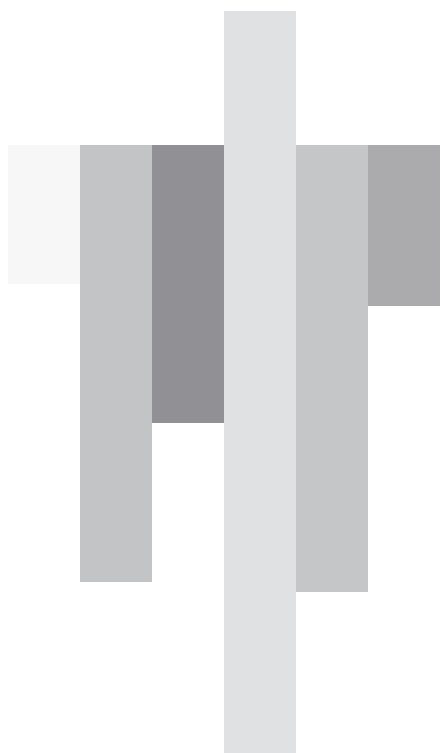


R290 / R600a

2. Compressors Catalogue



R290

LBP

50 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25				-23,3					
									-40	-35	W	COP	-10	Kcal/h	COP			
NLY45LAa	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	62	85	151	1.04	298	176	1.35	10.3	Lc	
NLY45LAb	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	62	85	151	1.11	298	176	1.44	10.3	Lc	
NLY60LAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	85	114	198	1.02	388	230	1.33	10.3	Lc	
NLY60LAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	85	114	198	1.09	388	230	1.42	10.3	Lc	
NLY60CAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	RSIR	P	C	85	114	198	1.02	388	230	1.33	10.3	Lc	
NLY60CAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	RSCR	P	C	85	114	198	1.09	388	230	1.42	10.3	Lc	
NL60FB	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	80	101	172	0.84	346	200	1.10	10.2	Lc	
NLY80LAa	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	113	150	263	1.04	524	306	1.35	10.9	Ld	
NLY80LAb	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	113	150	263	1.10	524	306	1.43	10.9	Ld	
NL80FB	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	103	134	232	0.85	468	270	1.10	10.9	Lc	
NLY90LAa	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	130	177	306	1.05	590	355	1.37	11.1	Ld	
NLY90LAb	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	130	177	306	1.11	590	355	1.44	11.1	Ld	
NL90FB	8.85	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	113	143	248	0.88	515	290	1.14	11.0	Ld	
NPY12LAa	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	174	232	401	1.04	781	465	1.35	12.3	Pd	
NPY12LAb	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	174	232	401	1.15	781	465	1.49	12.3	Pd	
NP12FB	12.05	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	132	181	333	0.91	692	390	1.19	12.0	Pd	
NPY14LAa	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	216	286	484	1.05	926	560	1.35	12.9	Pd	
NPY14LAb	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	216	286	484	1.14	926	560	1.48	12.9	Pd	
NP14FB	14.17	1/2	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	155	211	385	0.91	795	450	1.19	13.0	Pd	

R290

LBP

60 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25				-23,3					
									-40	-30	W	COP	-10	Kcal/h	COP			
NL45FR	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	71	95	164	0.85	318	190	1.10	10.3	Lc	
NL60FR	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	94	120	202	0.88	402	235	1.14	10.2	Lc	

High Efficiency Models

R600a: W (A) x 1.05 = kcal/h (B)

R290: W (A) x 1.16 = kcal/h (B)

R290: W (C) x 0.98 = kcal/h (D)









W x 1.16 = kcal/h

R290

HMBP

50 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C						WEIGHT Kg	DESIGN		
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)			Ashrae						
									5			7,2						
									-25	-15	10	Kcal/h	COP					
NL40TBa	4.05	1/5	HMBP	F	220-240V 50Hz ~1	RSIR	R	C-V	121	194	513	434	1.88	513	445	2.20	9.5	Lc
NL40TBb	4.05	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C	121	194	513	434	1.88	513	445	2.20	9.5	Lc
 NLY45RAa	4.56	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	148	237	609	518	2.15	609	530	2.51	10.2	Lc
 NLY45RAb	4.56	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	148	237	609	518	2.35	609	530	2.75	10.2	Lc
NL45TB	4.50	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	132	211	561	473	1.88	561	486	2.20	9.5	Lc
 NLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	211	324	829	703	2.21	829	720	2.58	10.4	Lc
 NLY60RAb	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	211	324	829	703	2.40	829	720	2.79	10.4	Lc
NL60TBa	5.68	1/4	HMBP	F	220-240V 50Hz ~1	RSIR	R	C-V	169	274	713	606	2.05	713	620	2.40	9.5	Lc
NL60TBb	5.68	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C	169	274	713	606	2.05	713	620	2.40	9.5	Lc
 NLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	258	411	1103	929	2.22	1103	955	2.60	11.4	Lc
 NLY80RAb	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	258	411	1103	929	2.39	1103	955	2.80	11.4	Lc
NL80TB	7.57	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	206	359	948	806	2.05	948	825	2.40	10.0	Ld
 NLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	306	480	1244	1054	2.20	1244	1080	2.56	11.4	Ld
 NLY90RAb	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	306	480	1244	1054	2.38	1244	1080	2.78	11.4	Ld
NL90TB	8.85	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	242	391	1102	921	2.08	1102	950	2.42	10.6	Ld
NP12TB	12.05	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	316	537	1517	1272	2.34	1517	1310	2.72	12.3	Pd
NP14TB	14.17	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	401	661	1789	1509	2.29	1789	1550	2.67	13.5	Pd

