

COMPRESSOR DEFINITION

Designation	NE 6211E
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	262HD71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	208-230 / 60	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - High 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	1/2	[hp]
2 Displacement	9.99	[cm ³] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
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)	11.08	[kg] (24.43 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0018	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0634/G6	
6 Start winding resistance	20.47	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.95	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	25.80	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	4.50	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @208V60Hz			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]
5364	1352	1572	741	4.50	33.13	7.24	1.82	2.12

E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V50Hz			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]
-15	(+5)	2110	532	618	357	2.70	11.07	5.91	1.49	1.73
-10	(+14)	2609	657	764	384	2.81	13.76	6.77	1.71	1.98
-5	(+23)	3198	806	937	418	2.93	16.95	7.65	1.93	2.24
0	(+32)	3879	977	1137	453	3.05	20.66	8.60	2.17	2.52
+5	(+41)	4651	1172	1363	484	3.17	24.94	9.65	2.43	2.83
+10	(+50)	5514	1390	1616	505	3.30	29.79	10.84	2.73	3.18

TEST CONDITIONS: @208V50Hz			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]
-15	(+5)	1889	476	554	390	2.79	10.60	4.87	1.23	1.43
-10	(+14)	2377	599	697	415	2.93	13.39	5.70	1.44	1.67
-5	(+23)	2961	746	868	452	3.07	16.76	6.52	1.64	1.91
0	(+32)	3641	918	1067	494	3.23	20.73	7.35	1.85	2.15
+5	(+41)	4418	1113	1294	537	3.39	25.34	8.25	2.08	2.42
+10	(+50)	5291	1333	1550	574	3.55	30.60	9.24	2.33	2.71

TEST CONDITIONS: @208V50Hz			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]
-15	(+5)	1714	432	502	440	2.80	10.35	3.91	0.99	1.15
-10	(+14)	2158	544	632	458	2.98	13.08	4.73	1.19	1.38
-5	(+23)	2703	681	792	493	3.18	16.48	5.48	1.38	1.61
0	(+32)	3349	844	981	538	3.39	20.55	6.21	1.57	1.82
+5	(+41)	4097	1033	1201	588	3.61	25.34	6.96	1.75	2.04
+10	(+50)	4948	1247	1450	637	3.84	30.86	7.77	1.96	2.28

E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	2542	640	745	431	3.25	13.34	5.89	1.48	1.73
-10	(+14)	3143	792	921	467	3.39	16.58	6.73	1.70	1.97
-5	(+23)	3854	971	1129	504	3.53	20.42	7.65	1.93	2.24
0	(+32)	4674	1178	1369	540	3.68	24.90	8.65	2.18	2.53
+5	(+41)	5604	1412	1642	578	3.83	30.05	9.69	2.44	2.84
+10	(+50)	6644	1674	1947	616	3.98	35.90	10.78	2.72	3.16

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	2276	574	667	459	3.34	12.77	4.95	1.25	1.45
-10	(+14)	2864	722	839	507	3.51	16.14	5.65	1.42	1.66
-5	(+23)	3568	899	1045	553	3.70	20.19	6.45	1.62	1.89
0	(+32)	4387	1106	1285	599	3.89	24.98	7.33	1.85	2.15
+5	(+41)	5322	1341	1560	644	4.09	30.53	8.27	2.08	2.42
+10	(+50)	6375	1607	1868	688	4.29	36.87	9.27	2.33	2.71

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	2065	520	605	468	3.37	12.46	4.41	1.11	1.29
-10	(+14)	2600	655	762	532	3.60	15.77	4.89	1.23	1.43
-5	(+23)	3257	821	954	594	3.84	19.85	5.48	1.38	1.61
0	(+32)	4036	1017	1183	654	4.09	24.76	6.17	1.56	1.81
+5	(+41)	4937	1244	1447	711	4.35	30.53	6.94	1.75	2.03
+10	(+50)	5962	1502	1747	767	4.62	37.18	7.77	1.96	2.28

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +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		