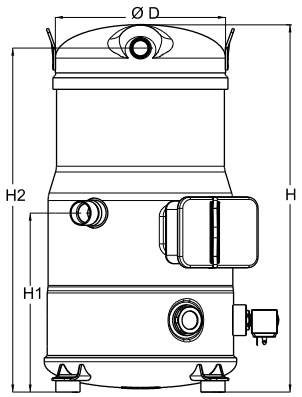
General Characteristics

Model number (on compressor nameplate)		**VZH088AGANA**
Code number for Singlepack*		120G0010
Code number for Industrial pack**		120G0078
Drawing number		8560025e
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		Threaded
Oil equalization connection		1-3/4" Rotolock
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Swept volume	5.39 in3/rev	
Net weight	121 lbs	
Oil charge	112 oz, POE - 160SZ	
Maximum system test pressure Low Side / High side	483 psi / 653 psi	
Maximum differential test pressure	537 psi	
Maximum number of starts per hour	12	
Refrigerant charge limit	13 lbs	
Approved refrigerants	R410A	

Dimensions

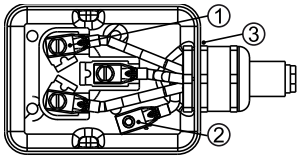


D=9.6 inch, H=19.1 inch,
H1=9.3 inch, H2=17.8 inch, H3=- inch

Electrical Characteristics

Nominal voltage	Frequency converter CDS303 required with supply voltage 380-480V/3/50-60Hz
Voltage range	342-528 V supply to frequency converter
Winding resistance (between phases) +/- 7% at 77°F	0.10 Ω
Rated Load Amps (RLA)	37.5 A
Maximum Must Trip current (MMT)	46.9 A
Motor protection	Motor protection by frequency converter

Terminal box



IP54 (with cable gland)

1: Power connection, 3 x 4.8 mm (3/16")
2: Earth M4
3: Hole Ø 33 mm (1.30")

Recommended Installation torques

Oil sight glass	37 ft.lbs
Power connections / Earth connection	2 ft.lbs / 1 ft.lbs
Mounting bolts	11 ft.lbs

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 8 Unboxed compressors on pallet (order per multiples of 8)

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set, 1-1/8" ODF & 7/8" ODF	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

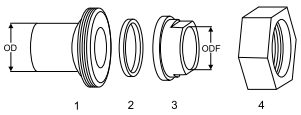
Oil / lubricants	Code no.
POE lubricant, 160SZ, 1 liter can	7754023
POE lubricant, 160SZ, 2 liter can	120Z0571

Crankcase heaters	Code no.
Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391
Surface sump heater, 80 W, 575 V, CE mark, UL	120Z0402
Belt type crankcase heater, 65 W, 110 V, CE mark, UL	7773109
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0038
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0039
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466
Belt type crankcase heater, 65 W, 575 V, CE mark, UL	120Z0467

Miscellaneous accessories	Code no.
Discharge temperature sensor / converter	120Z0157
Discharge temperature sensor	120Z0158
Discharge temperature converter	120Z0159
Acoustic hood for VZH	120Z0509
Discharge thermostat kit	7750009

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z0066
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box incl cover	120Z0146
Terminal box cover	120Z0149
T block connector 2.1" x 2.3"	8173230
Coil / 230V	120Z0143
Coil / 24V	120Z0144

Solder sleeve adapter set

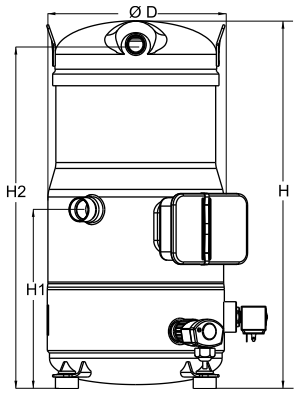


1: Rotolock adapter (Suc & Dis)
2: Gasket (Suc & Dis)
3: Solder sleeve (Suc & Dis)
4: Rotolock nut (Suc & Dis)

General Characteristics

Model number (on compressor nameplate)		**VZH088AGBNA**
Code number for Singlepack*		120G0022
Code number for Industrial pack**		120G0090
Drawing number		8560055b
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		None
Oil equalization connection		1-3/4" Rotolock
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Swept volume	5.39 in3/rev	
Net weight	121 lbs	
Oil charge	112 oz, POE - 160SZ	
Maximum system test pressure Low Side / High side	483 psi / 653 psi	
Maximum differential test pressure	537 psi	
Maximum number of starts per hour	12	
Refrigerant charge limit	13 lbs	
Approved refrigerants	R410A	

Dimensions

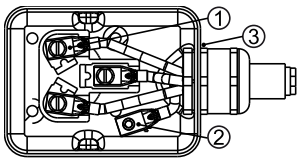


D=9.6 inch, H=19.1 inch,
H1=9.3 inch, H2=17.8 inch, H3=- inch

Electrical Characteristics

Nominal voltage	Frequency converter CDS303 required with supply voltage 380-480V/3/50-60Hz
Voltage range	342-528 V supply to frequency converter
Winding resistance (between phases) +/- 7% at 77°F	0.10 Ω
Rated Load Amps (RLA)	37.5 A
Maximum Must Trip current (MMT)	46.9 A
Motor protection	Motor protection by frequency converter

Terminal box



IP54 (with cable gland)

1: Power connection, 3 x 4.8 mm (3/16")
2: Earth M4
3: Hole Ø 33 mm (1.30")

Recommended Installation torques

Power connections / Earth connection	2 ft.lbs / 1 ft.lbs
Mounting bolts	11 ft.lbs

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 8 Unboxed compressors on pallet (order per multiples of 8)

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set, 1-1/8" ODF & 7/8" ODF	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

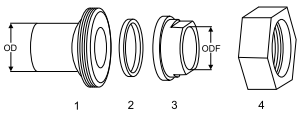
Oil / lubricants	Code no.
POE lubricant, 160SZ, 1 liter can	7754023
POE lubricant, 160SZ, 2 liter can	120Z0571

Crankcase heaters	Code no.
Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391
Surface sump heater, 80 W, 575 V, CE mark, UL	120Z0402
Belt type crankcase heater, 65 W, 110 V, CE mark, UL	7773109
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0038
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0039
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466
Belt type crankcase heater, 65 W, 575 V, CE mark, UL	120Z0467

