PB+CO®mpressor HWV 20 COMPRESSED AIR + HEAT – A STRONG PAIR THANKS TO COGENERATION

Technical Data

PB+CO*mpressor	HWV 20	
Engine	4-cylinder industrial gas engine from Volkswagen	
Fuel	Natural gas, liquefied gas	
Gas input	68 kW Hi	
Compressor	Screw compressor, oil-injection, power input max. 22 kW	reserved.
Nominal delivery rate	up to 3,2 m³/min*	ngesı
Nominal pressure	up to 10 bar	id cha
Thermal output	up to 60 kW	hts ar
Temperature level hot water (return / forward flow)	70/90°C	Allrig
Thermal efficiency	87,5%	417
Dimensions L x W x H	1.200 x 800 x 1.520 mm, with separator 2.250 x 800 x 1.520 mm	E E E
Weight	700 kg	Valid 1

* Depending on nominal pressure

Protect resources, protect the climate, protect your budget – in one draft of air

YOUR BENEFITS

- + Up to **60% cheaper generation** of compressed air and heat through gas engine
- + Compressed air generation **independent** of electricity rate and changing legal conditions (e.g. Cogeneration Protection Law KWKG)
- + High-efficiency machine with efficiency level of 95 %
- + Transparent compressed air generation thanks to Postberg + Co. measuring technology in moist compressed air
- + Environment-friendly up to 50 % less CO₂ emissions than electrical compressors
- + Cogeneration technology high heat recovery efficiency thanks to high flow temperatures (95°C)
- + Compact HWV 20 has a 35 % smaller footprint than a cogenerator with electrical compressor
- + Compatible with all common compressor controls
- + Modular design also as container
- + Made in Germany developed and manufactured in Hannover
- + Service directly from the manufacturer
- + Funding and operation by means of **contracting** through our cooperation partner Städtische Werke AG Kassel

Save half of the costs.

Ensure availability.

Increase quality.



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PB+CO®mpressor HVVV20

Combined Heat and Air generation plant (CHA)

COMPRESSED AIR AT ITS BEST

PB+CO[®]mpressor

PB+CO[®]mpressor HWV 20 - THE SOLUTION FOR ECONOMIC COMPRESSED AIR GENERATION

As efficiency specialist in the field of compressed air, **Postberg** + Co. presents the air cogenerator HWV 20 as innovative, highly efficient and consequently environment-friendly compressor that can reduce the operating costs of compressed air generation by up to 60%.

The system is highly efficient due to the use of a gas-operated combustion engine with the parallel utilization of the waste heat generated during compressed air production. As a result, the overall costs (including maintenance and capital costs) can be reduced by up to 40%.

Cost comparison – effiency expressed in figures



Application examples of the PB+CO®mpressor family

The PB+CO®mpressors HWV 20, TGA 210 and TGA 100 can be applied in all cases where compressed air and heat are needed and have to be generated in a multi-shift operation. The air cogenerators are applied, for example, in the following industries.

+ PLASTICS PROCESSING

Heat is required for heating the injection moulds and there is a general compressed air requirement which may account for up to 10% of the operating electricity costs.

+ ELECTROPLATING

Heat requirement for electrolyte bath and high compressed air requirement for subsequent metal processing.

+ PAPER PRODUCTION

Heat requirement for the production of paper and generally high compressed air requirement for further processing to paper rolls or multi-layer cardboard.

+ FOOD INDUSTRY

Washing and rinsing of fittings and vessels (e.g. bottles and milking systems) as well as compressed air requirement for handling technology.

Compressed air generation - finally efficient

Conventional compressed air production

Compressed air is one of the most expensive energy carriers of our time. In practice, only approx. 3.5% of the primary energy used is converted to compressed air.

50 % waste heat



This is different in the case of air cogenerators. Here, natural gas as the primary energy source is used to 95%. The major portion is converted to heat (up to 85%) and the other portion to compressed air (approx. 10%). This so-called power-heat cogeneration process relieves the environment as the energy input for compressed air generation is significantly lower than in electrical compressors.

Maximum energy output through double heat extraction and direct coupling of gas engine and compressor





Already during compressed air generation, a large portion approx. 50% - is lost as waste heat. In addition, the waste heat from the compressors that can be utilized has an insufficient temperature level (max. 70 °C) so that it cannot be employed in processes.

Derived in 2010 from a funding project of the DBU German Foundation for Environment, the PB+CO®mpressor HMV 20 is today produced in series by Energiewerkstatt in Hanover, a specialist for the production of cogeneration plants for over 30 years. Our partner network includes **TEDOM Compressors** and Pressluft Frankfurt as further manufacturers of highefficiency compressors as well as Städtische Werke AG Kassel for the contracting.

Benefit from more than 10 years of experience accumulated by Postberg + Co. in the development, production and project execution of high-efficiency machines in the field of powerheat cogeneration as well as the special compressed air measurement know-how to optimize the compressed air systems.

COMPRESSED AIR AT ITS BEST

PB+CO[®]mpressor powered by energiewerkstatt