

# High Efficiency

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2. Compressors Catalogue

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# R134a

# LBP

# 50 Hz

R134a compressors compatible with R12

## HIGH EFFICIENCY

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							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				
GLY35AAa	3.68	1/10	LBP	S	220-240V 50Hz ~1	RSIR	P	C	33	47	66	0.94	151	78	1.23	9.0	Lb
GLY35AAb	3.68	1/10	LBP	S	220-240V 50Hz ~1	RSCR	P	C	32	47	67	0.99	153	79	1.29	9.0	Lb
GLY40AAa	4.02	1/9	LBP	S	220-240V 50Hz ~1	RSIR	P	C	35	53	75	0.96	169	89	1.25	9.1	Lb
GLY40AAb	4.02	1/9	LBP	S	220-240V 50Hz ~1	RSCR	P	C	36	54	76	1.00	171	90	1.31	9.1	Lb
GLY45AAa	4.56	1/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	47	65	89	1.01	192	104	1.3	9.2	Lb
GLY45AAb	4.56	1/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	48	66	90	1.05	193	105	1.36	9.2	Lb
GLY55AAa	5.46	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	53	78	108	1.03	238	127	1.33	9.2	Lb
GLY55AAb	5.46	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	54	78	109	1.09	239	128	1.40	9.2	Lb
GLY60AAa	5.98	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	58	85	119	1.03	255	139	1.34	9.3	Lb
GLY60AAb	5.98	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	58	86	120	1.10	256	140	1.42	9.3	Lb
GLY70AAa	6.65	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	70	96	132	1.05	288	154	1.36	9.8	Lb
GLY70AAb	6.65	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	71	97	133	1.12	289	155	1.44	9.8	Lb
GLY75AAa	7.38	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	74	107	147	1.06	311	172	1.36	10.0	Lc
GLY75AAb	7.38	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	76	108	147	1.12	312	172	1.44	10.0	Lc
GLY80AAa	8.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	92	123	164	1.07	349	191	1.37	10.0	Lc
GLY80AAb	8.10	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	93	124	165	1.13	351	192	1.45	10.0	Lc
GLY90AAa	9.09	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	104	140	186	1.07	387	216	1.37	10.4	Ld
GLY90AAb	9.09	1/4	LBP	S	220-240V 50Hz ~1	RSCR	P	C	103	140	187	1.13	388	217	1.45	10.4	Ld
GPM10AA	10.18	1/4	LBP	S	220-240V 50Hz ~1	RSIR	R	C	95	136	188	0.94	405	220	1.22	11.5	Pc
GPM12BA	12.10	3/8	LBP	OC	220-240V 50Hz ~1	RSIR	R	C	128	178	241	0.94	500	280	1.21	11.5	Pc
GPM12CA	12.10	3/8	LBP	F	220-240V 50Hz ~1	RSIR	R	C	128	178	241	0.94	500	280	1.21	11.5	Pc
GPY12AAa	12.10	3/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	128	178	241	0.96	500	280	1.23	11.5	Pd
GPY12AAb	12.10	3/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	128	178	241	1.04	500	280	1.33	11.5	Pd
GPY12LAa	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	113	162	225	1.00	509	265	1.30	12.1	Pd
GPY12LAb	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	113	162	225	1.06	509	265	1.38	12.1	Pd

# R134a

# LBP

# 60 Hz

R134a compressors compatible with R12

## HIGH EFFICIENCY

MODEL	DISPLACEMENT cm <sup>3</sup>	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		Kcal/h	COP		
									W	COP		W	COP				
GLY40ADa	4.02	1/9	LBP	S	115V 60Hz ~1	RSIR	P	C	46	65	91	0.97	208	107	1.26	9.0	Lb
GLY40ADb	4.02	1/9	LBP	S	115V 60Hz ~1	RSCR	P	C	46	65	91	1.02	208	107	1.32	9.0	Lb
GLY50ADa	5.12	1/7	LBP	S	115V 60Hz ~1	RSIR	P	C	56	83	117	1.02	259	138	1.33	9.5	Lc
GLY50ADb	5.12	1/7	LBP	S	115V 60Hz ~1	RSCR	P	C	56	83	117	1.06	259	138	1.38	9.5	Lc

