Selection guide

Embraco Scroll Compressors

Refrigeration Application

think ahead

embraco
Nidec

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We are Nidec Global Appliance

A global partner for home and commercial refrigeration industries

About Nidec Global Appliance
With over 13,000 employees, 17 manufacturing units, and 5 business offices across 9 countries, Nidec Global Appliance manufactures and commercializes solutions for commercial and residential applications. Its portfolio includes Embraco and U.S. MOTORS® solutions for refrigeration, heating, ventilation, and air conditioning, Nidec motors for residential washing machines, dryers, and dishwashers, and FIR motors and pumps for food service equipment, commercial washing machines, and medical applications. Nidec Global Appliance is a Platform of ACIM (Appliance, Commercial, and Industrial Motors), a Business Unit of Nidec Corporation. For further information, access the company profile.

embraco
Nidec

Over 50 years raising the bar of refrigeration

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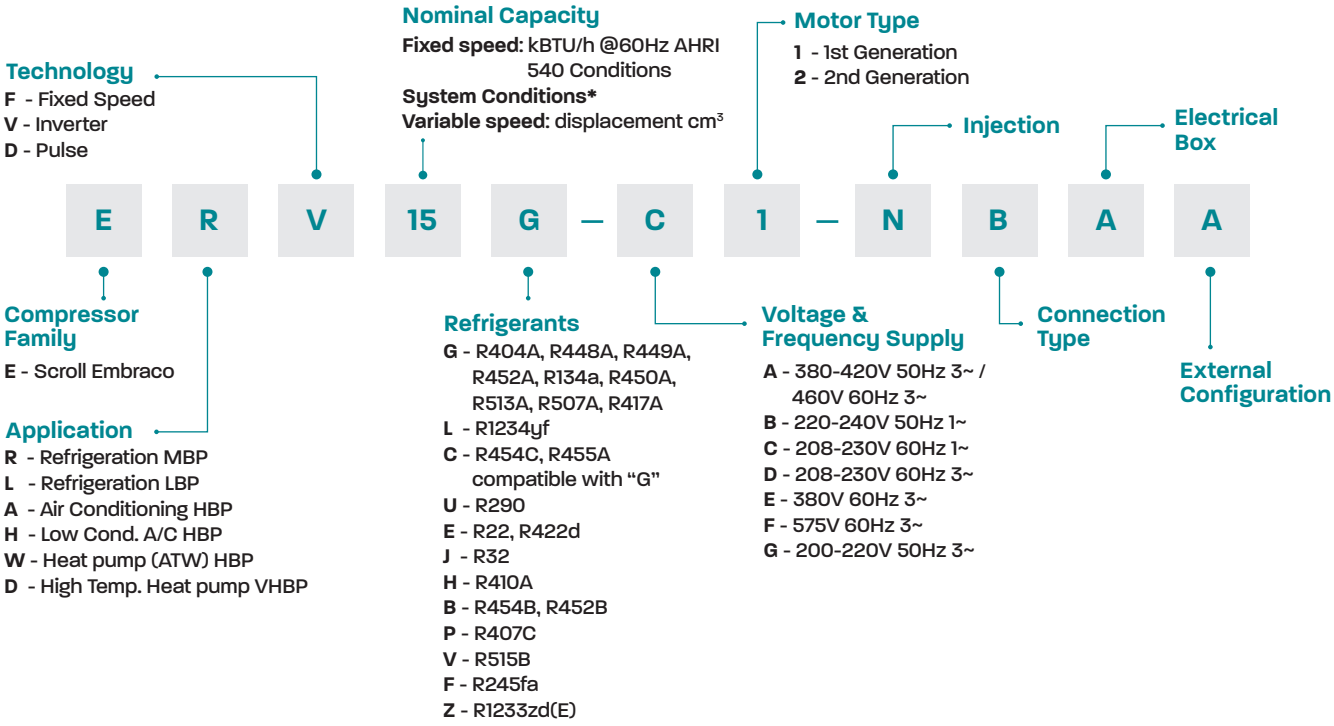
About Embraco
Embraco is a global brand of solutions for refrigeration, heating, and air-conditioning, counting on a broad, efficient, and competitive portfolio of compressors (both hermetic piston and scroll), condensing units, monoblocks, and electronic components for applications in the residential, food service, food retail, merchandisers, medical, agriculture, and industrial sectors. Since 1971, its solutions have been differentiated by innovation that exceeds customers' most challenging expectations. Embraco is part of Nidec Global Appliance. Further information at www.embraco.com

Home appliances
Products for residential applications for HVAC&R.

Commercial appliances
Compressors and cooling solutions for commercial applications for food retail, kitchens, industrial and agriculture end use.

Aftermarket
Parts distribution, replacement and retail focused on retail owners, installers and contractors.

Nomenclature



AHRI 540 (60 Hz)
LBP: E.T. -31,7 °C (-25 °F), C.T. 40,6 °C (105 °F), SH 50K, SC 0K
MBP: E.T. -6,7 °C (20 °F), C.T. 48,9 °C (120 °F), SH 25K, SC 0K
HBP / A/C: E.T. 7,2 °C (45 °F), C.T. 54,4 °C (130 °F), SH 11,1K, SC 8,3K
HP: E.T. 5 °C (41 °F), C.T. 55 °C (131 °F), SH 5K, SC 4K

System Conditions
Low Cond. A/C (50 Hz): E.T. 10 °C (50 °F), C.T. 46 °C (114,8 °F), SH 11K, SC 8,5K
A/C R290 (60 Hz): E.T. -7 °C (19,4 °F), C.T. 50 °C (122 °F), SH 11,1K, SC 8,3K
R515B (50 Hz): E.T. 30 °C (86 °F), C.T. 95 °C (203 °F), SH 11,1K, SC 8,3K
R245fa (50 Hz): E.T. 50 °C (122 °F), C.T. 120 °C (248 °F), SH 5K, SC 10K
R1233zd(E) (50 Hz): E.T. 70 °C (158 °F), C.T. 145 °C (293 °F), SH 5K, SC 10K

Product Platform & Capacity Range

Med. Temp.

Product Series	Refrigerant	HP	1.2	1.7	2	3	4	5	6	7	8	9	10	11	12	13	15	17	20	25	30	35
ERF**G / P	R404A, R448A, R449A, R452A, R134a, R450A, R513A, R507A, R417A, R407C	1 ~																				
		3 ~																				
ERF**E	R22	1 ~																				
		3 ~																				
ERF**U	R290	1 ~																				
		3 ~																				
ERF**C	R454C, R455A	1 ~																				
		3 ~																				

Low Temp.

Product Series	Refrigerant	HP	1.2	1.7	2	3	4	5	6	7	8	9	10	11	12	13	15	17	20	25	30	35
ELF**G / P	R404A, R448A, R449A, R452A, R134a, R450A, R513A, R507A, R417A, R407C	1 ~																				
		3 ~																				
ELF**E	R22	1 ~																				
		3 ~																				
ELF**U	R290	1 ~																				
		3 ~																				
ELF**C	R454C, R455A	1 ~																				
		3 ~																				

50Hz

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

Medium Temperatures Refrigeration Application

R404A | Power Supply 50 Hz 220-240 1~ (B)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09G-B1	1.2	3.8	21.6	2336	7978	1458	1.6	5.5	ZS/ZB09KAE-PFJ	/	/
ERF11G-B1	1.4	4.4	25.0	2709	9250	1540	1.8	6.0	ZS/ZB11KAE-PFJ	/	/
ERF13G-B1	1.7	5.3	30.5	3232	11039	1765	1.8	6.3	ZS/ZB13KAE-PFJ	/	/
ERF15G-B1	2.0	6.1	34.8	3635	12414	1939	1.9	6.4	ZB15KQE-PFJ	MLZ015	YM34E2G-100
ERF19G-B1	2.5	7.4	42.7	4435	15148	2277	1.9	6.7	ZB19KQE-PFJ	MLZ019	YM43E2G-100
ERF21G-B1	3.0	8.4	48.0	5176	17675	2580	2.0	6.9	ZB21KQE-PFJ	MLZ021	YM49E2G-100
ERF26G-B1	3.5	10.0	57.5	6213	21217	3360	1.8	6.3	ZB26KQE-PFJ	MLZ026	YM60E2G-100
ERF30G-B1	4.0	11.7	67.2	7255	24777	3738	1.9	6.6	ZB29KQE-PFJ	MLZ030	YM70E2G-100
ERF37G-B1	5.0	14.3	82.0	8851	30227	4563	1.9	6.6	ZB38KQE-PFJ	/	/

R404A | Power Supply 50Hz 380-420 3~ (A) 200-220 3~ (G)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09G-A1	1.2	3.8	21.6	2356	8047	1302	1.8	6.2	ZS/ZB09KAE-TFD	/	/
ERF11G-A1	1.4	4.4	25.0	2743	9367	1429	1.9	6.6	ZS/ZB11KAE-TFD	/	/
ERF13G-A1	1.7	5.3	30.5	3333	11382	1690	2.0	6.7	ZS/ZB13KAE-TFD	/	/
ERF15G-A1	2.0	6.1	34.8	3786	12930	1879	2.0	6.9	ZB15KQE-TFD	MLZ015	YM34E1G-100
ERF19G-A1	2.5	7.4	42.7	4461	15234	2247	2.0	6.8	ZB19KQE-TFD	MLZ019	YM43E1G-100
ERF21G-A1	3.0	8.4	48.0	5155	17607	2510	2.1	7.0	ZB21KQE-TFD	MLZ021	YM49E1G-100
ERF26G-A1	3.5	10.0	57.5	6253	21355	3086	2.0	6.9	ZB26KQE-TFD	MLZ026	YM60E1G-100
ERF30G-A1	4.0	11.7	67.2	7577	25877	3554	2.1	7.3	ZB29KQE-TFD	MLZ030	YM70E1G-100
ERF37G-A1	5.0	14.3	82.0	9020	30806	4224	2.1	7.3	ZB38KQE-TFD	MLZ038	YM86E1G-100
ERF45G-A1	6.0	17.2	98.7	11056	37758	5258	2.1	7.2	ZB45KQE-TFD	MLZ045	YM102E1G-100
ERF51G-A1	7.0	19.1	109.5	11977	40905	5554	2.2	7.4	ZB48KQE-TFD	MLZ048	YM115E1G-100
ERF56G-A1	8.0	21.0	120.8	13614	46493	6322	2.2	7.4	ZB58KQE-TFD	MLZ058	YM132E1G-100
ERF67G-A1	9.0	25.4	146.0	16383	55949	7670	2.1	7.3	ZB66KQE-TFD	MLZ066	YM158E1G-100
ERF78G-A1	10.0	29.4	168.7	19051	65062	8833	2.2	7.4	ZB76KQE-TFD	MLZ076	YM182E1G-100
ERF88G-A1	12.0	33.5	192.8	21709	74141	10132	2.1	7.3	/	MLZ090	YM210E1G-100
ERF95G-A1	13.0	36.0	207.0	23109	78921	10745	2.2	7.3	ZB95KQE-TFD	/	YM240E1G-105
ERF107G-A1	15.0	40.8	234.4	26180	89409	12384	2.1	7.2	ZB114KQE-TFD	MLZ116	YM260E1G-100
ERF115G-A1	20.0	43.6	250.3	27892	95255	13276	2.1	7.2	ZB130KQE-TED	MLZ130	YM280E1G-100
ERF155G-A1	22.0	58.1	334.0	38047	129937	17315	2.2	7.5	ZB150KQE-TWM	MLZ160	YM350E1G-100
ERF177G-A1	25.0	66.6	382.6	43311	147916	19901	2.2	7.4	ZB190KQE-TWM	MLZ200	YM410E1G-100
ERF217G-A1	30.0	80.7	464.0	53165	181568	25351	2.1	7.2	ZB220KQE-TWM	MLZ240	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

