

FUSION Commercial Condensing Units Reciprocating and Scroll Product Catalogue



THE PERFECT CHOICE WITH MORE THAN 100 YEARS OF REFRIGERATION EXPERIENCE AND IDEAL SOLUTION FOR COMMERCIAL REFRIGERATION.

J & E Hall Fusion Reciprocating and Fusion Scroll commercial refrigeration units create the perfect answer for those demanding a compact yet efficient unit. The units are the ideal solution for commercial refrigeration sectors where noise, size and reliability are paramount.

Housed in a cabinet made of electro-galvanized mild steel with an anti-corrosion treatment and coated in baked polyester powder paint, units are able to withstand the most stringent weather testing. The integral IP54 rated control panel provides further protection to all essential electrical components.

All units are acoustically lined. The Fusion Scroll units house the extremely efficient Copeland scroll compressor and the standard Fusion Reciprocating range house a highly reliable reciprocating compressor fitted with compressor jacket to further reduce noise.

*excludes small units

All condensing units come complete with all components fitted during manufacture to save the installer time and money. Fusion Reciprocating and Fusion Scroll condensing units are available for both medium and low temperature applications.



FUSION RECIPROCATING

On all models

- + R404A refrigerant
- + Robust weather resistant housing
- + Highly reliable hermetic compressor
- + Liquid receiver with fusible plug
- + Adjustable HP/LP pressure safety switch
- + Liquid line with sight glass and filter drier factory fitted
- + IP54 rated control panel
- + Noise data tested to ISO 3774-2 standard
- + Oil separator and check valve for low temperature models
- + CE marked
- + Polyurethane foam insulation for improved noise reduction
- + Externally mounted service valves for easy isolation and an extended tail for easy installation
- + Hexagon head screws and stainless steel washers for easy removal of access panels

On medium, large and twin fan models features include:

- + Compressor contactor
- + Fan speed controller**
- + Crankcase heater**
- + Fitted compressor jacket for improved noise reduction
- + Isolator with integrated MCB for improved electrical layout
- + Medium temperature units can also operate on R134a if required

** optional

FUSION SCROLL

On all models

- + R404A refrigerant (Medium temperature units can also operate on R134a if required)
- + Robust weather resistant housing
- + Highly reliable Copeland scroll compressor
- + Liquid receiver with fusible plug
- + Adjustable HP/LP pressure safety switch
- + Liquid line with sight glass and filter drier factory fitted
- + IP54 rated control panel
- + Noise data tested to ISO 3774-2 standard
- + Oil separator and check valve for low temperature models
- + CE marked
- + Polyurethane foam insulation for improved noise reduction
- + Externally mounted service valves for easy isolation and an extended tail for easy installation
- + Hexagon head screws and stainless steel washers for easy removal of access panels
- + Isolator with integrated MCB for improved electrical layout
- + Fan speed controller**
- + Crankcase heater**