High Efficiency Models

R134a: W (A) x 1.05 = kcal/h (B)

R134a: W (C) x 0.94 = kcal/h (D)

W x 0.86 = kcal/h

# R134a

# HMBP | HBP

# 50 Hz

R134a compressors compatible with R12

## HIGH EFFICIENCY

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								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			
GLY60RAa	5.98	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	106	191	<b>486</b>	<b>2.06</b>	586	<b>500</b>	<b>2.36</b>	9.9	Lc	
GLY60RAb	5.98	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	106	191	<b>486</b>	<b>2.25</b>	586	<b>500</b>	<b>2.6</b>	9.9	Lc	
GLY80RAa	8.10	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	159	275	<b>681</b>	<b>2.17</b>	819	<b>700</b>	<b>2.5</b>	10.4	Lc	
GLY80RAb	8.10	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	159	275	<b>681</b>	<b>2.35</b>	819	<b>700</b>	<b>2.71</b>	10.4	Lc	
GLY90RAa	9.09	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	169	298	<b>748</b>	<b>2.06</b>	901	<b>770</b>	<b>2.37</b>	11.3	Lc	
GLY90RAb	9.09	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	169	298	<b>748</b>	<b>2.27</b>	901	<b>770</b>	<b>2.61</b>	11.3	Lc	
GPY12RAa	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	228	401	<b>993</b>	<b>2.05</b>	1192	<b>1020</b>	<b>2.35</b>	12.6	Pd	
GPY12RAb	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	228	401	<b>993</b>	<b>2.24</b>	1192	<b>1020</b>	<b>2.58</b>	12.6	Pd	
GPY14RAa	14.32	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	296	492	<b>1161</b>	<b>1.98</b>	1386	<b>1190</b>	<b>2.27</b>	12.6	Pd	
GPY14RAb	14.32	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	296	492	<b>1161</b>	<b>2.18</b>	1386	<b>1190</b>	<b>2.5</b>	12.6	Pd	
GPY16RAa	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	287	512	<b>1248</b>	<b>2.20</b>	1490	<b>1351</b>	<b>2.31</b>	12.8	Pd	
GPY16RAb	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	287	512	<b>1248</b>	<b>2.20</b>	1490	<b>1351</b>	<b>2.50</b>	12.8	Pd	

# R134a

# HMBP | HBP

# 60 Hz

R134a compressors compatible with R12

## HIGH EFFICIENCY

MODEL	DISPLACEMENT cm <sup>3</sup>	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			
GLY80RDa	8.10	1/5	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	169	299	<b>776</b>	<b>2.03</b>	939	<b>800</b>	<b>2.34</b>	10.3	Lc	
GLY80RDb	8.10	1/5	HMBP	F	115V 60Hz ~1	CSR	R	C-V	169	299	<b>776</b>	<b>2.18</b>	939	<b>800</b>	<b>2.51</b>	10.5	Lc	
GLY90RDa	9.09	1/4	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	198	348	<b>875</b>	<b>1.96</b>	1053	<b>900</b>	<b>2.25</b>	10.6	Lc	
GLY90RDb	9.09	1/4	HMBP	F	115V 60Hz ~1	CSR	R	C-V	198	348	<b>875</b>	<b>2.11</b>	1053	<b>900</b>	<b>2.42</b>	10.6	Lc	
GPY12RDa	12.10	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	281	480	<b>1151</b>	<b>1.96</b>	1375	<b>1180</b>	<b>2.25</b>	12.3	Pd	
GPY12RDb	12.10	3/8	HMBP	F	115V 60Hz ~1	CSR	R	C-V	281	480	<b>1151</b>	<b>2.12</b>	1375	<b>1180</b>	<b>2.44</b>	12.3	Pd	
GPY14RDa	14.32	1/2	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	318	516	<b>1411</b>	<b>1.91</b>	1739	<b>1467</b>	<b>2.22</b>	12.8	Pd	
GPY14RDb	14.32	1/2	HMBP	F	115V 60Hz ~1	CSR	R	C-V	318	516	<b>1411</b>	<b>2.04</b>	1739	<b>1467</b>	<b>2.36</b>	12.8	Pd	
GPY16RDa	16.15	1/2	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	349	614	<b>1519</b>	<b>1.89</b>	1822	<b>1560</b>	<b>2.17</b>	12.8	Pd	
GPY16RDb	16.15	1/2	HMBP	F	115V 60Hz ~1	CSR	R	C-V	349	614	<b>1519</b>	<b>2.01</b>	1822	<b>1560</b>	<b>2.31</b>	12.8	Pd	

