EBARA

SUBMERSIBLE MOTORS

Type BSM HT

FEATURES

- High quality PE2+PA winding wires
- CW & CCW direction of rotation
- Our motors can be operated horizontally
- Availability to be operated by Soft-Starter
- Max. ambient water temperature 50°C (70°C is optional)
- Flange with NEMA standards
- Water coolant system
- Stainless steel shaft
- Our rewindable motors provides long service life
- High efficiency provides operation cost savings
- Variable operation revolutions by frequency convertor
- Customized production option
- Optional high corrosion resistive materials (AISI 304/ AISI 316/Duplex/Bronze)
- Standard voltage 380/460V - 50/60Hz (Allowable voltage tolerance ±%10)

Ahead Beyond

Submersible Motors BSM HT

- High quality PE2+PA winding wires
- High efficiency provides operation cost savings
- Max. ambient water temperature 50°C (70°C is optional)
- Variable operation revolutions by frequency convertor
- Standard voltage 380/460V -50/60Hz (Allowable voltage tolerance ±% 10)
- Customized production option
- Water coolant system
- CW & CCW direction of rotation
- Availability to be operated by Soft-Starter
- Rewindable Motors provides long service life
- Motors can be operated horizontally
- Optional high corrosion resistive materials (AISI 304/AISI 316/Duplex/Bronze)
- Stainless steel shaft
- Flange with NEMA standards

GENERAL FEATURES

PT100 Overheating Protection
By connecting the PT1 00 thermal sensors to the slot that is standardly placed on upper bearing body, motor temperature can be easily measured.

Up-Thrust Ring
Provides safe operation conditions for motor by absorbing Up-Thrust loads with its machined surface and water channels on it.

Cable Connection
Preventing the water inside the motor to run through the cable and reach connection parts of power cables by specially designed cable seals.

Adjustment Screw
Standard shaft height can be precisely adjusted by the adjustment screw on the thrust bearing base.

Membrane
Membrane minimizes the expansion pressure that is caused by heating of cooling water's inside the motor

Slinger (Sand Guard)
Slinger helps to prevent the sand inside the water of the well entering in mechanical seal and through mechanical seal to inside of the motor.

Heavy Duty Bearings With High Thrust Capacity
Heavy duty bearings provides the option to revolve both sides, has the capacity to carry high thrust load.

Water Lubricated Radial Carbon Bearings
Radial carbon bearings, which have channels in its structure that makes it possible to get lubricated by water easily, provides precise bearing of rotor shaft at up and down.

Chrome-plated Bearing Collet
Chrome-plated and precisely machined bearing collets which are located in the radial bearings operating area, have great importance for bearing the rotor.

Mechanical Sealing For High Sand Resistance (IP68)
Although mechanical seal is optionally used by other brands, it is always used by Vansan as a standard, to prevent sand and other particles to get into motors to provide long bearing life.

Practical And Easy-to-Mount Output Power Cable
Connection of the power cable to body is made practically by cable seal and seal cover. Power cables can be changed easily without any damage.

Pressure Balancing Checkvalve
Checkvalve controls the pressure changes inside the motor. When the pressure increases, it throws water out of the motor. When the pressure drops, it filtrates the water inside well and gets it inside the motor by the help of this checkvalve to balance the pressure inside. Thus why pressure differences inside motor never causes membrane under motor to blow up.

PRODUCT CODE SYSTEM

BSM 10 / 250

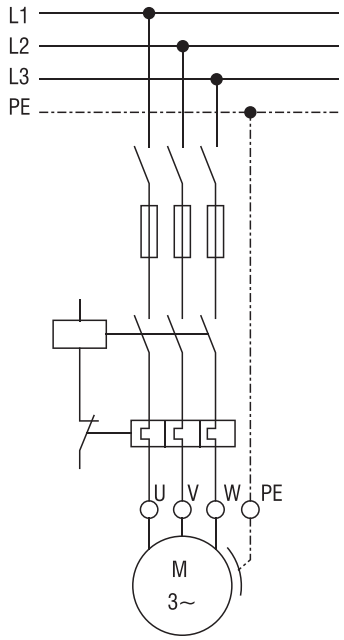
- 250 — Motor power (HP)
- 10 — Motor diameter (inch)
- BSM — Motor type

TECHNICAL DATA

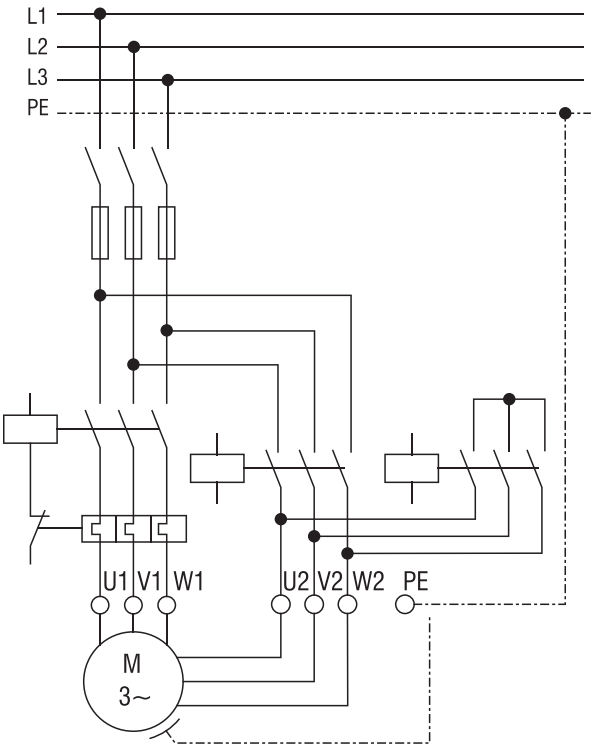
Tensile Strength	Standard: IEC 60811-1-1	23°C (±5)	≥ 10 N/mm²
Elongation	Standard: IEC 60811-1-1	23°C (±5)	≥ %100
Dielectric constant	Standard: DIN 53483	20°C / 800 Hz	2,3
Specific insulation resistance	Standard: IEC 60093	20°C	10 Ω cm
Dielectric breakdown strength	Standard: DIN VDE 0303-21	20°C/50 Hz	70 kV/mm
Tensile strength after aging		80°C / 7x24 hour	≥ 10 N/mm²
Elongation at break after aging		80°C / 7x24 hour	≥ %100