Miscellaneous accessories	Code no.
Discharge temperature sensor / converter	120Z0157
Discharge temperature sensor	120Z0158
Discharge temperature converter	120Z0159
Acoustic hood for scroll compressor VZH	120Z0511
Discharge thermostat kit	7750009
Hybrid Manifolding Kit for VZH088+SH090 VZH117+SH140 VZH117+SH161 24V	120Z0653
Hybrid Manifolding Kit for VZH088+SH120 VZH117+SH184 24V	120Z0651
Hybrid Manifolding Kit for VZH088+SH090 VZH117+SH140 VZH117+SH161 230V	120Z0654
Hybrid Manifolding Kit for VZH088+SH120 VZH117+SH184 230V	120Z0652
Suction separator for VZH088+SH090 (50Hz)	120Z0676
Suction separator for VZH088+SH090 (60Hz)	120Z0675
Suction separator for VZH088+SH120 (50Hz)	120Z0664
Suction separator for VZH088+SH120 (60Hz)	120Z0658
Oil level sensor electrical part 24VAC/VDC	120Z0561
Oil level sensor electrical part 230VAC	120Z0562

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z0066
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z0495
Gasket for oil sight glass (white teflon)	8156129
Terminal box incl cover	120Z0146
Terminal box cover	120Z0149
T block connector 2.1" x 2.3"	8173230
Coil / 230V	120Z0143
Coil / 24V	120Z0144
Oil level sensor screw in mechanical part	120Z0560

Solder sleeve adapter set



1: Rotolock adapter (Suc & Dis)
2: Gasket (Suc & Dis)
3: Solder sleeve (Suc & Dis)
4: Rotolock nut (Suc & Dis)

General Characteristics

Model number (on compressor nameplate)		**VZH088AGDNA**
Code number for Singlepack*		120G0102
Drawing number		8560097b
Suction and discharge connections		Brazed
Suction connection		1-1/8 " ODF
Discharge connection		7/8 " ODF
Oil sight glass		Installed on OEQ
Oil equalization connection		1-3/4" Rotolock
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Swept volume	5.39 in3/rev	
Net weight	121 lbs	
Oil charge	128 oz, POE - 160SZ	
Maximum system test pressure Low Side / High side	483 psi / 653 psi	
Maximum differential test pressure	537 psi	
Maximum number of starts per hour	12	
Refrigerant charge limit	13 lbs	
Approved refrigerants	R410A	

Electrical Characteristics

Nominal voltage	Frequency converter CDS303 required with supply voltage 380-480V/3/50-60Hz
Voltage range	342-528 V supply to frequency converter
Winding resistance (between phases) +/- 7% at 77°F	0.10 Ω
Rated Load Amps (RLA)	37.5 A
Maximum Must Trip current (MMT)	46.9 A
Motor protection	Motor protection by frequency converter

Recommended Installation torques

Power connections / Earth connection	2 ft.lbs / 1 ft.lbs
Mounting bolts	11 ft.lbs

Parts shipped with compressor

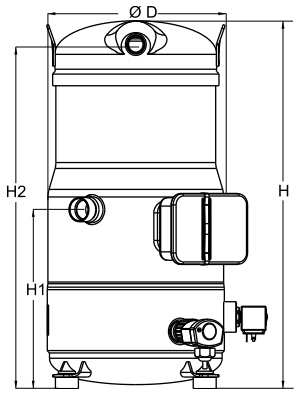
Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

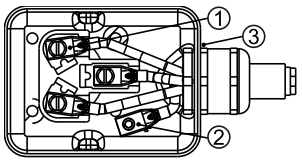
-

Dimensions



D=9.6 inch, H=19.1 inch,
H1=9.3 inch, H2=17.8 inch, H3=- inch

Terminal box



IP54 (with cable gland)

1: Power connection, 3 x 4.8 mm (3/16")
2: Earth M4
3: Hole Ø 33 mm (1.30")

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set, 1-1/8" ODF & 7/8" ODF	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

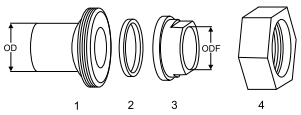
Oil / lubricants	Code no.
POE lubricant, 160SZ, 1 liter can	7754023
POE lubricant, 160SZ, 2 liter can	120Z0571

Crankcase heaters	Code no.
Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391
Surface sump heater, 80 W, 575 V, CE mark, UL	120Z0402
Belt type crankcase heater, 65 W, 110 V, CE mark, UL	7773109
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0038
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0039
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466
Belt type crankcase heater, 65 W, 575 V, CE mark, UL	120Z0467

Miscellaneous accessories	Code no.
Discharge temperature sensor / converter	120Z0157
Discharge temperature sensor	120Z0158
Discharge temperature converter	120Z0159
Acoustic hood for scroll compressor VZH	120Z0511
Discharge thermostat kit	7750009
Hybrid Manifolding Kit for VZH088+SH090 VZH117+SH140 VZH117+SH161 24V	120Z0653
Hybrid Manifolding Kit for VZH088+SH120 VZH117+SH184 24V	120Z0651
Hybrid Manifolding Kit for VZH088+SH090 VZH117+SH140 VZH117+SH161 230V	120Z0654
Hybrid Manifolding Kit for VZH088+SH120 VZH117+SH184 230V	120Z0652
Suction separator for VZH088+SH090 (50Hz)	120Z0676
Suction separator for VZH088+SH090 (60Hz)	120Z0675
Suction separator for VZH088+SH120 (50Hz)	120Z0664
Suction separator for VZH088+SH120 (60Hz)	120Z0658
Oil level sensor electrical part 24VAC/VDC	120Z0561
Oil level sensor electrical part 230VAC	120Z0562

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z0066
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z0495
Gasket for oil sight glass (white teflon)	8156129
Terminal box incl cover	120Z0146
Terminal box cover	120Z0149
T block connector 2.1" x 2.3"	8173230
Coil / 230V	120Z0143
Coil / 24V	120Z0144
Oil level sensor screw in mechanical part	120Z0560

Solder sleeve adapter set



1: Rotolock adapter (Suc & Dis)
2: Gasket (Suc & Dis)
3: Solder sleeve (Suc & Dis)
4: Rotolock nut (Suc & Dis)

