



Model: EMX80CLT
Code: 701AA72

embraco POWER IN.
CHANGE ON

Type:	On-off
Voltage [V] / Frequency [Hz] / Phases	220-240 V 50 Hz 1 ~
Refrigerant:	R-600a
Application:	LBP

Motor type:	LST
Starting torque:	LST
HP:	1/7
Displacement:	12.21 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
23.10 W	42.74 W	0.34 kg/h	0.54 W/W

APPLICATION

Evaporating temperature range:	-35 to -10 °C	Cooling type:	Static
Permanent operating temperature (peak) :	55 (65) °C	Air Flow	--
Expansion device:	Capillary tube	Maximum motor temperature:	130 °C

ELECTRICAL DATA

Start winding resistance at 25°C (77°F):	18.65 Ω +/- 8%	Run winding resistance at 25°C (77°F):	13.71 Ω +/- 8%
FLA - full load amperage L/MBP [A] 50 Hz / 60 Hz:	1.26 / -	LRA (A) 50 Hz / 60 Hz:	7.47 / -
		FLA - full load amperage HBP [A] 50 Hz / 60 Hz:	1.52 / -

MECHANICAL DATA

Bore:	26 mm	Stroke:	11.5 mm
		Displacement:	12.21 cm ³

OTHER INFORMATION

Weight:	7.9 kg	Oil charge:	150 ml
Lubricant type:	Alkylbenzenic ISO5	Nitrogen charge:	No

EXTERNAL SETTINGS

	Shape	Material	Diameter [mm]
Suction connector	Slanted 42° up + 45° to Back	Copper	6.10
Discharge connector	Slanted 0° up + 45° to Back	Copper	4.94
Process connector	Slanted 45° up + 45° to Back	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	23.10	42.74	0.34	0.54	32.34	0.76
ASHRAE LBP 32	26.77	41.67	0.29	0.64	36.00	0.86
CECOMAF LBP	19.63	40.92	0.26	0.48	28.18	0.69
EN12900 LBP**	13.52	37.67	0.15	0.36	18.93	0.50
EN12900 MBP**	52.64	47.03	0.63	1.12	66.02	1.40

