

# METRIC MEASUREMENT SYSTEM

## Product Specifications for H79B24UABH

Measurement System: Metric	Revision: 3	Technical Specifications			
Refrigerant: R407C	Series Family: B	Voltage	Phase	Frequency	Evaporator Temperature Range
		220/240	1	50	-30°C to 10°C

Performance	1	2	3	4	5	6	7
	ARI	ARI	ASRET	B-POINT	CHEER	HEATPUMP	ARI*
	(220v)	(240v)	(220v)	(220v)	(220v)	(220v)	(220v)
Capacity (Watts)	5 400	5 500	5 600	6 700	7 700	4 400	5 800
Motor Input (Watt)	1 760	1 780	1 830	1 550	1 450	1 390	1 880
Current (Amp)	8.1	7.4	7.8	7.3	6.8	6.4	8.7
COP	3.1	3.1	3.1	4.4	5.3	3.1	3.1
Efficiency (%)		66.0	65.0				66.0
Evaporating Temp.°C	7.2	7.2	7.2	7.2	7.2	-1.1	7.2
Condensing Temp.°C	54.4	54.4	54.4	43.3	37.8	43.3	54.4
Ambient Temp.°C	35	35	35	35	35	35	35
Liquid Temp.°C	41.7	41.7	41.7	30	24.4	30	43.9
Return Gas Temp.°C	18.3	18.3	35	18.3	18.3	10	20.6

Nominal Performance Data @ 50 Hz (±5) based upon 72hr run-in

\* "Average" method (others use the "Dew Point" method).

The "Dew Point" method values were updated July 2010 to conform to AHRI 540.

## Mechanical Data

Bore X Stroke	4.394 X 1.458 cm	Speed	2950 rpm
Displacement	7.8 m <sup>3</sup> /hr	IPRV Setting	31 - 38 ΔP(bar)
Displacement	44.2 cc/rev	Refrigerant Charge Limit	3 kg

## Electrical Data

RLA: 9.4	LRA: 56	MCC: 13.6
Voltage Range: 198 - 264	Protection Type: Internal Line Break	
U.L. File: N/A	CE Approval: Yes	CCC Approval: No
Motor Res. in Ohms (Ω) ± 5%		
T1-T3 (C-R)	T1-T2 (C-S)	T2-T3 (S-R)
1.180	2.620	3.800

## Electrical Accessories

Start Relay: GE 3ARR3*10S* ( )	
Start Cap: 145-175/250 μF/volts	
Run Cap: 40/370 μF/volts	(Parenthesis Denote Med.Torque Components)
PTCR Start Device: Ceramite P/N: 305C19	PTCR Start Device: AC Ohms: 20
Crankcase Heater Vendor P/N: Sensata 8HT5	
Type-Watts: PCTR - 30	

## Other Technical Info

Oil Name: Polyolester 32BCE	Oil Charge	Internal Free Volume	5 572 cc
Oil Spec: 581857	Initial Charge: 1035 cc	Max. Compressor Height	34.925 cm
Viscosity: 30.0 cSt @ 40°C	Recharge: 946 cc	Weight Net	29.9 kg
		Weight Shipped	31.5 kg

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# METRIC MEASUREMENT SYSTEM



Performance Table for H79B24UABH

220/240-1-50Hz  
R407C -Dew Point  
11°K Superheat  
8°K Subcooling  
35°C Ambient  
@220-1-50

