

COMPRESSOR DEFINITION

Designation	NE X6225UA
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	865AA46

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight 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 temperature			
9.1 Operating	18.4	[kgf/cm ²] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	21.02	[cm ³] (1.283 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	23.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4AL3C-649	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	USP-521-83	
6 Start winding resistance	8.29	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.84	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	28.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900MBP Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°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]
5501	1386	1612	778	3.64	19.80	7.08	1.78	2.07

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 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]
-20	(- 4)	4191	1056	1228	604	2.86	13.58	6.93	1.75	2.03
-15	(+ 5)	5135	1294	1505	656	3.09	16.74	7.83	1.97	2.29
-10	(+14)	6254	1576	1833	706	3.31	20.51	8.86	2.23	2.60
-5	(+23)	7549	1902	2212	753	3.53	24.93	10.03	2.53	2.94
0	(+32)	9018	2273	2643	797	3.73	30.03	11.32	2.85	3.32
+5	(+41)	10663	2687	3125	838	3.92	35.86	12.72	3.21	3.73
+10	(+50)	12483	3146	3658	877	4.10	42.45	14.23	3.59	4.17

TEST CONDITIONS: @220V50Hz			EN12900 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]
-20	(- 4)	3651	920	1070	655	3.08	12.97	5.58	1.41	1.64
-15	(+ 5)	4495	1133	1317	719	3.37	16.07	6.25	1.58	1.83
-10	(+14)	5488	1383	1608	780	3.66	19.75	7.02	1.77	2.06
-5	(+23)	6630	1671	1943	839	3.93	24.04	7.89	1.99	2.31
0	(+32)	7921	1996	2321	896	4.19	28.99	8.84	2.23	2.59
+5	(+41)	9360	2359	2743	949	4.44	34.63	9.86	2.49	2.89
+10	(+50)	10948	2759	3208	1000	4.68	41.01	10.96	2.76	3.21

TEST CONDITIONS: @220V50Hz			EN12900 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]
-20	(- 4)	3096	780	907	702	3.27	12.25	4.41	1.11	1.29
-15	(+ 5)	3832	966	1123	779	3.65	15.26	4.92	1.24	1.44
-10	(+14)	4692	1182	1375	854	4.00	18.81	5.49	1.38	1.61
-5	(+23)	5674	1430	1663	927	4.35	22.94	6.12	1.54	1.79
0	(+32)	6778	1708	1986	997	4.68	27.70	6.80	1.71	1.99
+5	(+41)	8006	2017	2346	1065	5.00	33.12	7.52	1.90	2.20
+10	(+50)	9356	2358	2741	1130	5.31	39.24	8.27	2.08	2.42

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.45 +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		