Performance data at 25 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	-	21 279	26 695	33 150	40 733	49 530	-	-	-
90	-	19 065	24 281	30 395	37 494	45 667	50 183	60 132	64 468
100	-	17 918	22 989	28 886	35 697	43 513	47 825	57 312	61 445
110	-	16 680	21 577	27 228	33 723	41 153	45 246	54 245	58 164
120	-	-	20 001	25 379	31 532	38 550	42 412	50 898	54 593
130	-	-	-	23 304	29 093	35 680	39 301	47 256	50 721
140	-	-	-	-	-	-	-	43 356	46 592
Power input in W									
70	-	1 545	1 626	1 701	1 718	1 623	-	-	-
90	-	2 169	2 142	2 174	2 212	2 205	2 167	1 993	1 877
100	-	2 614	2 510	2 498	2 526	2 541	2 527	2 424	2 346
110	-	3 162	2 967	2 897	2 899	2 922	2 924	2 878	2 831
120	-	-	3 524	3 381	3 344	3 359	3 370	3 366	3 345
130	-	-	-	3 962	3 870	3 864	3 876	3 900	3 899
140	-	-	-	-	-	-	-	4 490	4 504
Current consumption in A									
70	-	4.14	4.21	4.27	4.42	4.71	-	-	-
90	-	4.34	4.37	4.32	4.27	4.30	4.36	4.63	4.81
100	-	4.91	4.98	4.93	4.84	4.79	4.80	4.94	5.05
110	-	5.65	5.79	5.78	5.69	5.60	5.57	5.62	5.68
120	-	-	6.68	6.75	6.69	6.60	6.56	6.55	6.58
130	-	-	-	7.72	7.74	7.69	7.65	7.61	7.63
140	-	-	-	-	-	-	-	8.71	8.71
Mass flow in lbs/h									
70	-	237	296	365	445	536	-	-	-
90	-	237	298	368	448	540	590	701	749
100	-	234	297	367	448	540	590	701	749
110	-	231	294	365	446	538	589	699	747
120	-	-	289	361	443	535	585	695	742
130	-	-	-	355	437	529	579	689	736
140	-	-	-	-	-	-	-	680	727
Energy Efficiency Ratio (E.E.R.)									
70	-	13.77	16.41	19.48	23.72	30.53	-	-	-
90	-	8.79	11.34	13.98	16.95	20.71	23.15	30.16	34.34
100	-	6.85	9.16	11.56	14.13	17.13	18.93	23.64	26.20
110	-	5.28	7.27	9.40	11.63	14.09	15.47	18.85	20.54
120	-	-	5.68	7.51	9.43	11.48	12.59	15.12	16.32
130	-	-	-	5.88	7.52	9.23	10.14	12.12	13.01
140	-	-	-	-	-	-	-	9.66	10.34

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	39 301	Btu/h	Current consumption	7.65	A
Power input	3 876	W	Mass flow	579	lbs/h
E.E.R.	10.14				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 30 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	20 737	26 138	32 679	40 475	49 641	60 292	-	-	-
90	18 021	23 276	29 511	36 843	45 388	55 262	60 734	72 818	78 099
110	-	20 380	26 174	32 908	40 698	49 665	54 626	65 576	70 361
130	-	-	-	28 276	35 199	43 149	47 547	57 263	61 516
140	-	-	-	-	32 097	39 523	43 634	52 728	56 714
150	-	-	-	-	-	-	39 680	48 214	51 961
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	1 901	1 934	2 004	2 071	2 092	2 026	-	-	-
90	2 705	2 600	2 585	2 619	2 659	2 665	2 642	2 519	2 433
110	-	3 619	3 470	3 422	3 434	3 463	3 471	3 449	3 418
130	-	-	-	4 586	4 520	4 523	4 539	4 570	4 575
140	-	-	-	-	5 213	5 185	5 195	5 234	5 251
150	-	-	-	-	-	-	5 950	5 986	6 008
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	4.59	4.75	4.84	4.95	5.13	5.45	-	-	-
90	5.04	5.25	5.31	5.31	5.30	5.36	5.43	5.71	5.88
110	-	6.60	6.79	6.83	6.78	6.72	6.71	6.75	6.81
130	-	-	-	8.80	8.86	8.83	8.80	8.76	8.76
140	-	-	-	-	9.90	9.94	9.94	9.91	9.90
150	-	-	-	-	-	-	11.01	11.03	11.03
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	231	292	364	447	543	653	-	-	-
90	226	289	362	446	542	653	714	849	908
110	-	282	356	441	538	649	710	845	903
130	-	-	-	430	528	640	701	835	893
140	-	-	-	-	521	632	693	828	886
150	-	-	-	-	-	-	684	818	876
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.91	13.51	16.30	19.54	23.73	29.75	-	-	-
90	6.66	8.95	11.41	14.07	17.07	20.73	22.99	28.91	32.10
110	-	5.63	7.54	9.62	11.85	14.34	15.74	19.01	20.58
130	-	-	-	6.17	7.79	9.54	10.48	12.53	13.45
140	-	-	-	-	6.16	7.62	8.40	10.07	10.80
150	-	-	-	-	-	-	6.67	8.05	8.65
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	47 547	Btu/h	Current consumption	8.80	A
Power input	4 539	W	Mass flow	701	lbs/h
E.E.R.	10.48				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	69	dB(A)
With accoustic hood	62	dB(A)

