

SCREW COMPRESSORS

oil injected

ECONO SCREW
ACU 75/2 to 355

FAIR INFORMATION



HAFI ENGINEERING INCREASES YOUR OUTPUT SIGNIFICANTLY

Modern designed and developed air - compressor packages are more than just compressors, built on traditional way. Today, highly automated industrial plants and process operations have a demand on high-quality air-compressor-packages, designed in accordance with the latest state of technology, efficient, simple to operate and particularly reliable, in order to avoid interruptions to production as far as possible.

HAFI air compressors are equipped with air ends brand AERZENER with optimized profiles for high efficiency, modest energy consumption and long serviceable life. In combination with the electronic intelligence of the HAFIMATIK enables particularly efficient operation of the HAFI Econo Screw systems. With the incorporation of the optionally available frequency-controlled drive, the efficiency can be even further improved.



"STATE OF THE ART" DEVELOPMENT AND DESIGN

The design of the new HAFI ECONO SCREW compressor meet therefore precisely the industrial requirements and represents the latest State of the Art. All systems are manufactured in accordance with ISO 9001 and conforming to the CE guidelines.

Technically solid and service-friendly design of the HAFI ECONO SCREW compressors:

- ▶ Environmentally conscious, enclosed sump
- ▶ Distinct separation of compression area, cooling area and electrical installation.
- ▶ Double vibration neutralizing with elastic machine feet under the aggregate and under the base frame.
- ▶ Air ends directly assembled on the oil tank prevents leaks
- ▶ Maintenance-free V-belt drive with constant optimal tension up to 250 kW, long lifetime of the V-belt similar to transmission via gear drive. Direct drive via gear box and coupling from 250 kW
- ▶ Reliable cooling unit for air and lube oil with high efficiency
- ▶ Integrated oil-filtration up to 15 kW
- ▶ Oil tank with large surfaces and multiple oil pre-filtration

26 MODEL SIZES UP TO 53 M³/MIN AND UP TO 13 BAR

HAFI produce the new oil-injected ECONO SCREW compressors in 26 sizes from 0,4 up to 53 m³/min. The series ACU 75/2 to ACU 355 permits volume flows of 13 to 53 m³/min and can be designed up to 13 bar(g).

HAFIMATIK - THE INTELLIGENT AND ECONOMIC CONTROL SYSTEM

With the HAFIMATIK Controller the user gets a technically perfected control-, regulating- and monitoring system, designed for the complete compressor series. The intelligent system is used to acquire, monitor and visualize the important operation parameters and functions. At the same time, the most efficient operating mode is selected. An optimal combination idle-running, full-load or intermittent operation utilizes energy-saving potentials!

By operational faults, the HAFIMATIK Controller allows fast restarting, localization and displaying possible reason of error.



COMPRESSED AIR

- ▶ in the desired quality
- ▶ in the correct quantity
- ▶ at the right place
- ▶ with the necessary pressure

increases the productivity and the competitiveness.

INSTALLATION - OPERATION - MAINTENANCE

Central compressor rooms and foundations are no longer necessary with HAFI - compact aggregates. The vibration-free and silent running allows to install HAFI air-compressors there, where compressed air is needed. Decentralized installation minimizes the costs for expensive and maintenance-intensive pipeline systems. HAFIMATIK reduces operating- and maintenance costs and increases the user-friendliness.

ENGINEERING

Whether as replacement or extension of an existing compressor station or in the design of a completely new compressed-air system - HAFI is the reliable and competent partner for consulting, planning and engineering!

ENERGY-SAVING BY HEAT RECOVERY

As a possibility of utilizing energy when operating HAFI screw-type compressors, there are three types of heat recovery systems provided:

- ▶ HAFI-HRS-P:
Plate heat exchanger for heating up water for heating systems.
- ▶ HAFI-HRS-R:
Tubular heat exchanger for heating up water for heating systems.
- ▶ HAFI-HRS-SR:
Safety heat exchanger for heating water for utilization purposes.

In order to prevent a mixing of the service water with lube oil, the heat transfer is done over a double-wall – tube bundle.

QUALITY COMPRESSED AIR FOR YOUR HIGH DEMANDS

Highly efficient filters on suction side clean the air from dust and other particles.

The special design of the oil-filtration tank with multi-stage oil pre-filtration and particularly large surfaces as well as generously dimensioned outboard (up to ACU 160) or integrated (from ACU 200) oil separators produce prevent foaming and bubbles in the oil system.

