

Feature	Advantages
Temperature range	One motor design for artic, desert or standard Rig -40°C in every case up to +55°C without derating
Low Noise	around 85dBA @ 1m around -5dB @ 1m less than competition adding silencer or VFD operation possible to reduce noise level to 75dBA @ 1m
VFD Blower	reduction of noise level no limitation in voltage or frequency extended lifecycle of main motor (drive main motor in optimum temperature) up to 44% savings, „green efficiency“
Design	MP, DW, RT motors are interchangeable design with bigger shaft for high sideloads (belt or chain driven) standardized and customized options for protection / On- and offshore
Quality shaft	Rolled out 90° angle for less stress on the shaft for higher loads single or double shaft special shaft design possible
Isolation	better isolation material for longer life time 3x time isolation and varnish insulation test with 3,3kV
Less inertia	faster operation in DW less weight, higher hook load 1500hp: GEB28 767 ft/lb ² compare to 1600hp: Breuer 593ft/lb ² 1500hp: GEB28 8750 ftlb compare to 1600hp: Breuer 10566 ftlb
More torque	Longer overload cycle up to 10min higher overload curves possible
Maintenance	no maintenance in between 50.000h compare to GE max. 25.000h extended Bearing lifetime, no grease intervalls No downtime in between planned service intervalls
customization	All ideas are possible e.g. silencer, air ducts, IP56 water cooling, special filters, air exhaust, for Container, buildings, outside, desert operation, special vibration protection kits
Temperature sensor	Redundancy on all sensors (2x5 platinum RTD, 2x3 PTC) thermal switch (PTC) for emergency shut down ATEX possible without pressure sensor Footprint, shaft and hub are in line with 5GE752, GEB20/22/28/29 (can easily replace GE motor with Breuer)
interchangeable	BREUER motors are always matching inside the space of an GE motor (can easily replace GE motor with Breuer)
Vibration monitoring	Boreholes prepared in vertical and horizontal axes for calculation of needed service Auto detection without to be at the Rig location
Quality	Made in Germany quality product BREUER 144 years of motor history - mainly for underground mining (ATEX zones) technical advantages in the complete motor concept
Breuer motors	one supplier for motor – drive solution optimized concept, easier handling Direct to use motors, VFD and complete Drive houses and TopDrive Container
VFD solutions	Complete customized solution by using only standard stacks and standard controller Around 10% smaller than main competition Tested and experienced system for > 10 years in drilling (Controller in > 500 VFD units)