

COMPRESSOR DEFINITION

Designation	NE U6210U
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	862FA51

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 pressures/temperature			
9.1 Operating (gauge)	19.1	[kgf/cm ²] (272 psig)	/ °C - °F
9.2 Peak (gauge)	21.2	[kgf/cm ²] (301 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	8.77	[cm ³] (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)	10.6	[kg] (23.37 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

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-0030	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MST26ALK-3259	
6 Start winding resistance	27.92	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.53	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	20.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.90	[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]
4147	1045	1215	457	2.99	14.19	9.08	2.29	2.66

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
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)	1991	502	583	271	2.46	5.63	7.32	1.85	2.15
-15	(+ 5)	2355	593	690	291	2.52	6.67	8.08	2.04	2.37
-10	(+14)	2825	712	828	308	2.57	8.03	9.18	2.31	2.69
-5	(+23)	3403	858	997	321	2.61	9.72	10.60	2.67	3.10
0	(+32)	4089	1030	1198	332	2.64	11.75	12.33	3.11	3.61
+5	(+41)	4882	1230	1431	340	2.66	14.12	14.39	3.63	4.22
+10	(+50)	5785	1458	1695	345	2.67	16.87	16.75	4.22	4.91

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
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)	1741	439	510	294	2.56	5.31	5.97	1.50	1.75
-15	(+ 5)	2084	525	611	319	2.60	6.38	6.55	1.65	1.92
-10	(+14)	2521	635	739	342	2.65	7.76	7.37	1.86	2.16
-5	(+23)	3053	769	895	362	2.71	9.44	8.41	2.12	2.46
0	(+32)	3680	927	1078	379	2.78	11.45	9.68	2.44	2.84
+5	(+41)	4403	1110	1290	394	2.86	13.80	11.16	2.81	3.27
+10	(+50)	5222	1316	1530	407	2.95	16.49	12.85	3.24	3.76

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
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)	1428	360	418	307	2.68	4.75	4.61	1.16	1.35
-15	(+ 5)	1740	438	510	339	2.69	5.82	5.14	1.29	1.51
-10	(+14)	2133	537	625	369	2.73	7.17	5.80	1.46	1.70
-5	(+23)	2608	657	764	396	2.80	8.82	6.59	1.66	1.93
0	(+32)	3165	798	927	422	2.90	10.78	7.50	1.89	2.20
+5	(+41)	3806	959	1115	446	3.03	13.05	8.53	2.15	2.50
+10	(+50)	4529	1141	1327	468	3.19	15.66	9.68	2.44	2.84

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		