

COMPRESSOR DEFINITION

Designation	NE U6214U
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	862GD71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	208-230 / 60	[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 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 temperature			
9.1 Operating	18.4	[kgf/cm ²] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	12.11	[cm ³] (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/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0030	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MRA38168-3259	
6 Start winding resistance	8.96	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.67	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	23.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
3661	923	1073	647	4.08	15.30	5.66	1.43	1.66

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz			ARI4 Fan		(Condensing temperature 35°C (+95°F))					
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)	2636	664	772	475	3.61	9.31	5.54	1.40	1.62
-15	(+ 5)	3218	811	943	511	3.70	11.44	6.30	1.59	1.85
-10	(+14)	3928	990	1151	548	3.79	14.08	7.18	1.81	2.10
-5	(+23)	4767	1201	1397	584	3.89	17.25	8.16	2.06	2.39
0	(+32)	5734	1445	1680	622	4.00	20.98	9.22	2.32	2.70
+5	(+41)	6829	1721	2001	659	4.12	25.30	10.35	2.61	3.03
+10	(+50)	8051	2029	2359	698	4.25	30.22	11.54	2.91	3.38

TEST CONDITIONS: @230V60Hz			ARI4 Fan		(Condensing temperature 45°C (+113°F))					
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	663	507	3.68	8.83	4.46	1.12	1.31
-15	(+ 5)	2780	700	815	552	3.80	10.94	5.04	1.27	1.48
-10	(+14)	3413	860	1000	596	3.92	13.55	5.72	1.44	1.68
-5	(+23)	4162	1049	1220	640	4.05	16.70	6.50	1.64	1.90
0	(+32)	5025	1266	1472	683	4.19	20.41	7.36	1.85	2.16
+5	(+41)	6003	1513	1759	726	4.33	24.72	8.27	2.09	2.42
+10	(+50)	7095	1788	2079	768	4.49	29.65	9.24	2.33	2.71

TEST CONDITIONS: @230V60Hz			ARI4 Fan		(Condensing temperature 55°C (+131°F))					
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)	1883	475	552	532	3.72	8.28	3.54	0.89	1.04
-15	(+ 5)	2326	586	682	589	3.88	10.30	3.95	1.00	1.16
-10	(+14)	2871	723	841	643	4.05	12.85	4.46	1.12	1.31
-5	(+23)	3517	886	1031	696	4.21	15.94	5.05	1.27	1.48
0	(+32)	4264	1075	1250	748	4.38	19.60	5.71	1.44	1.67
+5	(+41)	5113	1288	1498	797	4.56	23.86	6.42	1.62	1.88
+10	(+50)	6063	1528	1776	845	4.75	28.75	7.17	1.81	2.10

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +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		