 High Efficiency Models

R134a: W (A) x 1.05 = kcal/h (B)

R134a: W (C) x 0.94 = kcal/h (D)

W x 0.86 = kcal /h

**R404A | R507 (\*)**
**LBP**
**50 Hz**
**HIGH EFFICIENCY**

MODEL	DISPLACEMENT cm <sup>3</sup>	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		
									-40	-30		W	COP				
MLY40AAa	4.02	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	45	95	130	0.89	271	166	1.25	10.1	Lb
MLY40AAb	4.02	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	45	95	130	0.94	271	166	1.32	10.1	Lb
MLY45LAa	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	61	118	158	0.92	318	200	1.30	10.0	Lc
MLY45LAb	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	61	118	158	0.98	318	200	1.38	10.0	Lc
MLY50AAa	5.11	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	65	131	174	0.88	344	220	1.23	10.5	Lb
MLY50AAb	5.11	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	65	131	174	0.93	344	220	1.31	10.5	Lb
MLY60LAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	87	169	222	0.90	430	280	1.26	10.3	Lc
MLY60LAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	87	169	222	0.97	430	280	1.36	10.3	Lc
MLY80LAa	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	104	208	276	0.91	550	350	1.28	10.9	Ld
MLY80LAb	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	104	208	276	0.98	550	350	1.38	10.9	Ld
MLY90LAa	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	121	236	313	0.91	614	395	1.28	11.4	Ld
MLY90LAb	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	121	236	313	0.98	614	395	1.38	11.4	Ld
MPT12LA	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	194	348	453	1.01	876	570	1.42	13.0	Pd
MPT14LA	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	243	420	535	0.99	988	670	1.38	13.4	Pd

**R404A | R507 (\*)**
**LBP**
**60 Hz**
**HIGH EFFICIENCY**

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							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		
									-40	-30		W	COP				
MLT50AD	5.11	1/5	LBP	S	115V 60Hz ~1	RSCR	P	C	75	155	210	1.01	438	268	1.42	10.4	Lc
MLT50ADb	5.11	1/5	LBP	F	115V 60Hz ~1	CSR	R	C	75	155	210	1.01	438	268	1.42	10.4	Lc
MLT50ADc	5.11	1/5	LBP	S	115V 60Hz ~1	CSR	R	C-V	75	155	210	1.01	438	268	1.42	10.4	Lc
MLT50LD	5.11	1/5	LBP	F	115V 60Hz ~1	CSR	R	C-V	75	155	210	1.01	438	268	1.42	10.4	Lc
MLY60LDa	5.98	1/5	LBP	F	115V 60Hz ~1	CSIR	R	C-V	102	198	260	0.89	503	328	1.25	10.3	Lc
MLY60LDb	5.98	1/5	LBP	F	115V 60Hz ~1	CSR	R	C-V	102	198	260	0.95	503	328	1.34	10.3	Lc
MLT90LD	9.09	1/4	LBP	F	115V 60Hz ~1	CSR	R	C-V	160	285	375	0.99	753	474	1.40	11.0	Ld
MLT90CD	9.09	1/3	LBP	F	115V 60Hz ~1	RSCR	P	C	165	291	383	1.03	773	485	1.45	11.0	Ld
MLT90CDb	9.09	1/3	LBP	F	115V 60Hz ~1	CSR	R	C-V	160	285	375	0.99	753	474	1.40	11.0	Ld
MLT90CDc	9.09	1/3	LBP	S	115V 60Hz ~1	CSR	R	C-V	160	285	375	0.99	753	474	1.40	11.0	Ld
MPT12LD	12.10	3/8	LBP	F	115V 60Hz ~1	CSR	R	C-V	226	398	516	1.01	996	650	1.41	12.7	Pd
MPT12CD	12.10	3/8	LBP	F	115V 60Hz ~1	RSCR	P	C	226	398	516	1.01	996	650	1.41	12.7	Pd
MPT12CDb	12.10	3/8	LBP	F	115V 60Hz ~1	CSR	R	C-V	226	398	516	1.01	996	650	1.41	12.7	Pd

