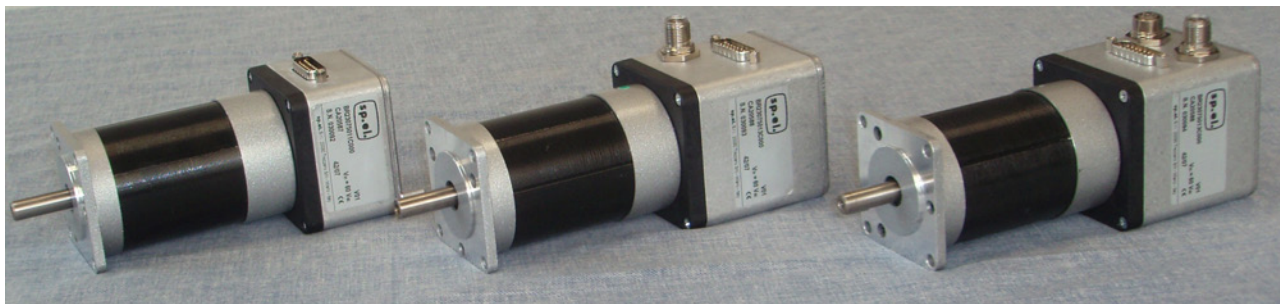


BR23

Integrated Brushless Motor



Integrated brushless dc motor represents ideal high tech low cost solution for industrial application designer which want the simplicity of the motor with on-board electronics. The integrated electronics simplifies cabling of machine, reducing problems due to electrical noise.

FEATURES

- Low cost.
- Hall effects brushless motor.
- Single power supply or dual power supply (optional).
- 5 optocoupled input.
- 1 analog input.
- 2 open collector output (500 mA).
- Standard input = Positive active.
- Protection :
 - ✓ Max. bus voltage.
 - ✓ Min. bus voltage.
 - ✓ Max. Temperature (electronic).
 - ✓ Max. continuous over current (i^2t).
 - ✓ Following error (position control version).
- RS485 or CanBus communication.
- Protocol : ModBus (RS485) or CanOpen (CanBus).
- Instruction list language (ModBus version) to create your programm (up to 512 instructions).
- Speed control.
- Position control.
- Torque control.
- Firmware update by RS485.
- EMI compliant.

GENERAL SPECIFICATIONS

Power Input voltage (+V)

Nominal power supply.....	+24 to +60 VDC
External logic power (optional).....	+24 VDC

I/O

1 opto-coupled high speed digital inputs.....	400 Khz
4 opto-coupled low speed digital inputs.....	5 Khz
1 analog digital inputs.....	12 bits (0-10V)
2 open collector output.....	500 mA
Voltage range.....	0 to +24 VDC

Communication

Link.....	RS485 / CanBus
Protocol.....	ModBus /CanOpen
Baud Rate ModBus.....	19200 bps
Baud Rate CanBus.....	up to 1 Mb

Motion

Hall effects.....	12 step/rev.
Magnetic encoder.....	256 step/rev.
Optical encoder.....	up to 5000 step/rev.

