

COMPRESSOR DEFINITION

Designation	NE U6187Z
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	268IE71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 60	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSCR		
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	14.2	[kgf/cm ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	9.99	[cm ³] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
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	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	17.5(400)	[µF(VAC minimum)]
5 Motor protection	T0590/G9	
6 Start winding resistance	6.83	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.15	[Ω at 25°C (77°F)] +/- 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)	4.74	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @127V60Hz			ARIHBP 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]
3966	999	1162	494	4.81	31.12	8.03	2.02	2.35

E - PERFORMANCE - CURVES

TEST CONDITIONS: @127V60Hz		ARI18 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]
-15	(+ 5)	1924	485	564	297	3.89	12.09	6.44	1.62	1.89
-10	(+14)	2292	577	672	318	3.92	14.31	7.30	1.84	2.14
-5	(+23)	3033	764	889	350	4.05	19.13	8.65	2.18	2.53
0	(+32)	3952	996	1158	386	4.22	25.20	10.19	2.57	2.99
+5	(+41)	4853	1223	1422	417	4.39	31.20	11.64	2.93	3.41
+10	(+50)	5542	1397	1624	436	4.51	35.78	12.71	3.20	3.73

TEST CONDITIONS: @127V60Hz		ARI18 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]
-15	(+ 5)	1715	432	503	314	4.03	11.79	5.41	1.36	1.59
-10	(+14)	2022	509	592	339	4.08	13.93	6.05	1.52	1.77
-5	(+23)	2702	681	792	377	4.23	18.74	7.15	1.80	2.10
0	(+32)	3561	897	1044	419	4.43	24.90	8.43	2.13	2.47
+5	(+41)	4404	1110	1291	458	4.64	31.05	9.61	2.42	2.82
+10	(+50)	5035	1269	1475	485	4.80	35.86	10.40	2.62	3.05

TEST CONDITIONS: @127V60Hz		ARI18 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]
-15	(+ 5)	1464	369	429	327	4.07	11.11	4.41	1.11	1.29
-10	(+14)	1707	430	500	355	4.14	13.20	4.91	1.24	1.44
-5	(+23)	2326	586	682	397	4.32	18.04	5.86	1.48	1.72
0	(+32)	3125	787	916	444	4.56	24.30	6.99	1.76	2.05
+5	(+41)	3908	985	1145	488	4.81	30.64	7.99	2.01	2.34
+10	(+50)	4479	1129	1312	522	5.02	35.71	8.59	2.16	2.52

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		