

Interesting used VMY 346 screwcompressor unit SABROE VMY 346 NR unit (2003) E-motor: 450 kW (1999) Year of build : 1995



General description:

This unit is very interesting for technical specialists. The basis is the unit build in 1995 for the refrigerant and suited with Liquid injection. The potential Buyers will only notice an R22 compressor unit, only the experienced technical engineers discover the real potential of this unit.

The facts to consider about the unit :

- The compressor block is the well-known VMY346NR of 2003. The VMY346NR is very strong block with a swept 2708 m3/hr. (suitable for VSD)
- The Oil separator is built in 1995 by Sabroe Denmark, with a special feature of separate oil vessel. The benefit is that the temperature can be controlled in several ways The constriction is suitable for modern Freon and NH3 till the pressure range of 26 bar (g).

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- The E-motor 450kW of 1999, was produced in the time before the globalization and has high • level of engineering. Therefore is a long life span.
- The Pre-lubrication pump on the unit, which starts before the compressor is in operation, building up the oil pressure. After the start oil pressure is reached, the compressor starts and the main oil lubrication pump on the compressor takes over the lubrication of the compressor. These construction is one of the most safe lubrications in the world of refrigeration engineers. This is a real old school.
- The oil filter is single, the filter elements are low pressure drop for long time of operation. •
- The compressor unit is controlled by a UNISAB PRO II controller, the well-known standard of Sabroe units. Still are there specialized companies for repair of UNISAB I and II systems.

Recommendation of my side:

- This unit is interesting for users outside Europa. The oil separator OHU 4131 has designed according to AD-Merkblatter/ TUV approved as a standard in 1995. This was before the introduction of the PED-CE. This old school design is so much flexible, that the standards of it can be found nowadays.
- The cooling is based on liquid injection. I recommend strongly to modify the oil cooling to a water-cooled or refrigerant cooled oil cooler to complete this unit. We can support you by this modification.
- By exchange the cupper piping, the present Eco port and eliminate the oil injection system, this unit is suitable for NH3 operation.

The compressor : VMY346NR



The compressor block VMY346NR has a Sept volume of 2708m3/hr /50HZ Own main full flow oil pump. Eco

connection. Electronic part load indication with a output of 4-20 MA signal.

The compressor is from 2003. Well maintained.

This Strong Journal/roller baring type compressor is Heavy duty design, with an extreme long life span- for almost 45 years and more .

The VMY 346 NR is a Neben Rotor driven Compressor, therefore the swept volume is higher than his smaller brother The VMY 346 HR driven.

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The oil separator : UHU 4131



The unique construction of the Sabroe oil separator is the oil buffer tank, which is below the original oil separator. The oil will be collected in the lowest tank.

This construction makes compressor units very suitable for the use in fishing vessels, in countries with very hot climate and for the modern refrigerants like R410, R507, which in general generate much less discharge heat.

There are special modifications, which improve the stableness of the compressor unit by use of R410, R507 and other Freon type based on several gases together.

The E-motor: 450 kW Schorch 315 size of 1999



The E-motor is a well-known model . On 400V at 2950 RPM (50 Hz) the duty is 450 kW. Even on 460V at 3565 RPM (60 Hz) the duty is 520 kW .

Modification to VSD suitable is possible.

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The lubrication oil pumps : pre- lubrication pumps in combination of full flow pumps .



The unit is suited with 2 oil pumps – the external is used by start to build –up the oil pressure and prepare for lubrication to start.



On the Compressor block is a direct drive full flow oil pump mounted . As soon as the compressor is running the pre-lube pump stops and the Full flow oil pump takes over the duty of pressurizing the lubrication oil.



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The oil filter : Single oil filter

The unit is suited with a single oil filter, the elements are low pressure drop.



The compressor controller : UNISAB PRO II

This compressor controller is one of the most well-known compressor controllers in the world. Today is the Compressor UNISAB Pro III on the market – still there companies , who repair , provide exchange system for the older models.

Technical details:

The swept volume of VMY 346NR is 2708m3/hr by 50Hz (2950 rpm) The unit is built as high stage compressor unit :

Additional possibilities to include by the sale:

- Modifications of the unit to match other working conditions.
- Modification to electro controllers design of Starter panels.

The unit can be offered :

- As it is loaded on a truck/ in container.
 - Additional Services :
 - Tested on leakage with test report.
 - o Axial measurement of the compressor with inspection report
 - Complete overhaul of the compressors.
 - Warranty 3 month- 6 month's (only by overhauled compressors)

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