Performance data at 35 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	24 614	30 944	38 603	47 731	58 472	70 966	-	-	-
90	21 366	27 466	34 717	43 264	53 250	64 818	71 240	85 449	91 668
110	-	24 074	30 767	38 581	47 664	58 159	63 982	76 870	82 515
130	-	-	-	33 242	41 295	50 598	55 765	67 224	72 254
140	-	-	-	-	37 770	46 462	51 297	62 039	66 764
150	-	-	-	-	-	-	46 845	56 947	61 402
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	2 295	2 328	2 392	2 454	2 484	2 450	-	-	-
90	3 111	3 039	3 038	3 076	3 121	3 143	3 135	3 061	3 005
110	-	4 091	3 986	3 959	3 980	4 018	4 033	4 036	4 022
130	-	-	-	5 224	5 181	5 195	5 214	5 253	5 265
140	-	-	-	-	5 947	5 934	5 947	5 990	6 008
150	-	-	-	-	-	-	6 795	6 832	6 853
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	5.19	5.35	5.48	5.61	5.83	6.18	-	-	-
90	5.90	6.13	6.23	6.27	6.30	6.39	6.47	6.75	6.92
110	-	7.55	7.78	7.86	7.86	7.82	7.82	7.86	7.91
130	-	-	-	9.87	9.97	9.97	9.95	9.90	9.89
140	-	-	-	-	11.08	11.15	11.14	11.10	11.08
150	-	-	-	-	-	-	12.34	12.34	12.33
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	275	347	430	527	639	769	-	-	-
90	268	341	426	524	636	766	838	996	1 065
110	-	333	418	517	630	760	832	990	1 059
130	-	-	-	506	620	750	822	981	1 050
140	-	-	-	-	613	744	816	974	1 043
150	-	-	-	-	-	-	807	966	1 035
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.72	13.29	16.14	19.45	23.54	28.97	-	-	-
90	6.87	9.04	11.43	14.07	17.06	20.62	22.73	27.91	30.50
110	-	5.88	7.72	9.74	11.97	14.47	15.86	19.05	20.52
130	-	-	-	6.36	7.97	9.74	10.70	12.80	13.72
140	-	-	-	-	6.35	7.83	8.63	10.36	11.11
150	-	-	-	-	-	-	6.89	8.34	8.96
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	55 765	Btu/h	Current consumption	9.95	A
Power input	5 214	W	Mass flow	822	lbs/h
E.E.R.	10.70				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 40 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	28 447	35 698	44 466	54 919	67 226	81 553	-	-	-
90	24 693	31 635	39 901	49 660	61 082	74 336	81 704	98 025	105 176
110	-	27 762	35 355	44 249	54 619	66 636	73 316	88 128	94 625
130	-	-	-	38 204	47 380	58 026	63 955	77 139	82 938
140	-	-	-	-	43 424	53 369	58 919	71 288	76 741
150	-	-	-	-	-	-	53 951	65 595	70 744
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	2 692	2 728	2 789	2 851	2 894	2 893	-	-	-
90	3 527	3 487	3 500	3 544	3 598	3 637	3 645	3 622	3 594
110	-	4 579	4 513	4 508	4 540	4 588	4 611	4 640	4 641
130	-	-	-	5 875	5 854	5 879	5 901	5 950	5 967
140	-	-	-	-	6 693	6 693	6 709	6 756	6 777
150	-	-	-	-	-	-	7 648	7 685	7 706
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	5.80	5.97	6.11	6.27	6.52	6.91	-	-	-
90	6.76	7.00	7.13	7.20	7.27	7.39	7.48	7.78	7.94
110	-	8.48	8.75	8.87	8.91	8.91	8.91	8.95	8.99
130	-	-	-	10.93	11.08	11.11	11.09	11.03	11.00
140	-	-	-	-	12.25	12.35	12.35	12.29	12.26
150	-	-	-	-	-	-	13.66	13.65	13.62
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	318	401	496	607	735	884	-	-	-
90	310	393	490	601	730	878	960	1 143	1 222
110	-	383	481	593	722	871	953	1 135	1 215
130	-	-	-	581	712	861	943	1 126	1 205
140	-	-	-	-	705	854	937	1 119	1 199
150	-	-	-	-	-	-	929	1 112	1 192
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.57	13.09	15.95	19.26	23.23	28.19	-	-	-
90	7.00	9.07	11.40	14.01	16.98	20.44	22.42	27.07	29.26
110	-	6.06	7.83	9.82	12.03	14.52	15.90	19.00	20.39
130	-	-	-	6.50	8.09	9.87	10.84	12.97	13.90
140	-	-	-	-	6.49	7.97	8.78	10.55	11.32
150	-	-	-	-	-	-	7.05	8.54	9.18
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	63 955	Btu/h	Current consumption	11.09	A
Power input	5 901	W	Mass flow	943	lbs/h
E.E.R.	10.84				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 45 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	32 236	40 399	50 268	62 038	75 903	92 054	-	-	-
90	28 001	35 785	45 062	56 030	68 882	83 816	92 124	110 546	118 622
110	-	31 446	39 938	49 912	61 565	75 096	82 628	99 349	106 692
130	-	-	-	43 161	53 454	65 433	72 118	87 007	93 566
140	-	-	-	-	49 061	60 246	66 503	80 475	86 646
150	-	-	-	-	-	-	60 999	74 157	79 988
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	3 090	3 133	3 195	3 262	3 321	3 356	-	-	-
90	3 952	3 942	3 971	4 025	4 089	4 148	4 172	4 199	4 200
110	-	5 082	5 054	5 068	5 113	5 172	5 203	5 259	5 276
130	-	-	-	6 539	6 540	6 574	6 600	6 659	6 683
140	-	-	-	-	7 450	7 462	7 481	7 533	7 557
150	-	-	-	-	-	-	8 508	8 547	8 568
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	6.43	6.58	6.73	6.93	7.22	7.64	-	-	-
90	7.61	7.85	8.00	8.11	8.22	8.37	8.47	8.77	8.93
110	-	9.41	9.70	9.87	9.94	9.97	9.98	10.02	10.05
130	-	-	-	11.99	12.18	12.24	12.22	12.15	12.11
140	-	-	-	-	13.43	13.55	13.55	13.48	13.43
150	-	-	-	-	-	-	14.98	14.95	14.90
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	361	454	561	686	831	998	-	-	-
90	352	445	553	678	823	990	1 083	1 288	1 379
110	-	434	543	669	814	981	1 074	1 280	1 370
130	-	-	-	657	803	971	1 064	1 270	1 360
140	-	-	-	-	796	964	1 058	1 264	1 354
150	-	-	-	-	-	-	1 051	1 257	1 347
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.43	12.90	15.73	19.02	22.86	27.43	-	-	-
90	7.09	9.08	11.35	13.92	16.85	20.20	22.08	26.32	28.24
110	-	6.19	7.90	9.85	12.04	14.52	15.88	18.89	20.22
130	-	-	-	6.60	8.17	9.95	10.93	13.07	14.00
140	-	-	-	-	6.59	8.07	8.89	10.68	11.47
150	-	-	-	-	-	-	7.17	8.68	9.34
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	72 118	Btu/h	Current consumption	12.22	A
Power input	6 600	W	Mass flow	1 064	lbs/h
E.E.R.	10.93				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	35 981	45 047	56 010	69 089	84 502	102 468	-	-	-
90	31 291	39 914	50 201	62 373	76 652	93 257	102 501	123 011	132 008
110	-	35 123	44 517	55 568	68 500	83 539	91 917	110 534	118 715
130	-	-	-	48 113	59 519	72 820	80 254	96 829	104 139
140	-	-	-	-	54 679	67 092	74 046	89 601	96 478
150	-	-	-	-	-	-	67 988	82 634	89 133
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	3 491	3 542	3 610	3 687	3 765	3 839	-	-	-
90	4 387	4 406	4 452	4 517	4 594	4 677	4 718	4 795	4 822
110	-	5 601	5 606	5 641	5 698	5 771	5 811	5 895	5 928
130	-	-	-	7 218	7 236	7 281	7 311	7 382	7 413
140	-	-	-	-	8 218	8 242	8 263	8 321	8 348
150	-	-	-	-	-	-	9 376	9 416	9 437
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	7.07	7.20	7.35	7.58	7.90	8.36	-	-	-
90	8.45	8.68	8.85	8.99	9.13	9.31	9.43	9.74	9.89
110	-	10.32	10.64	10.84	10.96	11.01	11.03	11.07	11.09
130	-	-	-	13.05	13.28	13.36	13.35	13.27	13.21
140	-	-	-	-	14.60	14.74	14.75	14.66	14.59
150	-	-	-	-	-	-	16.30	16.24	16.17
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	403	506	626	764	925	1 111	-	-	-
90	393	497	616	755	916	1 102	1 205	1 434	1 534
110	-	485	605	744	906	1 092	1 195	1 424	1 524
130	-	-	-	732	894	1 080	1 184	1 413	1 514
140	-	-	-	-	887	1 074	1 178	1 407	1 508
150	-	-	-	-	-	-	1 171	1 401	1 501
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.31	12.72	15.52	18.74	22.44	26.69	-	-	-
90	7.13	9.06	11.28	13.81	16.68	19.94	21.73	25.66	27.37
110	-	6.27	7.94	9.85	12.02	14.48	15.82	18.75	20.03
130	-	-	-	6.67	8.22	10.00	10.98	13.12	14.05
140	-	-	-	-	6.65	8.14	8.96	10.77	11.56
150	-	-	-	-	-	-	7.25	8.78	9.44
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	80 254	Btu/h	Current consumption	13.35	A
Power input	7 311	W	Mass flow	1 184	lbs/h
E.E.R.	10.98				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 55 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	39 683	49 643	61 692	76 071	93 025	112 795	-	-	-
90	34 563	44 023	55 317	68 691	84 390	102 660	112 835	135 421	145 332
110	-	38 796	49 092	61 219	75 427	91 964	101 184	121 683	130 695
130	-	-	-	53 061	65 573	80 187	88 361	106 605	114 656
140	-	-	-	-	60 280	73 906	81 550	98 665	106 238
150	-	-	-	-	-	-	74 919	91 026	98 181
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	3 893	3 957	4 035	4 125	4 227	4 341	-	-	-
90	4 832	4 878	4 941	5 020	5 114	5 222	5 281	5 407	5 462
110	-	6 135	6 171	6 225	6 296	6 384	6 435	6 546	6 595
130	-	-	-	7 909	7 945	8 000	8 035	8 118	8 156
140	-	-	-	-	8 998	9 032	9 056	9 119	9 150
150	-	-	-	-	-	-	10 253	10 293	10 315
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	7.73	7.82	7.97	8.22	8.58	9.08	-	-	-
90	9.29	9.49	9.67	9.84	10.02	10.23	10.36	10.68	10.83
110	-	11.22	11.57	11.80	11.95	12.04	12.06	12.09	12.11
130	-	-	-	14.11	14.38	14.48	14.48	14.38	14.31
140	-	-	-	-	15.77	15.94	15.95	15.84	15.75
150	-	-	-	-	-	-	17.60	17.52	17.43
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	445	558	689	841	1 018	1 222	-	-	-
90	434	548	679	831	1 008	1 213	1 326	1 578	1 689
110	-	536	667	820	997	1 202	1 316	1 568	1 678
130	-	-	-	808	985	1 190	1 304	1 556	1 667
140	-	-	-	-	978	1 183	1 297	1 550	1 660
150	-	-	-	-	-	-	1 291	1 543	1 654
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.19	12.55	15.29	18.44	22.01	25.99	-	-	-
90	7.15	9.02	11.19	13.68	16.50	19.66	21.37	25.04	26.61
110	-	6.32	7.96	9.83	11.98	14.40	15.72	18.59	19.82
130	-	-	-	6.71	8.25	10.02	11.00	13.13	14.06
140	-	-	-	-	6.70	8.18	9.01	10.82	11.61
150	-	-	-	-	-	-	7.31	8.84	9.52
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	88 361	Btu/h	Current consumption	14.48	A
Power input	8 035	W	Mass flow	1 304	lbs/h
E.E.R.	11.00				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 60 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	43 341	54 187	67 312	82 985	101 470	123 035	-	-	-
90	37 816	48 112	60 410	74 982	92 097	112 024	123 126	147 775	158 595
110	-	42 463	53 662	66 864	82 343	100 372	110 428	132 795	142 632
130	-	-	-	58 004	71 617	87 533	96 441	116 335	125 118
140	-	-	-	-	65 862	80 690	89 015	107 667	115 926
150	-	-	-	-	-	-	81 791	99 332	107 129
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	4 298	4 377	4 468	4 577	4 707	4 863	-	-	-
90	5 286	5 359	5 440	5 536	5 649	5 784	5 861	6 038	6 118
110	-	6 685	6 748	6 821	6 907	7 012	7 073	7 214	7 279
130	-	-	-	8 615	8 665	8 731	8 771	8 867	8 912
140	-	-	-	-	9 789	9 831	9 859	9 929	9 963
150	-	-	-	-	-	-	11 137	11 178	11 201
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	8.40	8.44	8.58	8.85	9.25	9.79	-	-	-
90	10.11	10.29	10.47	10.66	10.87	11.12	11.27	11.59	11.74
110	-	12.11	12.47	12.74	12.92	13.04	13.07	13.10	13.10
130	-	-	-	15.16	15.47	15.59	15.59	15.48	15.39
140	-	-	-	-	16.94	17.14	17.15	17.01	16.90
150	-	-	-	-	-	-	18.91	18.79	18.68
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	486	610	752	918	1 111	1 333	-	-	-
90	475	599	742	908	1 100	1 323	1 447	1 722	1 843
110	-	586	730	896	1 089	1 312	1 436	1 711	1 832
130	-	-	-	883	1 076	1 299	1 423	1 698	1 819
140	-	-	-	-	1 069	1 292	1 416	1 691	1 812
150	-	-	-	-	-	-	1 409	1 684	1 805
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	10.08	12.38	15.06	18.13	21.56	25.30	-	-	-
90	7.15	8.98	11.10	13.55	16.30	19.37	21.01	24.48	25.92
110	-	6.35	7.95	9.80	11.92	14.31	15.61	18.41	19.60
130	-	-	-	6.73	8.26	10.03	11.00	13.12	14.04
140	-	-	-	-	6.73	8.21	9.03	10.84	11.64
150	-	-	-	-	-	-	7.34	8.89	9.56
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	96 441	Btu/h	Current consumption	15.59	A
Power input	8 771	W	Mass flow	1 423	lbs/h
E.E.R.	11.00				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