R22 | Power Supply 50 Hz 220-240 1~ (B)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09E-B1	1.2	3.8	21.6	2281	7788	1361	1.7	5.7	ZS/ZB09KA-PFJ	/	/
ERF11E-B1	1.4	4.4	25.0	2651	9052	1450	1.8	6.2	ZS/ZB11KA-PFJ	/	/
ERF13E-B1	1.7	5.3	30.5	3231	11034	1643	2.0	6.7	ZS/ZB13KA-PFJ	/	/
ERF15E-B1	2.0	6.1	34.8	3751	12810	1805	2.1	7.1	ZB15KQ-PFJ	MLM015	YM34A2G-100
ERF19E-B1	2.5	7.4	42.7	4501	15372	2070	2.2	7.4	ZB19KQ-PFJ	MLM019	YM43A2G-100
ERF21E-B1	3.0	8.4	48.0	5231	17866	2338	2.2	7.6	ZB21KQ-PFJ	MLM021	YM49A2G-100
ERF26E-B1	3.5	10.0	57.5	6322	21589	3056	2.1	7.1	ZB26KQ-PFJ	MLM026	YM60A2G-100
ERF30E-B1	4.0	11.7	67.2	7222	24663	3329	2.2	7.4	ZB29KQ-PFJ	MLM030	YM70A2G-100
ERF37E-B1	5.0	14.3	82.0	8802	30061	4071	2.2	7.4	ZB38KQ-PFJ	/	/

R22 | Power Supply 50Hz 380-420 3~ (A) 200-220 3~ (G)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09E-A1	1.2	3.8	21.6	2311	7891	1181	2.0	6.7	ZS/ZB09KA-TFD	/	/
ERF11E-A1	1.4	4.4	25.0	2698	9213	1301	2.1	7.1	ZS/ZB11KA-TFD	/	/
ERF13E-A1	1.7	5.3	30.5	3281	11204	1535	2.1	7.3	ZS/ZB13KA-TFD	/	/
ERF15E-A1	2.0	6.1	34.8	3821	13049	1710	2.2	7.6	ZB15KQ-TFD	MLM015	YM34A1G-100
ERF19E-A1	2.5	7.4	42.7	4511	15406	2000	2.3	7.7	ZB19KQ-TFD	MLM019	YM43A1G-100
ERF21E-A1	3.0	8.4	48.0	5241	17900	2293	2.3	7.8	ZB21KQ-TFD	MLM021	YM49A1G-100
ERF26E-A1	3.5	10.0	57.5	6332	21623	2713	2.3	8.0	ZB26KQ-TFD	MLM026	YM60A1G-100
ERF30E-A1	4.0	11.7	67.2	7212	24629	3041	2.4	8.1	ZB29KQ-TFD	MLM030	YM70A1G-100
ERF37E-A1	5.0	14.3	82.0	9102	31086	3846	2.4	8.1	ZB38KQ-TFD	MLM038	YM86A1G-100
ERF45E-A1	6.0	17.2	98.7	10983	37508	4698	2.3	8.0	ZB45KQ-TFD	MLM045	YM102A1G-100
ERF51E-A1	7.0	19.1	109.5	12553	42871	5273	2.4	8.1	ZB48KQ-TFD	MLM048	YM115A1G-100
ERF56E-A1	8.0	21.0	120.8	13553	46287	5767	2.4	8.0	ZB58KQ-TFD	MLM058	YM132A1G-100
ERF67E-A1	9.0	25.4	146.0	16214	55373	6815	2.4	8.1	ZB66KQ-TFD	MLM066	YM158A1G-100
ERF78E-A1	10.0	29.4	168.7	18955	64733	7844	2.4	8.3	ZB76KQ-TFD	MLM076	YM182A1G-100
ERF88E-A1	12.0	33.5	192.8	21605	73786	8985	2.4	8.2	ZB88KQ-TFD	MLM090	YM210A1G-100
ERF95E-A1	13.0	36.0	207.0	23006	78568	9553	2.4	8.2	ZB95KQ-TFD	/	YM240A1G-105
ERF107E-A1	15.0	40.8	234.4	26056	88987	10998	2.4	8.1	ZB114KQ-TFD	MLM116	YM260A1G-100
ERF115E-A1	20.0	43.6	250.3	27807	94965	11752	2.4	8.1	ZB130KQ-TED	MLM130	YM280A1G-100
ERF155E-A1	22.0	58.1	334.0	38063	129992	15518	2.5	8.4	ZB150KQ-TWM	MLM160	YM350A1G-100
ERF177E-A1	25.0	66.6	382.6	43226	147625	17750	2.4	8.3	ZB190KQ-TWM	MLM200	YM410A1G-100
ERF217E-A1	30.0	80.7	464.0	52838	180450	22630	2.3	8.0	ZB220KQ-TWM	MLM240	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

R290 | Power Supply 50 Hz 220-240 1~ (B)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF08U-B1	1.2	3.8	21.6	1931	6594	1130	1.7	5.8	/	/	/
ERF09U-B1	1.4	4.4	25.0	2256	7704	1243	1.8	6.2	/	/	/
ERF10U-B1	1.7	5.3	30.5	2764	9441	1449	1.9	6.5	/	/	/
ERF13U-B1	2.0	6.1	34.8	3283	11213	1604	2.0	7.0	/	/	/
ERF16U-B1	2.5	7.4	42.7	3955	13509	2044	1.9	6.6	/	/	/
ERF17U-B1	3.0	8.4	48.0	4482	15305	2210	2.0	6.9	/	/	/
ERF22U-B1	3.5	10.0	57.5	5359	18301	2751	1.9	6.7	/	/	/
ERF25U-B1	4.0	11.7	67.2	6489	22161	3088	2.1	7.2	/	/	/
ERF33U-B1	5.0	14.3	82.0	7912	27021	3771	2.1	7.2	/	/	/

R290 | Power Supply 50Hz 380-420 3~ (A) 200-220 3~ (G)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF08U-A1	1.2	3.8	21.6	1995	6814	1023	2.0	6.7	ZB07KAU-TFD	/	/
ERF09U-A1	1.4	4.4	25.0	2321	7928	1135	2.0	7.0	ZB09KAU-TFD	/	/
ERF10U-A1	1.7	5.3	30.5	2840	9700	1318	2.2	7.4	ZB10KAU-TFD	/	/
ERF13U-A1	2.0	6.1	34.8	3350	11443	1489	2.2	7.7	ZB11KAU/ZB12KCU	/	/
ERF16U-A1	2.5	7.4	42.7	4095	13984	1822	2.2	7.7	/	/	/
ERF17U-A1	3.0	8.4	48.0	4616	15764	2000	2.3	7.9	ZB17KCU-TFM	/	/
ERF22U-A1	3.5	10.0	57.5	5599	19122	2349	2.4	8.1	ZB20KCU-TFM	/	/
ERF25U-A1	4.0	11.7	67.2	6734	22998	2750	2.4	8.4	ZB25KCU-TFM	/	/
ERF33U-A1	5.0	14.3	82.0	8049	27490	3279	2.5	8.4	ZB31KCU-TFM	/	/
ERF38U-A1	6.0	17.2	98.7	9820	33538	3900	2.5	8.6	ZB37KCU-TFM	/	/
ERF41U-A1	7.0	19.1	109.5	10648	36365	4356	2.4	8.3	/	/	/
ERF47U-A1	8.0	21.0	120.8	11978	40908	4863	2.5	8.4	ZB49KCU-TFM	/	/
ERF57U-A1	9.0	25.4	146.0	14533	49632	5964	2.4	8.3	YB56K1G-TFD	/	/
ERF67U-A1	10.0	29.4	168.7	16943	57863	6924	2.4	8.4	YB64K1G-TFD	/	/
ERF72U-A1	12.0	33.5	192.8	19517	66654	7467	2.6	8.9	/	/	/
ERF80U-A1	13.0	36.0	207.0	20780	70969	8300	2.5	8.6	YB81K1G-TFD	/	/
ERF89U-A1	15.0	40.8	234.4	23542	80399	9598	2.5	8.4	/	/	/
ERF97U-A1	20.0	43.6	250.3	24790	84662	10324	2.4	8.2	YB97K2G-TFD	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

60Hz

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

Medium Temperatures Refrigeration Application

R404A | Power Supply 60 Hz 208-230 1~ (C)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09G-C1	1.2	4.5	21.6	2827	9653	1757	1.6	5.5	ZS/ZB09KCE-PFV	/	/
ERF11G-C1	1.4	5.2	25.0	3277	11193	1856	1.8	6.0	ZS/ZB11KCE-PFV	/	/
ERF13G-C1	1.7	6.4	30.5	4008	13690	2141	1.9	6.4	ZS/ZB13KCE-PFV	/	/
ERF15G-C1	2.0	7.3	34.8	4592	15681	2319	2.0	6.8	ZB15KCE-PFV	MLZ015	YM34E2G-100
ERF19G-C1	2.5	8.9	42.7	5413	18487	2708	2.0	6.8	ZB19KCE-PFV	MLZ019	YM43E2G-100
ERF21G-C1	3.0	10.0	48.0	6295	21499	3097	2.0	6.9	ZB21KCE-PFV	MLZ021	YM49E2G-100
ERF26G-C1	3.5	12.0	57.5	7612	25997	4053	1.9	6.4	ZB26KCE-PFV	MLZ026	YM60E2G-100
ERF30G-C1	4.0	14.0	67.2	8881	30330	4623	1.9	6.6	ZB29KCE-PFV	/	YM70E2G-100
ERF37G-C1	5.0	17.1	82.0	10447	35678	5394	1.9	6.6	/	/	/

R404A | Power Supply 60 Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09G-D1	1.2	4.5	21.6	2851	9737	1569	1.8	6.2	ZS/ZB09KCE-TF5	/	/
ERF11G-D1	1.4	5.2	25.0	3319	11334	1721	1.9	6.6	ZS/ZB11KCE-TF5	/	/
ERF13G-D1	1.7	6.4	30.5	4033	13773	2036	2.0	6.8	ZS/ZB13KCE-TF5	/	/
ERF15G-D1	2.0	7.3	34.8	4592	15681	2283	2.0	6.9	ZB15KCE-TF5	MLZ015	YM34E7G-100
ERF19G-D1	2.5	8.9	42.7	5425	18528	2673	2.0	6.9	ZB19KCE-TF5	MLZ019	YM43E7G-100
ERF21G-D1	3.0	10.0	48.0	6307	21541	3061	2.1	7.0	ZB21KCE-TF5	MLZ021	YM49E7G-100
ERF26G-D1	3.5	12.0	57.5	7636	26080	3636	2.1	7.2	ZB26KCE-TF5	MLZ026	YM60E7G-100
ERF30G-D1	4.0	14.0	67.2	8706	29732	4071	2.1	7.3	ZB29KCE-TF5	MLZ030	YM70E7G-100
ERF37G-D1	5.0	17.1	82.0	10935	37346	5159	2.1	7.2	ZB38KCE-TF5	MLZ038	YM86E7G-100
ERF45G-D1	6.0	20.6	98.7	13267	45310	6309	2.1	7.2	ZB45KCE-TF5	MLZ045	YM102E7G-100
ERF51G-D1	7.0	22.9	109.5	15104	51582	7097	2.1	7.3	ZB48KCE-TF5	MLZ048	YM125E7G-100
ERF56G-D1	8.0	25.2	120.8	16336	55791	7586	2.2	7.4	ZB58KCE-TF5	MLZ058	YM132E7G-100
ERF67G-D1	9.0	30.5	146.0	19659	67139	9204	2.1	7.3	ZB66KCE-TF5	MLZ066	YM158E7G-100
ERF78G-D1	10.0	35.2	168.7	22861	78075	10599	2.2	7.4	ZB76KQE-TF5	MLZ076	YM182E7G-100
ERF88G-D1	12.0	40.3	192.8	26051	88969	12158	2.1	7.3	/	/	YM200E7G-100
ERF95G-D1	13.0	43.2	207.0	27731	94705	12894	2.2	7.3	ZB95KCE-TW5	/	/
ERF107G-D1	15.0	48.9	234.4	31416	107291	14860	2.1	7.2	ZB114KCE-TW5	/	/
ERF115G-D1	20.0	52.3	250.3	33470	114306	15932	2.1	7.2	ZB130KQ-TE5	/	/
ERF155G-E1	22.0	69.7	334.0	45513	155434	21264	2.1	7.3	ZB150KQE-TW7	/	/
ERF177G-E1	25.0	79.9	382.6	51957	177443	24356	2.1	7.3	ZB190KQE-TW7	/	/
ERF217G-E1	30.0	96.9	464.0	63200	215700	29700	2.1	7.3	ZB220KQE-TW7	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

