

COMPRESSOR DEFINITION

Designation	NE 6195E
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	261LG71

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	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)	10.3	[kg] (22.71 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	T0558/G9	
6 Start winding resistance	7.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.20	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	29.00	[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)	6.65	[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]
3742	943	1096	495	5.52	23.11	7.56	1.91	2.22

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)	1951	492	572	291	4.26	10.25	6.70	1.69	1.96
-10	(+14)	2391	602	701	321	4.38	12.61	7.44	1.88	2.18
-5	(+23)	2947	743	864	347	4.51	15.61	8.50	2.14	2.49
0	(+32)	3620	912	1061	368	4.65	19.29	9.86	2.48	2.89
+5	(+41)	4410	1111	1292	384	4.78	23.65	11.50	2.90	3.37
+10	(+50)	5317	1340	1558	395	4.91	28.73	13.43	3.39	3.94

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)	1660	418	486	313	4.30	9.30	5.33	1.34	1.56
-10	(+14)	2079	524	609	345	4.50	11.72	6.03	1.52	1.77
-5	(+23)	2598	655	761	375	4.69	14.71	6.90	1.74	2.02
0	(+32)	3216	810	942	403	4.89	18.32	7.94	2.00	2.33
+5	(+41)	3932	991	1152	430	5.09	22.56	9.14	2.30	2.68
+10	(+50)	4748	1196	1391	455	5.28	27.45	10.47	2.64	3.07

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)	1357	342	398	336	4.34	8.19	4.02	1.01	1.18
-10	(+14)	1755	442	514	369	4.61	10.64	4.76	1.20	1.40
-5	(+23)	2234	563	655	404	4.87	13.62	5.55	1.40	1.63
0	(+32)	2794	704	819	440	5.14	17.14	6.36	1.60	1.86
+5	(+41)	3435	866	1006	478	5.40	21.24	7.19	1.81	2.11
+10	(+50)	4156	1047	1218	517	5.67	25.93	8.02	2.02	2.35

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		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)	2282	575	669	357	4.98	11.99	6.39	1.61	1.87
-10	(+14)	2797	705	820	383	5.13	14.75	7.30	1.84	2.14
-5	(+23)	3448	869	1010	408	5.28	18.26	8.45	2.13	2.48
0	(+32)	4236	1067	1241	431	5.44	22.56	9.84	2.48	2.88
+5	(+41)	5160	1300	1512	451	5.59	27.67	11.44	2.88	3.35
+10	(+50)	6221	1568	1823	469	5.74	33.62	13.26	3.34	3.88

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		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)	1942	489	569	366	5.03	10.88	5.32	1.34	1.56
-10	(+14)	2433	613	713	403	5.26	13.71	6.04	1.52	1.77
-5	(+23)	3040	766	891	439	5.49	17.22	6.92	1.74	2.03
0	(+32)	3763	948	1103	472	5.72	21.43	7.96	2.01	2.33
+5	(+41)	4601	1159	1348	503	5.95	26.39	9.14	2.30	2.68
+10	(+50)	5555	1400	1628	532	6.18	32.12	10.45	2.63	3.06

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		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)	1587	400	465	376	5.08	9.58	4.22	1.06	1.24
-10	(+14)	2053	517	602	424	5.39	12.45	4.85	1.22	1.42
-5	(+23)	2614	659	766	470	5.70	15.93	5.56	1.40	1.63
0	(+32)	3269	824	958	515	6.01	20.05	6.36	1.60	1.86
+5	(+41)	4018	1013	1177	557	6.32	24.84	7.21	1.82	2.11
+10	(+50)	4862	1225	1425	598	6.63	30.33	8.13	2.05	2.38

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		