** optional

FUSION RECIPROCATING Commercial Condensing Units

Model	Compressor			Coil Vol.	Airflow	Fan Motors		Connections		Receiver vol. (L)	Net Weight (kg)	Noise dB(A)**	Dimensions (mm)		
	Type	Operating Current (A)	LRC (A)	(L)	m³/hr	No.	FLC (A)	Suction	Liquid				Width	Depth	Height
JEHBCU-0050-M-1	SC10 MLX	3	18.4	1.9	1910	1	0.6	3/8	1/4	1.2	46	29	887	430	489
JEHBCU-0088-M-1	SC18 MLX	4.3	23.4	1.9	1910	1	0.6	3/8	1/4	1.2	46	29	887	430	489
JEHBCU-0150-M-1	MTZ18-5VM	6.6	40	1.5	3040	1	0.6	1/2	3/8	4.6	82	37	1109	478	649
JEHBCU-0150-M-3	MTZ18-4VM	2.7	20	1.5	3040	1	0.6	1/2	3/8	4.6	82	37	1109	478	649
JEHBCU-0225-M-1	MTZ28-5VM	11	51	3.1	2620	1	0.6	1/2	3/8	4.6	89	36	1109	478	649
JEHBCU-0225-M-3	MTZ28-4VM	4	23	3.1	2620	1	0.6	1/2	3/8	4.6	89	36	1109	478	649
JEHBCU-0300-M-1	MTZ36-5VM	15.2	60	3.1	2620	1	0.6	5/8	3/8	4.6	89	37	1109	478	649
JEHBCU-0300-M-3	MTZ36-4VM	4.9	30	3.1	2620	1	0.6	5/8	3/8	4.6	89	37	1109	478	649
JEHBCU-0400-M-3	MTZ50-4VM	6.5	42	4.7	6050	1	1.1	7/8	1/2	7.6	120	37	1335	529	884
JEHBCU-0500-M-3	MTZ64-4VM	8.3	67	4.7	6050	1	1.1	7/8	1/2	7.6	120	40	1335	529	884
JEHBCU-0600-M-3	MTZ72-4VM	8.7	80	7.6	5180	1	1.1	7/8	1/2	7.6	126	40	1335	529	884
JEHBCU-0675-M-3	MTZ81-4VM	10.3	80	7.6	5180	1	1.1	1 1/8	1/2	7.6	126	42	1335	529	884
JEHBCU-0825-M-3	MTZ100-4VM	12.4	90	6.9	6770	2	1.6	1 1/8	1/2	14	205	42	1258	590	1436
JEHBCU-1000-M-3	MTZ125-4VM	14.3	105	6.9	6770	2	1.6	1 1/8	1/2	14	205	42	1258	590	1436
JEHBCU-0075-L-1	SC18 CLX	3.8	23.5	1.9	1910	1	0.6	3/8	1/4	1.2	46	30	887	430	489
JEHBCU-0175-L-1	NTZ48-5VM	5.9	37	1.5	3040	1	0.6	5/8	3/8	4.6	86	35	1109	478	649
JEHBCU-0175-L-3	NTZ48-4VM	2.6	16	1.5	3040	1	0.6	5/8	3/8	4.6	86	35	1109	478	649
JEHBCU-0225-L-1	NTZ68-5VM	10.8	53	3.1	2620	1	0.6	5/8	3/8	4.6	92	38	1109	478	649
JEHBCU-0225-L-3	NTZ68-4VM	4.1	25	3.1	2620	1	0.6	5/8	3/8	4.6	92	38	1109	478	649
JEHBCU-0350-L-3	NTZ96-4VM	4.3	32	5	6050	1	1.1	7/8	1/2	7.6	125	38	1335	529	884
JEHBCU-0400-L-3	NTZ136-4VM	7.5	51	5	6050	1	1.1	1 1/8	1/2	7.6	125	38	1335	529	884
JEHBCU-0725-L-3	NTZ215-4VM	9.8	74	6.9	6770	2	1.6	1 1/8	1/2	14	203	41	1258	590	1436
JEHBCU-0825-L-3	NTZ271-4VM	12.8	96	6.9	6770	2	1.6	1 1/8	1/2	14	203	40	1258	590	1436

①Maximum Continuous Current

* Sound pressure levels @10m free field at (-10/+32°C) MT & (-25/+32°C) LT conditions. Alternative conditions may produce different results.

