit Connections		Dry Weight (Kgs)	Dimensions (mm) (W x D x H)
				-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C			Liquid	Suction		
N04120120	JEHSD-0400-B3-M-3	R407A	3.26	4210	5270	6440	7790	9380	11250	-	6620	39	1/2	7/8	128	1353 x 575 x 872
		R407F	3.23	-	5660	6910	8350	10050	12150	-	7030					
		R448A	3.15	4320	5280	6380	7610	9010	10600	12450	6590					
		R449A	3.15	4320	5280	6380	7610	9010	10600	12450	6590					
N04120121	JEHSD-0600-B3-M-3	R407A	3.24	6030	7470	9150	11050	13200	15550	-	9450	40	1/2	7/8	134	1353 x 575 x 872
		R407F	3.08	6410	7990	9730	11650	13700	15950	-	9950					
		R448A	2.93	6220	7700	9320	11050	13000	15100	17450	9640					
		R449A	2.93	6220	7700	9320	11050	13000	15100	17450	9640					
N04120122	JEHSD-0800-B4-M-3	R407A	2.75	8120	10000	12200	14750	17650	20900	-	12650	44	3/4	1 1/8	213	1348 x 612 x 1727
		R407F	2.84	8300	10250	12450	15000	17850	21000	-	12750					
		R448A	2.75	8370	10200	12300	14650	17300	20400	23900	12700					
		R449A	2.75	8370	10200	12300	14650	17300	20400	23900	12700					

Rating Condition: Suction Gas Superheat 10K / Subcooling 0K / 32°C Ambient
Capacity data presented in accordance with BS EN 13215:2016

Sound Pressure Level (SPL) measured in an anechoic room (-10/+32°C) MT conditions. Alternative conditions may produce different results *Alternative cooling capacity condition: -10°Cte/+32°Cta MT with 0K SC

Part Number	Unit Model	Refrigerant	SEPR	Cooling Capacity (Watts) @ Te							20°C RGT Cooling Capacity (Watts)*	SPL @ 10m dB(A)	Unit Connections		Dry Weight (Kgs)	Dimensions (mm) (W x D x H)
				-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C			Liquid	Suction		
N04120128	JEHSDT-1200-B5-M-3	R407A	2.70	-	14300	**17480**	21200	25400	30200	-	-	42	3/4	1 3/8	315	1387 x 851 x 1697
		R407F	2.79	-	15760	**19440**	23500	27900	32800	-	19860					
		R448A	2.71	-	15480	**18800**	22600	26900	31900	37800	19440					
		R449A	2.71	-	15480	**18800**	22600	26900	31900	37800	19440					
N04120134	JEHSDT-1600-B6-M-3	R407A	2.66	-	19480	**23800**	28300	33600	-	-	-	44	3/4	1 3/8	380	1735 x 854 x 1727
		R407F	2.70	-	19650	**24250**	28950	34300	40300	-	-					
		R448A	2.72	-	19570	**23700**	28050	33200	39250	46100	24550					
		R449A	2.72	-	19570	**23700**	28050	33200	39250	46100	24550					

Rating condition: Suction gas superheat 10K / subcooling 0K / 32°C ambient. Capacity data presented in accordance with BS EN 13215:2016

Sound Pressure Level (SPL) measured in an anechoic room (-10/+32°C) MT conditions. Alternative conditions may produce different results *Alternative cooling capacity condition: -10°Cte/+32°Cta MT with 0K SC

Refrigerants	GWP	TCO² eq (Tonnes CO² equivalent)
R407A	2107	GWP x total system refrigerant charge (Kgs) 1000
R407F	1825	
R448A	1387	
R449A	1397	

NOTE

J & E Hall commercial condensing units' functioning relies on fluorinated greenhouse gases. This table illustrates refrigerants used, GWP values and Tonnes CO^2 equivalent calculation.

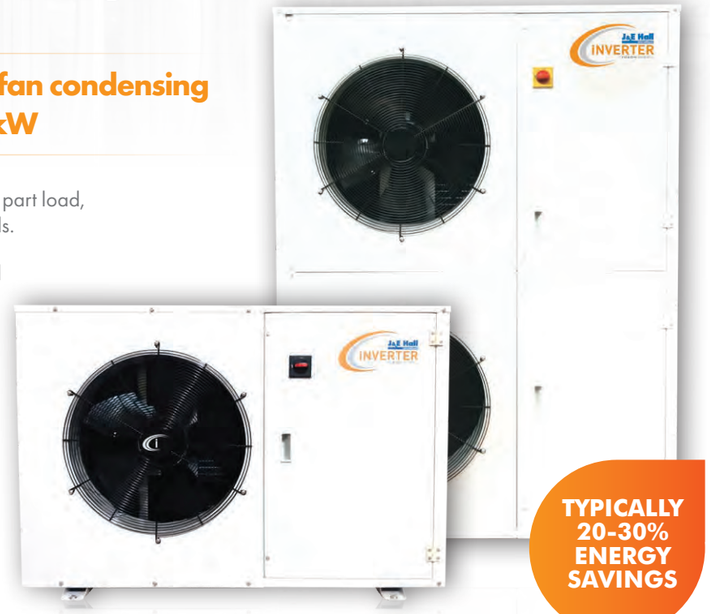
Inverter Commercial Condensing Units

Inverter driven single and twin fan condensing units with capacities up to 25.7kW

With an increased demand for higher efficiencies at part load, we also offer a range of Fusion Scroll inverter models.

