



# Dry air – for free

i.HOC – integrated dryer for dry-running compressors

The new integrated rotation dryer for Kaeser dry-running rotary screw compressors reliably delivers compressed air with pressure dew points down to -30 °C, all while saving energy. This compressed air dryer was specially developed for integration into Kaeser dry-running rotary screw compressors.

To regenerate the desiccant when saturated with moisture, the i.HOC rotation dryer uses all hot compressed air produced by the second compression stage, which is more effective than using only a partial stream. The advantages of full-flow regeneration become evident above all when the temperatures

of the cooling medium start rising. The compressed air flows axially through the silica gel used as the desiccant. Kaeser rotation dryers achieve outstanding drying results, without further heating the regeneration air using electricity. In the i.HOC process (“integrated heat of compression”) the necessary heat is avail-

able free of charge. The patented Kaeser process also ensures pressure dew point stability, even with variable free air deliveries and compressors running at partial load. During commissioning, the required pressure dew point is reached and remains stable after only one drum revolution. The speed of rotation is auto-

matically adjusted to the current operating situation of the compressor in order to ensure optimal desiccant regeneration – the basis for reliable maintenance of low pressure dew points down to -30 °C. Dryer efficiency always depends on differential pressure: pressure losses in the dryer must usually be countered by increasing pressure in the compressor, which requires a great deal of

energy. Not so for the i.HOC dryer: the radial blower in the base of the rotation dryer equalises any pressure losses incurred during the drying process, as needed. This guarantees maximum quality and stability of the pressure dew point.

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*Innovative, intelligent, integrated – the new i.HOC compressed air dryer as an integrated component of a DSG series dry-running rotary screw compressor.*



# OILFREE-AIR