

Hermetic Condensing Units

For Refrigeration Applications



Copeland[™]
brand products


EMERSON[™]
Climate Technologies

World Leader in Refrigeration Technology

Emerson Climate Technologies is the world's most renowned manufacturer of refrigeration compressors and condensing units. The company continues to innovate and invest in refrigeration solutions that ensure food safety and quality.

Emerson's Integral Horse Power Hermetic Condensing Units provide perfect cooling with their robust and reliable design while creating value for its users.

Key Features

- Compact Design with Single Fan Option
- High Efficiency Copeland™ CR Compressors for 2HP and Above Units
- Energy Efficient Silent Fans
- Condenser Coils Designed for High Ambient
- Liquid Receiver as Standard Feature
- Optimal Layout of Components for Easy Serviceability
- Designed for Middle East Conditions
- Extended Range
 - 1.5HP to 5HP
 - R22 Refrigerant, High & Medium Temperature
- Local Availability

Nomenclature

F	3	A	1	—	B	225	—	C	F	Z	—	102
1	2	3	4		5	6		7	8	9		10

1 CONDENSING UNIT FAMILY SERIES

2 REFRIGERANT
3 - R22

3 A - AIR COOLED

4 FAMILY SERIES

5 MODEL REVISION

6 NOMINAL HP

Code	HP
150	1.5
200	2
225	2.25
301	3
325	3.25
401	4
501	5

7 COMPRESSOR MOTOR TYPE

Description	Code
1 phase: Capacitor Run - Capacitor Start	C
Three Phase	T

8 COMPRESSOR MOTOR PROTECTION

Protection Type	Code
Internal Protection	F

9 ELECTRICAL CODES

Voltage	Code
220/240 - 1 phase	Z
380/420 - 3 phase	M

10 BOM

101	Standard
102	With HP/LP Switch
103	With HP/LP Switch and Crank Case Heater
320	With HP/LP Switch and Crank Case Heater and Contactor



Performance Data

Model	Ambient Temperature (°C)	Capacity						Power					
		Evaporating Temperature (°C)											
		-15	-10	-5	0	5	7.2	-15	-10	-5	0	5	7.2
F3A1-B150-CFZ-101	32		2133	2575	3139	3701	3951		1171	1252	1345	1434	1473
	38		1941	2311	2882	3400	3630		1209	1290	1404	1505	1550
	43		1779	2188	2653	3136	3350		1243	1346	1456	1567	1616
	46		1680	2061	2508	2973	3180		1266	1376	1490	1606	1657
F3A1-B200-CFZ-102	32	2119	2863	3606	4411	5298	5727	1265	1420	1557	1683	1817	1884
	38	1825	2539	3244	4003	4815	5219	1249	1431	1587	1733	1884	1952
	43		2257	2926	3625	4388	4757		1420	1597	1760	1926	2002
	46		2079	2729	3387	4129	4468		1408	1600	1770	1950	2030
F3A1-B225-CFZ-102	32	2822	3655	4537	5483	6450	6888	1497	1718	1938	2153	2376	2483
	38	2464	3288	4132	5004	5884	6275	1499	1738	1973	2213	2454	2561
	43		2982	3778	4602	5435	5805		1749	1999	2254	2510	2624
	46		2777	3554	4353	5158	5515		1753	2012	2277	2543	2661
F3A2-B301-CFZ-320	32	3580	4600	5740	6990	8360	8990	1940	2150	2360	2550	2730	2807
	38	3100	4090	5180	6370	7650	8235	1960	2210	2440	2670	2890	2989
	43	2700	3680	4730	5860	7070	7622	1960	2230	2500	2760	3010	3129
	46		3430	4460	5560	6730	7269		2240	2530	2810	3080	3201
F3A2-B301-TFM-320	32	3517	4566	5709	6946	8300	8909	1940	2166	2382	2598	2812	2900
	38	3136	4138	5234	6424	7708	8294	1940	2202	2454	2706	2956	3060
	43		3728	4777	5914	7145	7708		2218	2512	2800	3082	3210
	46			4557	5669	6874	7426			2548	2872	3196	3340
F3A2-B325-TFM-320	32	4420	5351	6623	8024	9560	10287	2240	2528	2816	3108	3404	3540
	38	3781	4883	6078	7397	8845	9525	2250	2564	2882	3206	3538	3690
	43		4396	5545	6799	8188	8821		2572	2930	3280	3640	3800
	46			5288	6512	7873	8483			2953	3316	3689	3853
F3A2-B401-TFM-320	32	5363	7016	8886	10943	13141	14126	2990	3358	3752	4134	4508	4660
	38	4806	6330	8089	10029	12080	13042	3040	3444	3864	4296	4706	4890
	43		5668	7303	9097	11037	11928		3510	3966	4434	4890	5090
	46			6921	8644	10508	11365			4001	4486	4964	5172
F3A2-B501-TFM-320	32	6623	8224	10041	12098	14384	15533	3770	4086	4402	4704	4990	5110
	38	6184	7708	9419	11371	13540	14595	3990	4368	4730	5086	5432	5600
	43		7163	8786	10644	12708	13716		4604	5028	5430	5840	6000
	46			8482	10295	12308	13294			5171	5595	6036	6192

Note: 1. Capacity data @ 2K subcooling and 18.3°C return gas temperature

Technical Data



Condensing Unit Model	Nominal HP	Dimensions (mm)			Connecting Lines (in.)		Electrical Data (Amps)				Power Input (Watt)	Air flow (m3/hr)	Net Weight (kg)
							230-1-50		380-3-50				
		L	W	H	Suction	Liquid	MCA	Max Fuse Size	MCA	Max Fuse Size			
F3A1-B150-CFZ-101	1.5	560	570	445	1/2	3/8	11	17			150	1860	49
F3A1-B200-CFZ-102	2	560	570	445	1/2	3/8	12	19			150	1730	57
F3A1-B225-CFZ-102	2.25	560	715	445	5/8	3/8	17	27			150	1730	60
F3A2-A301-CFZ-320	3	866	638	485	5/8	3/8	19.8	30.6			350	3075	125
F3A2-B301-TFM-320	3	866	638	485	1 1/8	3/8			12.8	15	350	3075	125
F3A2-B325-TFM-320	3.25	866	638	485	1 1/8	3/8			13	15	350	3075	125
F3A2-B401-TFM-320	4	1120	726	683	1 1/8	1/2			13.2	15	500	6000	200
F3A2-B501-TFM-320	5	1120	726	683	1 1/8	1/2			14.4	20	500	6000	200

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