R22 | Power Supply 60 Hz 208-230 1~ (C)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09E-C1	1.2	4.5	21.6	2759	9424	1640	1.7	5.7	ZS/ZB09KA-PFV	/	/
ERF11E-C1	1.4	5.2	25.0	3207	10953	1748	1.8	6.3	ZS/ZB11KA-PFV	/	/
ERF13E-C1	1.7	6.4	30.5	3909	13351	1980	2.0	6.7	ZS/ZB13KA-PFV	/	/
ERF15E-C1	2.0	7.3	34.8	4585	15659	2088	2.2	7.5	ZB15KQ-PFV	MLZ015	YM34A3G-100
ERF19E-C1	2.5	8.9	42.7	5401	18446	2448	2.2	7.5	ZB19KQ-PFV	MLZ019	YM43A3G-100
ERF21E-C1	3.0	10.0	48.0	6278	21439	2784	2.3	7.7	ZB21KQ-PFV	MLZ021	YM49A3G-100
ERF26E-C1	3.5	12.0	57.5	7586	25907	3683	2.1	7.0	ZB26KQ-PFV	MLZ026	YM60A3G-100
ERF30E-C1	4.0	14.0	67.2	8897	30385	4201	2.1	7.2	ZB29KQ-PFV	/	YM70A3G-100
ERF37E-C1	5.0	17.1	82.0	10523	35936	4906	2.1	7.3	/	/	/

R22 | Power Supply 60 Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF09E-D1	1.2	4.5	21.6	2796	9548	1423	2.0	6.7	ZS/ZB09KA-TF5	/	/
ERF11E-D1	1.4	5.2	25.0	3264	11148	1568	2.1	7.1	ZS/ZB11KA-TF5	/	/
ERF13E-D1	1.7	6.4	30.5	3970	13557	1850	2.1	7.3	ZS/ZB13KA-TF5	/	/
ERF15E-D1	2.0	7.3	34.8	4585	15659	2052	2.2	7.6	ZB15KQ-TF5	MLZ015	YM34A7G-100
ERF19E-D1	2.5	8.9	42.7	5413	18487	2400	2.3	7.7	ZB19KQ-TF5	MLZ019	YM43A7G-100
ERF21E-D1	3.0	10.0	48.0	6290	21480	2752	2.3	7.8	ZB21KQ-TF5	MLZ021	YM49A7G-100
ERF26E-D1	3.5	12.0	57.5	7598	25948	3256	2.3	8.0	ZB26KQ-TF5	MLZ026	YM60A7G-100
ERF30E-D1	4.0	14.0	67.2	8654	29555	3650	2.4	8.1	ZB29KQ-TF5	MLZ030	YM70A7G-100
ERF37E-D1	5.0	17.1	82.0	10923	37303	4615	2.4	8.1	ZB38KQ-TF5	MLZ038	YM86A7G-100
ERF45E-D1	6.0	20.6	98.7	13179	45009	5637	2.3	8.0	ZB45KQ-TF5	MLZ045	YM102A7G-100
ERF51E-D1	7.0	22.9	109.5	15064	51445	6327	2.4	8.1	ZB48KQ-TF5	MLZ048	YM125A7G-100
ERF56E-D1	8.0	25.2	120.8	16264	55544	6920	2.4	8.0	ZB58KQ-TF5	MLZ058	YM132A7G-100
ERF67E-D1	9.0	30.5	146.0	19457	66448	8178	2.4	8.1	ZB66KQ-TF5	MLZ066	YM158A7G-100
ERF78E-D1	10.0	35.2	168.7	22745	77680	9413	2.4	8.3	ZB76KQ-TF5	MLZ076	YM182A7G-100
ERF88E-D1	12.0	40.3	192.8	25926	88543	10782	2.4	8.2	ZB88KQ-TF5	/	YM200A7G-100
ERF95E-D1	13.0	43.2	207.0	27607	94281	11464	2.4	8.2	ZB95KQ-TF5	/	/
ERF107E-D1	15.0	48.9	234.4	31267	106784	13197	2.4	8.1	ZB114KC-TW5	/	/
ERF115E-D1	20.0	52.3	250.3	33368	113958	14102	2.4	8.1	ZB130KQ-TE5	/	/
ERF155E-E1	22.0	69.7	334.0	45511	155428	19503	2.3	8.0	ZB150KQ-TW7	/	/
ERF177E-E1	25.0	79.9	382.6	51712	176607	21803	2.4	8.1	ZB190KQ-TW7	/	/
ERF217E-E1	30.0	96.9	464.0	63315	216233	27204	2.3	7.9	ZB220KQ-TW7	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -6.70C (200F) *C.T. 48.90C (1200F), Superheat 25K, Subcooling 0K

R290 | Power Supply 60 Hz 208-230 1~ (C)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF08U-C1	1.2	4.5	21.6	2324	7937	1401	1.7	5.7	/	/	/
ERF09U-C1	1.4	5.2	25.0	2732	9332	1555	1.8	6.0	/	/	/
ERF10U-C1	1.7	6.4	30.5	3380	11545	1764	1.9	6.5	/	/	/
ERF13U-C1	2.0	7.3	34.8	3998	13656	1957	2.0	7.0	/	/	/
ERF16U-C1	2.5	8.9	42.7	4903	16746	2313	2.1	7.2	/	/	/
ERF17U-C1	3.0	10.0	48.0	5530	18886	2524	2.2	7.5	/	/	/
ERF22U-C1	3.5	12.0	57.5	6700	22881	3014	2.2	7.6	/	/	/
ERF25U-C1	4.0	14.0	67.2	8044	27470	3447	2.3	8.0	/	/	/
ERF33U-C1	5.0	17.1	82.0	9525	32528	4277	2.2	7.6	/	/	/

R290 | Power Supply 60 Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	D Brand	Y Brand
ERF08U-D1	1.2	4.5	21.6	2425	8283	1272	1.9	6.5	/	/	/
ERF09U-D1	1.4	5.2	25.0	2822	9636	1405	2.0	6.9	/	/	/
ERF10U-D1	1.7	6.4	30.5	3459	11813	1631	2.1	7.2	/	/	/
ERF13U-D1	2.0	7.3	34.8	4068	13893	1839	2.2	7.6	/	/	/
ERF16U-D1	2.5	8.9	42.7	4979	17003	2176	2.3	7.8	/	/	/
ERF17U-D1	3.0	10.0	48.0	5596	19111	2400	2.3	8.0	/	/	/
ERF22U-D1	3.5	12.0	57.5	6754	23068	2849	2.4	8.1	/	/	/
ERF25U-D1	4.0	14.0	67.2	8124	27744	3383	2.4	8.2	/	/	/
ERF33U-D1	5.0	17.1	82.0	9717	33185	4008	2.4	8.3	/	/	/
ERF38U-D1	6.0	20.6	98.7	9810	33503	3996	2.5	8.4	/	/	/
ERF41U-D1	7.0	22.9	109.5	10633	36314	4387	2.4	8.3	/	/	/
ERF47U-D1	8.0	25.2	120.8	11954	40826	4907	2.4	8.3	/	/	/
ERF57U-D1	9.0	30.5	146.0	17499	59763	7425	2.4	8.0	/	/	/
ERF67U-D1	10.0	35.2	168.7	20404	69684	8345	2.4	8.4	/	/	/
ERF72U-D1	12.0	40.3	192.8	23470	80154	9635	2.4	8.3	/	/	/
ERF80U-D1	13.0	43.2	207.0	24999	85376	10494	2.4	8.1	/	/	/
ERF89U-D1	15.0	48.9	234.4	28313	96694	12213	2.3	7.9	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

50Hz

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

Low Temperatures Refrigeration Application

R404A | Power Supply 50 Hz 220-240 1~ (B)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-B1	1.2	3.8	21.6	978	3341	999	1.0	3.3	ZF04KAE-PFJ	/	/
ELF05G-B1	1.4	4.4	25.0	1146	3915	1056	1.1	3.7	ZF05KAE-PFJ	/	/
ELF06G-B1	1.7	5.3	30.5	1399	4779	1236	1.1	3.9	ZF06KAE-PFJ	/	/
ELF07G-B1	2.0	6.1	34.8	1612	5506	1428	1.1	3.9	ZF07KAE-PFJ	YF13E2G-Q102	/
ELF08G-B1	2.5	7.4	42.7	1911	6525	1632	1.2	4.0	ZF09KAE-PFJ	YF17E2G-Q102	/
ELF09G-B1	3.0	8.4	48.0	2239	7647	1928	1.2	4.0	/	YF20E2G-Q102	/
ELF12G-B1	3.5	10.0	57.5	2667	9109	2377	1.1	3.8	/	YF25E2G-Q102	/
ELF13G-B1	4.0	11.7	67.2	3035	10366	2648	1.1	3.9	/	YF29E2G-Q102	/
ELF17G-B1	5.0	14.3	82.0	3704	12651	3232	1.1	3.9	/	/	/

R404A | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-A1	1.2	3.8	21.6	983	3358	989	1.0	3.4	ZF04KAE-TFD	/	/
ELF05G-A1	1.4	4.4	25.0	1149	3925	1049	1.1	3.7	ZF05KAE-TFD	/	/
ELF06G-A1	1.7	5.3	30.5	1403	4792	1229	1.1	3.9	ZF06KAE-TFD	/	/
ELF07G-A1	2.0	6.1	34.8	1612	5506	1398	1.2	3.9	ZF06K4E/ZF06KQE	YF13E1G-Q100	2FES-2Y-40S
ELF08G-A1	2.5	7.4	42.7	1911	6525	1688	1.1	3.9	ZF08K4E/ZF08KQE	YF17E1G-Q100	2EES-2Y-40S
ELF09G-A1	3.0	8.4	48.0	2239	7647	1898	1.2	4.0	ZF09K4E/ZF09KQE	YF20E1G-Q100	2EES-2Y-40S
ELF12G-A1	3.5	10.0	57.5	2667	9109	2347	1.1	3.9	ZF11K4E/ZF11KQE	YF25E1G-Q100	2DES-2Y-40S
ELF13G-A1	4.0	11.7	67.2	3035	10366	2618	1.2	4.0	ZF13K4E/ZF13KQE	YF29E1G-Q100	2CES-3Y-40S/LLZ013
ELF17G-A1	5.0	14.3	82.0	3831	13085	2936	1.3	4.5	ZF15K4E/ZF15KQE	YF35E1G-Q100	4FES-3Y-40S/LLZ015
ELF20G-A1	6.0	17.2	98.7	4578	15634	3481	1.3	4.5	ZF18K4E/ZF18KQE	YF41E1G-Q100	4EES-4Y-40S/LLZ018
ELF23G-A1	7.5	21.0	120.8	5653	19305	4274	1.3	4.5	ZF25K4E/ZF25KQE	YF56E1G-Q100	4DES-5Y-40S/LLZ024
ELF28G-A1	9.0	25.4	146.0	6767	23111	5093	1.3	4.5	ZF28K4E/ZF28KQE	YF65E1G-Q100	4BES-9Y-40S/LLZ034
ELF32G-A1	10.0	29.4	168.7	7862	26850	5933	1.3	4.5	ZF34K5E/ZF34KQE	YF72E1G-Q100	4TES-9Y-40P
ELF37G-A1	12.0	33.5	192.8	8957	30588	6834	1.3	4.5	/	YF80E1G-Q100	/
ELF39G-A1	13.0	36.0	207.0	9603	32797	7362	1.3	4.5	ZF41K5E/ZF41KQE	YSF100E1G-Q100	4NES-14Y-40P
ELF45G-A1	15.0	40.8	234.4	10947	37386	8350	1.3	4.5	ZF49K5E/ZF49KQE	YSF125E1G-Q100	4NES-14Y-40P
ELF50G-A1	17.0	43.6	250.3	12241	41804	9389	1.3	4.5	ZF54K5E/ZF54KQE	/	4JE-15Y-40P
ELF56G-A1	20.0	48.2	277.0	13544	46256	10389	1.3	4.5	/	/	/
ELF67G-A1	22.0	58.1	334.0	16331	55774	12527	1.3	4.5	/	/	/
ELF77G-A1	25.0	66.6	382.6	18708	63890	14350	1.3	4.5	/	/	/
ELF89G-A1	30.0	77.3	444.0	21661	73976	16615	1.3	4.5	/	/	/
ELF93G-A1	35.0	80.7	464.0	22688	77483	17403	1.3	4.5	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

embraco
Nidec

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R404A | Power Supply 50 Hz 220-240 1~ (B)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-B1	1.2	3.8	21.6	1380	4712	1140	1.2	4.1	/	/	/
ELF05G-B1	1.4	4.4	25.0	1617	5522	1210	1.3	4.6	/	/	/
ELF06G-B1	1.7	5.3	30.5	1973	6740	1413	1.4	4.8	/	/	/
ELF07G-B1	2.0	6.1	34.8	2274	7766	1638	1.4	4.7	/	YF13E2G-V102	/
ELF08G-B1	2.5	7.4	42.7	2695	9204	1872	1.4	4.9	/	YF17E2G-V102	/
ELF09G-B1	3.0	8.4	48.0	3158	10785	2211	1.4	4.9	/	YF20E2G-V102	/
ELF12G-B1	3.5	10.0	57.5	3762	12847	2600	1.4	4.9	/	YF25E2G-V102	/
ELF13G-B1	4.0	11.7	67.2	4281	14620	3036	1.4	4.8	/	YF29E2G-V102	/
ELF17G-B1	5.0	14.3	82.0	5225	17843	3705	1.4	4.8	/	/	/