Cond. Temp.	Nominal performance ±5% based on 72 hr run-in									Evap. Temp.
		-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
25°C	Capacity	785	1189	1973	3106	4561	6308	8318	10563	13013
	Power	508	551	657	803	968	1129	1265	1353	1370
	Current	3.0	3.5	4.1	4.6	5.1	5.5	5.8	5.7	5.4
	MassFlow	15.1	22.6	37.1	58.1	84.7	116.1	151.7	190.6	232.1
	COP	1.55	2.16	3.00	3.87	4.71	5.59	6.58	7.81	9.50
	Efficiency									
	Capacity	937	1097	1627	2497	3679	5144	6863	8806	10946
	Power	695	699	770	886	1024	1163	1279	1352	1358
	Current	3.0	3.4	4.0	4.6	5.1	5.6	6.0	6.1	6.0
	MassFlow	19.0	21.8	31.7	48.0	69.9	96.7	127.6	161.8	198.6
	COP	1.35	1.57	2.11	2.82	3.59	4.42	5.37	6.51	8.06
	Efficiency									
	Capacity		1126	1457	2119	3084	4322	5805	7503	9388
	Power		805	856	956	1081	1211	1323	1395	1404
	Current		3.3	3.9	4.5	5.1	5.7	6.2	6.5	6.5
	MassFlow		23.4	29.7	42.4	60.8	84.0	111.3	141.9	175.2
	COP		1.40	1.70	2.22	2.85	3.57	4.39	5.38	6.69
	Efficiency									
	Capacity			1359	1869	2672	3739	5040	6548	8233
	Power			899	996	1123	1259	1380	1465	1492
	Current			3.8	4.4	5.1	5.8	6.4	6.9	7.1
	MassFlow			28.9	39.1	55.0	75.8	100.6	128.8	159.6
	COP			1.51	1.88	2.38	2.97	3.65	4.47	5.52
	Efficiency									
	Capacity				1642	2338	3289	4466	5839	7380
	Power				991	1135	1290	1435	1548	1607
	Current				4.4	5.1	5.9	6.6	7.2	7.7
	MassFlow				35.9	50.4	69.8	93.3	120.2	149.6
	COP				1.66	2.06	2.55	3.11	3.77	4.59
	Efficiency									
	Capacity				1334	1980	2870	3977	5270	6723
	Power				925	1099	1289	1472	1627	1731
	Current				4.2	5.0	5.9	6.7	7.5	8.2
	MassFlow				30.6	44.9	64.0	87.3	113.9	143.0
	COP				1.44	1.80	2.23	2.70	3.24	3.88
	Efficiency									
	Capacity					1493	2378	3470	4740	6158
	Power					1001	1239	1475	1686	1851
	Current					4.9	5.8	6.8	7.7	8.6
	MassFlow					36.1	56.2	80.3	107.7	137.8
	COP					1.49	1.92	2.35	2.81	3.33
	Efficiency									
	Capacity						1708	2841	4142	5583
	Power						1125	1427	1709	1948
	Current						5.7	6.8	7.9	8.9
	MassFlow						44.0	70.1	99.5	131.5
	COP						1.52	1.99	2.42	2.87
	Efficiency									
	Capacity							1987	3375	4893
	Power							1314	1681	2009
	Current							6.6	7.9	9.1
	MassFlow							54.5	87.0	122.1
	COP							1.51	2.01	2.44
	Efficiency									
	Capacity									

Units: Capacity (Watt), Power(Watt), Current (Amp), Mass Flow(kg/hr), COP, Efficiency(%)

H79B24UABH Revision: 3

# ENGLISH MEASUREMENT SYSTEM

## Product Specifications for H79B24UABH

Measurement System: English	Revision: 3	<b>Technical Specifications</b>				
Refrigerant: R407C	Series Family: B	Voltage	Phase	Frequency	Evaporator Temperature Range	
		220/240	1	50	-20°F to 55°F	

Performance	1	2	3	4	5	6	7
	ARI	ARI	ASRET	B-POINT	CHEER	HEATPUMP	ARI*
	(220v)	(240v)	(220v)	(220v)	(220v)	(220v)	(220v)
Capacity (Btu/hr)	18 500	18 700	19 200	23 000	26 300	14 900	19 800
Motor Input (Watt)	1 760	1 780	1 830	1 550	1 450	1 390	1 880
Current (Amp)	8.1	7.4	7.8	7.3	6.8	6.4	8.7
EER (Btu/W-hr)	10.5	10.5	10.5	14.9	18.2	10.7	10.5
Efficiency (%)		66.0	65.0				66.0
Evaporating Temp.°F	45	45	45	45	45	30	45
Condensing Temp.°F	130	130	130	110	100	110	130
Ambient Temp.°F	95	95	95	95	95	95	95
Liquid Temp.°F	107	107	107	86	76	86	111
Return Gas Temp.°F	65	65	95	65	65	50	69