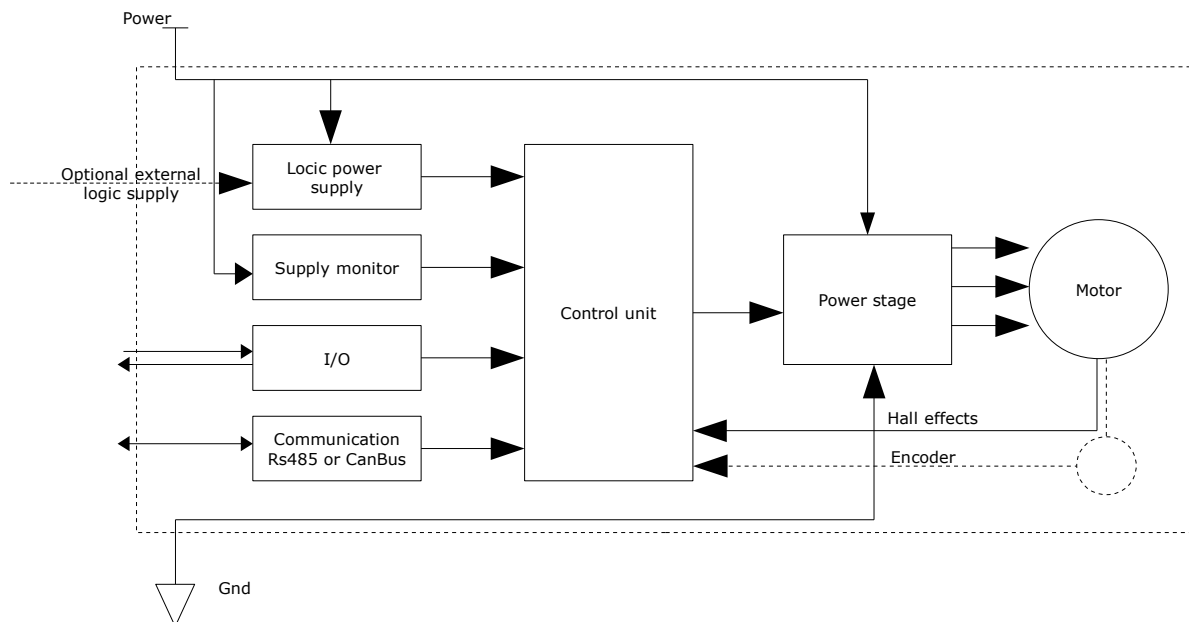
Protection

Over voltage.....	85 VDC
Under voltage.....	18 VDC
Over Temperature.....	85°C
Motor Protection.....	i ² t

Thermal consideration

Working temperature depends on the thermal exchange between motor flange and mounting plate. For more information contact manufacturer

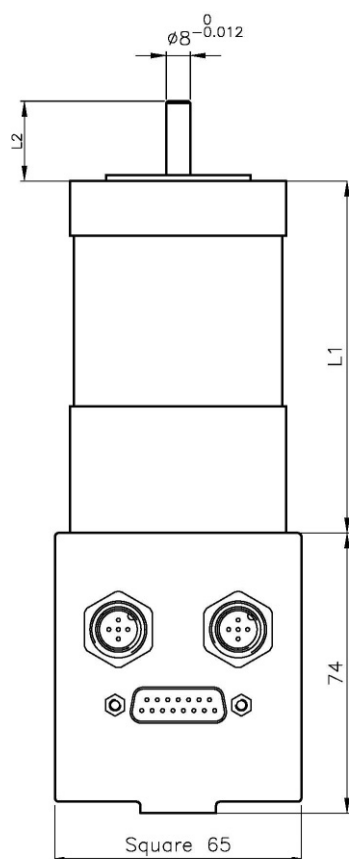
BLOCK DIAGRAM



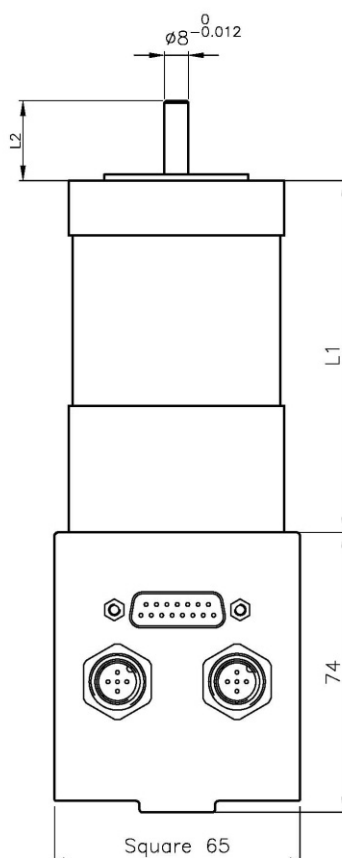
MOTOR SPECIFICATIONS

Motor type		055	075	095	115
Number of poles		4			
Rated speed	RPM	4850 ±5%			
Max. radial force		75N @ 20mm from the flange			
Max. axial force		15N			
Rated torque	Nm	0,11	0,22	0,32	0,43
Rotor power	W	46	92	133	180
Peak torque	Nm	0,39	0,7	1	1,27
Rotor inertia	gr-cm ²	75	119	173	230
L1 = Length	mm	55	75	95	115
Weight	Kg	0,5	0,75	1	1,25