R404A | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-A1	1.2	3.8	21.6	1387	4736	1140	1.2	4.2	/	/	/
ELF05G-A1	1.4	4.4	25.0	1621	5537	1210	1.3	4.6	/	/	/
ELF06G-A1	1.7	5.3	30.5	1979	6759	1413	1.4	4.8	/	/	/
ELF07G-A1	2.0	6.1	34.8	2274	7766	1603	1.4	4.8	/	YF13E1G-V100	/
ELF08G-A1	2.5	7.4	42.7	2695	9204	1935	1.4	4.8	/	YF17E1G-V100	/
ELF09G-A1	3.0	8.4	48.0	3158	10785	2176	1.5	5.0	/	YF20E1G-V100	/
ELF12G-A1	3.5	10.0	57.5	3762	12847	2691	1.4	4.8	/	YF25E1G-V100	/
ELF13G-A1	4.0	11.7	67.2	4281	14620	3001	1.4	4.9	ZF13KVE/ZFI20KQE	YF29E1G-V100	LLZ013/4E**-4Y
ELF17G-A1	5.0	14.3	82.0	5404	18455	3367	1.6	5.5	ZFI23KQE-TFD	YF35E1G-V100	LLZ015/4D**-5Y
ELF20G-A1	6.0	17.2	98.7	6457	22050	3991	1.6	5.5	ZF18KVE/ZFI26KQE	YF41E1G-V100	LLZ018/4D**-6Y
ELF23G-A1	7.5	21.0	120.8	7972	27227	4900	1.6	5.6	ZF25KVE/ZFI36KQE	YSF65E1G-V100	LLZ024/4D**-9Y
ELF28G-A1	9.0	25.4	146.0	9544	32596	5839	1.6	5.6	ZF28KVE/ZFI39KQE	YSF75E1G-V100	4P**-12Y
ELF32G-A1	10.0	29.4	168.7	11088	37869	6802	1.6	5.6	ZF34K5E/ZFI50KQE	YSF85E1G-V100	LLZ034/4N**-14Y
ELF37G-A1	12.0	33.5	192.8	12632	43142	7835	1.6	5.5	/	YSF90E1G-V100	/
ELF39G-A1	13.0	36.0	207.0	13545	46258	8440	1.6	5.5	ZF41K5E/ZFI59KQE	YSF100E1G-V100	4HE-**
ELF45G-A1	15.0	40.8	234.4	15440	52729	9574	1.6	5.5	ZF49K5E/ZFI68KQE	YSF125E1G-V100	4H*-18Y
ELF50G-A1	17.0	43.6	250.3	17264	58961	10502	1.6	5.6	ZF54K5E	/	/
ELF56G-A1	20.0	48.2	277.0	19103	65240	11620	1.6	5.6	ZFI81KQE-TFD	YF135E1G-V100	4G*-23Y
ELF67G-A1	22.0	58.1	334.0	23034	78664	14011	1.6	5.6	/	YF170E1G-V100	/
ELF77G-A1	25.0	66.6	382.6	26385	90111	16050	1.6	5.6	ZFI96KQE-TED	YF200E1G-V100	6H*-28Y/6J*-25Y
ELF89G-A1	30.0	77.3	444.0	30551	104336	18583	1.6	5.6	ZFI122KQE-TED	/	6G*-34Y
ELF93G-A1	35.0	80.7	464.0	31999	109282	19464	1.6	5.6	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.7°C (-25°F), *C.T. 40.6°C (105°F), Superheat 50K, Subcooling 0K

R22 | Power Supply 50 Hz 220-240 1~ (B)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-B1	1.2	3.8	21.6	892	3045	895	1.0	3.4	/	/	/
ELF05E-B1	1.4	4.4	25.0	991	3384	960	1.0	3.5	/	/	/
ELF06E-B1	1.7	5.3	30.5	1189	4061	1110	1.1	3.7	/	/	/
ELF07E-B1	2.0	6.1	34.8	1506	5143	1300	1.2	4.0	/	YF13A2G-Q102	/
ELF08E-B1	2.5	7.4	42.7	1764	6023	1485	1.2	4.1	/	YF17A2G-Q102	/
ELF09E-B1	3.0	8.4	48.0	2031	6937	1755	1.2	4.0	/	YF20A2G-Q102	/
ELF12E-B1	3.5	10.0	57.5	2626	8967	2254	1.2	4.0	/	YF25A2G-Q102	/
ELF13E-B1	4.0	11.7	67.2	2863	9778	2409	1.2	4.1	/	YF29A2G-Q102	/
ELF17E-B1	5.0	14.3	82.0	3494	11933	2941	1.2	4.1	/	/	/

R22 | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-A1	1.2	3.8	21.6	892	3045	890	1.0	3.4	/	/	/
ELF05E-A1	1.4	4.4	25.0	991	3384	950	1.0	3.6	/	/	/
ELF06E-A1	1.7	5.3	30.5	1189	4061	1100	1.1	3.7	/	/	/
ELF07E-A1	2.0	6.1	34.8	1506	5143	1280	1.2	4.0	ZF06K4/ZF06KQE	YF13A1G-Q100	2FES-2Y-40S
ELF08E-A1	2.5	7.4	42.7	1764	6023	1520	1.2	4.0	ZF08K4/ZF08KQE	YF17A1G-Q100	2EES-2Y-40S
ELF09E-A1	3.0	8.4	48.0	2031	6937	1731	1.2	4.0	ZF09K4/ZF09KQE	YF20A1G-Q100	2EES-2Y-40S
ELF12E-A1	3.5	10.0	57.5	2626	8967	2234	1.2	4.0	ZF11K4/ZF11KQE	YF25A1G-Q100	2DES-2Y-40S
ELF13E-A1	4.0	11.7	67.2	2863	9778	2359	1.2	4.1	ZF13K4/ZF13KQE	YF29A1G-Q100	2CES-3Y-40S
ELF17E-A1	5.0	14.3	82.0	3547	12114	2672	1.3	4.5	ZF15K4/ZF15KQE	YF35A1G-Q100	4FES-3Y-40S
ELF20E-A1	6.0	17.2	98.7	4256	14534	3168	1.3	4.6	ZF18K4/ZF18KQE	YF41A1G-Q100	4EES-4Y-40S
ELF23E-A1	7.5	21.0	120.8	5113	17461	3889	1.3	4.5	ZF25K4E/ZF25KQE	YF56A1G-Q100	4DES-5Y-40S
ELF28E-A1	9.0	25.4	146.0	6153	21014	4634	1.3	4.5	ZF28K4E/ZF28KQE	YF65A1G-Q100	4BES-9Y-40S
ELF32E-A1	10.0	29.4	168.7	7134	24364	5399	1.3	4.5	ZF34K5E/ZF34KQE	YF72A1G-Q100	4TES-9Y-40P
ELF37E-A1	12.0	33.5	192.8	8115	27714	6219	1.3	4.5	/	YF80A1G-Q100	/
ELF39E-A1	13.0	36.0	207.0	8719	29778	6698	1.3	4.4	ZF41K5E/ZF41KQE	YSF100A1G-Q100	/
ELF45E-A1	15.0	40.8	234.4	9859	33669	7598	1.3	4.4	ZF49K5E/ZF49KQE	YSF125A1G-Q100	4NES-14Y-40P
ELF50E-A1	17.0	43.6	250.3	10998	37561	8398	1.3	4.5	ZF54K5E/ZF54KQE	/	4JE-15Y-40P
ELF56E-A1	20.0	48.2	277.0	12169	41561	9292	1.3	4.5	/	/	/
ELF67E-A1	22.0	58.1	334.0	14674	50113	11205	1.3	4.5	/	/	/
ELF77E-A1	25.0	66.6	382.6	16809	57405	12835	1.3	4.5	/	/	/
ELF89E-A1	30.0	77.3	444.0	19462	66467	14861	1.3	4.5	/	/	/
ELF93E-A1	35.0	80.7	464.0	20385	69618	15566	1.3	4.5	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R22 | Power Supply 50 Hz 220-240 1~ (B)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-B1	1.2	3.8	21.6	1120	3825	1040	1.1	3.7	/	/	/
ELF05E-B1	1.4	4.4	25.0	1245	4250	1100	1.1	3.9	/	/	/
ELF06E-B1	1.7	5.3	30.5	1493	5100	1285	1.2	4.0	/	/	/
ELF07E-B1	2.0	6.1	34.8	1892	6460	1489	1.3	4.3	/	YF13A2G-V102	/
ELF08E-B1	2.5	7.4	42.7	2215	7565	1702	1.3	4.4	/	YF17A2G-V102	/
ELF09E-B1	3.0	8.4	48.0	2551	8713	2010	1.3	4.3	/	YF20A2G-V102	/
ELF12E-B1	3.5	10.0	57.5	3298	11263	2451	1.3	4.6	/	YF25A2G-V102	/
ELF13E-B1	4.0	11.7	67.2	3596	12281	2760	1.3	4.4	/	YF29A2G-V102	/
ELF17E-B1	5.0	14.3	82.0	4389	14988	3369	1.3	4.4	/	/	/

R22 | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-A1	1.2	3.8	21.6	1120	3825	1040	1.1	3.7	/	/	/
ELF05E-A1	1.4	4.4	25.0	1245	4250	1100	1.1	3.9	/	/	/
ELF06E-A1	1.7	5.3	30.5	1493	5100	1285	1.2	4.0	/	/	/
ELF07E-A1	2.0	6.1	34.8	1892	6460	1466	1.3	4.4	ZFI09KQE-TFD	YF13A1G-V100	/
ELF08E-A1	2.5	7.4	42.7	2215	7565	1741	1.3	4.3	/	YF17A1G-V100	/
ELF09E-A1	3.0	8.4	48.0	2551	8713	1983	1.3	4.4	ZFI13KQE-TFD	YF20A1G-V100	/
ELF12E-A1	3.5	10.0	57.5	3298	11263	2451	1.3	4.6	ZFI17KQE-TFD	YF25A1G-V100	/
ELF13E-A1	4.0	11.7	67.2	3596	12281	2703	1.3	4.5	ZF13KVE/ZFI20KQE	YF29A1G-V100	LLZ013
ELF17E-A1	5.0	14.3	82.0	4455	15216	3061	1.5	5.0	ZFI23KQE-TFD	YF35A1G-V100	LLZ015
ELF20E-A1	6.0	17.2	98.7	5345	18255	3629	1.5	5.0	ZF18KVE/ZFI26KQE	YF41A1G-V100	LLZ018
ELF23E-A1	7.5	21.0	120.8	6422	21931	4455	1.4	4.9	ZF25KVE/ZFI36KQE	YSF65A1G-V100	LLZ024
ELF28E-A1	9.0	25.4	146.0	7728	26394	5308	1.5	5.0	ZF28KVE/ZFI39KQE	YSF75A1G-V100	/
ELF32E-A1	10.0	29.4	168.7	8961	30602	6185	1.4	4.9	ZF34K5E/ZFI50KQE	YSF85A1G-V100	LLZ034
ELF37E-A1	12.0	33.5	192.8	10193	34809	7124	1.4	4.9	/	YSF90A1G-V100	/
ELF39E-A1	13.0	36.0	207.0	10952	37402	7673	1.4	4.9	ZF41K5E/ZFI59KQE	YSF100A1G-V100	/
ELF45E-A1	15.0	40.8	234.4	12383	42290	8704	1.4	4.9	ZF49K5E/ZFI68KQE	YSF125A1G-V100	/
ELF50E-A1	17.0	43.6	250.3	13814	47178	9620	1.4	4.9	ZF54K5E	/	/
ELF56E-A1	20.0	48.2	277.0	15285	52202	10645	1.4	4.9	ZFI81KQE-TFD	YF135E1G-V100	/
ELF67E-A1	22.0	58.1	334.0	18431	62944	12835	1.4	4.9	/	YF170E1G-V100	/
ELF77E-A1	25.0	66.6	382.6	21112	72103	14703	1.4	4.9	ZFI96KQE-TED	YF200E1G-V100	/
ELF89E-A1	30.0	77.3	444.0	24445	83485	17024	1.4	4.9	ZFI122KQE-TED	/	/
ELF93E-A1	35.0	80.7	464.0	25604	87443	17831	1.4	4.9	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.7°C (-25°F), *C.T. 40.6°C (105°F), Superheat 5K, Subcooling 0K

