COMPRESSOR DEFINITION

Designation	**NE 2125E**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**261IA51**

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	Low Back Pressure R22		
4.1 Evaporating temperature range	-30°C to -10°C	(-22°F to 14°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	21.7	[kgf/cm²] (309 psig)	/ ºC - ºF
9.2 Peak (gauge)	24.2	[kgf/cm²] (344 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/4+	[hp]
2 Displacement	8.77	[cm³] (0.535 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	15.920	
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)	10.35	[kg] (22.82 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (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	Current Relay	
2.1 Starting device	MTRP-0026	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM739LFBYY-53	
6 Start winding resistance	30.80	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	8.30	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	29.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	5.40	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**ASHRAELBP32** **Fan**		Evaporating temperature (Condensing temperature		**-23.3°C (-9.94°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]
1002	253	294	278	1.77	5.47	3.60	0.91	1.05

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **35ºC (+95ºF))**

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]
-30	**(-22)**	881	222	258	221	1.60	4.80	3.98	1.00	1.17
-25	**(-13)**	1179	297	346	255	1.71	6.44	4.63	1.17	1.36
-20	**(- 4)**	1544	389	452	286	1.80	8.45	5.40	1.36	1.58
-15	**(+ 5)**	1975	498	579	316	1.91	10.86	6.26	1.58	1.84
-10	**(+14)**	2473	623	725	343	2.03	13.65	7.20	1.81	2.11

TEST CONDITIONS: **@220V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **45ºC (+113ºF))**

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]
-30	**(-22)**	772	195	226	220	1.60	4.20	3.52	0.89	1.03
-25	**(-13)**	1041	262	305	259	1.72	5.68	4.02	1.01	1.18
-20	**(- 4)**	1372	346	402	297	1.84	7.51	4.61	1.16	1.35
-15	**(+ 5)**	1768	445	518	336	1.98	9.71	5.26	1.32	1.54
-10	**(+14)**	2227	561	653	376	2.14	12.29	5.93	1.50	1.74

TEST CONDITIONS: **@220V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **55ºC (+131ºF))**

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]
-30	**(-22)**	668	168	196	220	1.60	3.63	3.03	0.76	0.89
-25	**(-13)**	907	229	266	263	1.73	4.95	3.45	0.87	1.01
-20	**(- 4)**	1207	304	354	308	1.88	6.61	3.92	0.99	1.15
-15	**(+ 5)**	1568	395	459	356	2.05	8.61	4.41	1.11	1.29
-10	**(+14)**	1990	501	583	407	2.25	10.98	4.88	1.23	1.43

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		