COMPRESSOR DEFINITION

Designation	**NT 2168GK**
Nominal Voltage/Frequency	**200-240 V 50 Hz / 230 V 60 Hz**
Engineering Number	**922DN04**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	200-240 / 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 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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm²] (365 psig)	/ ºC - ºF
9.2 Peak (gauge)	28.7	[kgf/cm²] (408 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	14.50	[cm³] (0.885 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	15.870	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	17	[kg] (37.48 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	200-240 V 50 Hz / 230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-55-65	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0883/G6	
6 Start winding resistance	10.40	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	2.40	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	25.00	[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	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@200V50Hz**			**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]
2190	552	642	502	3.50	14.85	4.36	1.10	1.28

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@200V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **35ºC (+95ºF))**

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)**	959	242	281	272	2.69	6.45	3.53	0.89	1.03
-35	**(-31)**	1355	341	397	332	2.88	9.14	4.08	1.03	1.20
-30	**(-22)**	1843	465	540	388	3.06	12.47	4.74	1.19	1.39
-25	**(-13)**	2424	611	710	442	3.24	16.47	5.49	1.38	1.61
-20	**(- 4)**	3097	780	907	493	3.43	21.15	6.29	1.59	1.84
-15	**(+ 5)**	3860	973	1131	543	3.61	26.52	7.12	1.79	2.09
-10	**(+14)**	4714	1188	1381	593	3.79	32.61	7.94	2.00	2.33

TEST CONDITIONS: **@200V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **45ºC (+113ºF))**

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)**	855	215	251	273	2.70	5.73	3.13	0.79	0.92
-35	**(-31)**	1212	305	355	338	2.90	8.16	3.59	0.90	1.05
-30	**(-22)**	1664	419	488	400	3.11	11.24	4.15	1.05	1.22
-25	**(-13)**	2210	557	648	461	3.33	14.98	4.78	1.21	1.40
-20	**(- 4)**	2850	718	835	521	3.56	19.42	5.47	1.38	1.60
-15	**(+ 5)**	3582	903	1050	581	3.80	24.56	6.17	1.56	1.81
-10	**(+14)**	4408	1111	1292	642	4.06	30.43	6.86	1.73	2.01

TEST CONDITIONS: **@200V50Hz** — **ASHRAE32** **Fan** — (Condensing temperature **55ºC (+131ºF))**

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)**	751	189	220	266	2.65	5.02	2.81	0.71	0.82
-35	**(-31)**	1069	269	313	337	2.87	7.18	3.18	0.80	0.93
-30	**(-22)**	1485	374	435	407	3.12	10.00	3.65	0.92	1.07
-25	**(-13)**	1996	503	585	477	3.39	13.51	4.18	1.05	1.23
-20	**(- 4)**	2603	656	763	547	3.68	17.70	4.76	1.20	1.39
-15	**(+ 5)**	3305	833	968	619	4.00	22.62	5.35	1.35	1.57
-10	**(+14)**	4102	1034	1202	693	4.35	28.26	5.92	1.49	1.73

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
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	Vertical		
3.3 PROCESS	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		