

COMPRESSOR DEFINITION

Designation	T 2134Z
Nominal Voltage/Frequency	230 V 50 Hz
Engineering Number	203NV11

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	230 / 50	[V / Hz]	
4 Application type	Low Back Pressure R134a		
4.1 Evaporating temperature range	-30°C to -5°C	(-22°F to 23°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)	16.2	[kgf/cm ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	19.04	[cm ³] (1.162 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	20.830	
3 Lubricant charge	550	[ml] (18.60 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	13.85	[kg] (30.53 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0030	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0606/20	
6 Start winding resistance	20.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.45	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	13.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.80	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V50Hz			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°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]
1350	340	396	370	2.84	7.67	3.65	0.92	1.07

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V50Hz			ASHRAE32 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]
-35 (-31)	1115	281	327	309	2.63	6.30	3.45	0.87	1.01
-30 (-22)	1191	300	349	324	2.71	6.75	3.66	0.92	1.07
-25 (-13)	1441	363	422	351	2.80	8.18	4.13	1.04	1.21
-20 (- 4)	1864	470	546	390	2.91	10.61	4.79	1.21	1.40
-15 (+ 5)	2462	620	721	440	3.04	14.05	5.58	1.41	1.63
-10 (+14)	3233	815	947	502	3.20	18.53	6.43	1.62	1.88

TEST CONDITIONS: @230V50Hz			ASHRAE32 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]
-35 (-31)	911	229	267	283	2.70	5.14	3.14	0.79	0.92
-30 (-22)	1047	264	307	312	2.74	5.93	3.35	0.84	0.98
-25 (-13)	1326	334	389	351	2.81	7.53	3.78	0.95	1.11
-20 (- 4)	1751	441	513	400	2.92	9.97	4.38	1.10	1.28
-15 (+ 5)	2321	585	680	458	3.06	13.25	5.06	1.28	1.48
-10 (+14)	3035	765	889	526	3.25	17.39	5.78	1.46	1.69

TEST CONDITIONS: @230V50Hz			ASHRAE32 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]
-35 (-31)	716	180	210	257	2.77	4.03	2.83	0.71	0.83
-30 (-22)	910	229	267	300	2.77	5.15	3.05	0.77	0.89
-25 (-13)	1218	307	357	351	2.82	6.92	3.46	0.87	1.01
-20 (- 4)	1642	414	481	410	2.92	9.35	3.99	1.01	1.17
-15 (+ 5)	2182	550	639	476	3.08	12.45	4.59	1.16	1.34
-10 (+14)	2838	715	832	550	3.30	16.26	5.18	1.31	1.52

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8 +0.07/+0.00	[mm]	(0.315" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	8 +0.07/+0.00	[mm]	(0.315" +0.003"/+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		