**Submersible drainage pump**

**J 205**

**Specification**

Electric submersible pump.

- Maximum submergence: 20 m (65 ft). Protection class IP 68.
- Max temperature of pumped medium at max power input and continuous duty 40 ºC (104 ºF).
- Max medium density 1100 kg/m$^3$ (0.0397 lbs/inch$^3$).
- pH of the pumped medium 5-8.
- Strainer hole: 8 x 34 mm (5/16" x 1 5/16").
- Max number of starts 30/hour.

**J 205 ND** Medium head, 3-phase

**J 205 HD** High head, 3-phase

**Electric motor**

3-phase squirrel-cage induction motor, 60 Hz.

- Service factor 1.1. Class F insulation.
- Motor rating $P_2$: 26.0 kW (35 Hp). Speed: 3500 rpm

<table>
<thead>
<tr>
<th>Voltage, V</th>
<th>230</th>
<th>380</th>
<th>460</th>
<th>575</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal current, A</td>
<td>82</td>
<td>50</td>
<td>41</td>
<td>33</td>
</tr>
</tbody>
</table>

**Starting method**

- D.O.L. start with built-in contactor.
- Star-Delta start with built-in terminal block.
- When used with VFD, pump must be equipped with terminal block instead of contactor.

**Power cable**

- 20 m/65 ft H07RN8-F (standard cable):
  - 1-4x10 sq.mm. (460-575V D.O.L.-start)
  - 1-4x16 sq.mm. (380V D.O.L.-start)
  - 1-4x25 sq.mm. (230V D.O.L.-start)
  - 2-4x6 sq.mm. + 4x1.5 sq.mm. (380-575V star-delta start)
  - 2-4x10 sq.mm. + 4x1.5 sq.mm. (230V star-delta start)

- 20m/65 ft NSSHÖU../3E (heavy duty cable):
  - 3x6+3x6/3E+3x1.5 (3 control cables included) (460-575V D.O.L.)
  - 3x10+3x10/3E+3x2.5 (3 control cables included) (380V D.O.L.)

**Motor protection**

Built-in thermal switches in the stator windings (140ºC/284ºF, ±5), connected to built-in contactor, SoftDrive or to separate control box. DI leakage sensor (not in combination with built-in contactor or SoftDrive).

**Shaft seal**

Double mechanical seal in oil bath, mounted in seal cartridge for easy service.

- Primary seal: Silicon carbide on silicon carbide.
- Secondary seal: Silicon carbide on antimony treated carbon.

**Bearings**

- Upper bearing: Single-row deep groove ball bearing.
- Lower bearing: Double angular contact ball bearing.

**Discharge connections**

4" (standard HD), 6" (standard ND), 8" hose connections.

4", 6", 8" B.S.P. thread.

4", 6", 8" NPT thread.

**Weight**

155 kg / 342 lbs (without cable)

**Options and accessories**

- Zinc anodes. Surface protection coating.
- Wear plate in polyurethane. Electronic motor supervision.
- Series connection. Starter and control units.
- Automatic level control unit. Floatation system. Repair kit.
- Discharge connection accessories and hose.
## Materials

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
<th>EN</th>
<th>ASTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing / Castings</td>
<td>Aluminium</td>
<td>EN 1706:AC-43100</td>
<td>ASTM AlSi10mg</td>
</tr>
<tr>
<td>Strainer / Handle / Fasteners</td>
<td>Stainless steel</td>
<td>10088:X5CrNi18-10 (1.4301)</td>
<td>AISI 304</td>
</tr>
<tr>
<td>Shaft</td>
<td>Stainless steel</td>
<td>10088:X20Cr13 (1.4021)</td>
<td>AISI 420</td>
</tr>
<tr>
<td>Impeller</td>
<td>White cast iron</td>
<td>EN-GJN-HV600(XCr23)</td>
<td>ASTM A 532; Alloy III A</td>
</tr>
<tr>
<td>Wear parts / O-rings</td>
<td>Nitrile rubber</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>