

COMPRESSOR DEFINITION

Designation	NE U2155GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	954FA51

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	Low Back Pressure R404A		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°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	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 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	ESTER / ISO22	
4 Weight (with oil charge)	10.7	[kg] (23.59 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-49	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MSP30APK-3259	
6 Start winding resistance	17.09	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.36	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	19.50	[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	CCC - CE - IRAM - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900LBP_HH Fan		Evaporating temperature (Condensing temperature		-35°C (-31°F) 40°C (104°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]
1255	316	368	340	2.62	9.24	3.69	0.93	1.08

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		EN12900HH 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]
-40	(-40)	1038	261	304	292	2.54	7.19	3.54	0.89	1.04
-35	(-31)	1359	342	398	335	2.62	9.46	4.07	1.03	1.19
-30	(-22)	1772	446	519	379	2.72	12.37	4.68	1.18	1.37
-25	(-13)	2276	574	667	425	2.84	15.96	5.36	1.35	1.57
-20	(- 4)	2872	724	842	472	2.98	20.24	6.08	1.53	1.78
-15	(+ 5)	3560	897	1043	520	3.14	25.25	6.85	1.73	2.01
-10	(+14)	4340	1094	1272	569	3.32	31.01	7.63	1.92	2.24

TEST CONDITIONS: @220V50Hz		EN12900HH 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]
-40	(-40)	840	212	246	299	2.54	6.54	2.82	0.71	0.83
-35	(-31)	1119	282	328	347	2.63	8.75	3.23	0.81	0.95
-30	(-22)	1473	371	432	399	2.76	11.56	3.69	0.93	1.08
-25	(-13)	1902	479	557	453	2.91	15.00	4.19	1.06	1.23
-20	(- 4)	2406	606	705	510	3.09	19.09	4.71	1.19	1.38
-15	(+ 5)	2986	752	875	570	3.30	23.86	5.24	1.32	1.54
-10	(+14)	3641	918	1067	633	3.54	29.32	5.76	1.45	1.69

TEST CONDITIONS: @220V50Hz		EN12900HH 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]
-40	(-40)	640	161	188	298	2.57	5.77	2.15	0.54	0.63
-35	(-31)	882	222	258	353	2.67	7.97	2.49	0.63	0.73
-30	(-22)	1182	298	346	413	2.81	10.73	2.86	0.72	0.84
-25	(-13)	1541	388	451	477	2.99	14.07	3.23	0.81	0.95
-20	(- 4)	1958	493	574	546	3.22	18.01	3.60	0.91	1.05
-15	(+ 5)	2434	613	713	619	3.48	22.57	3.94	0.99	1.16
-10	(+14)	2969	748	870	696	3.79	27.78	4.25	1.07	1.25

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		