

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		
2.1 Max Refrigerant Charge	150 [g]		
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 - 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 temperature			
9.1 Operating	55	[°C]	
9.2 Peak	60	[°C]	
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: @V50Hz			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]
9952	2508	2916	1088	5.07	34.06	9.15	2.31	2.68

TEST CONDITIONS: @V50Hz			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: @V50Hz			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]
-20 (- 4)	4669	1177	1368	606	2.84	13.18	7.70	1.94	2.26
-15 (+ 5)	5699	1436	1670	653	3.07	16.15	8.73	2.20	2.56
-10 (+14)	6925	1745	2029	699	3.28	19.70	9.91	2.50	2.90
-5 (+23)	8348	2104	2446	744	3.49	23.86	11.22	2.83	3.29
0 (+32)	9967	2512	2921	787	3.68	28.64	12.66	3.19	3.71
+5 (+41)	11783	2969	3453	829	3.87	34.09	14.22	3.58	4.17
+10 (+50)	13795	3476	4042	869	4.04	40.20	15.87	4.00	4.65

TEST CONDITIONS: @V50Hz			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]
-20 (- 4)	4123	1039	1208	657	3.08	12.58	6.28	1.58	1.84
-15 (+ 5)	5059	1275	1482	718	3.36	15.50	7.04	1.77	2.06
-10 (+14)	6168	1554	1807	778	3.63	18.98	7.92	2.00	2.32
-5 (+23)	7449	1877	2183	835	3.90	23.04	8.91	2.25	2.61
0 (+32)	8902	2243	2608	890	4.16	27.70	10.00	2.52	2.93
+5 (+41)	10527	2653	3085	943	4.42	32.98	11.16	2.81	3.27
+10 (+50)	12324	3106	3611	994	4.68	38.92	12.40	3.12	3.63

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@V50Hz		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]
-20	(- 4)	3556	896	1042	696	3.32	11.85	5.11	1.29	1.50
-15	(+ 5)	4390	1106	1286	776	3.65	14.69	5.65	1.42	1.66
-10	(+14)	5373	1354	1574	854	3.98	18.06	6.29	1.58	1.84
-5	(+23)	6504	1639	1906	929	4.31	21.99	7.00	1.76	2.05
0	(+32)	7782	1961	2280	1001	4.65	26.49	7.78	1.96	2.28
+5	(+41)	9208	2320	2698	1070	4.99	31.59	8.61	2.17	2.52
+10	(+50)	10782	2717	3159	1137	5.34	37.31	9.48	2.39	2.78

TEST CONDITIONS:		EN12900			(Condensing temperature 35°C (+95°F))					
@V50Hz		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]
-20	(- 4)	4190	1056	1228	604	2.86	13.58	6.93	1.75	2.03
-15	(+ 5)	5136	1294	1505	656	3.09	16.74	7.83	1.97	2.29
-10	(+14)	6257	1577	1833	706	3.32	20.52	8.87	2.23	2.60
-5	(+23)	7551	1903	2213	753	3.53	24.93	10.03	2.53	2.94
0	(+32)	9016	2272	2642	797	3.73	30.02	11.32	2.85	3.32
+5	(+41)	10651	2684	3121	838	3.92	35.82	12.71	3.20	3.72
+10	(+50)	12452	3138	3649	877	4.10	42.35	14.19	3.58	4.16

TEST CONDITIONS:		EN12900			(Condensing temperature 45°C (+113°F))					
@V50Hz		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]
-20	(- 4)	3650	920	1069	655	3.08	12.97	5.58	1.41	1.64
-15	(+ 5)	4493	1132	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)	6633	1671	1944	839	3.92	24.05	7.89	1.99	2.31
0	(+32)	7925	1997	2322	896	4.18	29.01	8.84	2.23	2.59
+5	(+41)	9362	2359	2743	949	4.43	34.64	9.87	2.49	2.89
+10	(+50)	10942	2757	3206	1000	4.67	40.98	10.95	2.76	3.21

E - PERFORMANCE - CURVES

TEST CONDITIONS: @V50Hz		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)	3100	781	908	702	3.27	12.26	4.41	1.11	1.29
-15	(+ 5)	3830	965	1122	779	3.65	15.25	4.92	1.24	1.44
-10	(+14)	4688	1181	1374	854	4.01	18.80	5.49	1.38	1.61
-5	(+23)	5672	1429	1662	927	4.35	22.94	6.12	1.54	1.79
0	(+32)	6779	1708	1986	997	4.68	27.70	6.80	1.71	1.99
+5	(+41)	8008	2018	2346	1065	5.00	33.12	7.52	1.90	2.20
+10	(+50)	9355	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	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		