Medium Temperature Performance Data

MODEL	HP	TE TA	Cooling Capacity (Watts)						
			-25	-20	-15	-10	-5	0	5
JEHBCU-0050-M-1	0.5	27	-	746	915	1115	1348	1613	1910
		32	-	572	737	936	1166	1430	1729
		38	-	420	584	779	1007	1267	1560
JEHBCU-0088-M-1	0.88	27	-	1136	1419	1740	2098	2495	2928
		32	-	1064	1305	1589	1916	2285	2698
		38	-	933	1145	1400	1697	2038	2421
JEHBCU-0150-M-1&3	1.5	27	1033	1438	1914	2459	3073	3758	4513
		32	900	1269	1708	2217	2796	3444	4163
		38	730	1061	1457	1917	2441	3030	3684
JEHBCU-0225-M-1&3	2.25	27	1851	2517	3258	4074	4967	5933	6976
		32	1603	2230	2933	3710	4563	5491	6495
		38	1390	1963	2602	3303	4071	4902	5799
JEHBCU-0300-M-1&3	3	27	2479	3264	4161	5172	6295	7531	8881
		32	2279	3026	3882	4844	5915	7092	8377
		38	2009	2737	3563	4484	5503	6618	7830
JEHBCU-0400-M-3	4	27	3491	4693	6095	7696	9495	11494	13691
		32	3118	4218	5518	7017	8714	10610	12705
		38	2668	3665	4840	6191	7721	9427	11311
JEHBCU-0500-M-3	5	27	4607	5973	7559	9365	11393	13640	16108
		32	4152	5421	6912	8623	10554	12705	15078
		38	3598	4801	6181	7739	9474	11386	13476
JEHBCU-0600-M-3	6	27	4949	6532	8325	10326	12539	14960	17591
		32	4495	5986	7676	9564	11652	13938	16424
		38	3908	5314	6877	8595	10469	12499	14686
JEHBCU-0675-M-3	6.75	27	5503	7263	9212	11348	13673	16185	18887
		32	4937	6626	8476	10488	12660	14994	17489
		38	4365	5962	7688	9544	11528	13642	15884
JEHBCU-0825-M-3	8.25	27	5961	8027	10320	12838	15582	18551	21747
		32	5356	7327	9488	11836	14373	17097	20010
		38	4675	6496	8485	10639	12961	15449	18104
JEHBCU-1000-M-3	10	27	8287	10547	13001	15648	18489	21523	24751
		32	7451	9697	12060	14543	17143	19862	22699
		38	6617	8678	10865	13174	15608	18164	-

TE: Evaporating Temperature (°C) TA: Ambient Temperature (°C)
Rating condition based on EN 13215

Low Temperature Performance Data

MODEL	HP	TE TA	Cooling Capacity (Watts)				
			-40	-35	-30	-25	-20
JEHBCU-0075-L-1	0.75	27	392	538	699	876	1070
		32	311	449	604	775	962
		38	225	354	499	660	837
JEHBCU-0175-L-1&3	1.75	27	793	1130	1499	1900	2333
		32	691	1018	1373	1753	2162
		38	529	860	1217	1602	2012
JEHBCU-0225-L-1&3	2.25	27	1347	1847	2389	2975	3602
		32	1224	1685	2197	2765	3385
		38	1093	1516	2008	2570	3202
JEHBCU-0350-L-3	3.5	27	1619	2302	3119	4070	5156
		32	1346	1983	2740	3677	4732
		38	1161	1723	2442	3316	4347
JEHBCU-0400-L-3	4	27	2531	3440	4477	5645	6940
		32	2172	3036	4039	5183	6465
		38	1880	2682	3651	4786	6088
JEHBCU-0725-L-3	7.25	27	3746	5071	6513	8074	9753
		32	3300	4563	5965	7508	9189
		38	2755	3995	5390	6941	8648
JEHBCU-0825-L-3	8.25	27	5174	6954	8878	10949	13163
		32	4597	6254	8078	10068	12225
		38	3991	5494	7196	9097	11196

TE: Evaporating Temperature (°C) TA: Ambient Temperature (°C)
Rating condition based on EN 13215