* 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)**

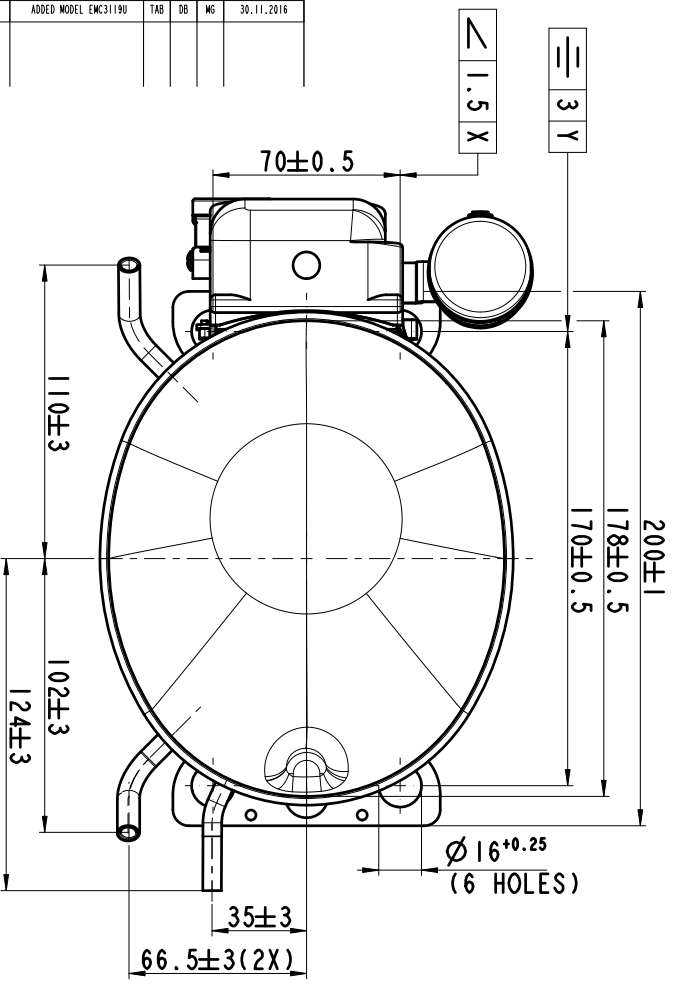
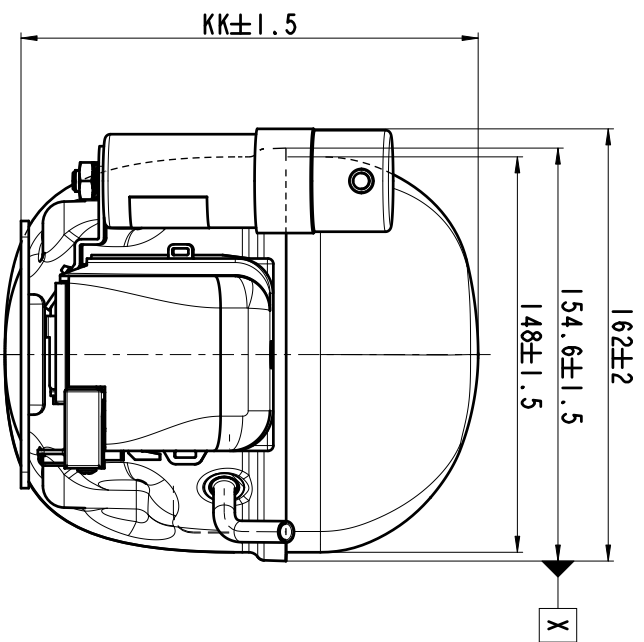
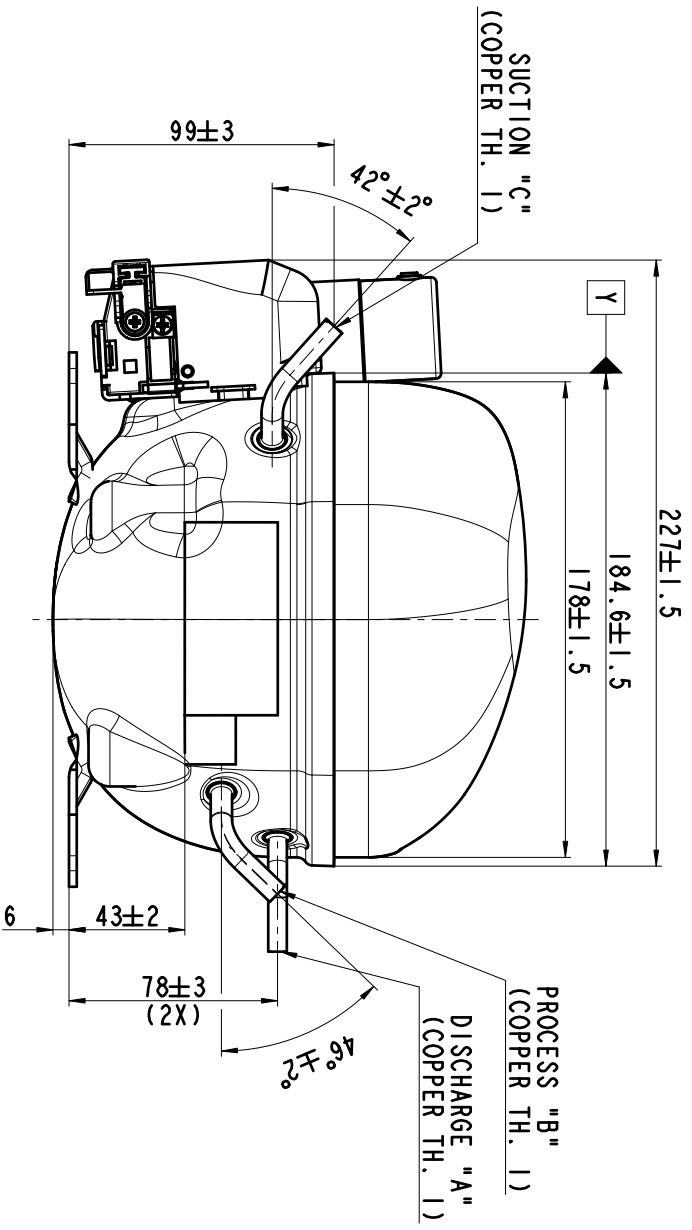
Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5%	+/-5%	+/-5%	+/- 7%	5% *	+/- 7%
	W	W	kg/h	W/W	W	W/W
-35.00	15.02	37.72	0.16	0.40	20.49	0.54
-30.00	21.05	39.15	0.23	0.54	27.93	0.71
-25.00	28.38	40.68	0.31	0.70	36.65	0.90
-20.00	37.06	42.25	0.41	0.88	46.63	1.10
-15.00	47.23	43.79	0.52	1.08	57.94	1.32
-10.00	59.06	45.23	0.65	1.31	70.73	1.56

