External heat recovery unit - AirWatt

Description

External heat recovery unit - AirWatt is designed to efficiently exploit the waste heat, generated during compression of air in rotary screw compressors. Sometimes this represents more than 70% of energy consumed by the rotary screw compressor for the operation. This heat can then be used to heat domestic water or for heating, at almost no additional costs. This does not only help save money, but is also environmentally friendly. Unit has two separate piping systems with counter flow. Energy exchange from compressor to sanitary water occurs in plate heat exchanger, where compressor oil and sanitary water meets. Unit is controlled by thermostatic valve, which prevents compressor system getting to cold and damaging compressor.

Technical specification

Working pressure (oil)	1 – 16 bar
Max. water pressure	10 bar
Working temperature (oil)	5°C – 120°C
Max. water output temperature	70 °C
Pressure drop (oil)	~ 100 mbar
Ambient temperature	1,5 °C – 55 °C
Water temperature indicator	Analogue, mechanical/Digital, electronic*

Materials

Housing	Steel sheet metal
Outside protection	Powder paint coated (Epoxy-polyester base)
Heat exchanger	Stainless steel
Pipes	Copper / Stainless steel*
Connections	Brass, copper
Feet	NBR

*** AirWatt 132, AirWatt 200, AirWatt 315**

Omega Air d.o.o. Ljubljana
Cesta Dolomitskega odreda 10
1000 Ljubljana, Slovenia

Tel: +386 (01) 200 68 00
Fax: +386 (01) 200 68 50

e-mail: info@omega-air.si
www.omega-air.si

Sizes

MODEL	CONNECTIONS		COMPRESSOR POWER	RECOVERABLE ENERGY*	DIMENSION			WEIGHT
	OIL	WATER	[kW]	[kW]	A [mm]	B [mm]	C[mm]	[kg]
AirWatt 22	G 1”	G 1''	7,5 11 15 18 22	5,6 8,3 11,3 13,5 16,5	410	620	660	33
AirWatt 37	G 1”	G 1''	30 37	22,5 29,6	410	620	660	35
AirWatt 75	G 1”	G 1''	45 55 75	33,8 41,3 56,3	410	620	660	42
AirWatt 132	G 2”	G 2”	90 110 132	67,5 82,5 99	480	955	860	53
AirWatt 200	G 2”	G 2”	160 180 200	120 135 150	480	955	860	78
AirWatt 315	G 2”	G 2”	250 280 315	187,5 210 236	480	955	860	90

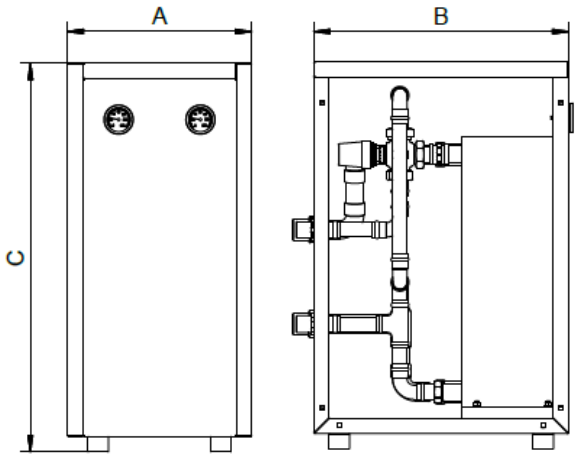
***The maximum recoverable energy is usually 70 – 80 % of the shaft power of the compressor**

Maintenance

Once per month make a visual check of EXTERNAL HEAT RECOVERY UNIT and make sure there is no visual damage or leaking. Regular cleaning will prevent thicker sediment and debris on piping wall and inside plate heat exchanger.
Recommended cleaning intervals:

- Every 6 months (very dirty and mineral rich water)
- Every 12 months (moderately dirty water, surface water)
- Every 3 years (clean water)

For cleaning oil sediments and grease it is recommended to use paraffin, for cleaning of limestone use formic acid, acetic acid or citric acid.



INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2015	

Omega Air d.o.o. Ljubljana
Cesta Dolomitskega odreda 10
1000 Ljubljana, Slovenia

Tel: +386 (01) 200 68 00
Fax: +386 (01) 200 68 50

e-mail: info@omega-air.si
www.omega-air.si