COMPRESSOR TECHNICAL DATA

COMPRESSOR DEFINITION

Designation	**NT2180GK**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**923HA04**

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		
4.1 Evaporating temperature range	-40°C to -10°C		
5 Motor type	CSR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling	Fan cooled	Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC 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	1	[hp]
2 Displacement	20.44	[cm³]
2.1 Bore	36.990	
2.2 Stroke	19.03	
3 Lubricant charge	450	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	17.4	[kg]
5 Nitrogen charge	0.2 to 0.3	[bar]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6AC3	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	17.5(440)	[µF(VAC minimum)]
5 Motor protection (external)	T0659/G9	
6 Start winding resistance	8.56	[ohm at 25ºC] +/- 8%
7 Run winding resistance	1.82	[ohm at 25ºC] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	35.0	[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: **@220V50Hz**	**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]	
530		507	2.42	14.35	1.05	

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **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	444	438	2.14	11.30	1.01
-35	584	501	2.39	14.90	1.17
-30	763	562	2.65	19.56	1.37
-25	984	622	2.92	25.35	1.58
-20	1248	685	3.20	32.35	1.82
-15	1555	753	3.49	40.64	2.06
-10	1907	827	3.79	50.27	2.31

TEST CONDITIONS: **@220V50Hz** — **EN12900** **Fan** — Condensing temperature **45ºC**

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	332	429	2.10	9.75	0.78
-35	468	510	2.42	13.53	0.92
-30	625	587	2.75	18.20	1.06
-25	814	664	3.10	23.83	1.22
-20	1034	743	3.45	30.50	1.39
-15	1286	825	3.81	38.27	1.56
-10	1573	913	4.18	47.22	1.73

TEST CONDITIONS: **@220V50Hz** — **EN12900** **Fan** — Condensing temperature **55ºC**

Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
°C	[W]	[W]	[A]	[kg/h]	[Wl/W]
-40	-	-	-	-	-
-35	338	523	2.52	11.98	0.66
-30	483	614	2.90	16.55	0.78
-25	640	702	3.28	21.91	0.91
-20	814	789	3.68	28.14	1.03
-15	1007	879	4.08	35.29	1.15
-10	1224	974	4.50	43.45	1.25

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	