



Model: NEK1116Z
Code: 268EA47

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:	RSIR-RSCR
Starting torque:	LST
HP:	
Displacement:	7.37 cm ³

OPERATING CONDITION : ARI LBP

Evaporation Temp.	-23.3 °C	Return Temp.	4.4 °C	Superheating	27.7 K
Condensing Temp.	48.9 °C	Liquid Temp.	48.9 °C	Subcooling	0.0 K

Cooling capacity	Power consumption	Mass flow rate	Efficiency
164.94 W	130.68 W	4.33 kg/h	1.26 W/W

APPLICATION

Evaporating temperature range:	-35 to -10 °C	Cooling type:	Static
Permanent operating temperature (peak) :	60 (70) °C	Air Flow	--
Expansion device:	Capillary tube	Maximum motor temperature:	130 °C

ELECTRICAL DATA

Start winding resistance at 25°C (77°F):	17.6 Ω +/- 8%	Run winding resistance at 25°C (77°F):	13.2 Ω +/- 8%
FLA - full load amperage L/MBP [A] 50 Hz / 60 Hz:	0.82 / -	LRA (A) 50 Hz / 60 Hz:	5.3 / -
		FLA - full load amperage HBP [A] 50 Hz / 60 Hz:	- / -

MECHANICAL DATA

Bore:	24.28 mm	Stroke:	7.96 mm
		Displacement:	7.37 cm ³

OTHER INFORMATION

Weight:	10.8 kg	Oil charge:	350 ml
Lubricant type:	Polyolester ISO22	Nitrogen charge:	Yes

EXTERNAL SETTINGS

	Shape	Material	Diameter [mm]
-			
Suction connector	Slanted 42°	Copper	6.10
Discharge connector	Slanted parallel to Base Plate	Copper	4.94
Process connector	Slanted 42°	Copper	6.10
Base plate:	European Standard	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
ARI LBP	164.94	130.68	4.33	1.26	234.13	1.79
ASHRAE LBP 32	193.55	133.37	3.76	1.45	264.39	1.98
CECOMAF LBP	141.36	125.69	3.37	1.12	207.58	1.65
EN12900 LBP**	99.54	85.34	2.05	1.17	142.15	1.67
EN12900 MBP**	367.53	184.35	8.03	1.99	466.39	2.53

* 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 : 0 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
-35.00	109.18	84.14	2.16	1.30	151.60	1.80
-30.00	149.00	98.95	2.95	1.51	200.72	2.03
-25.00	198.16	114.85	3.93	1.73	259.32	2.26
-20.00	258.33	131.36	5.14	1.97	328.77	2.50
-15.00	331.14	147.76	6.61	2.24	410.31	2.78
-10.00	418.29	163.22	8.38	2.56	505.15	3.09

CONDENSING TEMP. 45 °C**(SUBCOOLING : 0 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
-35.00	89.47	85.71	1.93	1.04	131.60	1.54
-30.00	125.82	103.13	2.71	1.22	179.26	1.74
-25.00	169.90	122.05	3.67	1.39	234.76	1.92
-20.00	223.75	142.27	4.85	1.57	300.19	2.11
-15.00	289.07	163.28	6.29	1.77	376.99	2.31
-10.00	367.53	184.35	8.03	1.99	466.39	2.53

CONDENSING TEMP. 55 °C**(SUBCOOLING : 0 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
-35.00	66.77	82.80	1.59	0.81	104.75	1.27
-30.00	101.56	103.67	2.42	0.98	154.06	1.49
-25.00	141.36	125.69	3.37	1.12	207.58	1.65
-20.00	189.08	149.31	4.52	1.27	269.08	1.80
-15.00	246.79	174.43	5.92	1.41	340.76	1.95
-10.00	316.21	200.55	7.62	1.58	424.08	2.11

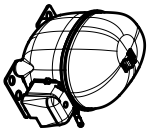
ELECTRICAL ACCESSORIES

Kit:	1
Starter device:	PTC
Engineering code:	V230
Run capacitor:	4
Starting capacitor:	--