Performance data at 65 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	46 954	58 677	72 873	89 830	109 839	133 189	-	-	-
90	41 051	52 180	65 481	81 248	99 774	121 350	133 374	160 074	171 797
110	-	46 124	58 228	72 504	89 250	108 763	119 650	143 871	154 525
130	-	-	-	62 942	77 651	94 858	104 493	126 019	135 525
140	-	-	-	-	71 426	87 443	96 440	116 607	125 541
150	-	-	-	-	-	-	88 605	107 553	115 980
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	4 705	4 802	4 912	5 043	5 204	5 404	-	-	-
90	5 749	5 847	5 949	6 062	6 198	6 363	6 459	6 686	6 790
110	-	7 250	7 338	7 428	7 531	7 654	7 727	7 898	7 978
130	-	-	-	9 333	9 398	9 474	9 519	9 629	9 682
140	-	-	-	-	10 591	10 641	10 672	10 749	10 788
150	-	-	-	-	-	-	12 028	12 071	12 095
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	9.08	9.06	9.19	9.48	9.92	10.50	-	-	-
90	10.92	11.06	11.24	11.45	11.70	11.99	12.14	12.48	12.63
110	-	12.99	13.36	13.66	13.88	14.02	14.06	14.08	14.07
130	-	-	-	16.21	16.55	16.70	16.71	16.57	16.46
140	-	-	-	-	18.11	18.33	18.34	18.18	18.05
150	-	-	-	-	-	-	20.20	20.06	19.92
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	527	660	814	994	1 202	1 443	-	-	-
90	516	649	804	983	1 192	1 434	1 568	1 866	1 997
110	-	637	792	971	1 180	1 421	1 556	1 854	1 984
130	-	-	-	958	1 166	1 407	1 542	1 839	1 970
140	-	-	-	-	1 159	1 400	1 534	1 831	1 962
150	-	-	-	-	-	-	1 526	1 823	1 954
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.98	12.22	14.84	17.81	21.11	24.64	-	-	-
90	7.14	8.92	11.01	13.40	16.10	19.07	20.65	23.94	25.30
110	-	6.36	7.94	9.76	11.85	14.21	15.48	18.22	19.37
130	-	-	-	6.74	8.26	10.01	10.98	13.09	14.00
140	-	-	-	-	6.74	8.22	9.04	10.85	11.64
150	-	-	-	-	-	-	7.37	8.91	9.59
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	104 493	Btu/h	Current consumption	16.71	A
Power input	9 519	W	Mass flow	1 542	lbs/h
E.E.R.	10.98				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 70 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	50 524	63 116	78 372	96 606	118 130	143 255	-	-	-
90	44 267	56 228	70 529	87 488	107 419	130 637	143 578	172 318	184 937
110	-	49 780	62 789	78 137	96 146	117 136	128 849	154 910	166 375
130	-	-	-	67 876	83 674	102 163	112 518	135 656	145 877
140	-	-	-	-	76 972	94 164	103 825	125 486	135 084
150	-	-	-	-	-	-	95 361	115 688	124 732
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	5 115	5 232	5 364	5 522	5 719	5 966	-	-	-
90	6 223	6 344	6 466	6 601	6 761	6 958	7 075	7 351	7 480
110	-	7 831	7 940	8 048	8 167	8 311	8 396	8 598	8 694
130	-	-	-	10 066	10 142	10 228	10 279	10 404	10 465
140	-	-	-	-	11 405	11 462	11 495	11 580	11 623
150	-	-	-	-	-	-	12 928	12 972	12 997
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	9.77	9.68	9.80	10.10	10.57	11.21	-	-	-
90	11.73	11.82	11.98	12.22	12.50	12.82	12.99	13.35	13.49
110	-	13.86	14.23	14.56	14.81	14.98	15.03	15.05	15.02
130	-	-	-	17.25	17.63	17.81	17.81	17.66	17.53
140	-	-	-	-	19.28	19.52	19.53	19.35	19.19
150	-	-	-	-	-	-	21.49	21.32	21.15
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	567	710	876	1 069	1 293	1 552	-	-	-
90	556	700	866	1 059	1 283	1 543	1 688	2 008	2 149
110	-	688	854	1 047	1 271	1 531	1 675	1 996	2 137
130	-	-	-	1 033	1 257	1 516	1 660	1 980	2 120
140	-	-	-	-	1 249	1 508	1 652	1 971	2 111
150	-	-	-	-	-	-	1 643	1 962	2 102
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.88	12.06	14.61	17.49	20.66	24.01	-	-	-
90	7.11	8.86	10.91	13.25	15.89	18.77	20.29	23.44	24.73
110	-	6.36	7.91	9.71	11.77	14.09	15.35	18.02	19.14
130	-	-	-	6.74	8.25	9.99	10.95	13.04	13.94
140	-	-	-	-	6.75	8.22	9.03	10.84	11.62
150	-	-	-	-	-	-	7.38	8.92	9.60
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	112 518	Btu/h	Current consumption	17.81	A
Power input	10 279	W	Mass flow	1 660	lbs/h
E.E.R.	10.95				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 75 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	54 051	67 502	83 811	103 314	126 344	153 234	-	-	-
90	47 466	60 256	75 555	93 701	115 032	139 886	153 738	184 506	198 016
110	-	53 431	67 345	83 765	103 033	125 492	138 025	165 912	178 181
130	-	-	-	72 805	89 687	109 447	120 515	145 247	156 172
140	-	-	-	-	82 499	100 855	111 171	134 303	144 553
150	-	-	-	-	-	-	102 057	123 738	133 386
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	5 526	5 668	5 826	6 015	6 251	6 547	-	-	-
90	6 706	6 849	6 993	7 151	7 339	7 571	7 708	8 034	8 186
110	-	8 427	8 554	8 679	8 817	8 982	9 080	9 315	9 426
130	-	-	-	10 812	10 897	10 994	11 052	11 193	11 262
140	-	-	-	-	12 231	12 292	12 329	12 422	12 470
150	-	-	-	-	-	-	13 836	13 881	13 907
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	10.48	10.31	10.40	10.72	11.23	11.91	-	-	-
90	12.53	12.55	12.71	12.96	13.27	13.63	13.82	14.18	14.32
110	-	14.71	15.09	15.44	15.72	15.92	15.97	15.99	15.95
130	-	-	-	18.29	18.71	18.91	18.92	18.74	18.59
140	-	-	-	-	20.45	20.71	20.72	20.51	20.33
150	-	-	-	-	-	-	22.78	22.57	22.37
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	607	759	937	1 143	1 383	1 660	-	-	-
90	596	750	927	1 134	1 374	1 653	1 807	2 151	2 301
110	-	738	916	1 122	1 362	1 640	1 795	2 138	2 288
130	-	-	-	1 108	1 347	1 624	1 778	2 120	2 270
140	-	-	-	-	1 339	1 615	1 768	2 109	2 259
150	-	-	-	-	-	-	1 759	2 098	2 248
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.78	11.91	14.39	17.18	20.21	23.41	-	-	-
90	7.08	8.80	10.80	13.10	15.67	18.48	19.95	22.97	24.19
110	-	6.34	7.87	9.65	11.69	13.97	15.20	17.81	18.90
130	-	-	-	6.73	8.23	9.95	10.90	12.98	13.87
140	-	-	-	-	6.75	8.20	9.02	10.81	11.59
150	-	-	-	-	-	-	7.38	8.91	9.59
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	120 515	Btu/h	Current consumption	18.92	A
Power input	11 052	W	Mass flow	1 778	lbs/h
