



Model: NT2180GK
Code: 922HA04

embraco POWER IN.
CHANGE ON

Type:	On-off
Voltage [V] / Frequency [Hz] / Phases	220-240 V 50 Hz 1 ~
Refrigerant:	R-404A
Application:	LBP

Motor type:	CSCR
Starting torque:	HST
HP:	1
Displacement:	20.44 cm ³

OPERATING CONDITION : ASHRAE LBP 32

Evaporation Temp.	-23.3 °C	Return Temp.	32.2 °C	Superheating	55.5 K
Condensing Temp.	54.4 °C	Liquid Temp.	32.2 °C	Subcooling	22.2 K

Cooling capacity	Power consumption	Mass flow rate	Efficiency
986.04 W	687.52 W	22.91 kg/h	1.43 W/W

APPLICATION

Evaporating temperature range:	-40 to -10 °C	Cooling type:	Fan Cooling
Permanent operating temperature (peak) :	55 (60) °C	Air Flow	--
Expansion device:	Capillary tube or Expansion valve	Maximum motor temperature:	130 °C

ELECTRICAL DATA

Start winding resistance at 25°C (77°F):	9.24 Ω +/- 8%	Run winding resistance at 25°C (77°F):	2.35 Ω +/- 8%
FLA - full load amperage L/MBP [A] 50 Hz / 60 Hz:	- / -	LRA (A) 50 Hz / 60 Hz:	- / -
		FLA - full load amperage HBP [A] 50 Hz / 60 Hz:	- / -

MECHANICAL DATA

Bore:	36.99 mm	Stroke:	9.52 mm
		Displacement:	20.44 cm ³

OTHER INFORMATION

Weight:	18 kg	Oil charge:	450 ml
Lubricant type:	Polyolester ISO22	Nitrogen charge:	Yes

EXTERNAL SETTINGS

	Shape	Material	Diameter [mm]
-			
Suction connector	Vertical	Copper	9.60
Discharge connector	Vertical	Copper	6.42
Process connector	Vertical	Copper	6.42
Base plate:	Universal	Tray holder:	No

PERFORMANCES AT STANDARD CHECK-POINTS

Checkpoint	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
EN12900 LBP	523.08	501.05	14.17	1.04	771.96	1.54
EN12900 MBP	1,603.76	902.66	48.16	1.78	2,094.92	2.32
EN12900HO	667.97	656.46	20.81	1.02	1,028.77	1.57

* Calculations performed considering isentropic compression and a housing loss of 10%. This is an estimated heat amount discarded in the discharge pipe and the condenser combined.

CONDENSING TEMP. 35 °C**(SUBCOOLING : 22.2 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-40.00	545.32	425.10	10.55	1.28	750.34	1.77
-35.00	734.87	482.39	14.26	1.52	982.96	2.04
-30.00	964.34	542.69	18.76	1.78	1,255.39	2.31
-25.00	1,240.97	603.88	24.23	2.05	1,574.07	2.61
-20.00	1,571.47	662.64	30.82	2.37	1,944.20	2.93
-15.00	1,962.69	714.71	38.69	2.75	2,370.85	3.32
-10.00	2,422.13	755.18	48.02	3.21	2,859.48	3.79

CONDENSING TEMP. 45 °C**(SUBCOOLING : 22.2 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-40.00	438.80	420.02	9.22	1.04	636.50	1.52
-35.00	613.37	489.07	12.93	1.25	863.57	1.77
-30.00	819.49	562.03	17.33	1.46	1,121.19	1.99
-25.00	1,066.61	638.89	22.65	1.67	1,419.67	2.22
-20.00	1,362.20	717.53	29.06	1.90	1,765.76	2.46
-15.00	1,713.12	794.43	36.74	2.16	2,164.88	2.73
-10.00	2,126.38	864.99	45.90	2.46	2,622.19	3.03

CONDENSING TEMP. 55 °C**(SUBCOOLING : 22.2 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-40.00	314.25	392.04	7.26	0.80	483.74	1.23
-35.00	484.04	478.33	11.22	1.01	721.94	1.51
-30.00	671.53	565.09	15.62	1.19	971.58	1.72
-25.00	890.70	656.46	20.81	1.36	1,251.50	1.91
-20.00	1,151.09	752.72	27.03	1.53	1,572.40	2.09
-15.00	1,460.27	851.82	34.50	1.71	1,941.28	2.28
-10.00	1,825.13	950.11	43.43	1.92	2,363.59	2.49

