

COMPRESSOR DEFINITION

Designation	NE X6217UA
Nominal Voltage/Frequency	220-240 V 50-60 Hz
Engineering Number	865DI76

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	220-240 / 50-60	[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	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	3/4	[hp]
2 Displacement	14.28	[cm ³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
2.2 Stroke [mm]	20.000	
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)	11.4	[kg] (25.13 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50-60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	QL2-7.8-NTC-15	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	12.5(400)	[µF(VAC minimum)]
5 Motor protection	USP-M1E-83	
6 Start winding resistance	12.02	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	24.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
6771	1706	1984	687	3.27	23.17	9.85	2.48	2.89

TEST CONDITIONS: @220V60Hz			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]
8194	2065	2401	857	3.89	28.04	9.56	2.41	2.80

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		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)	3106	783	910	406	2.27	8.77	7.64	1.93	2.24
-15	(+ 5)	3770	950	1105	434	2.05	10.68	8.69	2.19	2.55
-10	(+14)	4592	1157	1346	459	2.09	13.06	10.00	2.52	2.93
-5	(+23)	5571	1404	1632	482	2.27	15.92	11.58	2.92	3.39
0	(+32)	6708	1690	1966	501	2.49	19.28	13.41	3.38	3.93
+5	(+41)	8002	2016	2345	517	2.63	23.15	15.48	3.90	4.54
+10	(+50)	9454	2382	2770	530	2.58	27.55	17.79	4.48	5.21

TEST CONDITIONS: @220V50Hz		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)	2699	680	791	437	1.92	8.23	6.20	1.56	1.82
-15	(+ 5)	3304	833	968	476	1.81	10.12	6.95	1.75	2.04
-10	(+14)	4046	1020	1186	511	1.96	12.45	7.90	1.99	2.32
-5	(+23)	4924	1241	1443	543	2.26	15.23	9.04	2.28	2.65
0	(+32)	5938	1496	1740	572	2.59	18.48	10.36	2.61	3.04
+5	(+41)	7090	1787	2077	598	2.84	22.21	11.86	2.99	3.48
+10	(+50)	8377	2111	2455	621	2.91	26.46	13.52	3.41	3.96

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		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]
-20	(- 4)	2349	592	688	467	2.53	7.83	5.01	1.26	1.47
-15	(+ 5)	2874	724	842	515	2.39	9.62	5.58	1.41	1.64
-10	(+14)	3514	886	1030	561	2.52	11.82	6.28	1.58	1.84
-5	(+23)	4270	1076	1251	603	2.79	14.44	7.09	1.79	2.08
0	(+32)	5141	1296	1507	642	3.10	17.50	8.02	2.02	2.35
+5	(+41)	6128	1544	1796	678	3.34	21.02	9.04	2.28	2.65
+10	(+50)	7230	1822	2119	710	3.39	25.02	10.17	2.56	2.98

TEST CONDITIONS: @220V60Hz		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)	3879	977	1137	470	2.13	10.95	8.24	2.08	2.41
-15	(+ 5)	4709	1187	1380	511	2.31	13.34	9.23	2.33	2.71
-10	(+14)	5712	1439	1674	547	2.51	16.25	10.45	2.63	3.06
-5	(+23)	6887	1736	2018	580	2.70	19.68	11.87	2.99	3.48
0	(+32)	8234	2075	2413	610	2.86	23.67	13.51	3.40	3.96
+5	(+41)	9754	2458	2858	636	2.94	28.22	15.34	3.87	4.50
+10	(+50)	11446	2884	3354	658	2.92	33.36	17.37	4.38	5.09

TEST CONDITIONS: @220V60Hz		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)	3350	844	982	512	2.41	10.22	6.55	1.65	1.92
-15	(+ 5)	4111	1036	1205	562	2.57	12.60	7.32	1.84	2.14
-10	(+14)	5019	1265	1471	608	2.77	15.45	8.24	2.08	2.41
-5	(+23)	6074	1531	1780	651	2.97	18.79	9.31	2.35	2.73
0	(+32)	7275	1833	2132	690	3.14	22.64	10.53	2.65	3.09
+5	(+41)	8622	2173	2527	726	3.24	27.02	11.89	3.00	3.48
+10	(+50)	10116	2549	2964	758	3.25	31.95	13.37	3.37	3.92

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V60Hz		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]
-20	(- 4)	2845	717	834	536	2.44	9.48	5.31	1.34	1.56
-15	(+ 5)	3544	893	1038	601	2.71	11.86	5.90	1.49	1.73
-10	(+14)	4364	1100	1279	663	3.02	14.67	6.58	1.66	1.93
-5	(+23)	5305	1337	1554	722	3.33	17.93	7.35	1.85	2.15
0	(+32)	6366	1604	1865	776	3.62	21.67	8.20	2.07	2.40
+5	(+41)	7549	1902	2212	827	3.84	25.89	9.12	2.30	2.67
+10	(+50)	8852	2231	2594	875	3.98	30.63	10.11	2.55	2.96

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		