

The redesigned SM compressor range from Kaeser Compressors

Compact Compressed Air Power

Kaeser's latest generation of the highly successful SM rotary screw compressor range looks set to continue the legacy of its predecessors with enhanced performance and exceptional efficiency.

The previous SM series provided efficient compressed air production for smaller air deliveries up to 1.15 m³/min. As with the preceding models, the new range of SM rotary screw compressors has been able to benefit from many of the latest advances introduced in Kaeser Kompressoren's larger compressor packages. In redesigning the SM series, Kaeser has been able to enhance system power and cooling, reduce sound levels and maintain the compact footprint of only 0.49 m² (standard version). The results speak for themselves: With free air deliveries of 0.9 and 1.2 m³/min at 8 bar respectively, the SM 9 and 12 each deliver even more compressed air than their predecessors (11 and 15 bar pressure versions are also available). The existing 5.5 and 7.5 kW versions (the SM 9 and 12) are also joined by a 9 kW model, the SM 15, which delivers 1.5 m³/min at 8 bar. Furthermore, an integrated refrigeration dryer option is available to ensure reliable compressed air drying. Thermally shielded to prevent exposure to heat from the compressor package, the refrigeration dryer module makes SM series 'T' versions highly efficient, compact compressed air systems that are able to deliver a reliable source of quality, dry compressed air at all times. The SM 12 can be equipped with Kaeser's "SFC" variable speed control, allowing compressor performance to be precisely matched to suit fluctuating compressed air demand. It can also be supplied as part of a three-module system (SM 12 T SFC), which includes a compressor, refrigeration dryer and variable speed control.

Users looking for a compressed air package that not only delivers efficient air production and treatment, but which is also able to store compressed air with minimal space requirement can opt for an "Aircenter" package. Available in all three SM model sizes, each "Aircenter" includes a refrigeration dryer and a compressor mounted on a 270 litre air receiver. All three modules – the compressor, dryer and air receiver – are enclosed within in a single housing, so that the whole system appears as one unit. The SM 12 "Aircenter" model can also be equipped with variable speed control.

The striking anthracite-coloured housing cover on the front left of each unit is easy to remove and allows excellent component accessibility. Combined with outstanding ease of maintenance, each SM model represents the very latest advances in air system performance and design. Every unit uses a flow optimised "Sigma Profile" fluid-cooled airend and an IE3 rated motor to guarantee excellent specific power with

high energy-efficiency. The motor and airend are connected via a V-belt drive system equipped with an automatic tensioning device. This not only ensures constant and efficient power transmission, but also significantly reduces maintenance requirement. As a result of highly effective sound insulation and low airend speeds these ultra-quiet machines operate with sound pressure levels of only 64 to 66 dB (A). Moreover, a high-efficiency cooling system provides the motor and fluid / compressed air coolers with fresh cooling air drawn in from the ambient surroundings to achieve exceptionally low compressed air discharge temperatures.

The internal “Sigma Control basic” controller provides automatic system monitoring and precisely adjusts compressor performance to match actual compressed air demand. Models are also optionally available equipped with the “Sigma Control 2”, which allows connection to compressed air management systems.

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The new generation of Kaeser’s SM rotary screw compressor series combines ultra-quiet performance with exceptional power and efficiency for air deliveries from 0.9 to 1.5 m³/min. Models are also available with an integrated refrigeration dryer, variable speed control and an air receiver (“Aircenter”).