COMPRESSOR DEFINITION

Designation	**NE K6213U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**863CA51**

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 (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	12.11	[cm³] (0.739 cu.in)
2.1 Bore [mm]	27.775	
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)	11.1	[kg] (24.47 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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	MTRP-0050	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0743/G6	
6 Start winding resistance	20.88	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	3.93	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	19.30	[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 (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]
2756	695	808	497	3.58	9.92	5.55	1.40	1.63

E - PERFORMANCE - CURVES

TEST CONDITIONS: **EN12900** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Fan**

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)**	2118	534	621	397	3.31	6.86	5.34	1.35	1.56
-15	**(+ 5)**	2610	658	765	426	3.40	8.51	6.13	1.55	1.80
-10	**(+14)**	3207	808	940	454	3.49	10.52	7.07	1.78	2.07
-5	**(+23)**	3910	985	1146	480	3.57	12.91	8.14	2.05	2.39
0	**(+32)**	4717	1189	1382	505	3.66	15.71	9.33	2.35	2.74
+5	**(+41)**	5629	1419	1649	529	3.74	18.93	10.64	2.68	3.12
+10	**(+50)**	6646	1675	1947	552	3.82	22.60	12.05	3.04	3.53

TEST CONDITIONS: **EN12900** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Fan**

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)**	1822	459	534	425	3.37	6.47	4.29	1.08	1.26
-15	**(+ 5)**	2251	567	660	462	3.49	8.05	4.87	1.23	1.43
-10	**(+14)**	2772	699	812	498	3.60	9.98	5.56	1.40	1.63
-5	**(+23)**	3386	853	992	532	3.71	12.28	6.36	1.60	1.86
0	**(+32)**	4093	1031	1199	564	3.82	14.98	7.26	1.83	2.13
+5	**(+41)**	4892	1233	1434	594	3.93	18.10	8.24	2.08	2.41
+10	**(+50)**	5784	1457	1695	622	4.03	21.66	9.30	2.34	2.72

TEST CONDITIONS: **EN12900** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Fan**

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)**	1511	381	443	453	3.44	5.98	3.33	0.84	0.98
-15	**(+ 5)**	1872	472	549	501	3.59	7.45	3.74	0.94	1.10
-10	**(+14)**	2314	583	678	546	3.74	9.28	4.24	1.07	1.24
-5	**(+23)**	2836	715	831	588	3.90	11.47	4.82	1.22	1.41
0	**(+32)**	3438	866	1007	629	4.05	14.05	5.47	1.38	1.60
+5	**(+41)**	4119	1038	1207	667	4.19	17.04	6.18	1.56	1.81
+10	**(+50)**	4881	1230	1430	703	4.33	20.47	6.94	1.75	2.03

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		