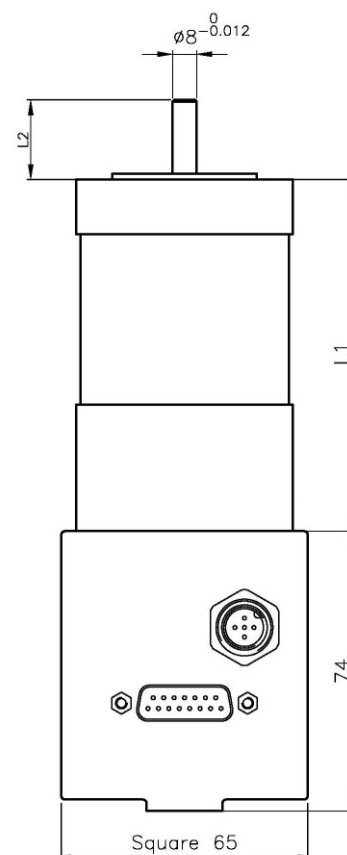
Flange type		Round Standard	Square
L2 = Length Shaft	mm	20,6±0,5	25±0,5



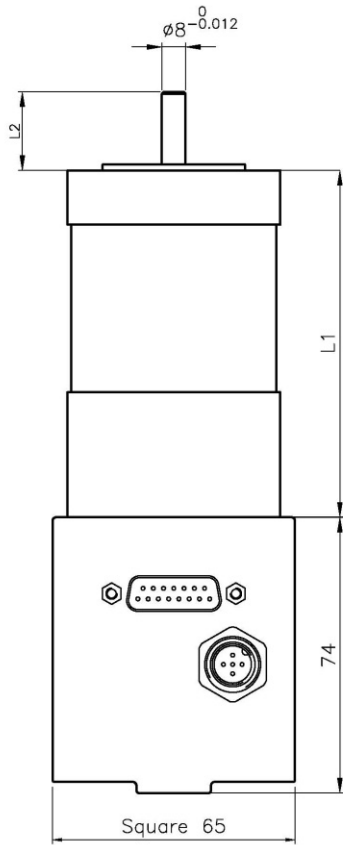
**2 canbus connectors
with optical encoder**



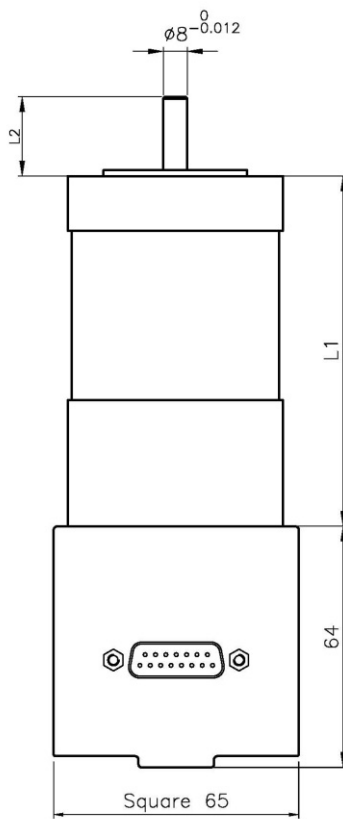
**2 canbus connectors
with/without
magnetic encoder**



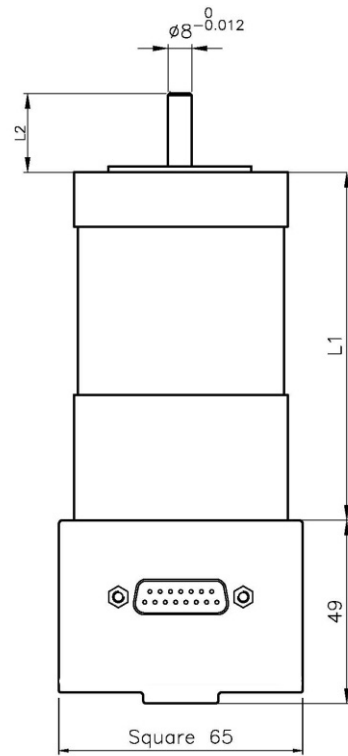
**1 canbus connector
with optical encoder**



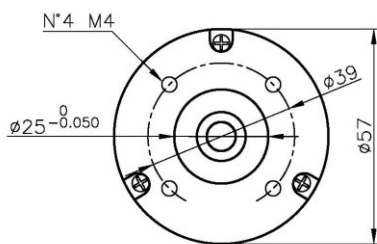
**1 canbus connector
with/without
magnetic encoder**