FUSION SCROLL Commercial Condensing Units

Model	Compressor			Coil Vol.	Airflow	Fan Motors		Connections		Receiver vol. (L)	Net Weight (kg)	Noise dB(A)**	Dimensions (mm)		
	Type	Operating Current (A)*	LRC (A)	(L)	m³/hr	No.	FLC (A)	Suction	Liquid				Width	Depth	Height
JEHBSCU-0200-M1	ZB15KQE-PFJ	7.7	58	3.1	2620	1	0.6	3/4	3/8	4.6	88	30	1109	478	649
JEHBSCU-0200-M3	ZB15KQE-TFD	3.1	26	3.1	2620	1	0.6	3/4	3/8	4.6	88	30	1109	478	649
JEHBSCU-0250-M1	ZB19KQE-PFJ	9.6	61	3.1	2620	1	0.6	3/4	3/8	4.6	90	31	1109	478	649
JEHBSCU-0250-M3	ZB19KQE-TFD	4.1	32	3.1	2620	1	0.6	3/4	3/8	4.6	90	31	1109	478	649
JEHBSCU-0300-M1	ZB21KQE-PFJ	12.6	82	3.1	2620	1	0.6	3/4	3/8	4.6	92	34	1109	478	649
JEHBSCU-0300-M3	ZB21KQE-TFD	5	40	3.1	2620	1	0.6	3/4	3/8	4.6	92	34	1109	478	649
JEHBSCU-0350-M1	ZB26KQE-PFJ	13.9	97	4.7	6050	1	1.1	3/4	1/2	7.6	114	35	1335	529	884
JEHBSCU-0350-M3	ZB26KQE-TFD	5.5	46	4.7	6050	1	1.1	3/4	1/2	7.6	114	35	1335	529	884
JEHBSCU-0400-M1	ZB29KQE-PFJ	15.6	114	4.7	6050	1	1.1	7/8	1/2	7.6	121	34	1335	529	884
JEHBSCU-0400-M3	ZB29KQE-TFD	7	50	4.7	6050	1	1.1	7/8	1/2	7.6	121	34	1335	529	884
JEHBSCU-0500-M3	ZB38KQE-TFD	9.4	65.5	4.7	6050	1	1.1	7/8	1/2	7.6	126	35	1335	529	884
JEHBSCU-0600-M3	ZB45KQE-TFD	9.7	74	7.6	5180	1	1.1	7/8	1/2	7.6	128	40	1335	529	884
JEHBSCU-0680-M3	ZB48KQE-TFD	9.9	101	7.6	5180	1	1.1	7/8	1/2	7.6	129	40	1335	529	884
JEHBSCU-0800-M3	ZB58KQE-TFD	12.4	95	6.9	6770	2	1.2	1 1/8	1/2	14	201	44	1261	594	1435
JEHBSCU-1000-M3	ZB76KQE-TFD	16.8	118	6.9	6770	2	1.2	1 3/8	1/2	14	201	44	1261	594	1435
JEHBSCU-0200-L3	ZF06K4E-TFD	2.9	26	3.1	2620	1	0.6	3/4	3/8	4.6	94	27	1109	478	649
JEHBSCU-0300-L3	ZF09K4E-TFD	4.8	40	3.1	2620	1	0.6	3/4	3/8	4.6	96	28	1109	478	649
JEHBSCU-0400-L3	ZF13K4E-TFD	5.2	51.5	4.7	6050	1	1.1	7/8	1/2	7.6	129	35	1335	529	884.6
JEHBSCU-0500-L3	ZF15K4E-TFD	6.8	64	4.7	6050	1	1.1	7/8	1/2	7.6	130	36	1335	529	884
JEHBSCU-0600-L3	ZF18K4E-TFD	7.2	74	4.7	6050	1	1.1	7/8	1/2	7.6	130	41	1335	529	884
JEHBSCU-0750-L3	ZF24K4E-TWD	11.2	99	6.9	6770	2	1.2	1 3/8	1/2	14	218	41	1261	594	1435
JEHBSCU-1000-L3	ZF33K4E-TWD	14	127	6.9	6770	2	1.2	1 3/8	1/2	14	218	42	1261	594	1435

© Maximum Continuous Current
 * Sound pressure levels @10m free field at (-10/+32°C) MT & (-25/+32°C) LT conditions. Alternative conditions may produce different result