Highly-effective combi-cooler in combination with a large sized cooling unit with high efficiency guarantees operational reliability, efficiency and quiet running.

Compressed-air from HAFI ECONO SCREW compressors (residual oil content 2-3 mg/m³, temperature increase 8-15 °C) already covers a variety of demands without treatment.

Naturally, downstream from HAFI ECONO SCREW screw-type compressors all compressed air treatment equipment, such as:

- ▶ Condensate separator
- ▶ Refrigeration dryer also in integrated design
- ▶ Absorption dryer
- ▶ Filter or filter combinations
- ▶ ECO TECH oil-free system

can also be installed.



ACCESSORIES FOR ANY REQUIREMENTS AND APPLICATION

HAFI ECONO SCREW compact aggregates are equipped to a very high level of technology as standard. For individual customer requirements the following options are available at extra cost:

- ▶ Frequency-controlled drive
- ▶ Water cooling
- ▶ Heat recovery systems including internal piping
- ▶ Master control system (for 2 to 8 compressors)
- ▶ Cyclone separator
- ▶ Super noise insulation
- ▶ Customized paintwork
- ▶ Acoustic hood heating
- ▶ Oil heater
- ▶ Filter monitoring system

Further custom designs are available on request, such as e.g.: compressor without noise hood, custom sizes.



MAINTENANCE MANAGEMENT, MORE THAN SERVICE

The maintenance-friendly design of the HAFI ECONO SCREW compressors with long maintenance intervals as well as the service management controlled via HAFIMATIK save time and money for our customers. Our well-trained service technicians are happy to assist or provide support for you in the realization of the maintenance-management concept in the context of a service contract. The local service organizations and local spare-parts stocks are the basis of the well-developed HAFI service network.

HAFI DELIVERY PROGRAM

HAFI provides oil-injected screw-type compressors with flow rates of 0,4 up to 53 m³/min with operating pressures of 8, 10 and 13 bar(g). The palette of electro-motors are available in a ranges from 3 to 355 kW. Thereby, the compressors with an output from 250 kW are driven directly via gear box. The machines in the output range of up to 250 kW are manufactured with V-belt drive.

TECHNICAL DATA

TYPE	Operating pressure		Volume flow		Motor rating	Drive type	Sound pressure level	Dimensions width x depth x height (super-silenced)	Weight
	bar(g)	psig	m ³ /min	cfm	kW		dB(A)	mm	kg
	ACU 75	8	115	13,00	459	75	v-belt	76	2400 x 1600 x 1700
10		150	11,60	410					
13		190	9,90	350					
ACU 90	8	115	15,30	540	90	v-belt	78	2400 x 1600 x 1700	2620
	10	150	13,70	484					
	13	190	11,90	420					
ACU 110	8	115	18,00	636	110	v-belt	79	2400 x 1600 x 1700	2700
	10	150	16,20	572					
	13	190	14,20	501					
ACU 132	8	115	23,50	830	132	v-belt	84	2800 x 1820 x 2030	3200
	10	150	20,80	734					
	13	190	17,20	607					
ACU 160	8	115	27,80	982	160	v-belt	84	2800 x 1820 x 2030	3200
	10	150	24,80	876					
	13	190	20,90	738					
ACU 200	8	115	33,70	1190	200	v-belt	87	2800 x 1820 x 2030	3500
	10	150	30,40	1073					
	13	190	26,70	943					
ACU 220	8	115	35,50	1254	220	v-belt	87	2800 x 1820 x 2030	3900
	10	150	35,50	1254					
ACU 250/1	10	150	35,50	1254	250	v-belt	87	2800 x 1820 x 2030	3900
	13	190	31,50	1112					
ACU 250/2	8	115	41,20	1455	250	gear box	87	3320 x 2100 x 2800	6500
	10	150	35,90	1268					
	13	190	29,30	1035					
ACU 315	8	115	47,10	1663	315	gear box	92	3320 x 2100 x 2800	6800
	10	150	42,10	1487					
	13	190	37,80	1335					
ACU 355	8	115	53,10	1875	355	gear box	92	3320 x 2100 x 2800	7000
	10	150	47,00	1660					
	13	190	42,00	1483					

Technical changes reserved

Volume flow is related to the intake conditions of the compressor (1 bar / 20 °C)

For other standard sizes ask for ACU 3-75/1 brochure.

Screw compressors for other pressures and higher motor ratings upon request.

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