E.E.R.	10.90				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 80 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	57 533	71 834	89 190	109 954	134 482	163 127	-	-	-
90	50 646	64 263	80 557	99 889	122 616	149 096	163 856	196 639	211 034
110	-	57 076	71 897	89 387	109 911	133 831	147 179	176 879	189 944
130	-	-	-	77 729	95 690	116 710	128 484	154 793	166 413
140	-	-	-	-	88 009	107 515	118 477	143 059	153 952
150	-	-	-	-	-	-	108 696	131 703	141 942
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	5 939	6 108	6 297	6 522	6 800	7 147	-	-	-
90	7 198	7 363	7 529	7 713	7 932	8 201	8 359	8 734	8 909
110	-	9 039	9 181	9 322	9 479	9 668	9 780	10 047	10 174
130	-	-	-	11 571	11 665	11 772	11 836	11 994	12 072
140	-	-	-	-	13 067	13 133	13 172	13 275	13 328
150	-	-	-	-	-	-	14 751	14 798	14 826
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	11.20	10.94	11.00	11.32	11.88	12.61	-	-	-
90	13.32	13.27	13.40	13.67	14.02	14.41	14.61	14.99	15.13
110	-	15.56	15.93	16.30	16.61	16.84	16.90	16.91	16.85
130	-	-	-	19.33	19.78	20.00	20.01	19.81	19.63
140	-	-	-	-	21.61	21.90	21.91	21.67	21.46
150	-	-	-	-	-	-	24.06	23.81	23.58
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	646	808	997	1 216	1 471	1 767	-	-	-
90	636	799	989	1 209	1 465	1 761	1 926	2 292	2 453
110	-	788	977	1 197	1 453	1 749	1 914	2 279	2 439
130	-	-	-	1 183	1 437	1 731	1 895	2 259	2 419
140	-	-	-	-	1 428	1 721	1 885	2 247	2 406
150	-	-	-	-	-	-	1 873	2 234	2 392
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.69	11.76	14.16	16.86	19.78	22.82	-	-	-
90	7.04	8.73	10.70	12.95	15.46	18.18	19.60	22.51	23.69
110	-	6.31	7.83	9.59	11.60	13.84	15.05	17.60	18.67
130	-	-	-	6.72	8.20	9.91	10.86	12.91	13.79
140	-	-	-	-	6.74	8.19	8.99	10.78	11.55
150	-	-	-	-	-	-	7.37	8.90	9.57
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	128 484	Btu/h	Current consumption	20.01	A
Power input	11 836	W	Mass flow	1 895	lbs/h
E.E.R.	10.86				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 85 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	60 971	76 115	94 508	116 525	142 542	172 933	-	-	-
90	53 808	68 250	85 538	106 050	130 167	158 268	173 931	208 717	223 990
110	-	60 715	76 445	95 004	116 778	142 153	156 311	187 809	201 664
130	-	-	-	82 648	101 683	123 953	136 426	164 291	176 599
140	-	-	-	-	93 500	114 144	125 744	151 753	163 277
150	-	-	-	-	-	-	115 275	139 582	150 399
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	6 355	6 554	6 777	7 043	7 367	7 768	-	-	-
90	7 700	7 884	8 074	8 287	8 539	8 847	9 027	9 452	9 648
110	-	9 666	9 820	9 977	10 154	10 368	10 494	10 796	10 937
130	-	-	-	12 344	12 444	12 562	12 633	12 809	12 895
140	-	-	-	-	13 915	13 984	14 026	14 139	14 197
150	-	-	-	-	-	-	15 674	15 723	15 752
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	11.93	11.57	11.59	11.93	12.52	13.30	-	-	-
90	14.10	13.97	14.08	14.35	14.73	15.16	15.38	15.77	15.91
110	-	16.39	16.76	17.14	17.49	17.74	17.81	17.80	17.74
130	-	-	-	20.36	20.85	21.09	21.10	20.87	20.67
140	-	-	-	-	22.78	23.08	23.10	22.82	22.58
150	-	-	-	-	-	-	25.33	25.05	24.78
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	684	856	1 056	1 289	1 559	1 873	-	-	-
90	676	849	1 050	1 284	1 555	1 870	2 045	2 433	2 603
110	-	839	1 039	1 273	1 544	1 858	2 032	2 420	2 590
130	-	-	-	1 258	1 527	1 839	2 012	2 397	2 566
140	-	-	-	-	1 517	1 827	2 000	2 383	2 552
150	-	-	-	-	-	-	1 987	2 368	2 535
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.59	11.61	13.94	16.55	19.35	22.26	-	-	-
90	6.99	8.66	10.59	12.80	15.24	17.89	19.27	22.08	23.22
110	-	6.28	7.78	9.52	11.50	13.71	14.89	17.40	18.44
130	-	-	-	6.70	8.17	9.87	10.80	12.83	13.70
140	-	-	-	-	6.72	8.16	8.96	10.73	11.50
150	-	-	-	-	-	-	7.35	8.88	9.55
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	136 426	Btu/h	Current consumption	21.10	A
Power input	12 633	W	Mass flow	2 012	lbs/h
E.E.R.	10.80				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 90 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	64 366	80 343	99 765	123 027	150 525	182 652	-	-	-
90	56 951	72 217	90 495	112 186	137 688	167 402	183 962	220 739	236 885
110	-	64 350	80 988	100 614	123 636	150 457	165 420	198 702	213 340
130	-	-	-	87 563	107 665	131 175	144 339	173 744	186 728
140	-	-	-	-	98 974	120 742	132 971	160 385	172 529
150	-	-	-	-	-	-	121 797	147 375	158 758
154	-	-	-	-	-	-	-	-	-
Power input in W									
70	6 773	7 004	7 267	7 577	7 952	8 408	-	-	-
90	8 212	8 414	8 629	8 872	9 160	9 510	9 714	10 187	10 405
110	-	10 309	10 471	10 643	10 842	11 083	11 224	11 560	11 717
130	-	-	-	13 131	13 236	13 364	13 442	13 637	13 732
140	-	-	-	-	14 774	14 845	14 891	15 013	15 077
150	-	-	-	-	-	-	16 606	16 655	16 687
154	-	-	-	-	-	-	-	-	-
Current consumption in A									
70	12.67	12.21	12.18	12.52	13.15	13.99	-	-	-
90	14.87	14.65	14.72	15.00	15.42	15.88	16.12	16.53	16.66
110	-	17.22	17.56	17.96	18.34	18.62	18.69	18.68	18.60
130	-	-	-	21.39	21.91	22.18	22.19	21.93	21.71
140	-	-	-	-	23.94	24.27	24.28	23.96	23.70
150	-	-	-	-	-	-	26.60	26.27	25.98
154	-	-	-	-	-	-	-	-	-
Mass flow in lbs/h									
70	723	904	1 115	1 360	1 646	1 978	-	-	-
90	715	898	1 111	1 358	1 645	1 978	2 163	2 573	2 753
110	-	889	1 101	1 348	1 635	1 966	2 151	2 560	2 740
130	-	-	-	1 333	1 617	1 946	2 129	2 535	2 713
140	-	-	-	-	1 606	1 933	2 115	2 519	2 696
150	-	-	-	-	-	-	2 099	2 501	2 677
154	-	-	-	-	-	-	-	-	-
Energy Efficiency Ratio (E.E.R.)									
70	9.50	11.47	13.73	16.24	18.93	21.72	-	-	-
90	6.93	8.58	10.49	12.65	15.03	17.60	18.94	21.67	22.77
110	-	6.24	7.73	9.45	11.40	13.58	14.74	17.19	18.21
130	-	-	-	6.67	8.13	9.82	10.74	12.74	13.60
140	-	-	-	-	6.70	8.13	8.93	10.68	11.44
150	-	-	-	-	-	-	7.33	8.85	9.51
154	-	-	-	-	-	-	-	-	-

