Equipment and solutions

3" Oil-Filled Submersible Motor

JOVAL

Product technical datasheet

3" oil-filled submersible motors for narrow boreholes.
Single-phase, built-in capacitor and three-phase versions.

FT-P107 · Rev. 1



3" (76 mm) oil-filled submersible motors for narrow boreholes. The JOVAL range includes standard single-phase (J3OL-S), single-phase with built-in capacitor (J3OL2F-S) and three-phase (J3OL-T) versions, with AISI 304 stainless steel construction, NEMA flange, IP68 protection.

Applications

- Water abstraction from 3" boreholes, reservoirs and water courses.
- Hydraulic pressure systems
- Agricultural irrigation
- Industrial and commercial applications

Operating conditions

- Confirm the installation conditions, power supply and duty point before commissioning.

Engineering note	Confirm the installation conditions, power supply and duty point before commissioning.
Complementary equipment	Contact JOVAL for compatible accessories and equipment.
Resources and support	Pump selection guide · JOVAL technical support
Contact	+351 253 490 740 · joval@joval.pt

Technical specifications

Type
Oil-cooled submersible motor

Standard
IEC34-1 / CE

Material
AISI 304

Protection
IP 68

Insulation
Class F

Thrust load
150 kg

Applications

- Water abstraction from 3" boreholes, reservoirs and water courses.
- Hydraulic pressure systems
- Agricultural irrigation
- Industrial and commercial applications

Operating conditions

Max Temperature
35 °C

Min. cooling flow
8 cm/s

Water pH value
6.5 - 8.0

Starts/Hour
20

Max. depth
100 m

Mounting
Vertical / Inclined

- Confirm the installation conditions, power supply and duty point before commissioning.

Engineering note Confirm the installation conditions, power supply and duty point before commissioning.

3" JOVAL Submersible Motors Oil Cooled

Dimensions and models

Code	Model	kW	HP	Voltage	Amperage	Capacitor (uF)	cos phi	rpm	L (mm)	Axial load (N)	Weight (kg)
2033210370	J3OL-S050	0,37	0,5	1x230	3,3	12	0,91	2800	378	1500	6,3
2033210550	J3OL-S075	0,55	0,75	1x230	4,8	15	0,91	2800	398	1500	6,7
2033210750	J3OL-S100	0,75	1	1x230	6,1	20	0,95	2800	438	1500	7,7
2033211100	J3OL-S150	1,1	1,5	1x230	8	30	0,99	2800	478	1500	8,4
2033220370	J3OL2F-S050	0,37	0,5	1x230	3,3	Built-in	0,91	2800	378	1500	6,3
2033220550	J3OL2F-S075	0,55	0,75	1x230	4,8	Built-in	0,91	2800	398	1500	6,7
2033220750	J3OL2F-S100	0,75	1	1x230	6,1	Built-in	0,95	2800	438	1500	7,7
2033221100	J3OL2F-S150	1,1	1,5	1x230	8	Built-in	0,99	2800	478	1500	8,4
2033230370	J3OL-T050	0,37	0,5	3x400	1,8	-	0,63	2800	358	1500	6,1
2033230550	J3OL-T075	0,55	0,75	3x400	2,1	-	0,65	2800	378	1500	6,5
2033230750	J3OL-T100	0,75	1	3x400	2,5	-	0,68	2800	398	1500	6,8
2033231100	J3OL-T150	1,1	1,5	3x400	3,5	-	0,70	2800	438	1500	7,8

Characteristics

- Complies with IEC34-1 and CE requirements.

- Monoblock asynchronous motor with squirrel-cage rotor.

- Outer shell, shaft and lower support in AISI 304 stainless steel.

- Upper bracket in electrophoretic cast iron or AISI 304 stainless steel.

- Angular-contact bearing designed for higher thrust load.

- Italian mechanical seal.

- Automatic pressure-balancing device in oil-resistant and waterproof butyl rubber.

- NEMA flange coupling and lacquer-coated wire according to NEMA MW37-C.

List of Materials

- High-quality silicon steel lamination.

- Italian mechanical seal.

- 220°C class lacquer-coated winding wire.

- High-quality bearing sized for heavy axial load.

Properties

- Thrust load: 1500 N.
- Protection degree: IP68.
- Insulation: Class F.
- Maximum ambient temperature: 35°C.
- Minimum cooling flow along the motor: 8 cm/s.
- Water pH value: 6.5 - 8.0.
- Maximum starts per hour: 20.
- Maximum submergence depth: 100 m.
- Oil lubricated.
- Operates in vertical or inclined position.
- Overload trip time under 10 s at 5x rated current.
- Special versions available on request.