

### COMPRESSOR DEFINITION

Designation	<b>NE U6215GK</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>959NA51</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
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 (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)	25.7	[kgf/cm <sup>2</sup> ] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm <sup>2</sup> ] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	12.11	[cm <sup>3</sup> ] (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	ESTER / ISO22	
4 Weight (with oil charge)	11.5	[kg] (25.35 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### 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	MTRPH-0055-65	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0743/G6	
6 Start winding resistance	14.26	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.25	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	22.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	4.48	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

### 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]	
6356	1602	1862	973	5.01	52.33	6.54	1.65	1.92	

### 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)	3203	807	939	471	2.94	20.34	6.78	1.71	1.99
-15	(+ 5)	3939	993	1154	520	3.12	25.15	7.58	1.91	2.22
-10	(+14)	4801	1210	1407	572	3.32	30.83	8.41	2.12	2.46
-5	(+23)	5789	1459	1696	626	3.53	37.44	9.25	2.33	2.71
0	(+32)	6902	1739	2022	683	3.76	45.04	10.11	2.55	2.96
+5	(+41)	8141	2051	2385	742	4.01	53.69	10.97	2.76	3.21
+10	(+50)	9505	2395	2785	804	4.28	63.45	11.82	2.98	3.46

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)	2712	683	795	508	3.07	18.98	5.36	1.35	1.57
-15	(+ 5)	3374	850	989	565	3.28	23.79	5.97	1.51	1.75
-10	(+14)	4142	1044	1214	626	3.51	29.40	6.61	1.66	1.94
-5	(+23)	5015	1264	1469	691	3.78	35.88	7.25	1.83	2.12
0	(+32)	5993	1510	1756	759	4.07	43.30	7.89	1.99	2.31
+5	(+41)	7076	1783	2073	831	4.38	51.71	8.51	2.15	2.49
+10	(+50)	8265	2083	2422	907	4.72	61.19	9.12	2.30	2.67

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)	2267	571	664	541	3.17	17.83	4.19	1.05	1.23
-15	(+ 5)	2832	714	830	611	3.44	22.42	4.63	1.17	1.36
-10	(+14)	3481	877	1020	685	3.75	27.77	5.08	1.28	1.49
-5	(+23)	4215	1062	1235	764	4.10	33.94	5.52	1.39	1.62
0	(+32)	5034	1269	1475	847	4.48	40.98	5.95	1.50	1.74
+5	(+41)	5937	1496	1740	935	4.90	48.97	6.36	1.60	1.86
+10	(+50)	6926	1745	2029	1027	5.35	57.96	6.73	1.70	1.97

### 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		

DEVELOPMENT