Medium Temperature Performance Data

MODEL	HP	TE TA	Cooling Capacity (watts)					
			-20	-15	-10	-5	0	5
JEHBSCU-0200-M-1&3	2	27	2688	3279	3924	4676	5536	6470
		32	2489	3032	3655	4354	5160	6038
		38	2231	2736	3279	3978	4730	5587
JEHBSCU-0250-M-1&3	2.5	27	2956	3655	4408	5321	6289	7373
		32	2790	3440	4193	4999	5966	6994
		38	2575	3171	3870	4676	5644	6704
JEHBSCU-0300-M-1&3	3	27	3655	4515	5429	6558	7794	9169
		32	3440	4246	5160	6235	7364	8643
		38	3225	3978	4838	5805	6934	8159
JEHBSCU-0350-M-1&3	3.5	27	4569	5590	6773	8224	9783	11577
		32	4246	5214	6343	7633	9138	10793
		38	3816	4676	5698	6934	8278	9826
JEHBSCU-0400-M-1&3	4	27	5149	6343	7697	9256	11019	12960
		32	4816	5913	7192	8643	10309	12145
		38	4300	5311	6472	7805	9342	11031
JEHBSCU-0500-M-3	5	27	6289	7686	9299	11073	13169	15426
		32	5805	7149	8654	10374	12309	14427
		38	5214	6396	7740	9353	11126	13126
JEHBSCU-0600-M-3	6	27	7149	8708	10535	12578	14835	17340
		32	6611	8116	9836	11718	13921	16286
		38	5966	7310	8869	10589	12524	14642
JEHBSCU-0680-M-3	6.8	27	7729	9459	11349	13567	15945	18582
		32	7323	8907	10766	12524	14835	17297
		38	6450	7848	9514	11341	13330	15545
JEHBSCU-0800-M-3	8	27	9029	11340	13879	16578	19602	22794
		32	8310	10503	12900	15426	18221	21162
		38	7321	9385	11610	13975	16501	19175
JEHBSCU-1000-M-3	10	27	11490	13929	16591	19404	22439	-
		32	10513	12801	15279	17791	20533	-
		38	9310	11449	13706	16125	18759	-

TE: Evaporating Temperature (°C) TA: Ambient Temperature (°C)
 Rating condition based on EN 13215

Low Temperature Performance Data

MODEL	HP	TE TA	Cooling Capacity (Watts)				
			-40	-35	-30	-25	-20
JEHBSCU-0200-L-3	2	27	1156	1451	1790	2182	2634
		32	1075	1355	1677	2053	2483
		38	984	1247	1553	1914	2333
JEHBSCU-0300-L-3	3	27	1500	1892	2333	2827	3386
		32	1414	1768	2193	2666	3225
		38	1306	1650	2048	2510	3042
JEHBSCU-0400-L-3	4	27	2225	2865	3601	4408	5375
		32	2086	2671	3333	4139	5053
		38	1914	2446	3075	3816	4676
JEHBSCU-0500-L-3	5	27	2682	3440	4300	5268	6343
		32	2505	3225	4031	4945	5966
		38	2295	2951	3709	4569	5590
JEHBSCU-0600-L-3	6	27	3279	4139	5053	6128	7364
		32	3064	3870	4730	5751	6934
		38	2817	3548	4408	5429	6558
JEHBSCU-0750-L-3	7.5	27	3902	4956	6117	7396	8794
		32	3644	4644	5751	6977	8331
		38	3333	4289	5343	6525	7869
JEHBSCU-1000-L-3	10	27	5440	6805	8353	10084	11986
		32	5010	6289	7740	9374	11180
		38	4515	5698	7031	8546	10288

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 Rating condition based on EN 13215



FUSION Tandem Digital SCROLL Series 5 commercial condensing units

Fusion Tandem Digital Scroll unit is an extension to the range of J&E Hall commercial products. With a capacity up to 31kW series 5 is an ideal solution for larger convenience store applications and is a packaged alternative to multi compressor racks. Digital compressor capacity control matches varying display case loads and provides the perfect energy efficient commercial refrigeration solution. It houses the extremely efficient Copeland Digital Scroll compressor and Copeland Scroll compressor which allow a simple and very reliable variable capacity system at MT envelope.

The digital modulated variable capacity Fusion Tandem Digital Scroll unit comes with Carel controller. The Carel controller provides real time load estimation and controls variable capacity from 10% to 100%. The controller also provides basic protection includes high discharge temperature trip, compressor trip, and oil return management. The controller can display suction temperature, outdoor temperature, condensing coil temperature, and discharge temperature.



