COMPRESSOR DEFINITION

Designation	**NE U6212GK**
Nominal Voltage/Frequency	**115-127 V 60 Hz**
Engineering Number	**958HE92**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115-127 / 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 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	25.2	[kgf/cm²] (358 psig)	/ ºC - ºF
9.2 Peak	28.3	[kgf/cm²] (402 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	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-70-31	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0928	
6 Start winding resistance	6.83	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.15	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	39.00	[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:			**ARIMBP**			Evaporating temperature		**-6.7°C (19.94°F)**
@115V60Hz			**Fan**			(Condensing temperature		**48.9°C (120.02°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]
2836	715	831	573	6.33	30.56	4.95	1.25	1.45

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ARI4**					(Condensing temperature **35ºC (+95ºF))**			
@115V60Hz		**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)**	2176	548	638	399	5.16	18.27	5.46	1.37	1.60
-15	**(+ 5)**	2561	645	751	447	5.46	21.92	5.75	1.45	1.68
-10	**(+14)**	3172	799	929	491	5.76	27.51	6.46	1.63	1.89
-5	**(+23)**	4007	1010	1174	530	6.05	35.22	7.55	1.90	2.21
0	**(+32)**	5067	1277	1485	564	6.35	45.28	8.98	2.26	2.63
+5	**(+41)**	6352	1601	1861	594	6.64	57.88	10.71	2.70	3.14
+10	**(+50)**	7861	1981	2303	618	6.93	73.22	12.71	3.20	3.72

TEST CONDITIONS:		**ARI4**					(Condensing temperature **45ºC (+113ºF))**			
@115V60Hz		**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)**	1800	454	528	422	5.30	17.69	4.25	1.07	1.25
-15	**(+ 5)**	2084	525	611	478	5.67	20.61	4.37	1.10	1.28
-10	**(+14)**	2574	649	754	529	6.03	25.71	4.85	1.22	1.42
-5	**(+23)**	3269	824	958	574	6.38	33.21	5.68	1.43	1.66
0	**(+32)**	4169	1051	1222	614	6.72	43.29	6.79	1.71	1.99
+5	**(+41)**	5275	1329	1546	648	7.06	56.18	8.16	2.06	2.39
+10	**(+50)**	6586	1660	1930	676	7.39	72.07	9.74	2.46	2.86

TEST CONDITIONS:		**ARI4**					(Condensing temperature **55ºC (+131ºF))**			
@115V60Hz		**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)**	1415	357	415	440	5.39	16.65	3.21	0.81	0.94
-15	**(+ 5)**	1607	405	471	505	5.84	19.10	3.20	0.81	0.94
-10	**(+14)**	1985	500	582	564	6.27	24.00	3.52	0.89	1.03
-5	**(+23)**	2549	642	747	616	6.70	31.54	4.13	1.04	1.21
0	**(+32)**	3299	831	967	663	7.11	41.93	4.98	1.25	1.46
+5	**(+41)**	4234	1067	1241	703	7.51	55.38	6.03	1.52	1.77
+10	**(+50)**	5356	1350	1569	737	7.90	72.08	7.26	1.83	2.13

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		