R290

HMBP

60 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C						WEIGHT Kg	DESIGN		
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)			Ashrae						
									5			7,2						
									-25	-15	10	Kcal/h	COP					
NL60TR	5.68	1/4	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	196	319	854	721	1.92	854	740	2.24	9.5	Lc

High Efficiency Models

R600a: W (A) x 1.05 = kcal/h (B)

R290: W (A) x 1.16 = kcal/h (B)

R290: W (C) x 0.98 = kcal/h (D)

W x 1.16 = kcal/h

R600a

LBP

50 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C							WEIGHT Kg	DESIGN	
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25		-10		-23,3		Kcal/h			COP
									W	COP	W	COP	W	COP				
HLY45AAa	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSIR	P	C	23	36	52	0.97	111	60	1.25	8.2	Lb	
HLY45AAb	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSCR	P	C	23	36	52	1.02	112	60	1.32	8.2	Lb	
HLY55AAa	5.46	1/9	LBP	S	220-240V 50Hz ~1	RSIR	P	C	28	44	62	1.03	130	72	1.33	8.9	Lb	
HLY55AAb	5.46	1/9	LBP	S	220-240V 50Hz ~1	RSCR	P	C	28	44	62	1.1	131	72	1.42	8.9	Lb	
HLY70AAa	6.65	1/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	42	59	80	1.08	162	92	1.37	9.0	Lb	
HLY70AAb	6.65	1/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	41	59	81	1.15	163	93	1.46	9.0	Lb	
HLY75AAa	7.38	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	47	66	89	1.10	183	102	1.40	9.1	Lb	
HLY75AAb	7.38	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	48	66	89	1.16	184	102	1.48	9.1	Lb	
HLY80AAa	8.10	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	53	74	99	1.11	201	113	1.41	9.1	Lb	
HLY80AAb	8.10	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	54	74	99	1.17	203	113	1.49	9.1	Lb	
HLY90AAa	9.09	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	67	84	109	1.11	230	125	1.41	9.5	Lc	
HLY90AAb	9.09	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	65	84	111	1.17	233	127	1.49	9.5	Lc	
HLY99AAa	9.95	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	69	90	119	1.10	248	136	1.40	9.6	Lc	
HLY99AAb	9.95	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	67	90	119	1.16	249	137	1.48	9.6	Lc	
HPY12AAa	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	78	107	144	1.12	300	165	1.43	10.7	Pc	
HPY12AAb	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	78	107	144	1.18	300	165	1.50	10.7	Pd	
HPY14AAa	14.32	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	92	124	166	1.13	344	190	1.43	11.0	Pc	
HPY14AAb	14.32	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	92	124	166	1.18	344	190	1.50	11.0	Pd	
HPY16AAa	16.15	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	101	136	181	1.13	380	208	1.44	11.2	Pc	
HPY16AAb	16.15	1/4	LBP	S	220-240V 50Hz ~1	RSCR	P	C	101	136	181	1.19	380	208	1.51	11.2	Pd	

R600a

HMBP

50 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY °C							WEIGHT Kg	DESIGN	
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25		-15		7,2		Kcal/h			COP
									W	COP	W	COP	W	COP				
HD40MBa	4.06	1/14	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	40	72	178	1.65	214	182	1.91	6.0	Dd	
HLY55MAa	5.46	1/10	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	48	96	250	2.20	300	255	2.51	9.4	Lb	
HLY55Mab	5.46	1/10	HMBP	S	220-240V 50Hz ~1	RSCR	P	C	48	96	250	2.32	300	255	2.67	9.4	Lb	
HLY70MAa	6.65	1/8	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	66	120	307	2.18	370	314	2.50	8.4	Lb	
HLY70Mab	6.65	1/8	HMBP	S	220-240V 50Hz ~1	RSCR	P	C	66	120	307	2.34	370	314	2.69	8.4	Lb	

High Efficiency Models

R600a: W (A) x 1.05 = kcal/h (B)

R290: W (A) x 1.16 = kcal/h (B)

R290: W (C) x 0.98 = kcal/h (D)

W x 1.16 = kcal/h

Testing cycle conditions	CECOMAF		ASHRAE	
	LBP (A)	HMBP (C)	LBP (B)	HMBP (D)
Condensing temperature		55	55	55
Liquid temperature		55	32	46
Suction temperature		32	32	35
Ambient temperature		32	32	35

F	OC	S	C	V	P	R
Fan cooled	Oil cooler	Static	Capillar and tube	Expansion valve	PTC	Relay

