DORIN CDB SERIES FOR SUBCRITICAL CO2 APPLICATIONS WITH PSs100 BAR/PS 150 BAR.

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Based on long term experience (20+ years of manufacturing, the pioneer globally in this field) on CO2 compressors and strong of almost 100 years of manufacturing compressors generally, DORIN designed a dedicated series of meet the compressors to specific requirements of those subcritical CO2 applications where is required a high standstill pressure and condensing temperature.



Series CDB – Model CD3500B

CDB Series combines the high energy efficiency and tested and reliable features of the CD Series with an increased pressure strength of up to 150 bar at high pressure side and 100 bar at low pressure side in standstill mode.

Thus, in response to regional market developments, DORIN is able to provide reliable, efficient and safe compressors even for any kind of system, including cascade and booster (high PSs values required).

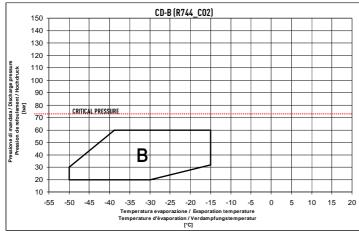
CDB characteristics treasure out from the CD specifically engineered for CO2 compressors:

- displacement capacity from 1.12 to 30.23 m³/h
- Pressure-proof housing for PSs of 100 bar on low pressure side and PS 150 bar on high pressure side
- Specially selected motors allowing efficient use in both conventional and elevated Tc systems
- High energy efficiency, reliability and safety with specifically adapted valves and cylinder heads
- Wear-resistant drive gear with specially developed multilayer bearings
- Optimally suited for operation with frequency inverter to control capacity

Based on the proven CD series these new compressor models have been developed to meet the specific demands at very high standstill pressures, occurring during longer system downtimes. **CDB Models** are particularly suited for use with condensing temperatures of up to 22°C.

In combination with CD Models for transcritical operation, this new series offers the possibility for very efficient medium and low temperature systems within the widest capacity range.

Furthermore, the hybrid solution **CDB/HEP ECOPREMIUM** Models in the form of a CO2/R134a cascade system is an example of the universal use of these compressor



models aiming at greater efficiency and low carbon footprint to the system built

For further information on CO2 see brochure:

<u>1LTZ016_CD_1412</u> (transcritical)

1LTZ017_CDS_1412 (subcritical)

Application limits based on 10 K suction gas superheat

Oil charge: PAG68 (or POE C85E).

Officine Mario Dorin is a company established in 1918, manufacturing compressors since 1932. Based in the area of Florence (Tuscany), Italy, OMD reaches all over the world thanks to its commercial partnerships and internal technical-commercial personnel. OMD is present in more than 90 countries supplying always perfect and reliable products, following the principle of its founder Mr Mario Dorin "...the main thing is that our products must always be perfect...".

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