

R290 / R600a

2. Compressors Catalogue
























compressors
R290 / R600a

R290

LBP

50 Hz

NATURAL REFRIGERANT













MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	CPR 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		COP			
									-40	-30		kcal/h	COP				
 NLY45LAa	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	62	115	151	1.04	298	176	1.35	10.0	Lc
 NLY45LAb	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	62	115	151	1.11	298	176	1.44	10.0	Lc
 NLY60LAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	85	152	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	152	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	152	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	152	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	132	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	201	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	201	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	177	232	0.85	468	270	1.10	10.0	Lc
 NLY90LAa	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	130	236	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	236	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	189	248	0.88	515	290	1.14	10.1	Ld
 NPY12LAa	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	174	308	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	308	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	248	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	375	484	1.05	926	560	1.35	12.8	Pd
 NPY14LAb	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	216	375	484	1.14	926	560	1.48	12.8	Pd
 NP14FB	14.17	1/2	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	155	288	385	0.91	795	450	1.19	12.5	Pd
 NX21FB	20.72	3/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	249	491	646	1.09	1245	750	1.42	17.5	Xd
 NX23FB	23.20	7/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	306	605	743	1.10	1405	851	1.43	17.5	Xd

R290

LBP

60 Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	CPR 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		COP			
									-40	-30		kcal/h	COP				
 NLY45LRa **	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	76	136	178	1.05	349	207	1.35	10.3	Lc
 NLY45LRb **	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	76	136	178	1.12	349	207	1.44	10.3	Lc
 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
 NLY60LRa	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	105	199	259	1.10	491	300	1.42	10.3	Lc
 NLY60LRb	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	105	199	259	1.18	491	300	1.53	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	11.0	Lc
 NLY80LRa	8.10	1/4	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	139	246	321	1.06	634	373	1.37	10.9	Lc
 NLY80LRb	8.10	1/4	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	139	246	321	1.12	634	373	1.46	10.9	Lc
 NLY90LRa **	9.09	1/3	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	153	275	359	1.05	704	417	1.36	11.2	Ld
 NLY90LRb **	9.09	1/3	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	153	275	359	1.12	704	417	1.44	11.2	Ld
 NPY12LRa **	12.10	3/8	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	200	361	470	1.05	922	546	1.35	12.3	Pd
 NPY12LRb **	12.10	3/8	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	200	361	470	1.12	922	546	1.44	12.3	Pd

(**) Model under development. Provisional performance/data.



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	CPR 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	P	C	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-V	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	10.0	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	10.0	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	P	C	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-V	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
 NX18TB **	18.40	3/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	508	851	2320	1961	2.15	2320	2014	2.50	16.8	Xc
 NX21TB **	20.72	7/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	581	969	2650	2242	2.14	2650	2304	2.49	17.2	Xd










(**) Model under development. Provisional performance/data.

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					
 NLY45RRa **	4.56	1/6	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	175	276	717	608	2.17	717	623	2.53	10.5	Lc
 NLY45RRb **	4.56	1/6	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	175	276	717	608	2.35	717	623	2.75	10.5	Lc
 NLY60RRa **	5.98	1/5	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	238	375	975	826	2.21	975	846	2.58	10.8	Lc
 NLY60RRb **	5.98	1/5	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	238	375	975	826	2.39	975	846	2.79	10.8	Lc
 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
 NLY80RRa **	8.10	1/4	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	315	497	1293	1095	2.23	1293	1122	2.60	11.1	Ld
 NLY80RRb **	8.10	1/4	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	315	497	1293	1095	2.40	1293	1122	2.80	11.1	Ld
 NLY90RRa **	9.09	1/3	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	357	562	1462	1239	2.19	1462	1269	2.56	11.4	Ld
 NLY90RRb **	9.09	1/3	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	357	562	1462	1239	2.36	1462	1269	2.76	11.4	Ld

(**) Model under development. Provisional performance/data.



