MINIMOTOR - DBSE BRUSHLESS SERVOMOTORS WITH PLANETARY GEARBOX

DBSE 55/100-25
48V dc 120rpm 17 Nm

- Efficient and compact
- Saves individual cable runs
- Up to 95Nm
- Open Bus protocols
- Reduce machine build components

PRODUCT DESCRIPTION

MOTOR: Brushless 4-pole three-phase sinusoidal motor, totally enclosed. Rotor with NdFeB magnets. Thermal cutoff. Winding Class F. Thermal cutoff. Protection IP65 in compliance with IEC/EN 60529 standards. Bearings with reduced backlash and special grease for high temperatures.
DRIVE: Power 24 and/or 48 Vdc • Magnetic absolute encoder SSI (12bit single-turn / 20bit multi-turn) with internal buffer battery• 5 PNP digital inputs and 1 analogue input -10 +10V ext. (0-5 o 4-20mA optional) • 1 relay output (NC-NO) • USB port for parametrisation • Torque, speed, position and homing control.
GEAR UNIT: planetary with hardened steel case with broached precision teeth Class 7. Heat-treated sun and planet gears.
Seal rings in special high-temperature rubber (FKM).
Lubrication with special long-lasting oil.
Rated torque up to 95 Nm.
All the models are implemented with the new “open” platform, which permits configuration with the following primary protocols: CanOpen, Ethercat, Modbus, Ethernet/IP, Profinet, Powerlink.

For full motor specifications please see motor only 'DBS' or download literature below.

Please click here for 2D and 3D drawings

TECHNICAL DATA

GENERAL DATA

Nominal speed	120 rpm
Nominal torque	17 Nm
Gear stages	2
Input voltage dc	48 Vdc
Digital inputs	2 pnp (24Vdc, 500kHz) , 3 pnp (24Vdc, 7kHz)
Outputs	1 NO 2A (42 Vdc)
Output power	235 W
Rated current	6.3 A

Nominal overload	200% x 60 sec
Motor control algorythm	Sinusoidal brushless with 12Bit single-turn / 20Bit multi-turn absolute encoder
Nominal output frequency carrier	4/8/12 kHz
Electronic brake output	24Vdc, max 0.5A
Ambient temperature	-10 … +40°C

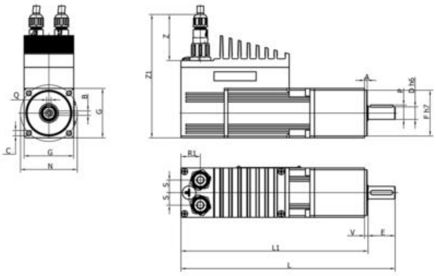
SAFETY FEATURES

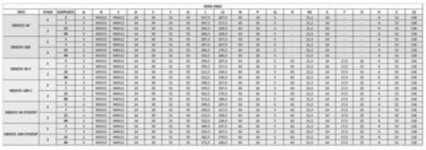
IP class	IP65
CE approved	Yes
Over voltage protection	Yes
Under voltage protection	Yes
Overheat protection	Yes
Memory error protection	Yes
Polarity reverse protection	Yes
Overcurrent protection	Yes
Communication error protection	Yes
Overload protection	Yes

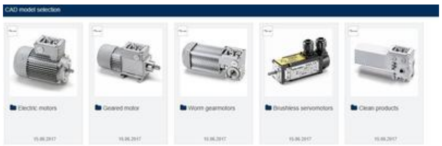
COMMUNICATION

Communication	USB
Ethercat	Yes
CanOpen	Yes
ProfiNET	Yes
Ethernet IP	Yes
Modbus RTU	Yes
PowerLink	Yes

Ratio	25:1







Please see product description above for 2D and 3D drawings