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	144 339	Btu/h	Current consumption	22.19	A
Power input	13 442	W	Mass flow	2 129	lbs/h
E.E.R.	10.74				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	85	dB(A)
With accoustic hood	79	dB(A)

Performance data at 95 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	-	84 518	104 962	129 461	158 430	192 284	-	-	-
90	-	76 163	95 430	118 295	145 178	176 496	193 950	232 706	249 719
100	-	72 106	90 580	112 425	138 064	167 917	184 556	221 520	237 758
110	-	67 978	85 526	106 219	130 483	158 744	174 506	209 559	224 972
120	-	-	80 171	99 585	122 353	148 903	163 731	196 762	211 310
130	-	-	-	92 472	113 636	138 377	152 225	183 150	196 803
140	-	-	-	-	-	-	-	168 955	181 710
Power input in W									
70	-	7 460	7 766	8 125	8 554	9 067	-	-	-
90	-	8 953	9 193	9 469	9 796	10 190	10 417	10 940	11 178
100	-	9 879	10 084	10 316	10 591	10 923	11 116	11 564	11 769
110	-	10 967	11 135	11 322	11 542	11 812	11 970	12 341	12 513
120	-	-	12 376	12 516	12 681	12 886	13 008	13 302	13 440
130	-	-	-	13 931	14 039	14 177	14 263	14 478	14 582
140	-	-	-	-	-	-	-	15 899	15 968
Current consumption in A									
70	-	12.84	12.77	13.11	13.78	14.68	-	-	-
90	-	15.32	15.35	15.63	16.07	16.58	16.83	17.26	17.39
100	-	16.65	16.80	17.13	17.53	17.91	18.06	18.25	18.25
110	-	18.03	18.36	18.77	19.17	19.47	19.56	19.54	19.44
120	-	-	19.99	20.53	20.99	21.26	21.30	21.12	20.93
130	-	-	-	22.42	22.97	23.26	23.27	22.98	22.73
140	-	-	-	-	-	-	-	25.11	24.81
Mass flow in lbs/h									
70	-	951	1 172	1 431	1 733	2 082	-	-	-
90	-	947	1 171	1 432	1 735	2 086	2 280	2 713	2 903
100	-	944	1 168	1 428	1 731	2 082	2 276	2 708	2 898
110	-	939	1 163	1 423	1 725	2 075	2 269	2 700	2 889
120	-	-	1 157	1 416	1 717	2 065	2 258	2 688	2 876
130	-	-	-	1 408	1 706	2 053	2 245	2 672	2 860
140	-	-	-	-	-	-	-	2 653	2 840
Energy Efficiency Ratio (E.E.R.)									
70	-	11.33	13.52	15.93	18.52	21.21	-	-	-
90	-	8.51	10.38	12.49	14.82	17.32	18.62	21.27	22.34
100	-	7.30	8.98	10.90	13.04	15.37	16.60	19.16	20.20
110	-	6.20	7.68	9.38	11.30	13.44	14.58	16.98	17.98
120	-	-	6.48	7.96	9.65	11.56	12.59	14.79	15.72
130	-	-	-	6.64	8.09	9.76	10.67	12.65	13.50
140	-	-	-	-	-	-	-	10.63	11.38

