

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		
4.1 Evaporating temperature range	-40°C to -10°C		
5 Motor type	CSR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Fan cooled	Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
	-	-	-
	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	24.7	[bar]	
9.2 Peak (gauge)	27.7	[bar]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	14.50	[cm³]
2.1 Bore	34.120	
2.2 Stroke	15.87	
3 Lubricant charge	450	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	17	[kg]
5 Nitrogen charge	0.2 to 0.3	[bar]

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	Voltage Relay	
2.1 Starting device	3ARR3B10AA3	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	15(440)	[µF(VAC minimum)]
5 Motor protection (external)	MRP30APK-3261	
6 Start winding resistance	10.4	[ohm at 25°C] +/- 8%
7 Run winding resistance	2.4	[ohm at 25°C] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	25.0	[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		EN12900LBP Fan		Evap. temp. -35°C	Return Gas +20°C
				Cond. temp. +40°C	Liquid Subcooling 0 K
Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
[W]		[W]	[A]	[kg/h]	[W/W]
354		345	1.80	9.60	1.03

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz		EN12900 Fan		Condensing temperature		35°C
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]	
-40	288	296	1.53	7.30	0.97	
-35	403	342	1.74	10.33	1.18	
-30	531	386	1.95	13.65	1.38	
-25	680	428	2.16	17.50	1.59	
-20	855	471	2.38	22.13	1.81	
-15	1064	516	2.60	27.77	2.05	
-10	1314	564	2.82	34.67	2.34	

TEST CONDITIONS: @200V50Hz		EN12900 Fan		Condensing temperature		45°C
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]	
-40	206	283	1.47	5.92	0.72	
-35	310	343	1.73	8.99	0.90	
-30	423	399	2.00	12.29	1.07	
-25	549	451	2.26	16.07	1.23	
-20	698	502	2.53	20.57	1.39	
-15	875	554	2.79	26.03	1.58	
-10	1089	606	3.05	32.70	1.79	

TEST CONDITIONS: @200V50Hz		EN12900 Fan		Condensing temperature		55°C
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]	
-40	-	-	-	-	-	
-35	224	328	1.71	7.61	0.66	
-30	319	400	2.03	10.84	0.79	
-25	422	465	2.34	14.50	0.91	
-20	542	528	2.65	18.83	1.03	
-15	685	590	2.96	24.06	1.16	
-10	859	651	3.26	30.43	1.32	

F - EXTERNAL CHARACTERISTICS

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