



Model: NE2121Z
Code: 262BA50

embraco POWER IN.
CHANGE ON

Type:	On-off
Voltage [V] / Frequency [Hz] / Phases	220-240 V 50 Hz 1 ~
Refrigerant:	R-134a
Application:	LBP

Motor type:	CSIR
Starting torque:	HST
HP:	1/4
Displacement:	9.26 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
252.16 W	202.60 W	4.89 kg/h	1.24 W/W

APPLICATION

Evaporating temperature range:	-30 to -5 °C	Cooling type:	Fan Cooling
Permanent operating temperature (peak) :	60 (70) °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):	21.1 Ω +/- 8%	Run winding resistance at 25°C (77°F):	7.7 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:	24.28 mm	Stroke:	10 mm
		Displacement:	9.26 cm ³

OTHER INFORMATION

Weight:	10.95 kg	Oil charge:	350 ml
Lubricant type:	Polyolester ISO22	Nitrogen charge:	Yes

EXTERNAL SETTINGS

-	Shape	Material	Diameter [mm]
Suction connector	Slanted 42°	Copper	8.10
Discharge connector	Straight	Copper	6.10
Process connector	Slanted 42°	Copper	6.10

Base plate:	European Standard	Tray holder:	No
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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
ARI LBP	213.53	215.56	5.61	0.99	303.10	1.41
ARI MBP	485.57	330.17	13.01	1.47	623.56	1.89
ASHRAE CBP	517.36	306.46	11.27	1.69	665.28	2.17
ASHRAE LBP 32	252.16	202.60	4.89	1.24	344.44	1.70
CECOMAF LBP	185.06	193.50	4.41	0.96	271.73	1.40
EN12900 MBP**	465.88	273.41	10.17	1.70	591.20	2.16

* 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%	+/-5%	+/-5%	+/- 7%	5% *	+/- 7%
	W	W	kg/h	W/W	W	W/W
-30.00	225.44	166.53	3.80	1.35	292.12	1.75
-25.00	297.49	186.34	5.03	1.60	375.69	2.02
-20.00	385.67	208.18	6.53	1.85	475.21	2.28
-15.00	492.45	231.45	8.36	2.13	592.64	2.56
-10.00	620.40	255.22	10.57	2.43	729.97	2.86
-5.00	772.33	278.20	13.20	2.78	889.33	3.20

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%	+/-5%	+/-5%	+/- 7%	5% *	+/- 7%
	W	W	kg/h	W/W	W	W/W
-30.00	196.35	168.97	3.55	1.16	266.15	1.58
-25.00	262.38	191.47	4.75	1.37	346.19	1.81
-20.00	342.84	216.62	6.22	1.58	440.79	2.03
-15.00	440.46	244.16	8.01	1.80	552.40	2.26
-10.00	557.80	273.41	10.17	2.04	683.12	2.50
-5.00	697.56	303.35	12.77	2.30	834.98	2.75

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%	+/-5%	+/-5%	+/- 7%	5% *	+/- 7%
	W	W	kg/h	W/W	W	W/W
-30.00	164.72	167.89	3.21	0.98	234.36	1.40
-25.00	226.34	193.50	4.41	1.17	313.02	1.62
-20.00	299.62	221.72	5.86	1.35	403.22	1.82
-15.00	388.04	252.90	7.61	1.53	508.69	2.01
-10.00	494.43	286.75	9.73	1.72	632.05	2.20
-5.00	621.47	322.49	12.28	1.93	775.46	2.40

ELECTRICAL ACCESSORIES

Kit:	1
Starter device:	CURRENT RELAY
Engineering code:	MTRP-0027
Run capacitor:	--
Starting capacitor:	72-88