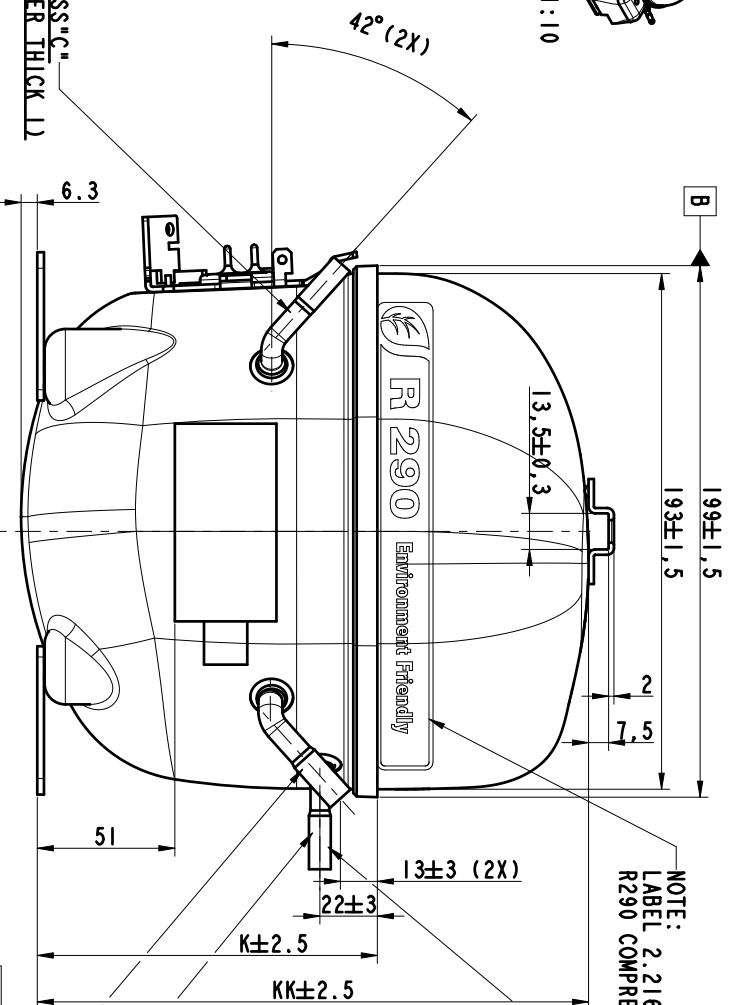
Thermal protector: T0503/07**Institutes approved for this electric kit:**

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

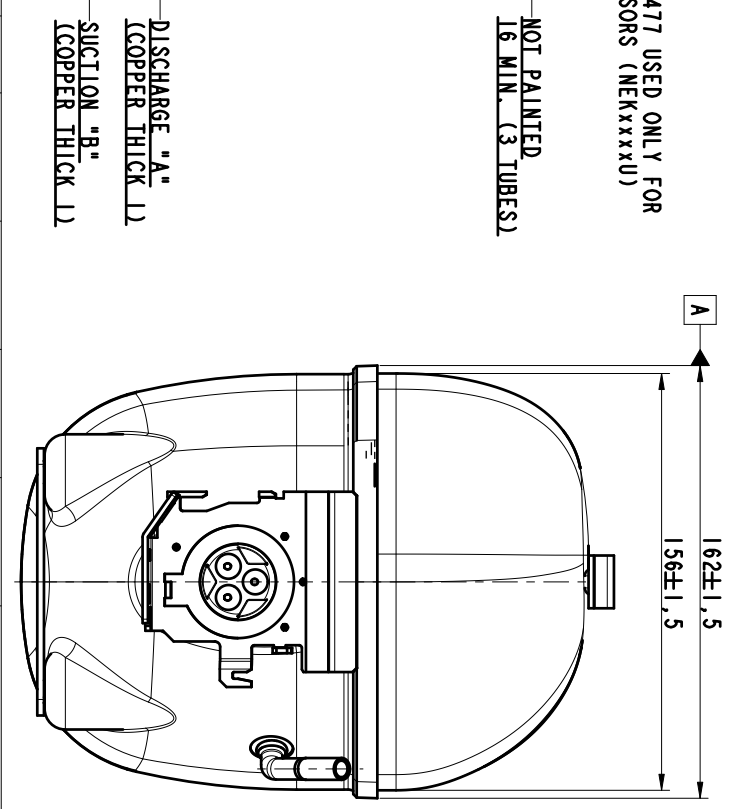
MECHANICAL ACCESSORIES**Rubber damper:** Yes**Metal bushing:** Optional



