

COMPRESSOR DEFINITION

Designation	NE U6217U
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	863JA51

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	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 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	AB / ISO32	
4 Weight (with oil charge)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELECTRICAL 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	MTRPH-0071-65	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MST20APK-3259	
6 Start winding resistance	11.03	[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 Hz)	21.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	3.84	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - 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 (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
6493	1636	1903	809	4.19	22.22	8.03	2.02	2.35

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2993	754	877	427	2.61	8.45	7.00	1.77	2.05
-15	(+ 5)	3693	931	1082	460	2.75	10.46	8.03	2.02	2.35
-10	(+14)	4519	1139	1324	495	2.89	12.85	9.13	2.30	2.67
-5	(+23)	5470	1378	1603	531	3.02	15.63	10.28	2.59	3.01
0	(+32)	6547	1650	1918	570	3.14	18.82	11.48	2.89	3.37
+5	(+41)	7750	1953	2271	609	3.25	22.42	12.72	3.21	3.73
+10	(+50)	9078	2288	2660	650	3.36	26.46	13.97	3.52	4.09

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2688	677	788	463	2.75	8.20	5.80	1.46	1.70
-15	(+ 5)	3281	827	961	509	2.94	10.05	6.45	1.63	1.89
-10	(+14)	3985	1004	1168	556	3.12	12.26	7.18	1.81	2.10
-5	(+23)	4799	1209	1406	604	3.31	14.84	7.95	2.00	2.33
0	(+32)	5724	1442	1677	653	3.49	17.81	8.77	2.21	2.57
+5	(+41)	6760	1703	1981	703	3.67	21.18	9.62	2.43	2.82
+10	(+50)	7906	1992	2317	753	3.84	24.97	10.49	2.64	3.07

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2253	568	660	501	2.87	7.51	4.51	1.14	1.32
-15	(+ 5)	2788	703	817	558	3.11	9.33	5.00	1.26	1.46
-10	(+14)	3419	862	1002	616	3.35	11.49	5.55	1.40	1.63
-5	(+23)	4146	1045	1215	674	3.60	14.02	6.15	1.55	1.80
0	(+32)	4968	1252	1456	732	3.84	16.91	6.79	1.71	1.99
+5	(+41)	5885	1483	1724	790	4.08	20.19	7.46	1.88	2.19
+10	(+50)	6898	1738	2021	848	4.33	23.87	8.13	2.05	2.38

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		