Single and twin fan units provide a flexible plug and play package for ease of installation.

Like digital units, inverter condensing units are suitable for multi cabinet systems and multiple evaporators for coldrooms.



TYPICALLY 20-30% ENERGY SAVINGS

Features

- Highly reliable scroll compressor with crankcase heater
- Inverter compressor drive with protection functions: short circuit, over current, ground fault, over voltage/under voltage and over temperature
- Full capacity modulation from approximately 40% to 120% of nominal capacity ensuring accurate stable storage conditions for longer product life and quality
- Advanced programmable controller and LCD display with automatic oil return function
- Vertical liquid receiver and oil separator
- Fitted with brazed type liquid line drier & sight glass
- External service valves
- Mains isolator
- Fan speed controller
- BACnet and Modbus Protocol feature
- Operates with R448A or R449A

Inverter Commercial Condensing Units

Part Number	Unit Model	Compressor Model	Phase	Electrical Data			SPL @ 10m dB(A)	Unit Connections		Dry Weight (kgs)	Unit Dimensions (mm) (WxDxH)	Mounting Dimensions (mm) (WxD)
				NC	MCC	LRC		Liquid	Suction			
N04120150	JEHSI-033-B3-M-3	AGK33FDAMTS	3	3.9	10.8	n/a	31	1/2"	5/8"	116	1334x546x872	945x500
N04120151	JEHSI-066-B3-M-3	AGK66FDBMTS	3	7.0	17.5	n/a	40	1/2"	3/4"	134	1334x546x872	945x500
N04120152	JEHSI-087-B4-M-3	AGK87FDCMTS	3	8.8	24.0	n/a	44	3/4"	7/8"	212	1348x600x1727	940x560

NC = Nominal Current at -10°Cte/+32°Cta MT conditions @ 60rps with R448A refrigerant
MCC = Maximum Continuous Current
LRC = Locked Rotor Current

Sound Pressure Level (SPL) measured in an anechoic room at -10°Cte/+32°Cta MT conditions @ 60rps. Alternative conditions may produce different results

Casing	Unit Model	Comp. Speed (rps)	SEPR	R448A/R449A Cooling Capacity (Watts) @ Te					
				-20°C	-15°C	-10°C	-5°C	0°C	5°C
Large	JEHSI-033-B3-M-3	30	3.03	1497	1795	**2142**	2542	2999	3517
		60		3058	3665	**4348**	5110	5951	6875
		80		3908	4659	**5503**	6446	7496	8657
		100		4826	5713	**6704**	7807	9030	10380
	JEHSI-066-B3-M-3	30	3.39	2827	3897	**4966**	6036	7105	8175
		60		4787	6694	**8600**	10507	12413	14320
		80		7723	9386	**11049**	12712	14375	16038
		100		9037	11117	**13196**	15276	-	-
Twin	JEHSI-087-B4-M-3	30	3.60	3328	4220	**5112**	6310	7508	8706
		60		6609	8644	**10680**	13449	16217	18986
		80		9416	11589	**13762**	16480	19198	21916
		100		11703	13906	**16109**	19296	22483	25670

Rating Condition MT: Suction Gas Superheat 10K / Subcooling 0K / 32°C Ambient
Capacity data presented in accordance with BS EN 13215:2016

Refrigerants	GWP	TCO² eq (Tonnes CO² equivalent)
R448A	1387	GWP x total system refrigerant charge (Kgs)
R449A	1397	1000

NOTE

J & E Hall commercial condensing units' functioning relies on fluorinated greenhouse gases. This table illustrates refrigerants used, GWP values and Tonnes CO^2 equivalent calculation.

J & E Hall Commercial Product Range

Commercial Condensing Units

J & E Hall provides a comprehensive range of Fusion reciprocating and Fusion Scroll condensing units for commercial refrigeration sectors. Energy efficiency is key to our product design and we manufacture full factory built units that are energy efficient, quiet and easy to install.

Cellar Coolers

The JCC cellar cooler range provides cost effective and reliable units designed with electronic control down to 4°C for beer cellars and other temperature controlled environments. CELLAR+ systems have increased capacities and longer pipe runs for larger cellar cooler applications.

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COMMERCIAL CONDENSING UNITS

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