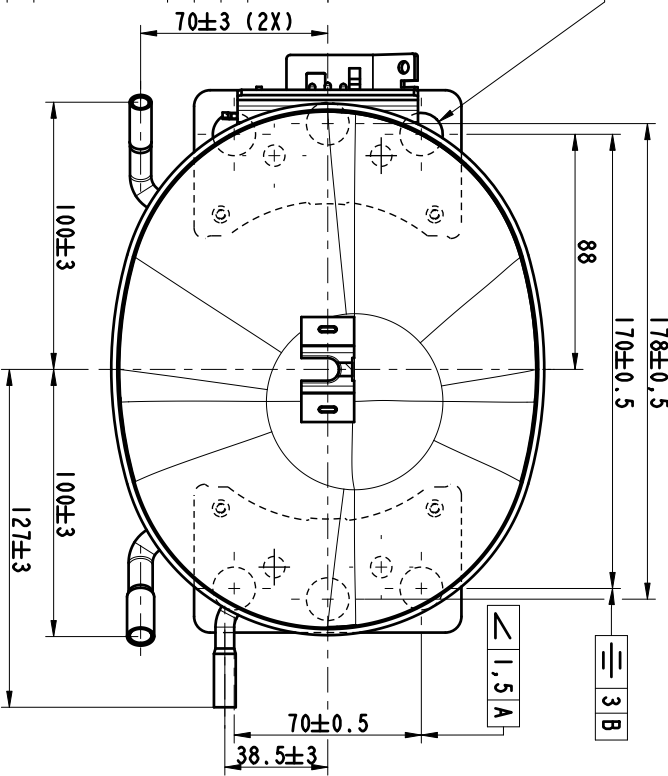
SCALE 1:10



NOTE:
LABEL 2.216.477 USED ONLY FOR
R290 COMPRESSORS (NEKxxxxU)



∅ 16^{+0,25} (6 HOLES)



ECM	REVISION	LO	BY	APP	DATE
36537	2	DELETED SLOWLY NOTE	ES	MG	01.06.2013
31062	3	FROM DIM 1000045 DIMEN: SHELL 859.50 (NEK21500K), NEK21340K REMOVED NEK21300K ADDED 200.54 (NEK21402K), 859.54 (NEK21500K)	TAB	MG	14.10.2013
27071	4	ADDED 862.54, 862.54 (NEK21340K);	TAB	MP	17.12.2013
44284	5	ADDED DIM MODELS NEK21004K, NEK21005K, NEK21006K, NEK21009K, NEK21072K;	TAB	MG	14.11.2016
44763	6	CHANGED DIMENSION IN FROM 201 TO 200 mm AND FROM 247 TO 246 mm;	TAB	MG	05.01.2017

MATERIAL	KK	K	A	B	C	SHELL TYPE	MODELS
206	127	127	1-D. 6-1-6-2 X 20 DEEP	1-D. 8-1-8-2 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	269.58 863.58 959.58	NEK6214Z NEK6213U NEK2168U NEU2168GJ NEU21786K
200	127	127	1-D. 4-86-5-03 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	268.47 862.34 862.54 958.54	NEK1121U NEK6210U NEK6187Y NEK21306K NEU21406K
188	115	115	1-D. 6-1-6-2 X 20 DEEP	1-D. 8-1-8-2 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	267.58 861.58	NEK6170Z NEK6160Y NEK6170Y NEK6181U NEU6187Z
			1-D. 4-86-5-03 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	1-D. 6-1-6-2 X 20 DEEP	957.54 861.47	NEK2121GK NEK21256K NEK6144Y



EXTERNAL VIEW "NEK"
VISTA ESTERNA "NEK"
EXTERNÝ POHĽAD "NEK"

CODE :
DRAWN : MILOS GALAD 04.04.2013
APP. : ROBER REICH
ECM : 28632

GEN. TOL. :
ANG. TOL. :
SCALE : 1:2
REPLACE
No. 1.960.959

THIS MATERIAL IS SUPPLIED AS IS AND IS NOT TO BE USED FOR ANY OTHER APPLICATIONS WITHOUT THE WRITTEN PERMISSION OF EMBRACO.