TECHNICAL DATA

D.O.L CONNECTION

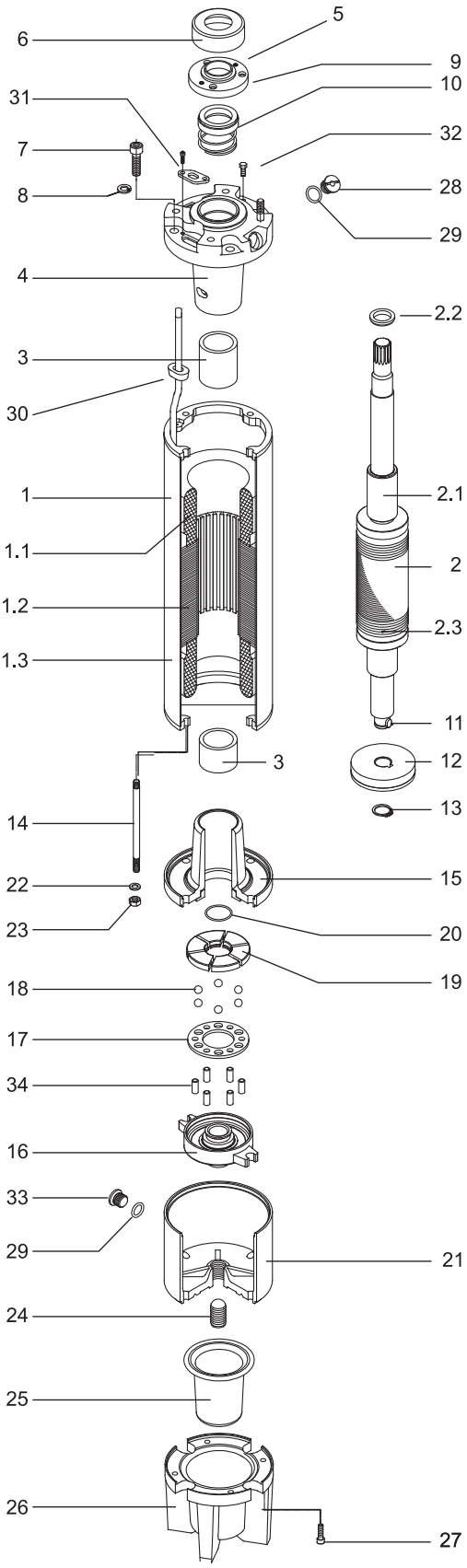


Y/Δ CONNECTION



PART LIST

No	PART NAME	MATERIAL
1	Stator	-
1.1	Winding wire	PE2 / PA
1.2	Stator package	M350 / Magnetic Seal
1.3	Stator shell	AISI 304
2	Rotor	-
2.1	Shaft sleeve	St 37 (Coated CrNi)
2.2	Balance ring	St 37
2.3	Copper ring	Cu
3	Radial bearing	Carbon / *Karbon*
4	Upper bearing body	GG20-22
5	Bushing	Bronze / *Bronz*
6	Slinger (sand guard)	NBR_EPDM
7	Hexagon socket cap screws	Inox
8	Copper ring	Cu
9	Cover seal	AISI 420
10	Mechanical seal	Ceramic Carbon / *Seramik Karbon*
11	Axial thrust bearing key	AISI 420
12	Axial thrust bearing	Carbon With Antimony / *Antimuan Karbon*
13	Retaining ring	St 37
14	Tie rod	Inox
15	Lower bearing body	GG20-22
16	Thrust bearing support	GG20-22
17	Ball holder	St 37 (Coated Cr+3 / *Cr+3 kaplama*)
18	Thrust bearing ball	Inox
19	Tilting pads	AISI 420
20	O-ring	NBR 70
21	Thrust bearing body	GG20
22	Copper ring	Cu
23	Nut	Inox
24	Screw (thrust bearing base)	Inox
25	Membrane	NBR-EPDM
26	Membrane body	GG22
27	Hexagon socket cap screws	Inox
28	Check-valve	Bronze / *Bronz*
29	O-ring	NBR 70
30	Cable seal	NBR
31	Seal cover	AISI 304
32	Nut	Inox
33	Plush (r 3/8")	Bronze / *Bronz*
34	Ball holder pins	Inox



* Dimensional details are provided for reference only.
* All specifications are subject to change without prior notice.

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