Flow rates up to: 6.5 m³/h
Head of up to: 7 m
Max. operating pressure: 10 bar
Temperature range: –8° to +110°C
  for domestic hot water: ≤ +60°C*
Nominal dimensions of connections (ND): 25 or 32**
*As per D.T.U.
**With EC 33 kit

APPLICATIONS
Circulating pumps for:
– domestic hot water distribution systems,
– low-pressure heating systems,
– air conditioning systems, etc.

And for all type of pumping for non-aggressive hot or cold water without abrasive particles in suspension.

• NEC single-phase -ND25 with NEC 33 kit for ND 32
• NEC 1/2 for single-phase and 3-phase versions

SINGLE IN-LINE PUMPS
Domestic hot water
50 Hz
ADVANTAGES

• Preserves quality of water whatever the type of pipes thanks to the stainless steel casing
• Single-piece design for direct fitting onto piping by means of 26-34 pipe unions (not supplied).
• Two fitting possibilities with adapters for ND 32.
• Small overall size.
• Simple to install, no problems with alignment.
• Reliable components.
• Corrosion-resistant mechanical seal.
• Extremely silent operation thanks to new motor bearings.
• Suitable for hard water (TH up to 50 °F).

DESIGN

• Hydraulic section
  Single cell, centrifugal.
  Volute casing body with “in-line” suction-discharge ports for direct fitting onto piping.
  Tight sealing on shaft feed-through ensured by self-lubricated, maintenance-free mechanical seal.

• Motor
  Ventilated at end of extended stainless steel shaft.
  High starting torque.
  Bearings greased for whole motor service life - silent running.

  Rotational speed
  NEC 1 : 1,450 rpm
  NEC 2 : 2,850 rpm
  Winding single-phase : 230 V
  3-phase : 230-400 V
  Frequency : 50 Hz
  Insulation class : F
  Protection index : IP 44 (motor) - IP 54 (terminal box)

PARTS LIST

• 1111 - Pump casing
• 1112 - Internal volute casing
• 2460 - Spacer sleeve
• 2510 - Mechanical seal thrust washer
• 2540 - Deflector
• 2545 - Circlip
• 2250 - Wheel
• 4213 - Mechanical seal carrier
• 4220 - Rotating seal ring
• 4240 - Stationary seal ring
• 4590 - Flat gasket
• 4610A - O-ring
• 4610B - O-ring
• 6545 - Shaft circlip
• 8010 - Motor with extended shaft
• 9902 - Socket head screw
• 9906 - Hexagonal head screw
• 9920 - Special nut

(*) Recommended spare parts

FITTING POSITION

Standard supply
**HYDRAULIC PERFORMANCE**

![Graphs showing hydraulic performance for NEC 1 and NEC 2 motors.]

**INSTALLATION DIAGRAM**

Pump on return system of domestic hot water (DHW) distribution loop.

![Diagram illustrating the installation of NEC pumps in the heating and DHW systems, including components like heating pump, boiler, safety set, check valve, isolating valve, and hot water distribution stations.]

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**NEC**

**3**

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**Salmson**
ELECTRICAL DATA AND DIMENSIONS

**NEC SINGLE-PHASE**

- Pipe unions.
- Adapters: NEC 33 kit (for replacement of NEC 33).
- Circuit breaker for motor protection.
- Check valves.
- Isolating valves.

**NEC 3-PHASE**

- Capacitor

<table>
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<th>ORDER REFERENCE</th>
<th>MOTOR</th>
<th>PUMP</th>
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<tr>
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<td>NEC-2-M-25</td>
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**SPECIFIC FEATURES**

a) **Electrical features**
- Versions: 3-phase 230-400 V (T) or single-phase 230 V (M) - 50 Hz
- Motor protection by circuit breaker.

b) **Fitting**
- Direct fitting on piping.
- Motor centreline always horizontal.
- Connection to installation by pipe unions (not supplied).

c) **Packaging**
- Supplied as standard domestic hot water version with suction port on top and discharge on bottom.
- With two gaskets without pipe unions.

d) **Maintenance**
- Complete replacement of the set or repair; see recommended spare parts (*) liable to wear.

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