R290 | Power Supply 50 Hz 220-240 1~ (B)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-B1	1.2	3.8	21.6	824	2816	815	1.0	3.5	/	/	/
ELF05U-B1	1.4	4.4	25.0	963	3290	896	1.1	3.7	/	/	/
ELF06U-B1	1.7	5.3	30.5	1180	4031	1045	1.1	3.9	/	/	/
ELF07U-B1	2.0	6.1	34.8	1402	4788	1157	1.2	4.1	/	/	/
ELF08U-B1	2.5	7.4	42.7	1689	5768	1474	1.1	3.9	/	/	/
ELF09U-B1	3.0	8.4	48.0	1914	6535	1594	1.2	4.1	/	/	/
ELF12U-B1	3.5	10.0	57.5	2288	7814	1983	1.2	3.9	/	/	/
ELF13U-B1	4.0	11.7	67.2	2771	9463	2226	1.2	4.3	/	/	/
ELF17U-B1	5.0	14.3	82.0	3378	11537	2719	1.2	4.2	/	/	/

R290 | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-A1	1.2	3.8	21.6	852	2910	737	1.2	3.9	/	/	/
ELF05U-A1	1.4	4.4	25.0	991	3385	819	1.2	4.1	/	/	/
ELF06U-A1	1.7	5.3	30.5	1213	4142	951	1.3	4.4	/	/	/
ELF07U-A1	2.0	6.1	34.8	1431	4886	1074	1.3	4.5	/	/	/
ELF08U-A1	2.5	7.4	42.7	1748	5971	1314	1.3	4.5	/	/	/
ELF09U-A1	3.0	8.4	48.0	1971	6731	1442	1.4	4.7	/	/	/
ELF12U-A1	3.5	10.0	57.5	2391	8165	1694	1.4	4.8	/	/	/
ELF13U-A1	4.0	11.7	67.2	2875	9820	1983	1.4	5.0	/	/	/
ELF17U-A1	5.0	14.3	82.0	3437	11738	2364	1.5	5.0	/	/	/
ELF20U-A1	6.0	17.2	98.7	4193	14320	2812	1.5	5.1	/	/	/
ELF23U-A1	7.5	21.0	120.8	5115	17467	3506	1.5	5.0	/	/	/
ELF28U-A1	9.0	25.4	146.0	6205	21192	4300	1.4	4.9	/	/	/
ELF32U-A1	10.0	29.4	168.7	7234	24707	4993	1.4	4.9	/	/	/
ELF37U-A1	12.0	33.5	192.8	8334	28460	5384	1.5	5.3	/	/	/
ELF39U-A1	13.0	36.0	207.0	8873	30303	5984	1.5	5.1	/	/	/
ELF45U-A1	15.0	40.8	234.4	10052	34329	6920	1.5	5.0	/	/	/
ELF50U-A1	17.0	43.6	250.3	10585	36150	7444	1.4	4.9	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R290 | Power Supply 50 Hz 220-240 1~ (B)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-B1	1.2	3.8	21.6	1080	3689	815	1.3	4.5	/	/	/
ELF05U-B1	1.4	4.4	25.0	1262	4310	896	1.4	4.8	/	/	/
ELF06U-B1	1.7	5.3	30.5	1547	5282	1045	1.5	5.1	/	/	/
ELF07U-B1	2.0	6.1	34.8	1837	6273	1157	1.6	5.4	/	/	/
ELF08U-B1	2.5	7.4	42.7	2213	7557	1474	1.5	5.1	/	/	/
ELF09U-B1	3.0	8.4	48.0	2507	8563	1594	1.6	5.4	/	/	/
ELF12U-B1	3.5	10.0	57.5	2998	10238	1983	1.5	5.2	/	/	/
ELF13U-B1	4.0	11.7	67.2	3630	12398	2226	1.6	5.6	/	/	/
ELF17U-B1	5.0	14.3	82.0	4426	15117	2719	1.6	5.6	/	/	/

R290 | Power Supply 50 Hz 380-420 3~ (A) 200-220 3~ (G)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-A1	1.2	3.8	21.6	1116	3812	737	1.5	5.2	/	/	/
ELF05U-A1	1.4	4.4	25.0	1299	4435	819	1.6	5.4	/	/	/
ELF06U-A1	1.7	5.3	30.5	1589	5427	951	1.7	5.7	/	/	/
ELF07U-A1	2.0	6.1	34.8	1874	6402	1074	1.7	6.0	/	/	/
ELF08U-A1	2.5	7.4	42.7	2291	7824	1314	1.7	6.0	/	/	/
ELF09U-A1	3.0	8.4	48.0	2582	8819	1442	1.8	6.1	/	/	/
ELF12U-A1	3.5	10.0	57.5	3132	10698	1694	1.8	6.3	/	/	/
ELF13U-A1	4.0	11.7	67.2	3767	12866	1983	1.9	6.5	/	/	/
ELF17U-A1	5.0	14.3	82.0	4503	15379	2364	1.9	6.5	/	/	/
ELF20U-A1	6.0	17.2	98.7	5494	18763	2812	2.0	6.7	/	/	/
ELF23U-A1	7.5	21.0	120.8	6701	22886	3506	1.9	6.5	/	/	/
ELF28U-A1	9.0	25.4	146.0	8130	27767	4300	1.9	6.5	/	/	/
ELF32U-A1	10.0	29.4	168.7	9479	32372	4993	1.9	6.5	/	/	/
ELF37U-A1	12.0	33.5	192.8	10919	37290	5384	2.0	6.9	/	/	/
ELF39U-A1	13.0	36.0	207.0	11626	39704	5984	1.9	6.6	/	/	/
ELF45U-A1	15.0	40.8	234.4	13170	44979	6920	1.9	6.5	/	/	/
ELF50U-A1	17.0	43.6	250.3	13869	47365	7444	1.9	6.4	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

60Hz

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

Low Temperatures Refrigeration Application

R404A | Power Supply 60 Hz 208-230 1~ (C)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-C1	1.2	4.5	21.6	1184	4043	1204	1.0	3.4	ZF04KAE-PFV	/	/
ELF05G-C1	1.4	5.2	25.0	1387	4738	1272	1.1	3.7	ZF05KAE-PFV	/	/
ELF06G-C1	1.7	6.4	30.5	1693	5782	1489	1.1	3.9	/	/	/
ELF07G-C1	2.0	7.3	34.8	1935	6607	1714	1.1	3.9	ZF06KAE-PFV	YF13E3G-Q100	/
ELF08G-C1	2.5	8.9	42.7	2293	7831	2038	1.1	3.8	ZF08K4E-PFV	YF17E3G-Q100	/
ELF09G-C1	3.0	10.0	48.0	2687	9176	2315	1.2	4.0	ZF09KAE-PFV	YF20E3G-Q100	/
ELF12G-C1	3.5	12.0	57.5	3200	10930	2853	1.1	3.8	ZF11K4E-PFV	YF25E3G-Q100	/
ELF13G-C1	4.0	14.0	67.2	3642	12439	3178	1.1	3.9	ZF13K4E-PFV	YF29E3G-Q100	/
ELF17G-C1	5.0	17.1	82.0	4279	14614	3748	1.1	3.9	/	/	/

R404A | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-D1	1.2	4.5	21.6	1190	4063	1192	1.0	3.4	ZF04KAE-TF5	/	/
ELF05G-D1	1.4	5.2	25.0	1391	4750	1264	1.1	3.8	ZF05KAE-TF5	/	/
ELF06G-D1	1.7	6.4	30.5	1698	5799	1480	1.1	3.9	/	/	/
ELF07G-D1	2.0	7.3	34.8	1935	6607	1678	1.2	3.9	ZF06KAE-TF5	YF13E7G-Q100	2FES-2Y-40S
ELF08G-D1	2.5	8.9	42.7	2293	7831	2026	1.1	3.9	ZF08K4E-TF5	YF17E7G-Q100	/
ELF09G-D1	3.0	10.0	48.0	2687	9176	2277	1.2	4.0	ZF09KAE-TF5	YF20E7G-Q100	2EES-2Y-40S
ELF12G-D1	3.5	12.0	57.5	3200	10930	2817	1.1	3.9	ZF11K4E-TF5	YF25E7G-Q100	2DES-2Y-40S
ELF13G-D1	4.0	14.0	67.2	3642	12439	3142	1.2	4.0	ZF13K4E-TF5	YF29E7G-Q100	2CES-3Y-40S/LLZ013
ELF17G-D1	5.0	17.1	82.0	4598	15702	3524	1.3	4.5	ZF15K4E-TF5	YF35E7G-Q100	4FES-3Y-40S/LLZ015
ELF20G-D1	6.0	20.6	98.7	5493	18761	4177	1.3	4.5	ZF18K4E-TF5	YF41E7G-Q100	4EES-4Y-40S/LLZ018
ELF23G-D1	7.5	25.2	120.8	6783	23166	5129	1.3	4.5	ZF24K4E-TWC	YF56E7G-Q100	4DES-5Y-40S/LLZ024
ELF28G-D1	9.0	30.5	146.0	8121	27733	6112	1.3	4.5	ZF28K4E-TFC	YF65E7G-Q100	4BES-9Y-40S
ELF32G-D1	10.0	35.2	168.7	9434	32220	7120	1.3	4.5	ZF34K5E-TFC	YF72E7G-Q100	4TES-9Y-40P/LLZ034
ELF37G-D1	12.0	40.3	192.8	10748	36706	8201	1.3	4.5	/	YF80E7G-Q100	4PES-12Y-40P
ELF39G-D1	13.0	43.2	207.0	11524	39357	8834	1.3	4.5	ZF41K5E-TFC	/	/
ELF45G-D1	15.0	48.9	234.4	13136	44863	10020	1.3	4.5	ZF49K5E-TFC	/	4NES-14Y-40P
ELF50G-D1	17.0	52.3	250.3	14689	50165	11267	1.3	4.5	ZF54K5E-TFC	/	4JE-15Y-40P
ELF56G-E1	20.0	57.8	277.0	16253	55507	12467	1.3	4.5	/	/	/
ELF67G-E1	22.0	69.7	334.0	19598	66929	15032	1.3	4.5	/	/	/
ELF77G-E1	25.0	79.9	382.6	22449	76668	17220	1.3	4.5	/	/	/
ELF89G-E1	30.0	93.2	444.0	25993	88771	19938	1.3	4.5	/	/	/
ELF93G-E1	35.0	96.9	464.0	27225	92979	20883	1.3	4.5	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R404A | Power Supply 60 Hz 208-230 1~ (C)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-C1	1.2	4.5	21.6	1669	5702	1374	1.2	4.1	/	/	/
ELF05G-C1	1.4	5.2	25.0	1957	6682	1458	1.3	4.6	/	/	/
ELF06G-C1	1.7	6.4	30.5	2388	8155	1703	1.4	4.8	/	/	/
ELF07G-C1	2.0	7.3	34.8	2729	9319	1965	1.4	4.7	/	YF13E2G-V102	/
ELF08G-C1	2.5	8.9	42.7	3234	11044	2337	1.4	4.7	/	YF17E2G-V102	/
ELF09G-C1	3.0	10.0	48.0	3790	12943	2652	1.4	4.9	/	YF20E2G-V102	/
ELF12G-C1	3.5	12.0	57.5	4514	15416	3120	1.4	4.9	/	YF25E2G-V102	/
ELF13G-C1	4.0	14.0	67.2	5137	17544	3643	1.4	4.8	/	YF29E2G-V102	/
ELF17G-C1	5.0	17.1	82.0	6270	21411	4445	1.4	4.8	/	/	/

