



## SUBMERSIBLE MOTORS

*(Full Stainless Steel)*

Type BSM 3S

### APPLICATIONS

Excellent choice for submersible motor applications, including:

- Water Wells (Domestic, Agricultural, Municipal)
- Sea Water and Fountains
- Mining and Industrial
- Drinking Water Applications

### 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
- Standard and dual flange options
- Water coolant system
- Our rewindable motors provides long service life
- High efficiency provides operation cost savings
- Variable operation revolutions by frequency convertor
- Standard voltage 380/460V - 50/60Hz  
(Allowable voltage tolerance  $\pm\%10$ )
- Filter Check Valve





CW & CCW direction of rotation

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)

Filter Check Valve

Water coolant system

High quality PE2+PA winding wires

Availability to be operated by Soft-Starter

Rewindable Vansan Motors provides long service life

Motors can be operated horizontally

Flange with NEMA standards (Key type flange for 10" is optional)

Standard and dual flange options

Stainless steel shaft

## GENERAL FEATURES



### PT1 00 Overheating Protection

By connecting the PT100 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 (IP6a)

Although mechanical seal is optionally used by other brands, it is always used by EPM 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 3S 8 / 150**

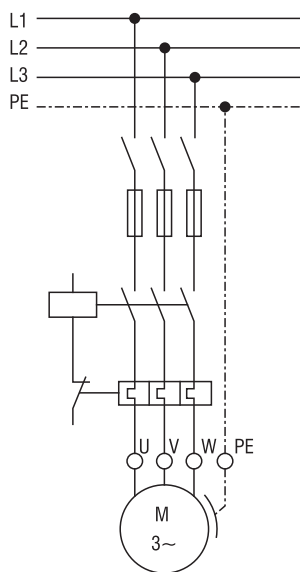


TECHNICAL DATA

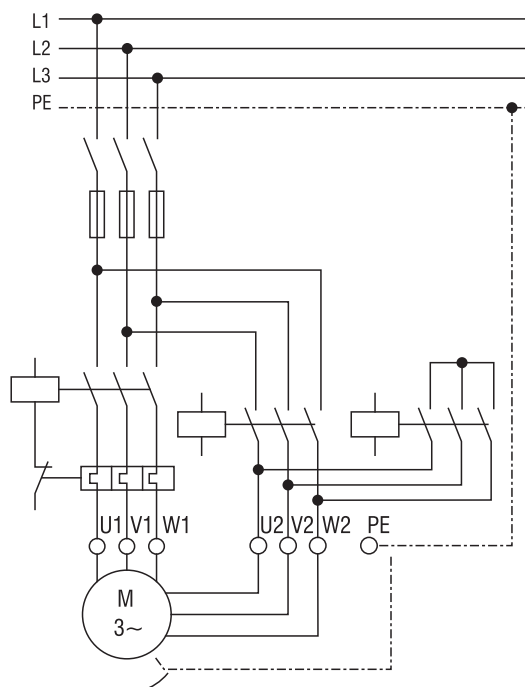
<b>Tensile Strength</b>	Standard: IEC 60811-1-1	23°C (±5)	≥ 10 N/mm <sup>2</sup>
<b>Elongation</b>	Standard: IEC 60811-1-1	23°C (±5)	≥ %100
<b>Dielectric constant</b>	Standard: DIN 53483	20°C / 800 Hz	2,3
<b>Specific insulation resistance</b>	Standard: IEC 60093	20°C	10 Ω cm
<b>Dielectric breakdown strength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