FUSION TANDEM DIGITAL SCROLL

On all models

- + Copeland Hermetic Scroll Compressor & Copeland Hermetic Digital Scroll Compressor
- + IP54 Rated Control Panel
- + Variable Capacity Control: 10% - 100%
- + Horizontal Liquid Receiver 18L
- + Safety Release Valve
- + Fitted Liquid Line Drier & Sight Glass
- + Acoustic Lining
- + Manual Adjustable Low Pressure Switch
- + High & Low Pressure Transducer
- + High Pressure Switch
- + Manual Motor Starter with Overload Protection
- + Isolator
- + Programmable Controller
- + Wired LCD Display Remote Controller
- + AC Modulation Fan Speed Controller
- + Compressor Contactor
- + Mechanical Bypass Circuit
- + Step Down Transformer 240V to 24V
- + Fuse Protection on Controller, Fan Speed Controller and Backup System
- + OM3 Oil Management
- + Oil Separator and Discharge Non Return Valve
- + Crankcase Heater
- + Operate with Refrigerants R404A

Model	Compressor			Coil Vol.	Fan Motors		Connections		Receiver vol. (L)	Net weight (Kg)	Noise dB(A)*	Weight	Dimensions (mm)		
	Type	Φ MCC(A)	LRC (A)	(L)	No.	FLC (A)	Suction	Liquid				kgs	Width	Depth	Height
JEHSDT-1200-M-3	ZBD45KQE-TFD	13.5	74.0	5.66	4	1.1	7/8	1/2	18	38.5	44.6	382	2000	630	1760
	ZB45KQE-TFD	14.2													

	HP	TE TA	Cooling Capacity (Watts)					
			-20	-15	-10	-5	0	5
JUKF1-1200MM3	12	27	13400	16360	19760	23600	27600	32700
		32	12420	15200	18400	22000	26100	30700
		38	11800	13700	16580	19880	23600	27800

TE: Evaporating Temperature (°C) TA: Ambient Temperature (°C)
Rating condition based on EN 13215



FUSION Digital SCROLL commercial condensing units

Fusion Digital Scroll unit houses the extremely efficient Copeland Digital Scroll compressor which allows a simple and very reliable variable capacity system at MT envelope. The digital modulated variable capacity Fusion Digital Scroll unit comes with Carel controller. The Carel controller provides real time load estimation and controls variable capacity. The controller also provides basic protection includes high discharge temperature trip, compressor trip. The controller can display suction temperature, outdoor temperature, condensing coil temperature, and discharge temperature. With a capacity up to 16kW digital scroll unit is an ideal solution for convenience stores, super-markets and petrol forecourts. Digital scroll unit is also suitable for multi cabinet systems.



FUSION DIGITAL SCROLL

- + Copeland Hermatic Digital Scroll Compressor
- + Liquid receiver with fusible plug
- + Oil separator and discharge non return valve
- + Acoustic lining
- + IP54 rated control panel
- + Isolator
- + Manual Motor start with short circuit and overload protection
- + Advanced programmable controller
- + LCD display
- + High & Low pressure transducers
- + Mechanical by-pass circuit
- + Manually adjustable low pressure switch
- + AC modulation fan speed controller
- + Compressor contactor
- + Step down transformer 240V to 24V
- + Fuse protection on controller, fan speed controller and backup system
- + Crankcase Heater
- + Operates with refrigerant R404A

Model	Compressor			Coil Vol.	Airflow	Fan Motors		Connections		Receiver	Net	Noise	Dimensions (mm)		
	Type	Φ MCC(A)	LRC (A)	(L)	m³/hr	No.	FLC (A)	Suction	Liquid	vol. (L)	weight (Kg)	dB(A)*	Width	Depth	Height
JEHSD-0600-M3	ZBD45KQE-TFD	13.5	74.0	7.6	5180	1	1.1	7/8	1/2	7.6	139	44	1347	556	884

	HP	TE		Cooling Capacity (Watts)					
		TA		-20	-15	-10	-5	0	5
JEHSD-0600-M-3	6	27		7067	8589	10374	12285	14385	16853
		32		6615	8033	9660	11550	13545	15855
		38		4998	7329	8789	10553	12285	14333

TE: Evaporating Temperature (°C) TA: Ambient Temperature (°C)
Rating condition based on EN 13215