R404A | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04G-D1	1.2	4.5	21.6	1678	5731	1374	1.2	4.2	/	/	/
ELF05G-D1	1.4	5.2	25.0	1962	6699	1458	1.3	4.6	/	/	/
ELF06G-D1	1.7	6.4	30.5	2395	8178	1703	1.4	4.8	/	/	/
ELF07G-D1	2.0	7.3	34.8	2729	9319	1924	1.4	4.8	ZFI09KQE	YF13E7G-V100	/
ELF08G-D1	2.5	8.9	42.7	3234	11044	2322	1.4	4.8	/	YF17E7G-V100	/
ELF09G-D1	3.0	10.0	48.0	3790	12943	2612	1.5	5.0	/	YF20E7G-V100	/
ELF12G-D1	3.5	12.0	57.5	4514	15416	3230	1.4	4.8	/	YF25E7G-V100	/
ELF13G-D1	4.0	14.0	67.2	5137	17544	3602	1.4	4.9	ZFI13KVE//ZFI21KQE	YF29E7G-V100	LLZ013
ELF17G-D1	5.0	17.1	82.0	6485	22146	4040	1.6	5.5	ZFI23KQE	YF35E7G-V100	LLZ015
ELF20G-D1	6.0	20.6	98.7	7748	26460	4790	1.6	5.5	ZF18KVE/ZFI29KQE	YF41E7G-V100	LLZ018
ELF23G-D1	7.5	25.2	120.8	9567	32673	5880	1.6	5.6	ZF25KVE/ZFI36KQE	YSF65E7G-V100	LLZ024
ELF28G-D1	9.0	30.5	146.0	11453	39115	7007	1.6	5.6	ZF28KVE	YSF75E7G-V100	/
ELF32G-D1	10.0	35.2	168.7	13306	45443	8162	1.6	5.6	ZF34K5E/ZFI50KQE	YSF85E7G-V100	LLZ034
ELF37G-D1	12.0	40.3	192.8	15159	51770	9402	1.6	5.5	ZFI59KQE	YSF90E7G-V100	/
ELF39G-D1	13.0	43.2	207.0	16254	55509	10128	1.6	5.5	ZF41K5E	YSF100E7G-V100	/
ELF45G-D1	15.0	48.9	234.4	18527	63275	11488	1.6	5.5	"ZF49K5E	YSF125E4G-V100	/
ELF50G-D1	17.0	52.3	250.3	20717	70753	12602	1.6	5.6	ZF54K5E	/	/
ELF56G-E1	20.0	57.8	277.0	22923	78287	13944	1.6	5.6	/	/	/
ELF67G-E1	22.0	69.7	334.0	27640	94397	16813	1.6	5.6	/	/	/
ELF77G-E1	25.0	79.9	382.6	31662	108133	19260	1.6	5.6	ZFI96KQE-TE7	/	/
ELF89G-E1	30.0	93.2	444.0	36661	125203	22300	1.6	5.6	ZFI122KQE-TE7	/	/
ELF93G-E1	35.0	96.9	464.0	38399	131139	23357	1.6	5.6	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R22 | Power Supply 60 Hz 208-230 1~ (C)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-C1	1.2	4.5	21.6	1079	3685	1078	1.0	3.4	/	/	/
ELF05E-C1	1.4	5.2	25.0	1199	4094	1157	1.0	3.5	/	/	/
ELF06E-C1	1.7	6.4	30.5	1439	4913	1337	1.1	3.7	/	/	/
ELF07E-C1	2.0	7.3	34.8	1807	6172	1560	1.2	4.0	/	YF13A3G-Q100	/
ELF08E-C1	2.5	8.9	42.7	2116	7228	1855	1.1	3.9	ZF08K4-PFV	YF17A3G-Q100	/
ELF09E-C1	3.0	10.0	48.0	2437	8324	2106	1.2	4.0	/	YF20A3G-Q100	/
ELF12E-C1	3.5	12.0	57.5	3151	10761	2705	1.2	4.0	/	YF25A3G-Q100	/
ELF13E-C1	4.0	14.0	67.2	3436	11735	2891	1.2	4.1	/	YF29A3G-Q100	/
ELF17E-C1	5.0	17.1	82.0	4257	14537	3619	1.2	4.0	/	/	/

R22 | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-D1	1.2	4.5	21.6	1079	3685	1072	1.0	3.4	/	/	/
ELF05E-D1	1.4	5.2	25.0	1199	4094	1144	1.0	3.6	/	/	/
ELF06E-D1	1.7	6.4	30.5	1439	4913	1325	1.1	3.7	/	/	/
ELF07E-D1	2.0	7.3	34.8	1807	6172	1536	1.2	4.0	ZF06K4-TF5	YF13A7G-Q100	2GES-2-40S
ELF08E-D1	2.5	8.9	42.7	2116	7228	1824	1.2	4.0	ZF08K4-TF5	YF17A7G-Q100	2FES-2-40S
ELF09E-D1	3.0	10.0	48.0	2437	8324	2077	1.2	4.0	ZF09K4-TF5	YF20A7G-Q100	2EES-2-40S
ELF12E-D1	3.5	12.0	57.5	3151	10761	2681	1.2	4.0	ZF11K4-TF5	YF25A7G-Q100	2DES-2-40S
ELF13E-D1	4.0	14.0	67.2	3436	11735	2831	1.2	4.1	ZF13K4-TF5	YF29A7G-Q100	2CES-3-40S
ELF17E-D1	5.0	17.1	82.0	4257	14537	3207	1.3	4.5	ZF15K4-TF5	YF35A7G-Q100	4EES-4-40S
ELF20E-D1	6.0	20.6	98.7	5107	17440	3801	1.3	4.6	ZF18K4-TF5	YF41A7G-Q100	4DES-5-40S
ELF23E-D1	7.5	25.2	120.8	6135	20953	4667	1.3	4.5	ZF24K4E-TWC	YF56A7G-Q100	4CES-6-40P
ELF28E-D1	9.0	30.5	146.0	7384	25216	5561	1.3	4.5	ZF28K4E-TFC	YF65A7G-Q100	4VES-7-40P
ELF32E-D1	10.0	35.2	168.7	8561	29237	6479	1.3	4.5	ZF34K5E-TFC	YF72A7G-Q100	4TES-9-40P
ELF37E-D1	12.0	40.3	192.8	9738	33257	7462	1.3	4.5	/	YF80A7G-Q100	4PES-12-40P
ELF39E-D1	13.0	43.2	207.0	10463	35734	8038	1.3	4.4	ZF41K5E-TFC	/	/
ELF45E-D1	15.0	48.9	234.4	11830	40403	9118	1.3	4.4	ZF49K5E-TFC	/	4NES-14-40P
ELF50E-D1	17.0	52.3	250.3	13198	45073	10078	1.3	4.5	ZF54K5E-TFC	/	4JE-15-40P
ELF56E-E1	20.0	57.8	277.0	14603	49873	11151	1.3	4.5	/	/	/
ELF67E-E1	22.0	69.7	334.0	17608	60136	13446	1.3	4.5	/	/	/
ELF77E-E1	25.0	79.9	382.6	20171	68886	15402	1.3	4.5	/	/	/
ELF89E-E1	30.0	93.2	444.0	23355	79761	17833	1.3	4.5	/	/	/
ELF93E-E1	35.0	96.9	464.0	24462	83542	18679	1.3	4.5	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R22 | Power Supply 60 Hz 208-230 1~ (C)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-C1	1.2	4.5	21.6	1355	4629	1254	1.1	3.7	/	/	/
ELF05E-C1	1.4	5.2	25.0	1506	5143	1326	1.1	3.9	/	/	/
ELF06E-C1	1.7	6.4	30.5	1807	6171	1549	1.2	4.0	/	/	/
ELF07E-C1	2.0	7.3	34.8	2270	7752	1787	1.3	4.3	/	YF13A3G-V100	/
ELF08E-C1	2.5	8.9	42.7	2658	9079	2125	1.3	4.3	/	YF17A3G-V100	/
ELF09E-C1	3.0	10.0	48.0	3062	10456	2411	1.3	4.3	/	YF20A3G-V100	/
ELF12E-C1	3.5	12.0	57.5	3958	13516	2941	1.3	4.6	/	YF25A3G-V100	/
ELF13E-C1	4.0	14.0	67.2	4316	14740	3312	1.3	4.5	/	YF29A3G-V100	/
ELF17E-C1	5.0	17.1	82.0	5267	17989	4042	1.3	4.5	/	/	/

R22 | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m³/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04E-D1	1.2	4.5	21.6	1355	4629	1254	1.1	3.7	/	/	/
ELF05E-D1	1.4	5.2	25.0	1506	5143	1326	1.1	3.9	/	/	/
ELF06E-D1	1.7	6.4	30.5	1807	6171	1549	1.2	4.0	/	/	/
ELF07E-D1	2.0	7.3	34.8	2270	7752	1760	1.3	4.4	ZFI09KQE	YF13A7G-V100	/
ELF08E-D1	2.5	8.9	42.7	2658	9079	2089	1.3	4.3	/	YF17A7G-V100	/
ELF09E-D1	3.0	10.0	48.0	3062	10456	2379	1.3	4.4	ZFI13KQE	YF20A7G-V100	/
ELF12E-D1	3.5	12.0	57.5	3958	13516	2941	1.3	4.6	ZFI17KQE	YF25A7G-V100	/
ELF13E-D1	4.0	14.0	67.2	4316	14740	3243	1.3	4.5	ZFI21KQE	YF29A7G-V100	/
ELF17E-D1	5.0	17.1	82.0	5346	18259	3673	1.5	5.0	ZFI23KQE	YF35A7G-V100	/
ELF20E-D1	6.0	20.6	98.7	6414	21906	4355	1.5	5.0	ZFI29KQE	YF41A7G-V100	/
ELF23E-D1	7.5	25.2	120.8	7706	26317	5346	1.4	4.9	/	YSF65A7G-V100	/
ELF28E-D1	9.0	30.5	146.0	9274	31673	6370	1.5	5.0	/	YSF75A7G-V100	/
ELF32E-D1	10.0	35.2	168.7	10753	36722	7421	1.4	4.9	/	YSF85A7G-V100	/
ELF37E-D1	12.0	40.3	192.8	12231	41771	8549	1.4	4.9	/	YSF90A7G-V100	/
ELF39E-D1	13.0	43.2	207.0	13142	44883	9209	1.4	4.9	/	YSF100A7G-V100	/
ELF45E-D1	15.0	48.9	234.4	14860	50748	10445	1.4	4.9	/	YSF125A4G-V100	/
ELF50E-D1	17.0	52.3	250.3	16577	56613	11545	1.4	4.9	/	/	/
ELF56E-E1	20.0	57.8	277.0	18342	62642	12774	1.4	4.9	/	/	/
ELF67E-E1	22.0	69.7	334.0	22117	75532	15403	1.4	4.9	/	/	/
ELF77E-E1	25.0	79.9	382.6	25335	86523	17644	1.4	4.9	/	/	/
ELF89E-E1	30.0	93.2	444.0	29334	100182	20429	1.4	4.9	/	/	/
ELF93E-E1	35.0	96.9	464.0	30725	104931	21398	1.4	4.9	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R290 | Power Supply 60 Hz 208-230 1~ (C)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-C1	1.2	4.5	21.6	992	3389	1011	1.0	3.4	/	/	/
ELF05U-C1	1.4	5.2	25.0	1167	3985	1121	1.0	3.6	/	/	/
ELF06U-C1	1.7	6.4	30.5	1443	4929	1272	1.1	3.9	/	/	/
ELF07U-C1	2.0	7.3	34.8	1707	5831	1411	1.2	4.1	/	/	/
ELF08U-C1	2.5	8.9	42.7	2094	7150	1668	1.3	4.3	/	/	/
ELF09U-C1	3.0	10.0	48.0	2361	8064	1820	1.3	4.4	/	/	/
ELF12U-C1	3.5	12.0	57.5	2861	9770	2173	1.3	4.5	/	/	/
ELF13U-C1	4.0	14.0	67.2	3435	11729	2485	1.4	4.7	/	/	/
ELF17U-C1	5.0	17.1	82.0	4067	13889	3084	1.3	4.5	/	/	/

