COMPRESSOR DEFINITION

Designation	**NE K6217U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**863GA51**

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	CSCR		
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	14.28	[cm³] (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/cm²]

C - ELECTRICAL 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	RVA4M3C-576	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	10(440)	[µF(VAC minimum)]
5 Motor protection	T0918/G9	
6 Start winding resistance	13.90	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	3.10	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[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**			**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]
6434	1621	1885	743	3.93	22.02	8.67	2.18	2.54

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE46** (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)**	2971	749	871	428	2.66	8.39	6.93	1.75	2.03
-15	**(+ 5)**	3637	917	1066	462	2.79	10.31	7.87	1.98	2.31
-10	**(+14)**	4427	1116	1297	494	2.91	12.60	8.96	2.26	2.62
-5	**(+23)**	5342	1346	1565	525	3.03	15.27	10.17	2.56	2.98
0	**(+32)**	6381	1608	1870	555	3.15	18.34	11.50	2.90	3.37
+5	**(+41)**	7545	1901	2211	583	3.27	21.83	12.94	3.26	3.79
+10	**(+50)**	8833	2226	2588	610	3.38	25.74	14.47	3.65	4.24

TEST CONDITIONS: **ASHRAE46** (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)**	2614	659	766	461	2.78	7.98	5.67	1.43	1.66
-15	**(+ 5)**	3208	808	940	502	2.94	9.83	6.39	1.61	1.87
-10	**(+14)**	3920	988	1149	542	3.10	12.06	7.23	1.82	2.12
-5	**(+23)**	4751	1197	1392	580	3.25	14.69	8.19	2.06	2.40
0	**(+32)**	5699	1436	1670	616	3.40	17.73	9.25	2.33	2.71
+5	**(+41)**	6766	1705	1983	651	3.55	21.20	10.39	2.62	3.05
+10	**(+50)**	7951	2004	2330	684	3.69	25.12	11.62	2.93	3.41

TEST CONDITIONS: **ASHRAE46** (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)**	2261	570	662	484	2.87	7.53	4.67	1.18	1.37
-15	**(+ 5)**	2771	698	812	536	3.07	9.27	5.17	1.30	1.52
-10	**(+14)**	3393	855	994	586	3.27	11.41	5.79	1.46	1.70
-5	**(+23)**	4127	1040	1209	635	3.47	13.96	6.50	1.64	1.90
0	**(+32)**	4974	1253	1457	681	3.67	16.93	7.30	1.84	2.14
+5	**(+41)**	5932	1495	1738	726	3.86	20.35	8.17	2.06	2.40
+10	**(+50)**	7002	1765	2052	769	4.05	24.22	9.11	2.30	2.67

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		