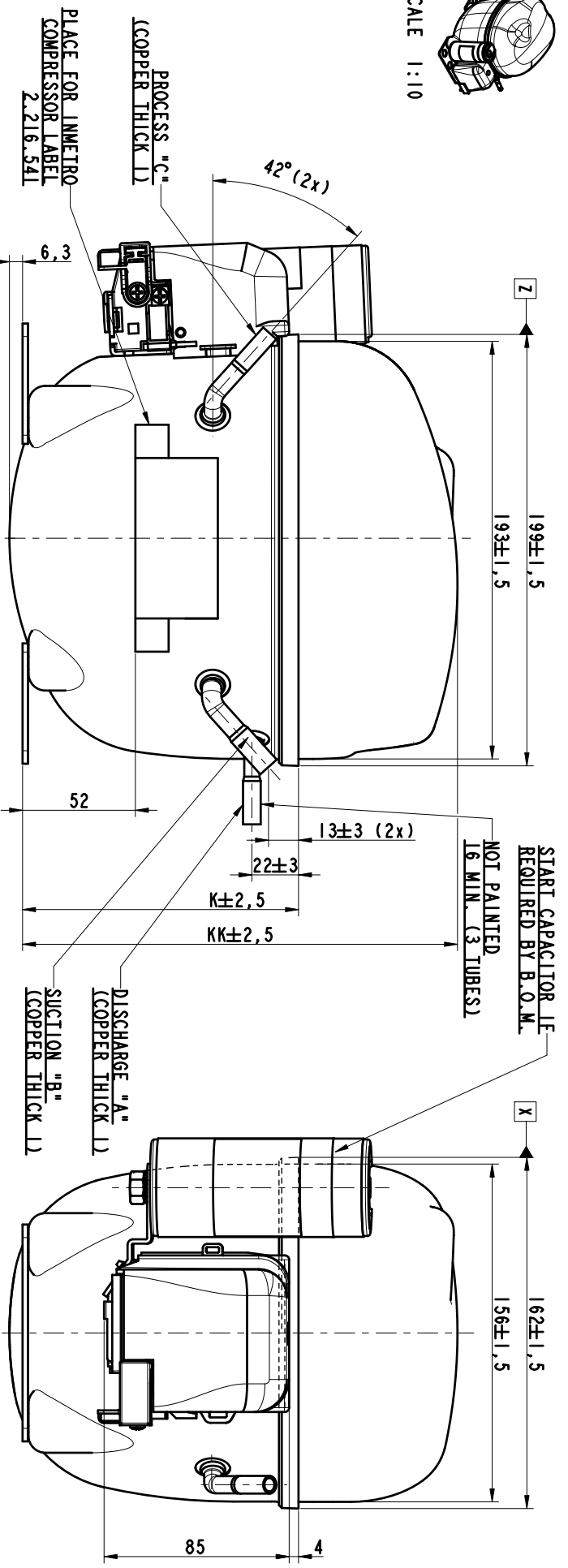
Thermal protector: T0057/G5**Institutes approved for this electric kit:**

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

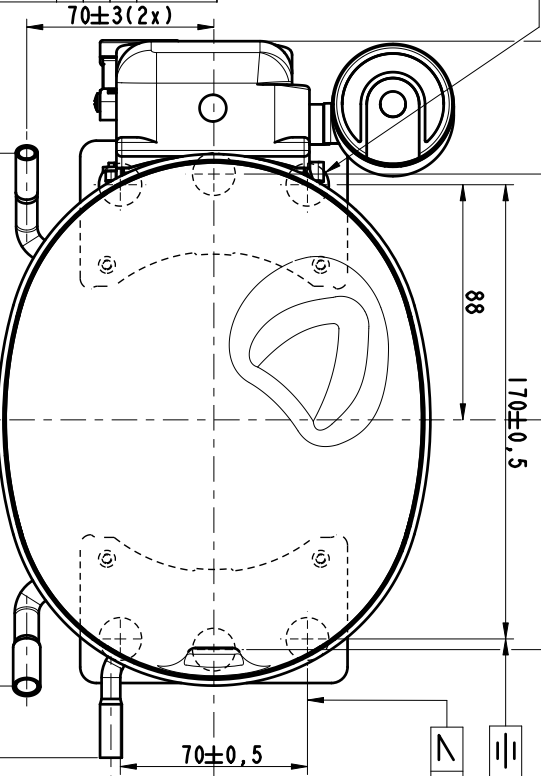
MECHANICAL ACCESSORIES**Rubber damper:** Yes**Metal bushing:** Optional



SCALE 1:10



Ø 16^{+0,25} (6 HOLES)



≡ 3 Z
 ≤ 1,5 X

50HZ MODELS

ECM	REVISION	LO	BY	APP	DATE
39503	3	TAB	KK	RR	07.09.2015
44703	4	TAB	KK	NG	20.01.2017

CODE	MATERIAL	NAME	GEN. TOL.	ANG. TOL.	SCALE	REPLACE	No.
188	KK	VISTA ESTERNA "NE"	---	---	1:2	---	1.960.798
200	K	EXTERNAL VIEW "NE-COMPRESSORS"	---	---	---	---	---
206	K	---	---	---	---	---	---
127	A	---	---	---	---	---	---
115	B	---	---	---	---	---	---
206	C	---	---	---	---	---	---
127	SHELL TYPE	---	---	---	---	---	---
115	MODELS	---	---	---	---	---	---

DRAWN : TONELLA M.
 APP. : VALENO P.
 ECM : TDT 29225

DELETED SHELL 953.50;
 DELETED MODELS NE6181G;
 NE2121G; NE6181G; NE2121G;
 KK: 188, 201, 207,
 MAS 187, 200, 206,
 K: 115, 127 MAS 111, 129, 1;
 13±3 (2x) MAS 12±3 (2x);
 22±3 MAS 24±3;
 127±3 MAS 125±3;
 ADDED PAGE 2
 - UPDATED SHELL UPPER COVER;
 SHELLS 243.50, 243.51,
 247.50, 247.51
 MOVED FROM PG. 1 TO PG. 2,
 MODELS NE1130Z, NE2121Z,
 NE2130Z, NE2134G, NE1212Z,
 NE5187Z, NE6187Z, NE6210Z,
 NE6170Z, NE6181G MOVED
 FROM PG. 1 TO PG. 2
 CHANGED DIMENSION KK
 FROM 201 TO 200 mm AND
 FROM 207 TO 206 mm;
 CORRECTED BASE DATUMS X, Z;