

MINIMOTOR - DBS BRUSHLESS SERVOMOTORS WITH INTEGRATED DRIVE

DBS 55/50
24/48V dc 3000rpm 0.4Nm 125W

- Efficient and compact
- Saves separate cable runs
- Up to 2.1Nm
- 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.

Rated torque up to 2.1 Nm.

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 or 4-20mA optional) • 1 relay output (NC-NO) • USB port for parametrisation • Torque, speed, position and homing control.

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.

[Please click here for 2D and 3D drawings.](#)

TECHNICAL DATA

GENERAL DATA

Nominal speed	3000 rpm
Nominal torque	0,4 Nm
Input voltage dc	24/48 Vdc
Digital inputs	2 pnp (24Vdc, 500kHz) , 3 pnp (24Vdc, 7kHz)
Outputs	1 NO 2A (42 Vdc)
Output power	125 W
Rated current	8A@24V/4.2A@48V A
Nominal overload	200% x 60 sec

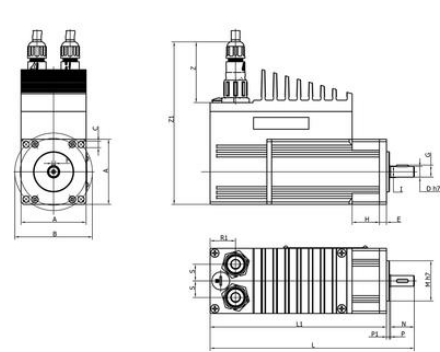
Motor control algorithm	Sinusoidal brushless with 12Bit single-turn / 20Bit multi-turn absolute encoder
Nominal output frequency carrier	4/8/12 kHz
Electronic brake output	24Vdc, max 0.5A
Ambient temperature	-10 ... +40°C

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





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

Model	Power	Speed	Current	Encoder	Brake	IP	Temp	Weight	Dimensions
1000	0.12	3000	0.5	12Bit	No	IP65	-10...+40	0.5	40x40x40
1001	0.18	3000	0.7	12Bit	No	IP65	-10...+40	0.7	45x45x45
1002	0.25	3000	1.0	12Bit	No	IP65	-10...+40	1.0	50x50x50
1003	0.37	3000	1.5	12Bit	No	IP65	-10...+40	1.5	55x55x55
1004	0.55	3000	2.2	12Bit	No	IP65	-10...+40	2.2	60x60x60
1005	0.75	3000	3.0	12Bit	No	IP65	-10...+40	3.0	65x65x65
1006	1.1	3000	4.5	12Bit	No	IP65	-10...+40	4.5	70x70x70
1007	1.5	3000	6.3	12Bit	No	IP65	-10...+40	6.3	75x75x75
1008	2.2	3000	9.0	12Bit	No	IP65	-10...+40	9.0	80x80x80
1009	3.0	3000	12.5	12Bit	No	IP65	-10...+40	12.5	85x85x85
1010	4.0	3000	16.7	12Bit	No	IP65	-10...+40	16.7	90x90x90
1011	5.5	3000	22.4	12Bit	No	IP65	-10...+40	22.4	95x95x95
1012	7.5	3000	30.0	12Bit	No	IP65	-10...+40	30.0	100x100x100
1013	11.0	3000	45.0	12Bit	No	IP65	-10...+40	45.0	110x110x110
1014	15.0	3000	63.0	12Bit	No	IP65	-10...+40	63.0	120x120x120
1015	22.0	3000	90.0	12Bit	No	IP65	-10...+40	90.0	130x130x130
1016	30.0	3000	120.0	12Bit	No	IP65	-10...+40	120.0	140x140x140
1017	40.0	3000	160.0	12Bit	No	IP65	-10...+40	160.0	150x150x150
1018	55.0	3000	220.0	12Bit	No	IP65	-10...+40	220.0	160x160x160
1019	75.0	3000	300.0	12Bit	No	IP65	-10...+40	300.0	170x170x170
1020	110.0	3000	450.0	12Bit	No	IP65	-10...+40	450.0	180x180x180
1021	150.0	3000	630.0	12Bit	No	IP65	-10...+40	630.0	190x190x190
1022	220.0	3000	900.0	12Bit	No	IP65	-10...+40	900.0	200x200x200
1023	300.0	3000	1200.0	12Bit	No	IP65	-10...+40	1200.0	210x210x210
1024	400.0	3000	1600.0	12Bit	No	IP65	-10...+40	1600.0	220x220x220
1025	550.0	3000	2200.0	12Bit	No	IP65	-10...+40	2200.0	230x230x230
1026	750.0	3000	3000.0	12Bit	No	IP65	-10...+40	3000.0	240x240x240
1027	1100.0	3000	4500.0	12Bit	No	IP65	-10...+40	4500.0	250x250x250
1028	1500.0	3000	6300.0	12Bit	No	IP65	-10...+40	6300.0	260x260x260
1029	2200.0	3000	9000.0	12Bit	No	IP65	-10...+40	9000.0	270x270x270
1030	3000.0	3000	12000.0	12Bit	No	IP65	-10...+40	12000.0	280x280x280
1031	4000.0	3000	16000.0	12Bit	No	IP65	-10...+40	16000.0	290x290x290
1032	5500.0	3000	22000.0	12Bit	No	IP65	-10...+40	22000.0	300x300x300
1033	7500.0	3000	30000.0	12Bit	No	IP65	-10...+40	30000.0	310x310x310
1034	11000.0	3000	45000.0	12Bit	No	IP65	-10...+40	45000.0	320x320x320
1035	15000.0	3000	63000.0	12Bit	No	IP65	-10...+40	63000.0	330x330x330
1036	22000.0	3000	90000.0	12Bit	No	IP65	-10...+40	90000.0	340x340x340
1037	30000.0	3000	120000.0	12Bit	No	IP65	-10...+40	120000.0	350x350x350
1038	40000.0	3000	160000.0	12Bit	No	IP65	-10...+40	160000.0	360x360x360
1039	55000.0	3000	220000.0	12Bit	No	IP65	-10...+40	220000.0	370x370x370
1040	75000.0	3000	300000.0	12Bit	No	IP65	-10...+40	300000.0	380x380x380
1041	110000.0	3000	450000.0	12Bit	No	IP65	-10...+40	450000.0	390x390x390
1042	150000.0	3000	630000.0	12Bit	No	IP65	-10...+40	630000.0	400x400x400
1043	220000.0	3000	900000.0	12Bit	No	IP65	-10...+40	900000.0	410x410x410
1044	300000.0	3000	1200000.0	12Bit	No	IP65	-10...+40	1200000.0	420x420x420
1045	400000.0	3000	1600000.0	12Bit	No	IP65	-10...+40	1600000.0	430x430x430
1046	550000.0	3000	2200000.0	12Bit	No	IP65	-10...+40	2200000.0	440x440x440
1047	750000.0	3000	3000000.0	12Bit	No	IP65	-10...+40	3000000.0	450x450x450
1048	1100000.0	3000	4500000.0	12Bit	No	IP65	-10...+40	4500000.0	460x460x460
1049	1500000.0	3000	6300000.0	12Bit	No	IP65	-10...+40	6300000.0	470x470x470
1050	2200000.0	3000	9000000.0	12Bit	No	IP65	-10...+40	9000000.0	480x480x480