R290 | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

*Liquid Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-D1	1.2	4.5	21.6	1036	3537	917	1.1	3.9	/	/	/
ELF05U-D1	1.4	5.2	25.0	1205	4115	1013	1.2	4.1	/	/	/
ELF06U-D1	1.7	6.4	30.5	1477	5044	1176	1.3	4.3	/	/	/
ELF07U-D1	2.0	7.3	34.8	1737	5932	1326	1.3	4.5	/	/	/
ELF08U-D1	2.5	8.9	42.7	2126	7260	1569	1.4	4.6	/	/	/
ELF09U-D1	3.0	10.0	48.0	2389	8160	1731	1.4	4.7	/	/	/
ELF12U-D1	3.5	12.0	57.5	2884	9850	2054	1.4	4.8	/	/	/
ELF13U-D1	4.0	14.0	67.2	3469	11846	2439	1.4	4.9	/	/	/
ELF17U-D1	5.0	17.1	82.0	4149	14169	2890	1.4	4.9	/	/	/
ELF20U-D1	6.0	20.6	98.7	4189	14305	2881	1.5	5.0	/	/	/
ELF23U-D1	7.5	25.2	120.8	5104	17432	3538	1.4	4.9	/	/	/
ELF28U-D1	9.0	30.5	146.0	7472	25518	5354	1.4	4.8	/	/	/
ELF32U-D1	10.0	35.2	168.7	8712	29754	6017	1.4	4.9	/	/	/
ELF37U-D1	12.0	40.3	192.8	10021	34225	6947	1.4	4.9	/	/	/
ELF39U-D1	13.0	43.2	207.0	10674	36454	7567	1.4	4.8	/	/	/
ELF45U-D1	15.0	48.9	234.4	12089	41287	8806	1.4	4.7	/	/	/

*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

*E.T. -31.70C (-25oF), *C.T. 40.60C (105oF), Superheat 50K, Subcooling 0K

R290 | Power Supply 60 Hz 208-230 1~ (C)

*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-C1	1.2	4.5	21.6	1300	4441	1011	1.3	4.4	/	/	/
ELF05U-C1	1.4	5.2	25.0	1529	5221	1121	1.4	4.7	/	/	/
ELF06U-C1	1.7	6.4	30.5	1891	6459	1272	1.5	5.1	/	/	/
ELF07U-C1	2.0	7.3	34.8	2237	7640	1411	1.6	5.4	/	/	/
ELF08U-C1	2.5	8.9	42.7	2743	9369	1668	1.6	5.6	/	/	/
ELF09U-C1	3.0	10.0	48.0	3094	10566	1820	1.7	5.8	/	/	/
ELF12U-C1	3.5	12.0	57.5	3748	12801	2173	1.7	5.9	/	/	/
ELF13U-C1	4.0	14.0	67.2	4500	15368	2485	1.8	6.2	/	/	/
ELF17U-C1	5.0	17.1	82.0	5329	18198	3084	1.7	5.9	/	/	/

R290 | Power Supply 60Hz 230 3~ (D) 380 3~ (E) 460 3~ (A) 575 3~ (F)

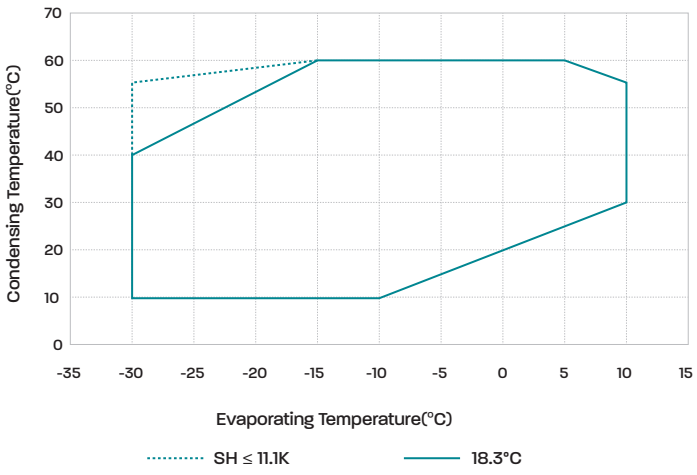
*Vapor Injection

Model	Nominal HP	Displacement		Capacity		Power	COP	EER	Cross Reference		
-	HP	m^3/h	cc/Rev.	W	BTU/H	W	W/W	(BTU/H)/W	C Brand	Y Brand	B/D Brand
ELF04U-D1	1.2	4.5	21.6	1357	4634	917	1.5	5.1	/	/	/
ELF05U-D1	1.4	5.2	25.0	1579	5391	1013	1.6	5.3	/	/	/
ELF06U-D1	1.7	6.4	30.5	1935	6609	1176	1.6	5.6	/	/	/
ELF07U-D1	2.0	7.3	34.8	2276	7772	1326	1.7	5.9	/	/	/
ELF08U-D1	2.5	8.9	42.7	2785	9512	1569	1.8	6.1	/	/	/
ELF09U-D1	3.0	10.0	48.0	3131	10692	1731	1.8	6.2	/	/	/
ELF12U-D1	3.5	12.0	57.5	3779	12905	2054	1.8	6.3	/	/	/
ELF13U-D1	4.0	14.0	67.2	4545	15521	2439	1.9	6.4	/	/	/
ELF17U-D1	5.0	17.1	82.0	5436	18565	2890	1.9	6.4	/	/	/
ELF20U-D1	6.0	20.6	98.7	5488	18743	2881	1.9	6.5	/	/	/
ELF23U-D1	7.5	25.2	120.8	6688	22840	3538	1.9	6.5	/	/	/
ELF28U-D1	9.0	30.5	146.0	9790	33435	5354	1.8	6.2	/	/	/
ELF32U-D1	10.0	35.2	168.7	11415	38985	6017	1.9	6.5	/	/	/
ELF37U-D1	12.0	40.3	192.8	13130	44842	6947	1.9	6.5	/	/	/
ELF39U-D1	13.0	43.2	207.0	13986	47764	7567	1.8	6.3	/	/	/
ELF45U-D1	15.0	48.9	234.4	15840	54095	8806	1.8	6.1	/	/	/

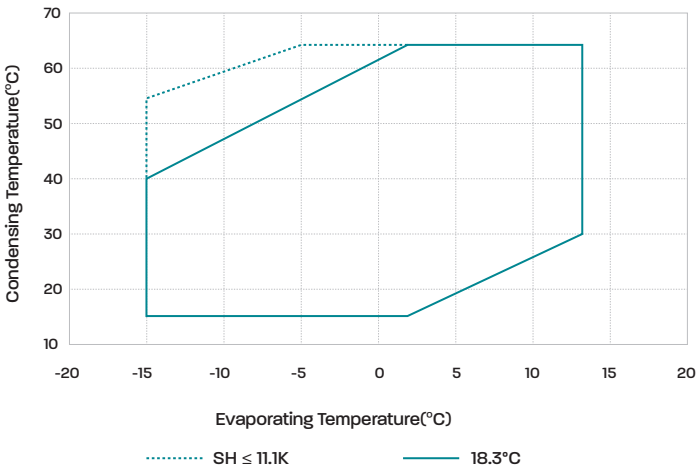
*E.T.: Evaporation Temperature
*C.T.: Condensing Temperature

Operating Envelope

R404A **ERF37G-C1**



R22 **ER**



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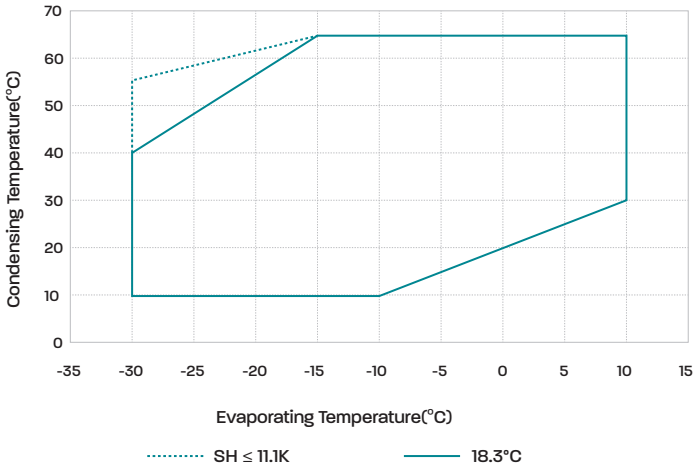
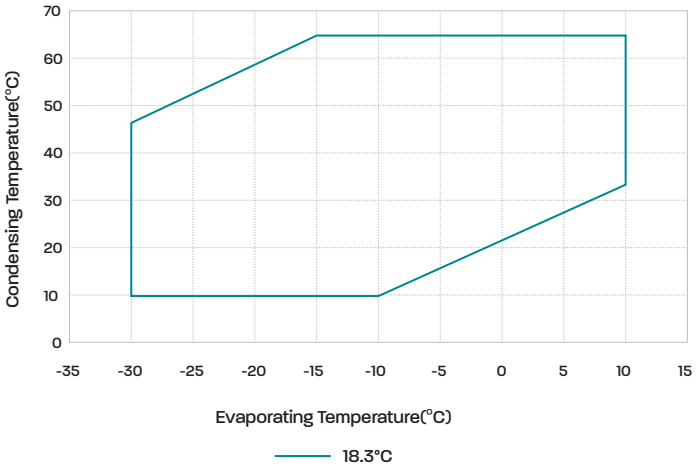
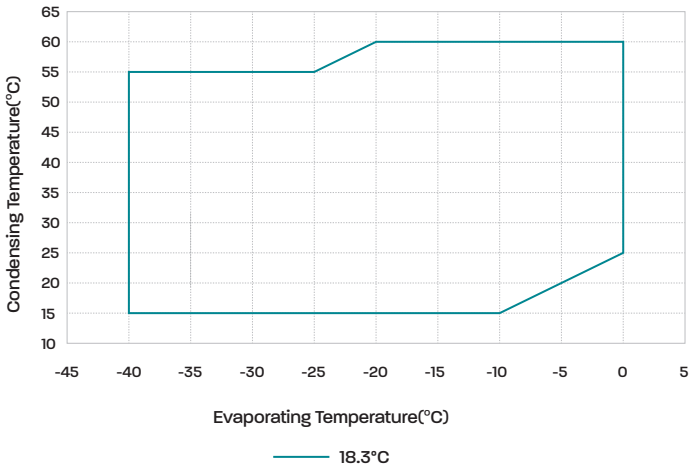