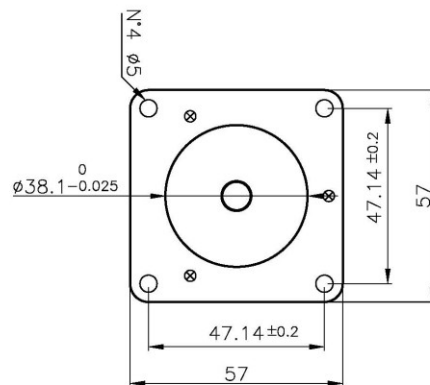
**Modbus with optical
encoder**



**Modbus with/without
magnetic encoder**

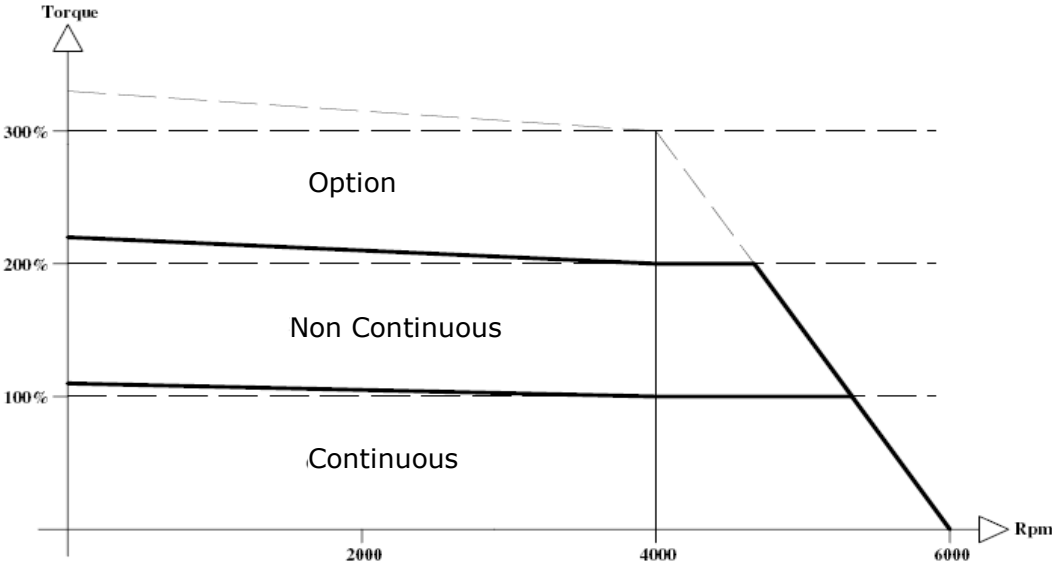


Standard



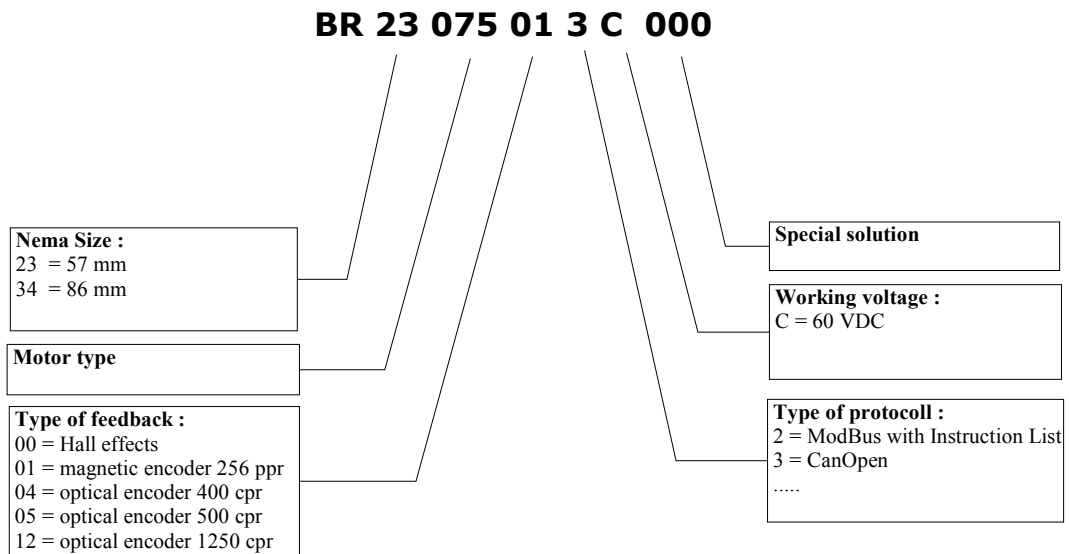
Square flange on request

PERFORMANCE CURVE



Torque vs. speed curve

ORDERING INFORMATION



N.B.

SP.EL. reserves the right to make changes without further notice to any products herein.