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	152 225	Btu/h	Current consumption	23.27	A
Power input	14 263	W	Mass flow	2 245	lbs/h
E.E.R.	10.67				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point
T C : Condensing temperature at dew point
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F
Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)

Performance data at 100 Hz, ARI rating conditions

R410A

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	55	59
Cooling capacity in Btu/h									
70	-	88 641	110 098	135 826	166 259	201 829	-	-	-
90	-	80 090	100 342	124 378	152 636	185 553	203 895	244 617	262 492
100	-	75 895	95 323	118 292	145 244	176 618	194 101	232 933	249 988
110	-	71 601	90 060	111 818	137 321	167 014	183 570	220 379	236 562
120	-	-	84 454	104 863	128 784	156 666	172 232	206 897	222 161
130	-	-	-	97 378	119 598	145 558	160 084	192 510	206 822
140	-	-	-	-	-	-	-	177 464	190 818
Power input in W									
70	-	7 921	8 274	8 687	9 174	9 747	-	-	-
90	-	9 499	9 766	10 077	10 447	10 888	11 139	11 711	11 968
100	-	10 483	10 703	10 961	11 269	11 640	11 853	12 344	12 567
110	-	11 640	11 811	12 012	12 256	12 555	12 730	13 138	13 325
120	-	-	13 121	13 263	13 440	13 666	13 801	14 123	14 274
130	-	-	-	14 745	14 853	15 003	15 097	15 332	15 445
140	-	-	-	-	-	-	-	16 795	16 870
Current consumption in A									
70	-	13.48	13.35	13.69	14.40	15.36	-	-	-
90	-	15.96	15.94	16.23	16.70	17.25	17.52	17.97	18.10
100	-	17.36	17.48	17.81	18.23	18.65	18.81	19.00	19.00
110	-	18.83	19.13	19.55	19.98	20.31	20.40	20.37	20.26
120	-	-	20.88	21.44	21.92	22.21	22.25	22.05	21.85
130	-	-	-	23.44	24.02	24.33	24.34	24.02	23.74
140	-	-	-	-	-	-	-	26.25	25.91
Mass flow in lbs/h									
70	-	997	1 230	1 502	1 818	2 185	-	-	-
90	-	996	1 231	1 506	1 824	2 193	2 398	2 852	3 051
100	-	993	1 229	1 503	1 821	2 190	2 394	2 848	3 047
110	-	989	1 225	1 498	1 816	2 183	2 387	2 839	3 038
120	-	-	1 219	1 491	1 807	2 172	2 376	2 826	3 024
130	-	-	-	1 482	1 796	2 159	2 361	2 808	3 005
140	-	-	-	-	-	-	-	2 787	2 982
Energy Efficiency Ratio (E.E.R.)									
70	-	11.19	13.31	15.64	18.12	20.71	-	-	-
90	-	8.43	10.27	12.34	14.61	17.04	18.31	20.89	21.93
100	-	7.24	8.91	10.79	12.89	15.17	16.38	18.87	19.89
110	-	6.15	7.62	9.31	11.20	13.30	14.42	16.77	17.75
120	-	-	6.44	7.91	9.58	11.46	12.48	14.65	15.56
130	-	-	-	6.60	8.05	9.70	10.60	12.56	13.39
140	-	-	-	-	-	-	-	10.57	11.31

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	160 084	Btu/h	Current consumption	24.34	A
Power input	15 097	W	Mass flow	2 361	lbs/h
E.E.R.	10.60				

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	33	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

Tolerance according EN12900

Sound power data

Sound power level	dB(A)
With accoustic hood	dB(A)