Nominal Performance Data @ 50 Hz (±5) based upon 72hr run-in

\* "Average" method (others use the "Dew Point" method).

The "Dew Point" method values were updated July 2010 to conform to AHRI 540.

## Mechanical Data

Bore X Stroke	1.730 X 0.574 in	Speed	2950 rpm
Displacement	276.4 ft <sup>3</sup> /hr	IPRV Setting	450 - 550 ΔP(psi)
Displacement	2.699 in <sup>3</sup> /rev	Refrigerant Charge Limit	6 lb

## Electrical Data

RLA: 9.4	LRA: 56	MCC: 13.6
Voltage Range: 198 - 264	Protection Type: Internal Line Break	
U.L. File: N/A	CE Approval: Yes	CCC Approval: No
Motor Res. in Ohms (Ω) ± 5%		
T1-T3 (C-R)	T1-T2 (C-S)	T2-T3 (S-R)
1.180	2.620	3.800

## Electrical Accessories

Start Relay: GE 3ARR3*10S* ()	
Start Cap: 145-175/250 μF/volts	
Run Cap: 40/370 μF/volts	(Parenthesis Denote Med.Torque Components)
PTCR Start Device: Ceramite P/N: 305C19	PTCR Start Device: AC Ohms: 20
Crankcase Heater Vendor P/N: Sensata 8HT5	
Type-Watts: PCTR - 30	

## Other Technical Info

Oil Name: Polyolester 32BCE	Oil Charge	Internal Free Volume	340 in <sup>3</sup>
Oil Spec: 581857	Initial Charge: 35 oz	Recharge: 32 oz	Max. Compressor Height
Viscosity: 30.0 cSt @ 40°C			13.75 in
		Weight Net	66.0 lb
		Weight Shipped	69.5 lb

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# ENGLISH MEASUREMENT SYSTEM



New Website Coming Soon

Performance Table for H79B24UABH

220/240-1-50Hz  
R407C -Dew Point  
20°F Superheat  
15°F Subcooling  
95°F Ambient  
@220-1-50