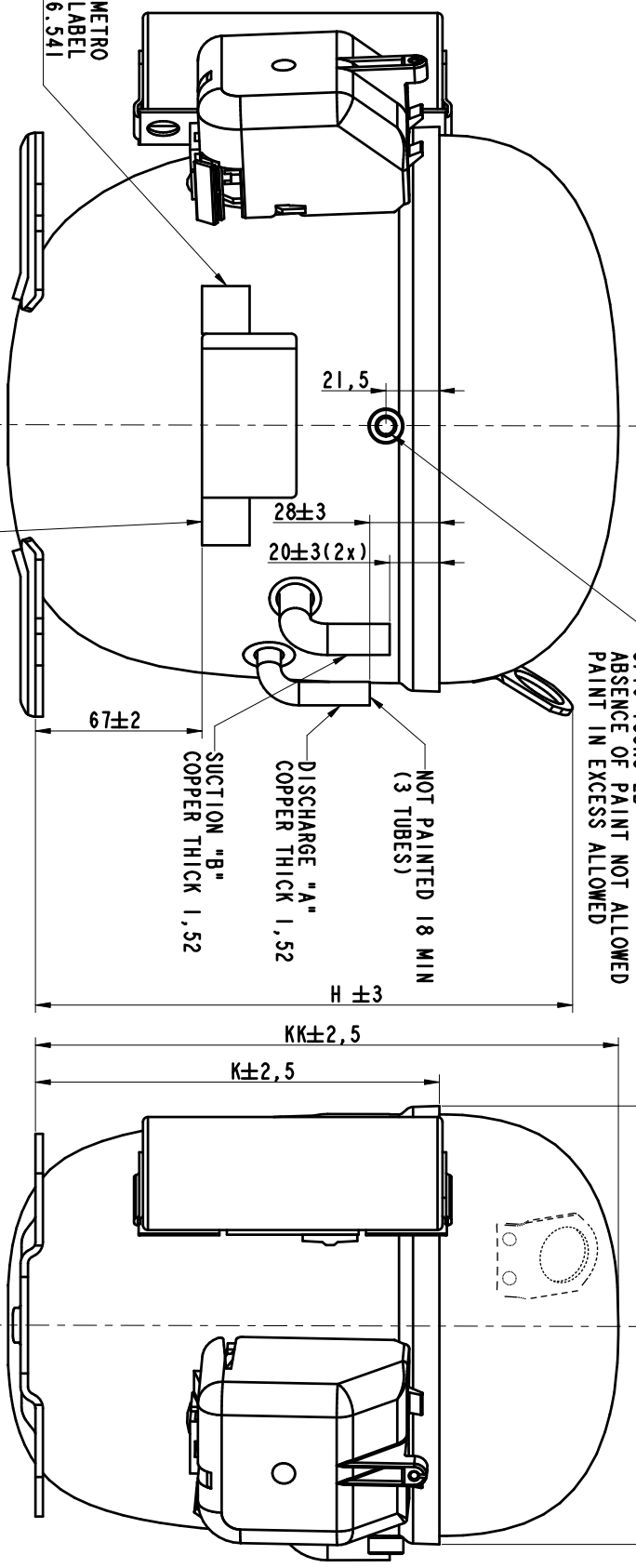
ELECTRICAL ACCESSORIES

Kit:	1
Starter device:	VOLTAGE RELAY
Engineering code:	RVA2L3C-112
Run capacitor:	15
Starting capacitor:	88-108

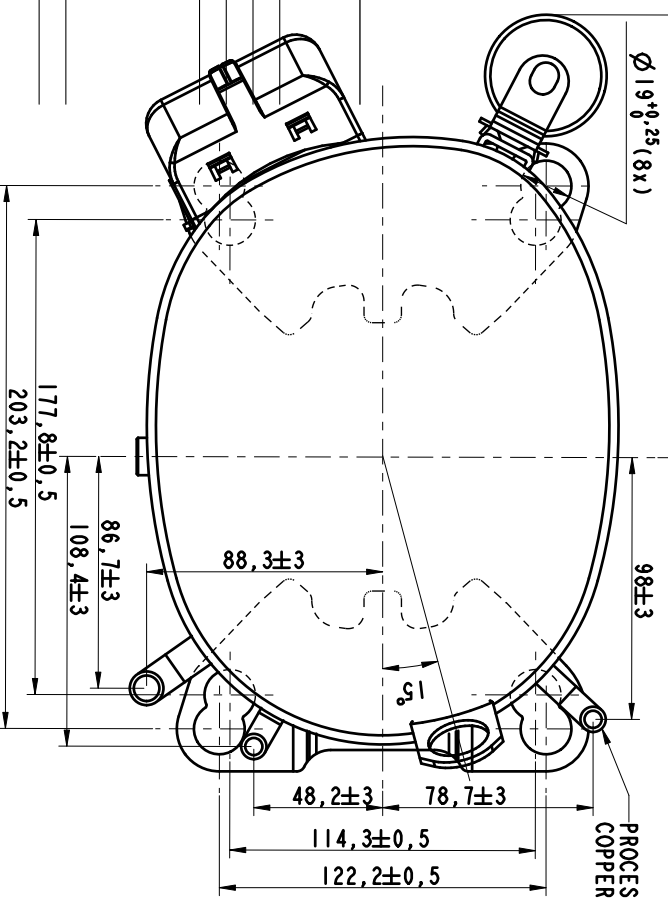
Thermal protector: T0743/G9**Institutes approved for this electric kit:**

If purchased without electricals consult Embraco to verify the supplier of electricals approved for this compressor

MECHANICAL ACCESSORIES**Rubber damper:** Yes**Metal bushing:** Optional



ECM	REVISION	LO	BY	APP	DATE	
-	ADDED HANGER TAB	-	-	-	21.11.2005	
507590	1	RELEASED	PV	VP	16.03.2006	
513311	2	ADDED SHELL 842.04 ADDED NT2160U, NT2170U	TAB	AP	RR	12.03.2009
517385	3	PROCESS TUBE CHANGED	TAB	LF	JK	13.05.2011
305537	4	ADDED NOTE ABOUT IMMETRO LABEL	C6	DG	MG	31.07.2013
34220	5	ADDED MODEL NT2170V	TAB	LF	MG	06.06.2014



234	162.5	216	I.D. 6.42-6.5 X23 DEEP	I.D. 9.6-9.67 X22 DEEP	I.D. 6.42-6.5 X23 DEEP	923.04	NT21926K NT21806K
220	148.5	202				922.04	NT21686K NT62226K NT21786K NT62126K NT62176K
KK	K	H	A	B	C	SHELLTYPE	MODELS
MATERIAL :							
CODE :							
DRAWN : P. VALERO 01.04.2005							
APP. : VALERO 01.04.2005							
ECM :							
NAME			embraco				
NT EXTERNAL VIEW							
CSIR PIN FUSITE							
GEN. TOL. :			ANG. TOL. :				
SCALE :			1:2				
REPLACE							
No.			1.960.883				

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