COMPRESSOR DEFINITION

Designation	**NE K6210U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**862CA51**

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 pressures/temperature			
9.1 Operating (gauge)	19.1	[kgf/cm²] (272 psig)	/ ºC - ºF
9.2 Peak (gauge)	21.2	[kgf/cm²] (301 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2-	[hp]
2 Displacement	8.77	[cm³] (0.535 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	15.920	
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)	10.7	[kg] (23.59 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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	MTRP-0029	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0964/G6	
6 Start winding resistance	31.70	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	5.18	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	16.10	[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:			**ASHRAEHBP46**		Evaporating temperature	**7.2°C (44.96°F)**		
@220V50Hz			**Fan**		(Condensing temperature	**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]
3988	1005	1169	459	2.75	13.65	8.69	2.19	2.55

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Fan**

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)**	1878	473	550	270	2.06	5.30	6.94	1.75	2.03
-15	**(+ 5)**	2243	565	657	290	2.12	6.36	7.75	1.95	2.27
-10	**(+14)**	2708	682	794	306	2.18	7.70	8.85	2.23	2.59
-5	**(+23)**	3274	825	959	320	2.23	9.36	10.24	2.58	3.00
0	**(+32)**	3940	993	1154	331	2.27	11.32	11.91	3.00	3.49
+5	**(+41)**	4706	1186	1379	340	2.31	13.61	13.87	3.50	4.06
+10	**(+50)**	5573	1404	1633	345	2.35	16.24	16.11	4.06	4.72

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Fan**

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)**	1619	408	474	287	2.09	4.94	5.67	1.43	1.66
-15	**(+ 5)**	1960	494	574	315	2.19	6.00	6.23	1.57	1.83
-10	**(+14)**	2387	601	699	340	2.28	7.34	7.00	1.76	2.05
-5	**(+23)**	2899	730	849	362	2.36	8.97	7.98	2.01	2.34
0	**(+32)**	3496	881	1025	381	2.43	10.88	9.16	2.31	2.68
+5	**(+41)**	4180	1053	1225	397	2.50	13.10	10.53	2.65	3.09
+10	**(+50)**	4949	1247	1450	410	2.56	15.63	12.10	3.05	3.55

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Fan**

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)**	1365	344	400	296	2.11	4.55	4.59	1.16	1.35
-15	**(+ 5)**	1690	426	495	333	2.25	5.66	5.08	1.28	1.49
-10	**(+14)**	2085	525	611	367	2.38	7.01	5.69	1.43	1.67
-5	**(+23)**	2551	643	747	398	2.49	8.62	6.42	1.62	1.88
0	**(+32)**	3087	778	905	425	2.60	10.51	7.27	1.83	2.13
+5	**(+41)**	3694	931	1083	449	2.70	12.67	8.23	2.07	2.41
+10	**(+50)**	4372	1102	1281	470	2.79	15.13	9.30	2.34	2.72

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		