Cond. Temp.	Nominal performance ±5% based on 72 hr run-in															Evap. Temp.	
		-20°F	-15°F	-10°F	-5°F	0°F	5°F	10°F	15°F	20°F	25°F	30°F	35°F	40°F	45°F	50°F	55°F
80°F	Capacity	2931	3534	4539	5931	7691	9803	12251	15016	18083	21435	25053	28923	33025	37345	41864	46566
	Power	575	591	629	684	753	831	916	1003	1089	1169	1240	1299	1340	1362	1359	1328
	Current	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.4	5.6	5.8	5.9	5.9	5.8	5.6	5.3
	MassFlow	37.0	44.1	56.2	72.9	94.1	119.3	148.4	181.0	216.8	255.7	297.2	341.1	387.1	435.0	484.4	535.1
	EER Efficiency	5.10	5.98	7.22	8.67	10.22	11.79	13.38	14.97	16.61	18.34	20.20	22.27	24.64	27.42	30.81	35.06
90°F	Capacity	3463	3596	4121	5021	6278	7877	9800	12029	14549	17343	20392	23682	27193	30911	34817	38894
	Power	752	748	766	804	856	920	991	1065	1140	1211	1274	1325	1361	1378	1373	1340
	Current	3.0	3.3	3.6	3.9	4.2	4.5	4.9	5.2	5.5	5.8	6.0	6.1	6.3	6.3	6.2	6.1
	MassFlow	46.0	47.3	53.6	64.6	80.0	99.5	122.8	149.6	179.7	212.8	248.5	286.6	326.9	368.9	412.5	457.4
	EER Efficiency	4.61	4.81	5.38	6.25	7.34	8.57	9.89	11.29	12.76	14.32	16.01	17.87	19.98	22.43	25.37	29.03
100°F	Capacity		3920	4094	4631	5516	6730	8258	10082	12184	14549	17160	19999	23049	26294	29716	33299
	Power		839	849	878	924	983	1050	1122	1196	1266	1331	1385	1425	1448	1449	1425
	Current		3.2	3.5	3.8	4.1	4.5	4.8	5.2	5.6	5.9	6.2	6.5	6.7	6.8	6.9	6.9
	MassFlow		53.4	55.6	62.5	73.8	89.2	108.4	131.1	157.1	186.1	217.7	251.7	287.8	325.8	365.3	406.0
	EER Efficiency		4.67	4.82	5.27	5.97	6.85	7.87	8.98	10.19	11.49	12.89	14.44	16.17	18.16	20.51	23.37
110°F	Capacity				4276	4917	5877	7139	8687	10502	12569	14869	17388	20106	23008	26077	29295
	Power				886	936	999	1072	1151	1233	1314	1390	1457	1511	1549	1567	1560
	Current				3.7	4.0	4.4	4.8	5.2	5.6	6.0	6.4	6.7	7.0	7.3	7.5	7.6
	MassFlow				60.0	68.8	81.8	98.6	118.9	142.5	169.0	198.2	229.8	263.5	299.0	336.0	374.3
	EER Efficiency				4.82	5.26	5.88	6.66	7.54	8.51	9.56	10.70	11.93	13.31	14.85	16.65	18.78
120°F	Capacity					3996	4831	5958	7359	9016	10914	13035	15362	17879	20568	23412	26395
	Power					868	946	1035	1131	1232	1332	1429	1519	1597	1660	1704	1725
	Current					3.9	4.3	4.7	5.2	5.6	6.1	6.5	7.0	7.4	7.7	8.1	8.3
	MassFlow					58.4	70.7	86.7	106.3	129.1	154.9	183.3	214.2	247.1	281.9	318.2	355.7
	EER Efficiency					4.60	5.11	5.76	6.50	7.32	8.19	9.12	10.12	11.20	12.39	13.74	15.30
130°F	Capacity							4227	5611	7240	9099	11170	13436	15880	18486	21236	24114
	Power							917	1040	1169	1299	1427	1548	1660	1758	1838	1897
	Current							4.5	5.0	5.5	6.1	6.6	7.1	7.6	8.1	8.5	8.9
	MassFlow							66.2	86.7	110.4	137.1	166.5	198.3	232.1	267.8	305.0	343.5
	EER Efficiency							4.61	5.39	6.19	7.00	7.83	8.68	9.57	10.52	11.55	12.71
140°F	Capacity									4689	6638	8789	11123	13625	16277	19063	21965
	Power									1023	1193	1361	1525	1679	1822	1948	2055
	Current									5.3	5.9	6.5	7.1	7.7	8.3	8.9	9.4
	MassFlow									79.7	109.0	141.0	175.4	211.8	250.1	289.9	331.0
	EER Efficiency									4.58	5.57	6.46	7.30	8.11	8.93	9.78	10.69
150°F	Capacity											5404	7937	10626	13455	16406	19462
	Power											1210	1425	1633	1830	2012	2176
	Current											6.3	7.0	7.7	8.4	9.1	9.7
	MassFlow											100.3	138.9	179.7	222.2	266.3	311.6
	EER Efficiency											4.47	5.57	6.51	7.35	8.15	8.94

Units: Capacity (Btu/hr), Power(Watt), Current (Amp), Mass Flow(lb/hr), EER(Btu/W-hr), Efficiency(%)