ENERGY CONNECTION SCHEMA

D.O.L CONNECTION

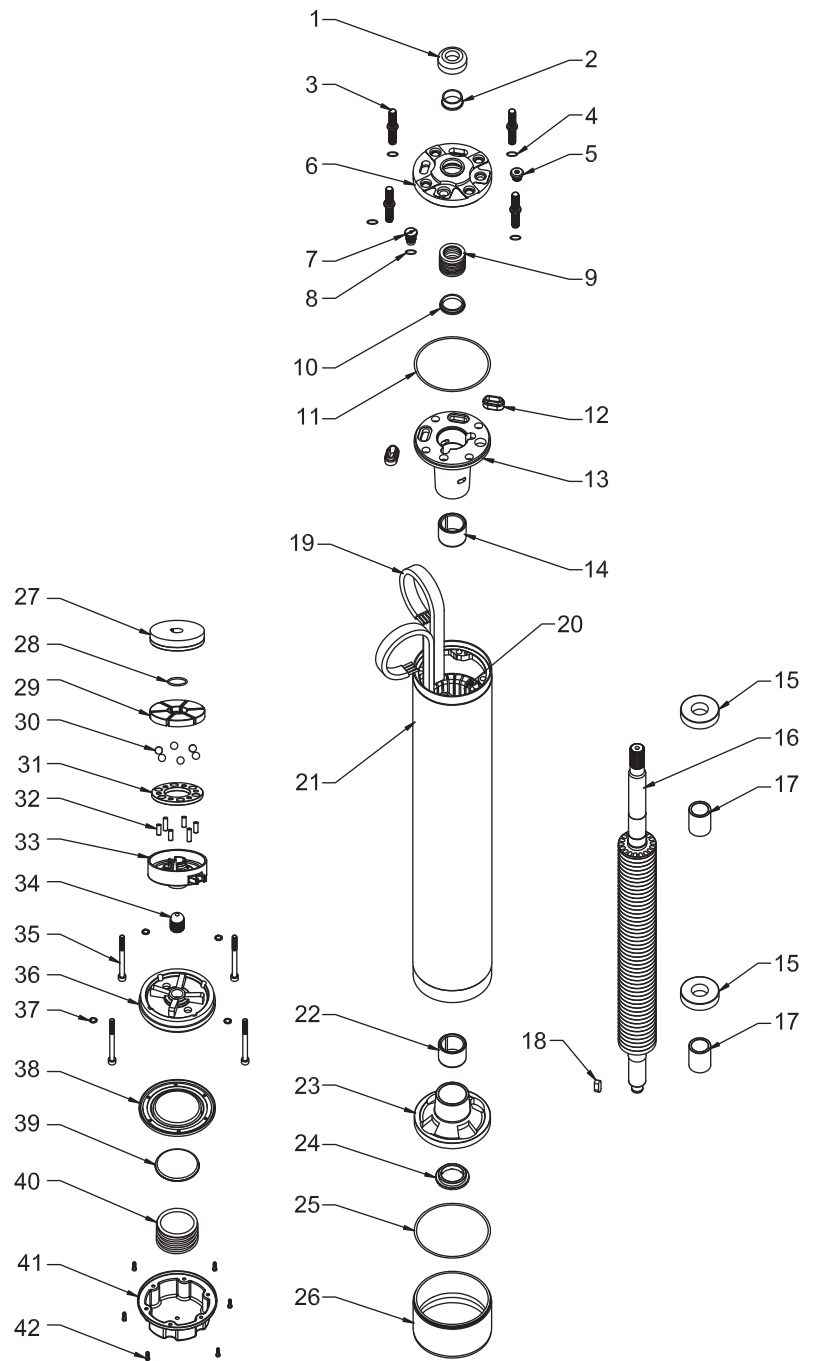


Y/Δ CONNECTION



## PART LIST

No	PART NAME	MATERIAL
1	Slinger (Sand Guard)	NBR_EPDM
2	Inner Ring	Bronze
3	Stud	AISI304
4	O-ring	NBR
5	Plug	AISI 304
6	Upper Connection Flange	AISI 304
7	Check Valve	AISI 304
8	O-ring NBR	AISI 304
9	Mechanical Seal	SIC-SiC
10	Support Ring	-
11	O-ring	NBR
12	Cable Seal	NBR
13	Upper Bearing Body	GG25
14	Radial Bearing	Carbon
15	Balance Ring	CK45
16	Rotor	-
17	Shaft Sleeve	St 37 (Coated CrNi ) Key
18	AISI 420	-
19	Energy Cable (Lead)	PVC
20	Stator Stack	M530/Magnetic Steel
21	Stator	-
22	Radial Bearing	Carbon
23	Lower Bearing Body	GG25
24	Up Thrust Bearing	Bronze
25	O-ring	NBR
26	Axial Bearing Sheet	AISI 304
27	Thrust Disc	Carbon With Antimony
28	O-ring	NBR
29	Axial Thrust Segments	AISI 420
30	Ball	Inox
31	Ball Holder	St 37 (Coated Cr+3) Pins
32	Inox	-
33	Axial Thrust Bearing Support	GG25
34	Screw	Inox
35	Bolt	AISI 304
36	Axial Bearing Body Flange	GG25
37	Copper Ring	Copper
38	Membrane	NBR
39	Support Sheet	AISI 304
40	Spring	AISI 304
41	Membrane Cover	AISI 304
42	Bolt	AISI 304



\* Dimensional details are provided for reference only.

\* All specifications are subject to change without prior notice.



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