

COMPRESSOR DEFINITION

Designation	NE 9213E
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	263EA51

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium-High Back pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	21.7	[kgf/cm ²] (309 psig)	/ °C - °F
9.2 Peak (gauge)	24.2	[kgf/cm ²] (344 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	12.11	[cm ³] (0.739 cu.in)
2.1 Bore [mm]	27.775	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO46	
4 Weight (with oil charge)	11.65	[kg] (25.68 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6AA3	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	10(450)	[µF(VAC minimum)]
5 Motor protection	T0606/G9	
6 Start winding resistance	[Ω at 25°C (77°F)] +/- 8%	
7 Run winding resistance	[Ω at 25°C (77°F)] +/- 8%	
8 LRA - Locked rotor amperage (50 Hz)	15.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	3.20	[A] - Measured according to UL 984
11 Approval boards certification	CCC	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
5541	1396	1624	674	3.10	34.22	8.22	2.07	2.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2125	536	623	392	1.90	11.12	5.41	1.36	1.59
-15	(+ 5)	2754	694	807	425	2.02	14.47	6.48	1.63	1.90
-10	(+14)	3514	885	1030	457	2.14	18.53	7.70	1.94	2.26
-5	(+23)	4404	1110	1290	486	2.26	23.33	9.06	2.28	2.66
0	(+32)	5424	1367	1589	514	2.39	28.89	10.55	2.66	3.09
+5	(+41)	6574	1657	1926	541	2.51	35.26	12.16	3.06	3.56
+10	(+50)	7854	1979	2301	566	2.63	42.44	13.87	3.50	4.06

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1831	461	536	404	1.95	10.23	4.54	1.14	1.33
-15	(+ 5)	2399	605	703	445	2.11	13.46	5.40	1.36	1.58
-10	(+14)	3085	777	904	484	2.27	17.38	6.37	1.60	1.87
-5	(+23)	3890	980	1140	522	2.43	22.02	7.43	1.87	2.18
0	(+32)	4812	1213	1410	560	2.59	27.41	8.59	2.16	2.52
+5	(+41)	5852	1475	1715	596	2.75	33.57	9.82	2.48	2.88
+10	(+50)	7010	1766	2054	631	2.91	40.53	11.12	2.80	3.26

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1525	384	447	417	2.01	9.17	3.65	0.92	1.07
-15	(+ 5)	2029	511	594	465	2.21	12.24	4.37	1.10	1.28
-10	(+14)	2638	665	773	513	2.41	15.99	5.15	1.30	1.51
-5	(+23)	3353	845	983	560	2.61	20.44	5.99	1.51	1.76
0	(+32)	4174	1052	1223	607	2.81	25.61	6.88	1.73	2.02
+5	(+41)	5100	1285	1494	653	3.01	31.54	7.81	1.97	2.29
+10	(+50)	6132	1545	1797	700	3.21	38.25	8.75	2.21	2.57

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		