 High Efficiency Models

(\*) Or R407B

R404A: W (A) x 1.17 = kcal/h (B)

W x 0.86 = kcal /h

R404A: W (C) x 1.02 = kcal/h (D)

**R404A | R507 (\*)**
**HMBP | HBP**
**50 Hz**
**HIGH EFFICIENCY**

MODEL	DISPLACEMENT cm <sup>3</sup>	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	10			Kcal/h
MLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	212	346	<b>766</b>	<b>1.77</b>	902	<b>825</b>	<b>2.15</b>	10.5	Lc
MLY60RAb	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	212	346	<b>766</b>	<b>1.93</b>	902	<b>825</b>	<b>2.36</b>	10.5	Lc
MLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.86</b>	1250	<b>1140</b>	<b>2.27</b>	11.4	Ld
MLY80RAb	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	282	463	<b>1055</b>	<b>2.02</b>	1250	<b>1140</b>	<b>2.46</b>	11.4	Ld
MLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	317	512	<b>1132</b>	<b>1.75</b>	1334	<b>1220</b>	<b>2.13</b>	11.3	Ld
MLY90RAb	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	317	511	<b>1136</b>	<b>1.92</b>	1340	<b>1225</b>	<b>2.34</b>	11.3	Ld

**R404A | R507 (\*)**
**HMBP | HBP**
**60 Hz**
**HIGH EFFICIENCY**

MODEL	DISPLACEMENT cm <sup>3</sup>	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	10			Kcal/h
MLY60RDa	5.98	1/4	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	252	411	<b>905</b>	<b>1.73</b>	1065	<b>975</b>	<b>2.10</b>	10.7	Lc
MLY60RDb	5.98	1/4	HMBP	F	115V 60Hz ~1	CSR	R	C-V	252	411	<b>905</b>	<b>1.86</b>	1065	<b>975</b>	<b>2.27</b>	10.7	Lc
MLY80RDa	8.10	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	330	543	<b>1232</b>	<b>1.77</b>	1457	<b>1330</b>	<b>2.15</b>	11.2	Ld
MLY80RDb	8.10	3/8	HMBP	F	115V 60Hz ~1	CSR	R	C-V	330	543	<b>1232</b>	<b>1.83</b>	1457	<b>1330</b>	<b>2.22</b>	11.2	Ld

High Efficiency Models

**(\*) Or R407B**

R404A: W (A) x 1.17 = kcal/h (B)

W x 0.86 = kcal /h

R404A: W (C) x 1.02 = kcal/h (D)

## R290

## LBP

## 50 Hz

### NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm <sup>3</sup>	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	
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	
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	
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	
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	

## R290

## HMBP

## 50 Hz

### NATURAL REFRIGERANT

MODEL	DISPLACEMENT cm <sup>3</sup>	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	W	COP	10	Kcal/h	COP			
NLY45RAa	4.56	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	148	237	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	518	2.35	609	530	2.75	10.2	Lc	
NLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	211	324	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	703	2.40	829	720	2.79	10.4	Lc	
NLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	258	411	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	929	2.39	1103	955	2.80	11.4	Lc	
NLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	306	480	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	1054	2.38	1244	1080	2.78	11.4	Ld	

### 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 <sup>3</sup>	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 <sup>3</sup>	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				
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