R290 **ER**



R404A/R290 **ELF**



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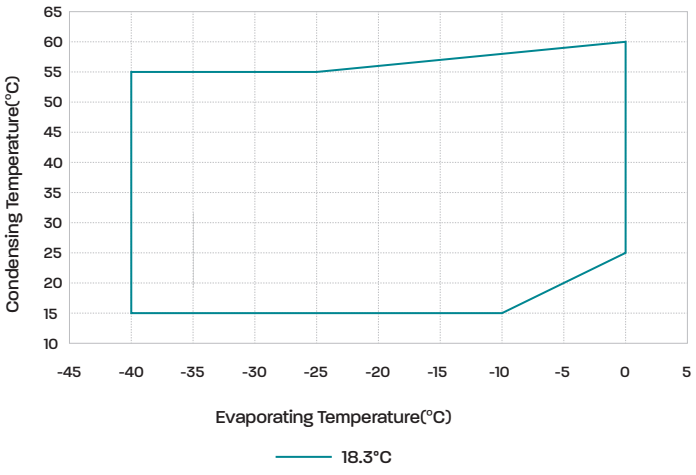
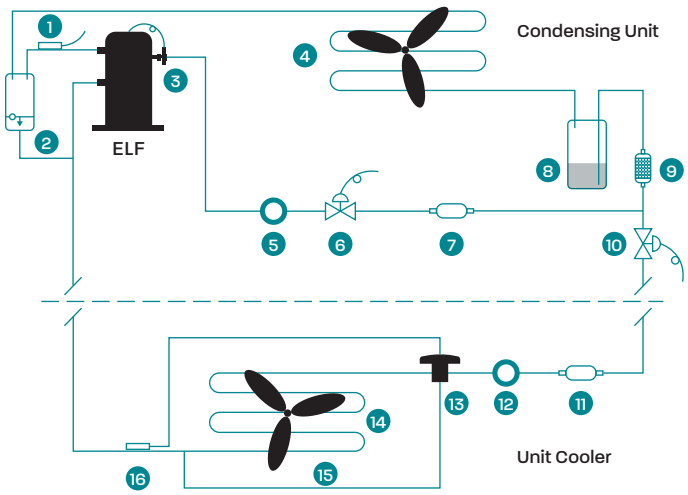


System Schematic

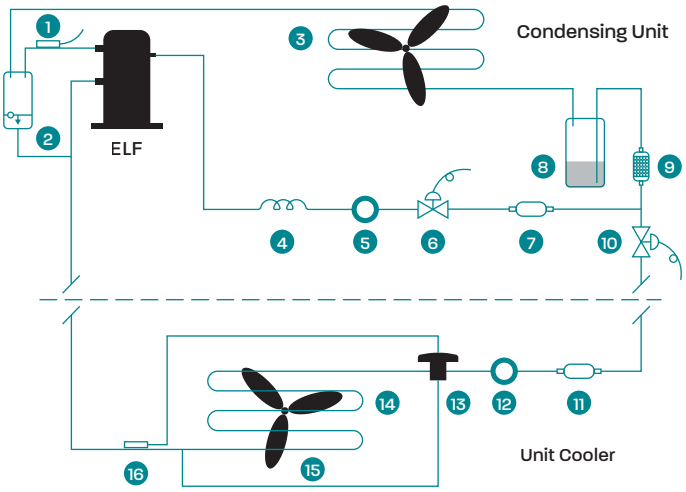


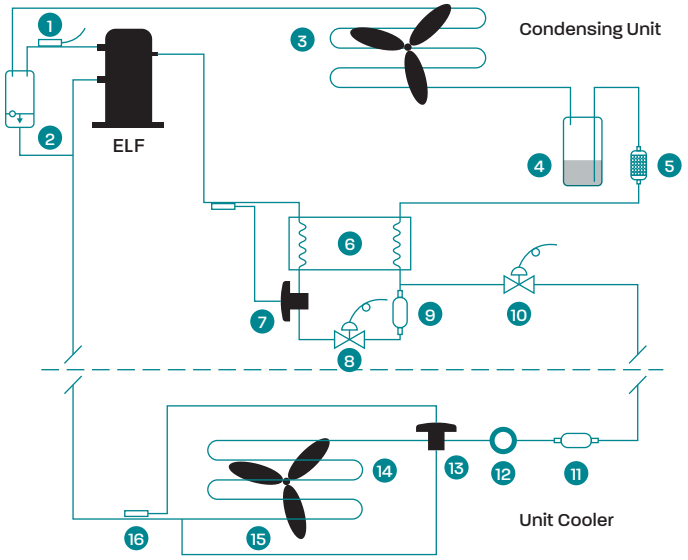
Liquid injection schematic

1. DLT Sensor
2. Oil Separator
3. DTC Valve
4. Condenser
5. Sight Glass
6. Solenoid Valve
7. Filter
8. Receiver
9. Filter Drier
10. Liquid Line Solenoid Valve
11. Filter
12. Sight Glass
13. TXV
14. Evaporator
15. Equilibrium Tube
16. Sensing Bulb

Liquid Injection without DTC schematic

1. DLT Sensor
2. Oil Separator
3. Condenser
4. Capillary Pipe
5. Sight Glass
6. Solenoid Valve
7. Filter
8. Receiver
9. Filter Drier
10. Liquid Line Solenoid Valve
11. Filter
12. Sight Glass
13. TXV
14. Evaporator
15. Equilibrium Tube
16. Sensing Bulb





Vapor injection schematic

1. DLT Sensor
2. Oil Separator
3. Condenser
4. Receiver
5. Filter Drier
6. PHE
7. TXV
8. Solenoid Valve
9. Filter
10. Liquid Line Solenoid Valve
11. Filter
12. Sight Glass
13. TXV
14. Evaporator
15. Equilibrium Tube
16. Sensing Bulb

Available Configuration

Embraco Nomenclature Code	Injection	Connection type			Electrical box	Optionals			Available Platform
		Discharge & Suction	Injection: Liquid & Vapor	Solenoid Valve (Pulse compressor only)		Sight Glass	Two-Phase Tandem Lines	Schrader Valve	
LCAG	Liquid	brazed	rotalock	without	terminal block IP54	brazed	without	without	F150 / F163
LCAM	Liquid	brazed	rotalock	without	terminal block IP54	rotalock	without	without	F150 / F163 / 190
LCBA	Liquid	brazed	rotalock	without	terminal block IP21	without	without	without	F150 / F163
LCBM	Liquid	brazed	rotalock	without	terminal block IP21	rotalock	without	without	F150 / F163
LCCG	Liquid	brazed	rotalock	without	terminal block IP65	brazed	without	without	F150 / F163 / F190
LDAM	Liquid	rotalock	rotalock	without	terminal block IP54	rotalock	without	without	F150 / F163 / F190
LDBA	Liquid	rotalock	rotalock	without	terminal block IP21	without	without	without	F150 / F163
LDBM	Liquid	rotalock	rotalock	without	terminal block IP21	rotalock	without	without	F150 / F163
LEAA	Liquid	brazed	brazed	without	terminal block IP54	without	without	without	F190
LEBA	Liquid	brazed	brazed	without	terminal block IP21	without	without	without	F150 / F163
LECA	Liquid	brazed	brazed	without	terminal block IP65	without	without	without	F150 / F163 / F190
LECG	Liquid	brazed	brazed	without	terminal block IP65	brazed	without	without	F150 / F163 / F190
LECH	Liquid	brazed	brazed	without	terminal block IP65	brazed	brazed	without	F150 / F163 / F190
NAAA	None	brazed	without	without	terminal block IP54	without	without	without	F150 / F163 / F190
NAAD	None	brazed	without	without	terminal block IP54	without	without	with	F238
NAAG	None	brazed	without	without	terminal block IP54	brazed	without	without	F190
NAAH	None	brazed	without	without	terminal block IP54	brazed	brazed	without	F190
NAAJ	None	brazed	without	without	terminal block IP54	brazed	without	with	F238
NAAM	None	brazed	without	without	terminal block IP54	rotalock	without	without	F150 / F163 / F190
NAAO	None	brazed	without	without	terminal block IP54	rotalock	rotalock	without	F190 / F238
NAAP	None	brazed	without	without	terminal block IP54	rotalock	without	with	F238
NABA	None	brazed	without	without	terminal block IP21	without	without	without	F150 / F163
NABG	None	brazed	without	without	terminal block IP21	brazed	without	without	F150 / F163
NABH	None	brazed	without	without	terminal block IP21	brazed	brazed	without	F150 / F163
NABM	None	brazed	without	without	terminal block IP21	rotalock	without	without	F150 / F163
NABO	None	brazed	without	without	terminal block IP21	rotalock	rotalock	without	F150 / F163
NACA	None	brazed	without	without	terminal block IP65	without	without	without	F150 / F163 / F190
NACG	None	brazed	without	without	terminal block IP65	brazed	without	without	F150 / F163 / F190
NACM	None	brazed	without	without	terminal block IP65	rotalock	without	without	F150 / F163 / F190
NBAA	None	rotalock	without	without	terminal block IP54	without	without	without	F150 / F163 / F190
NBAD	None	rotalock	without	without	terminal block IP54	without	without	with	F238
NBAM	None	rotalock	without	without	terminal block IP54	rotalock	without	without	F150 / F163 / F190
NBAP	None	rotalock	without	without	terminal block IP54	rotalock	without	with	F238
NBAR	None	rotalock	without	without	terminal block IP54	rotalock	rotalock	with	F238
NBBA	None	rotalock	without	without	terminal block IP21	without	without	without	F150 / F163
NBBM	None	rotalock	without	without	terminal block IP21	rotalock	without	without	F150 / F163
NMAM	None	brazed	without	brazed	terminal block IP54	rotalock	without	without	Pulse
NMBM	None	brazed	without	brazed	terminal block IP21	rotalock	without	without	Pulse
NNAM	None	rotalock	without	brazed	terminal block IP54	rotalock	without	without	Pulse
NNBM	None	rotalock	without	brazed	terminal block IP21	rotalock	without	without	Pulse
SEAM	Liquid without DTC	brazed	brazed	without	terminal block IP54	rotalock	without	without	F190
SEAP	Liquid without DTC	brazed	brazed	without	terminal block IP54	rotalock	without	with	F238
SEBM	Liquid without DTC	brazed	brazed	without	terminal block IP21	rotalock	without	without	F150 / F163
SFAM	Liquid without DTC	rotalock	brazed	without	terminal block IP54	rotalock	without	without	F190
SFAP	Liquid without DTC	rotalock	brazed	without	terminal block IP54	rotalock	without	with	F238
SFBM	Liquid without DTC	rotalock	brazed	without	terminal block IP21	rotalock	without	without	F150 / F163

Available Configuration

Embraco Nomenclature Code	Injection	Connection type			Electrical box	Optionals			Available Platform
		Discharge & Suction	Injection: Liquid & Vapor	Solenoid Valve (Pulse compressor only)		Sight Glass	Two-Phase Tandem Lines	Schrader Valve	
VEAA	Vapor	brazed	brazed	without	terminal block IP54	without	without	without	F150 / F163 / F190
VEAD	Vapor	brazed	brazed	without	terminal block IP54	without	without	with	F238
VEAM	Vapor	brazed	brazed	without	terminal block IP54	rotalock	without	without	F150 / F163 / F190
VEAP	Vapor	brazed	brazed	without	terminal block IP54	rotalock	without	with	F238
VEBA	Vapor	brazed	brazed	without	terminal block IP21	without	without	without	F150 / F163
VEBM	Vapor	brazed	brazed	without	terminal block IP21	rotalock	without	without	F150 / F163
VECA	Vapor	brazed	brazed	without	terminal block IP65	without	without	without	F150 / F163 / F190
VFAM	Vapor	rotalock	brazed	without	terminal block IP54	rotalock	without	without	F150 / F163 / F190
VFAP	Vapor	rotalock	brazed	without	terminal block IP54	rotalock	without	with	F238
VFBM	Vapor	rotalock	brazed	without	terminal block IP21	rotalock	without	without	F150 / F163
VQAM	Vapor	brazed	brazed	brazed	terminal block IP54	rotalock	without	without	Pulse
VQBM	Vapor	brazed	brazed	brazed	terminal block IP21	rotalock	without	without	Pulse
WCAM	Vapor DTC Compatible	brazed	rotalock	without	terminal block IP54	rotalock	without	without	F190
WCBM	Vapor DTC Compatible	brazed	rotalock	without	terminal block IP21	rotalock	without	without	F150 / F163
WDAM	Vapor DTC Compatible	rotalock	rotalock	without	terminal block IP54	rotalock	without	without	F190
WDBM	Vapor DTC Compatible	rotalock	rotalock	without	terminal block IP21	rotalock	without	without	F150 / F163
WOAM	Vapor DTC Compatible	brazed	rotalock	brazed	terminal block IP54	rotalock	without	without	Pulse
WOBM	Vapor DTC Compatible	brazed	rotalock	brazed	terminal block IP21	rotalock	without	without	Pulse
WPAM	Vapor DTC Compatible	rotalock	rotalock	brazed	terminal block IP54	rotalock	without	without	Pulse
WPBM	Vapor DTC Compatible	rotalock	rotalock	brazed	terminal block IP21	rotalock	without	without	Pulse

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2026