

B-KOOL

SIGNIFICANTLY LONGER FILTER CARTRIDGE LIFE

B-KOOL Refrigeration Dryer cools the compressed air and separates out most of the moisture, collecting it in the B-KOOL and thus preventing it from passing into the filter cartridge.

Particularly in environments with high ambient temperatures, the B-KOOL refrigeration dryer extends filter capacity to an outstanding extent.

The B-KOOL is available in three versions:

- › B-KOOL II 680i: Integrated solution in new design for MINI-VERTICUS and VERTICUS in Super Silent version
- › B-KOOL 680i: Integrated solution for PE-VE in Super Silent version
- › B-KOOL 680s: As standalone solution for compressors with P 41 or P 61 purification system

THE SMART WAY TO SAVE COSTS AND HELP THE ENVIRONMENT!



B-KOOL 680i



B-KOOL-Control



B-KOOL II 680i on top of MINI-VERTICUS



B-KOOL 680s in front of MARINER 320

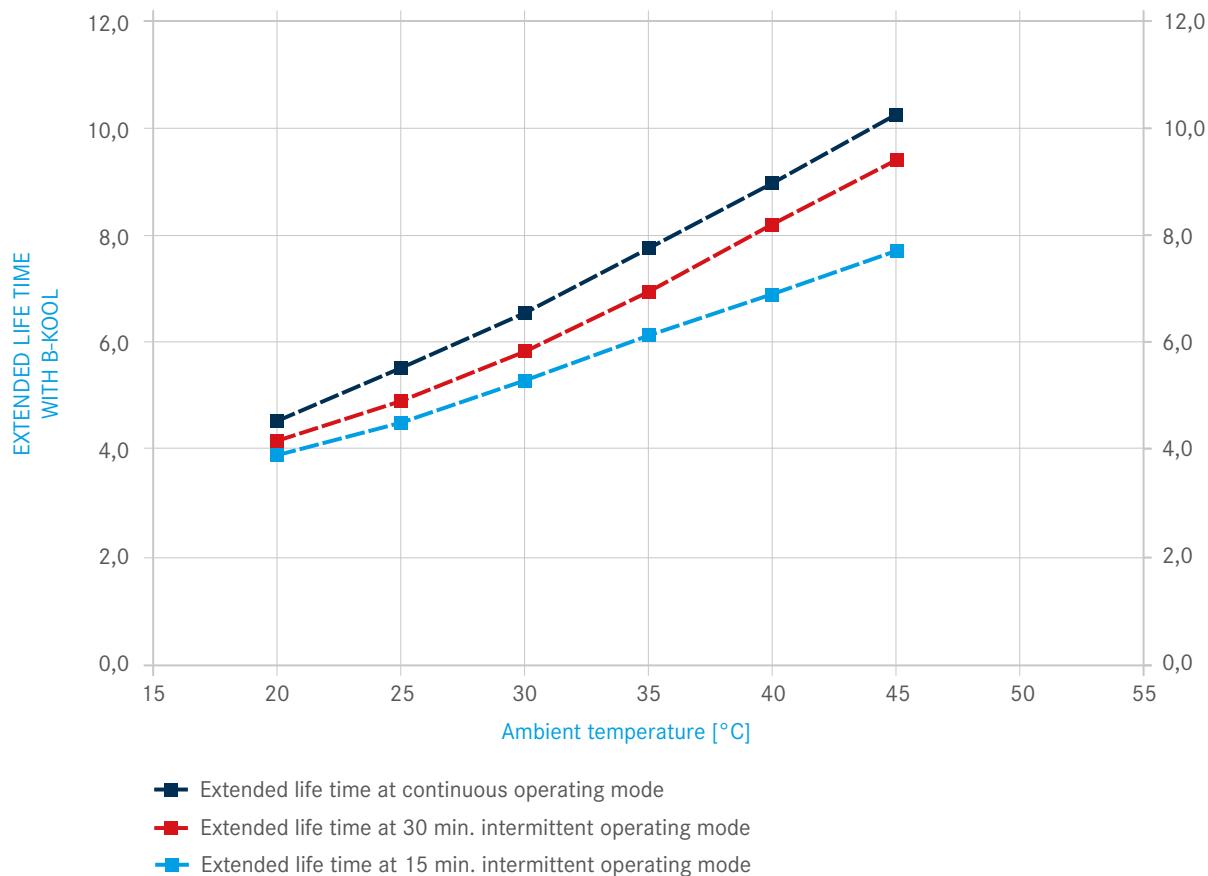
HOW THE B-KOOL REFRIGERATION DRYER WORKS

- 1.** The air saturated with moisture is fed out of the final separator of the compressor into the B-KOOL refrigeration dryer.
- 2.** In the high-efficiency cooling unit, the temperature of the compressed air, and thus its pressure dew-point, are reduced to approx. 3°C. For reasons of physics, the cooled air is no longer able to store the moisture content and the oil and water vapour condenses.
- 3.** The condensate is collected in the integrated separator and thus does not enter the filter cartridge.
- 4.** The condensate is discharged into the compressor unit's collecting container via the automatic condensate drain.
- 5.** The cooled and dried air is fed into the purification system by the B-KOOL refrigeration dryer.
- 6.** The B-KOOL control monitors the function of the integrated cooling technology and controls the condensate drain valve of the automatic condensate drain.

POTENTIAL FOR COST SAVINGS

The following diagram illustrates the huge potential for savings when the B-KOOL refrigeration dryer is used.

EXTENDED LIFE TIME WITH B-KOOL AT VARIOUS OPERATING MODES



Service life calculated for P 61 purification system with B-SECURUS in conjunction with a BAUER compressor; based on 225 bar final pressure (185 bar average filling pressure). Service lives will vary under other operating conditions and with different filling pressures.

TECHNICAL DATA

MODEL	B-KOOL II 680i, B-KOOL 680i AND B-KOOL 680s
Medium	Compressed air & nitrox (up to 40% O ₂)
Ambient temperature	+5 °C to +45 °C
Refrigerant	R 134 a
Compressed air infeed temperature	max. 60 °C
Max. operating pressure compressed air	350 bar/500 bar
Min. operating pressure compressed air	100 bar
Permissible free air delivery, compressor	200 – 700 l/min (10 l cylinder filling from 0-200 bar) 200 – 650 l/min (according to ISO 1217)
Power supply	100 – 127 VAC 50 Hz or 200 – 240 VAC 50/60 Hz
Power consumption	max. 550 W at 50 Hz, 610 W at 60 Hz