

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 - Hight starting torque		
7 Expantion 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 pressures/temperature			
9.1 Operating (gauge)	19.1	[kgf/cm²] (272 psig)	/ °C - °F
9.2 Peak (gauge)	21.2	[kgf/cm²] (301 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)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (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	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	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]
6493	1636	1903	809	4.19	22.22	8.03	2.02	2.35

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46				(Condensing temperature35°C (+95°F))				
@220V50Hz		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)	2996	755	878	427	2.61	8.45	7.02	1.77	2.06
-15	(+ 5)	3696	931	1083	460	2.75	10.47	8.04	2.03	2.36
-10	(+14)	4522	1140	1325	495	2.89	12.87	9.14	2.30	2.68
-5	(+23)	5474	1380	1604	531	3.02	15.65	10.29	2.59	3.02
0	(+32)	6552	1651	1920	569	3.14	18.83	11.49	2.90	3.37
+5	(+41)	7755	1954	2272	609	3.25	22.44	12.73	3.21	3.73
+10	(+50)	9084	2289	2662	650	3.36	26.47	13.99	3.53	4.10

TEST CONDITIONS:					ASHRAE46		(Condensing temperature 45°C (+113°F))			
@220V50Hz		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)	2682	676	786	463	2.75	8.18	5.77	1.45	1.69
-15	(+ 5)	3274	825	959	509	2.94	10.03	6.43	1.62	1.88
-10	(+14)	3977	1002	1165	556	3.13	12.24	7.16	1.80	2.10
-5	(+23)	4790	1207	1404	604	3.31	14.81	7.94	2.00	2.33
0	(+32)	5714	1440	1674	653	3.49	17.78	8.76	2.21	2.57
+5	(+41)	6749	1701	1978	703	3.67	21.15	9.61	2.42	2.82
+10	(+50)	7894	1989	2313	754	3.85	24.93	10.48	2.64	3.07

TEST CONDITIONS: @220V50Hz		ASHRAE46 Fan			(Condensing temperature 55°C (+131°F))					
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)	2256	569	661	501	2.87	7.52	4.51	1.14	1.32
-15	(+ 5)	2792	704	818	558	3.11	9.34	5.01	1.26	1.47
-10	(+14)	3423	863	1003	616	3.36	11.51	5.56	1.40	1.63
-5	(+23)	4150	1046	1216	673	3.60	14.03	6.16	1.55	1.81
0	(+32)	4973	1253	1457	731	3.84	16.92	6.80	1.71	1.99
+5	(+41)	5890	1484	1726	789	4.09	20.21	7.46	1.88	2.19
+10	(+50)	6904	1740	2023	847	4.33	23.89	8.14	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		