

COMPRESSOR DEFINITION

Designation	NE 6211E
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	263GG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	115 / 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)	11.65	[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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-63	
3 Start capacitor	145-175(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0809/G9	
6 Start winding resistance	5.33	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.87	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	38.50	[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)	7.00	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			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]
5348	1348	1567	779	8.70	33.03	6.87	1.73	2.01

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V50Hz			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)	2348	592	688	375	5.35	12.33	6.21	1.57	1.82
-10	(+14)	2920	736	856	423	5.52	15.40	6.98	1.76	2.04
-5	(+23)	3602	908	1056	452	5.72	19.08	8.02	2.02	2.35
0	(+32)	4394	1107	1288	474	5.94	23.41	9.22	2.32	2.70
+5	(+41)	5295	1334	1552	501	6.17	28.40	10.47	2.64	3.07
+10	(+50)	6306	1589	1848	545	6.39	34.07	11.64	2.93	3.41

TEST CONDITIONS: @115V50Hz			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)	2048	516	600	391	5.38	11.49	5.21	1.31	1.53
-10	(+14)	2562	646	751	451	5.65	14.43	5.72	1.44	1.68
-5	(+23)	3174	800	930	490	5.95	17.97	6.49	1.64	1.90
0	(+32)	3886	979	1139	523	6.27	22.13	7.41	1.87	2.17
+5	(+41)	4696	1183	1376	559	6.60	26.94	8.35	2.10	2.45
+10	(+50)	5605	1412	1642	611	6.93	32.41	9.20	2.32	2.70

TEST CONDITIONS: @115V50Hz			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)	1749	441	512	442	5.48	10.55	3.98	1.00	1.17
-10	(+14)	2204	555	646	505	5.83	13.36	4.39	1.11	1.29
-5	(+23)	2747	692	805	548	6.22	16.74	5.05	1.27	1.48
0	(+32)	3378	851	990	582	6.62	20.73	5.82	1.47	1.71
+5	(+41)	4097	1032	1200	620	7.04	25.33	6.61	1.66	1.94
+10	(+50)	4903	1236	1437	672	7.46	30.58	7.28	1.83	2.13

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@115V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2830	713	829	458	6.34	14.86	6.17	1.56	1.81
-10	(+14)	3519	887	1031	500	6.62	18.56	7.04	1.77	2.06
-5	(+23)	4341	1094	1272	540	6.89	22.99	8.04	2.03	2.36
0	(+32)	5294	1334	1551	578	7.16	28.20	9.16	2.31	2.69
+5	(+41)	6380	1608	1869	614	7.43	34.21	10.38	2.62	3.04
+10	(+50)	7598	1915	2226	650	7.70	41.05	11.69	2.95	3.42

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@115V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2468	622	723	481	6.46	13.84	5.14	1.30	1.51
-10	(+14)	3087	778	905	533	6.82	17.39	5.79	1.46	1.70
-5	(+23)	3825	964	1121	584	7.19	21.66	6.54	1.65	1.92
0	(+32)	4682	1180	1372	634	7.57	26.67	7.38	1.86	2.16
+5	(+41)	5658	1426	1658	683	7.95	32.46	8.28	2.09	2.43
+10	(+50)	6753	1702	1979	732	8.35	39.05	9.23	2.33	2.71

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@115V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2106	531	617	504	6.59	12.71	4.18	1.05	1.22
-10	(+14)	2655	669	778	566	7.03	16.10	4.69	1.18	1.37
-5	(+23)	3309	834	970	628	7.49	20.17	5.27	1.33	1.54
0	(+32)	4070	1026	1193	690	7.97	24.97	5.90	1.49	1.73
+5	(+41)	4936	1244	1446	752	8.47	30.52	6.57	1.66	1.92
+10	(+50)	5908	1489	1731	814	9.00	36.85	7.25	1.83	2.12

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		