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

Variable Speed Compressors

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	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	W	COP	kcal/h		
  NLT45FSN (**) 4,56 HMBP F 220-240V 50Hz ~1 ECM C	1800	75	133	353	2,71	429	345	3,03	10,4	Lc					
		2100	89	159	413	2,76	501	404			3,08				
		2400	101	182	470	2,7	568	460			3,02				
		3000	126	228	582	2,6	701	569			2,91				
		3600	150	264	695	2,55	845	680			2,85				
  NLT60FSN (**) 5,98 HMBP F 220-240V 50Hz ~1 ECM C	1800	101	180	476	2,76	578	466	3,08	10,8	Lc					
		2100	119	214	557	2,79	675	545			3,12				
		2400	136	244	633	2,75	764	619			3,07				
		3000	171	308	787	2,63	948	770			2,94				
		3600	203	358	941	2,55	1144	920			2,85				



R290

LBP

50 Hz

Variable Speed Compressors

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	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	-10	W	COP	kcal/h		
  NPT12FSC 12,10 LBP F 220-240V 50Hz ~1 ECM C	1800	115	196	257	1,18	521	300	1,52	12,1	Pc					
		2100	134	233	306	1,28	601	352			1,65				
		2400	152	268	349	1,26	680	405			1,63				
		3000	178	326	419	1,25	-	485			1,60				
		3600	216	393	506	1,22	-	585			1,57				

(**) Model under development. Provisional performance/data.

 Green Cooling Models
 New Model

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 / 60Hz

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	CPR 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					
									-35	-30	W	COP	-10	kcal/h	COP			
HD40AA	4.06	1/20	LBP	S	220-240V 50Hz ~1	RSIR	P	C	32	36	44	0.67	94	50	0.86	5.2	Db	
HLY45AAa	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSIR	P	C	23	36	52	0.97	111	60	1.25	6.8	Lb	
HLY45AAb	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSCR	P	C	23	36	52	1.02	112	60	1.32	6.8	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	1.10	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	9.1	Lb	
HLY70AAb	6.65	1/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	41	59	81	1.15	163	93	1.46	9.1	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	10.6	Lc	
HLY99AAb	9.95	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	67	90	119	1.16	249	137	1.48	10.6	Lc	
HPY12AAa	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	78	107	144	1.12	300	165	1.43	11.0	Pc	
HPY12AAb	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	78	107	144	1.18	300	165	1.50	11.0	Pd	
HPY12AGa	12.10	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	78	107	144	1.10	300	165	1.40	10.9	Pc	
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	11.0	Pc	
HPY16AAb	16.15	1/4	LBP	S	220-240V 50Hz ~1	RSCR	P	C	101	136	181	1.19	380	208	1.51	11.0	Pd	

Green Cooling 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

NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm ³	POWER hp	APPLICATION	CPR 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		10		7,2					
									-25	-15	W	COP	10	kcal/h	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	9.0	Lb	
 HLY55MAb	5.46	1/10	HMBP	S	220-240V 50Hz ~1	RSCR	P	C	48	96	250	2.32	300	255	2.67	9.0	Lb	
 HLY55MAac (***)	5.46	1/10	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	48	96	250	2.20	300	255	2.51	9.0	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	
 HLY70MAac (***)	6.65	1/8	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	66	120	307	2.18	370	314	2.50	8.4	Lb	
 HLY70MAad (***)	6.65	1/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	66	120	307	2.18	370	314	2.50	8.4	Lb	
 HLY99RAa (**)	9.95	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	111	197	460	2.07	553	470	2.39	10.2	Lc	
 HLY99RAb (**)	9.95	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	111	197	460	2.26	553	470	2.61	10.2	Lc	
 HPY12RAa (**)	12.10	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	138	252	562	2.12	680	575	2.45	10.5	Pc	
 HPY12RAb (**)	12.10	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	138	252	562	2.32	680	575	2.68	10.5	Pc	
 HPY14RAa (**)	14.32	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	164	294	670	2.11	808	685	2.43	10.9	Pd	
 HPY14RAb (**)	14.32	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	164	294	670	2.31	808	685	2.66	10.9	Pd	
 HPY16RAa (**)	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	182	334	753	2.40	905	770	2.40	11.1	Pd	
 HPY16RAb (**)	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	182	334	753	2.27	905	770	2.62	11.1	Pd	

 Green Cooling Models
 New Model

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

(**) Model under development. Provisional performance/data.

(***) First lowercase letter indicates:

b = Running capacitor included;
a = Running capacitor not included

Second lowercase letter indicates:

c = Statically cooled with starting capacitor;
a = Statically cooled without starting capacitor;
d = Fan cooled with starting capacitor;
b = Fan cooled without starting capacitor

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

