

COMPRESSOR DEFINITION

Designation	NE 5195E
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	261QG71

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	RSIR		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
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	1/3	[hp]
2 Displacement	7.99	[cm ³] (0.488 cu.in)
2.1 Bore [mm]	27.775	
2.2 Stroke [mm]	13.200	
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)	10.38	[kg] (22.88 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	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0558/G9	
6 Start winding resistance	13.55	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.40	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	34.00	[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)	6.50	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @100V50Hz			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]
3586	904	1051	497	6.47	22.15	7.22	1.82	2.12

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V50Hz		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)	1934	487	567	306	4.30	10.16	6.31	1.59	1.85
-10	(+14)	2358	594	691	330	4.42	12.43	7.16	1.80	2.10
-5	(+23)	2904	732	851	351	4.55	15.38	8.28	2.09	2.43
0	(+32)	3573	900	1047	370	4.67	19.03	9.65	2.43	2.83
+5	(+41)	4364	1100	1279	387	4.81	23.40	11.27	2.84	3.30
+10	(+50)	5277	1330	1546	402	4.94	28.52	13.12	3.31	3.85

TEST CONDITIONS: @100V50Hz		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)	1555	392	456	316	4.37	8.71	4.94	1.25	1.45
-10	(+14)	1977	498	579	348	4.55	11.14	5.69	1.43	1.67
-5	(+23)	2498	630	732	378	4.73	14.15	6.59	1.66	1.93
0	(+32)	3117	786	913	407	4.93	17.76	7.64	1.93	2.24
+5	(+41)	3834	966	1123	434	5.13	21.99	8.83	2.23	2.59
+10	(+50)	4649	1171	1362	459	5.34	26.88	10.15	2.56	2.97

TEST CONDITIONS: @100V50Hz		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)	1161	293	340	325	4.44	7.01	3.57	0.90	1.04
-10	(+14)	1581	398	463	366	4.67	9.59	4.32	1.09	1.27
-5	(+23)	2074	523	608	405	4.92	12.64	5.12	1.29	1.50
0	(+32)	2641	666	774	443	5.18	16.20	5.97	1.50	1.75
+5	(+41)	3282	827	962	480	5.45	20.29	6.84	1.72	2.00
+10	(+50)	3995	1007	1171	516	5.73	24.92	7.73	1.95	2.27

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V60Hz		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)	2262	570	663	355	4.99	11.88	6.36	1.60	1.86
-10	(+14)	2759	695	808	382	5.13	14.55	7.22	1.82	2.12
-5	(+23)	3398	856	996	407	5.28	18.00	8.35	2.10	2.45
0	(+32)	4180	1053	1225	430	5.42	22.26	9.74	2.45	2.85
+5	(+41)	5105	1287	1496	449	5.58	27.38	11.37	2.87	3.33
+10	(+50)	6174	1556	1809	466	5.73	33.37	13.24	3.34	3.88

TEST CONDITIONS: @100V60Hz		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)	1818	458	533	366	5.07	10.19	4.98	1.26	1.46
-10	(+14)	2313	583	678	403	5.28	13.03	5.74	1.45	1.68
-5	(+23)	2923	737	856	439	5.49	16.55	6.65	1.68	1.95
0	(+32)	3646	919	1068	472	5.72	20.77	7.71	1.94	2.26
+5	(+41)	4485	1130	1314	503	5.95	25.73	8.91	2.25	2.61
+10	(+50)	5438	1370	1594	532	6.19	31.44	10.24	2.58	3.00

TEST CONDITIONS: @100V60Hz		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)	1358	342	398	377	5.15	8.20	3.60	0.91	1.05
-10	(+14)	1850	466	542	424	5.42	11.22	4.36	1.10	1.28
-5	(+23)	2427	612	711	470	5.71	14.79	5.16	1.30	1.51
0	(+32)	3090	779	905	515	6.01	18.95	6.02	1.52	1.76
+5	(+41)	3839	967	1125	557	6.33	23.73	6.90	1.74	2.02
+10	(+50)	4674	1178	1370	598	6.65	29.16	7.80	1.97	2.29

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		