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	12.18	37.61	0.14	0.32	17.52	0.47
-30.00	17.33	39.15	0.21	0.44	24.21	0.62
-25.00	24.01	40.97	0.29	0.59	32.60	0.80
-20.00	32.08	42.95	0.38	0.75	42.39	0.99
-15.00	41.58	45.00	0.50	0.92	53.50	1.19
-10.00	52.64	47.03	0.63	1.12	66.02	1.40

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	10.49	37.73	0.14	0.28	16.00	0.42
-30.00	14.01	38.99	0.18	0.36	20.72	0.53
-25.00	19.63	40.92	0.26	0.48	28.18	0.69
-20.00	26.88	43.22	0.35	0.62	37.48	0.87
-15.00	35.60	45.72	0.47	0.78	48.26	1.06
-10.00	45.81	48.32	0.60	0.95	60.44	1.25



ECM	REVISION	LO	BY	APP	DATE
36011	1	ADDED SHELL TYPE 711.72 REMOVED "R60S" FROM LABEL	TAB B2	MG RR	18.06.2015
37254	2	ADDED MODELS EMC3121U EMC3125U ADDED LABEL FOR R290 MODELS	TAB C1-C2	MG RR	17.02.2016
44284	3	ADDED MODEL EMC3119U	TAB	DB MG	30.11.2016

KK	A	B	C	SHELL TYPE	MODELS
171	1. D. 4.90-5.02 X 15 DEEP	1. D. 6.1-6.2 X 15 DEEP	1. D. 6.1-6.2 X 15 DEEP	701.72 711.72	EMX3118Y EMC3121U EMC3119U EMY3118Y EMC3125U

MATERIAL :
CODE :
DRAWN : MILOS GALAD 17.12.2014
APP. : ROBERT REICH
ECM : 34258

NAME
EXTERNAL VIEW EM COMPRESSOR
EXTERNY POHLAD KOMPRESOR EM

GEN. TOL. :
ANG. TOL. :
SCALE : 1/2
REPLACE
No. 1.960.969

embraco EMC3118Y
 THERMALLY PROTECTED 220-240V ~ 50Hz
 R 600A
 CE
 SUCCTION
 MADE IN SLOVAKIA
 NO START WITHOUT STARTING DEVICE
 701ZATZ
 ISO/IEC/14
 N11XED96
 CAUTION
 RISK OF FIRE
 R 600a

embraco EMC3121U
 THERMALLY PROTECTED 220-240V ~ 50Hz
 R 290
 CE
 SUCCTION
 MADE IN SLOVAKIA
 NO START WITHOUT STARTING DEVICE
 711JATZ
 17/FEB/16
 NB5NB6X5
 CAUTION
 RISK OF FIRE
 R 290

THIS MATERIAL IS COMPATIBLE AND CONFORMS TO ENBRACO R600A AND R290 REFRIGERANT. IT IS NOT MIXED WITH OTHER REFRIGERANTS.