

Heat pumps of the DROPS M4.1 series are high efficiency, compact devices for the production of domestic hot water. Owing to its design, the device can be connected to any new or existing tank.

INSYGO



Main features:

- It allows easy and quick access due to a monoblock design and in-built circulation pump
- Highly energy-efficient thanks to high quality components
- High level of safety due to pressure and temperature safety devices used in the refrigeration circuit
- Automatic defrosting of the evaporator
- Possibility to set four time intervals (two for night time and two for day time) for different water temperature for each day of the week.
- The pump can work with a photovoltaic system or generation tariff system via an additional, potential-free NO contact, which starts the heat pump
- It can supply an electric heater
- It can control a hot water circulation pump
- Easy wall installation using the included frame



Main components:

- High efficiency rotation compressor, optimised for domestic hot water heat pumps
- Energy-efficient radial fan from EBM Papst
- Evaporator with a special hydrophilic surface that improves defrosting and limits the accumulation of dirt on the fins
- WILO circulation pump
- Intuitive controller
- Condenser - SWEP plate exchanger
- Plastic body
- Mount brackets for floor assembly

Basic technical specifications:

- Installation: indoors
 - dimensions (diameter x height): 668 x 512 mm
 - Outer diameter of the pump ducts: 200 mm
 - Spigots for the heating circuit: IG ¾"
 - Weight: 45 kg
 - Coolant: R134a / 0.6 kg
 - Heat-carrying agent: water/glycol mixture
 - Recommended flow: 0.28m³/h
 - Temperature range (external): +5 do +43
 - Max. temperature of heated water: +60 °C
 - Electrical power supply: 1/N/PE 220-240 V/50 Hz
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- Energy consumption for drawn air temperature of 20°C: min 0.29kW, max. 0.560kW
 - Max. heating capacity for drawn air temperature of 20°C: 1,98 kW
 - Average heating capacity for drawn air temperature of 20°C and water heating from 10 to 55°C: 1,49 kW
 - COP, water heating 10 ÷ 40°C: 4,33
 - COP, water heating 10 ÷ 45°C: 3,98
 - COP, water heating 10 ÷ 50°C: 3,55
 - COP, water heating 10 ÷ 55°C: 3,22
 - Heating time for 100 L water at 10 ÷ 40°C: 2h:27min
 - Heating time for 100 L water at 10 ÷ 45°C: 3h:07min
 - Heating time for 100 L water at 10 ÷ 50°C: 3h:57min
 - Heating time for 100 L water at 10 ÷ 55°C: 4h:38min
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- Energy consumption for drawn air temperature of 35°C: min 0.29kW, max. 0.65kW
 - Max. heating capacity for drawn air temperature of 35°C: 2.57 kW
 - Average heating capacity for drawn air temperature of 35°C and water heating from 10 to 60°C: 1,9 kW
 - COP, water heating 10 ÷ 40 °C: 6.9
 - COP, water heating 10 ÷ 45°C: 6.6
 - COP, water heating 10 ÷ 50°C: 5.7
 - COP, water heating 10 ÷ 55°C: 4.9
 - Heating time for 100 L water at 10 ÷ 40°C: 1.5 h
 - Heating time for 100 L water at 10 ÷ 45°C: 1.9 h
 - Heating time for 100 L water at 10 ÷ 50°C: 2.6 h
 - Heating time for 100 L water at 10 ÷ 55°C: 3.4 h

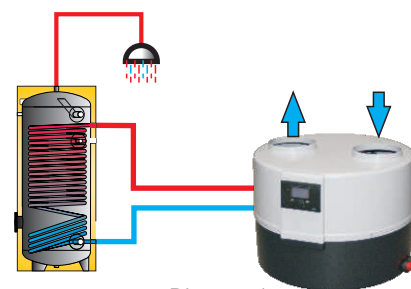


Diagram 1

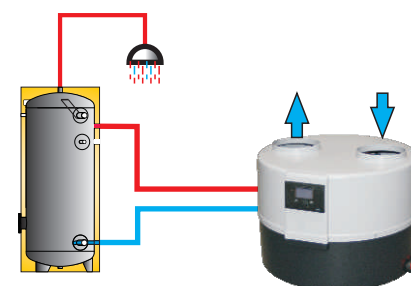


Diagram 2

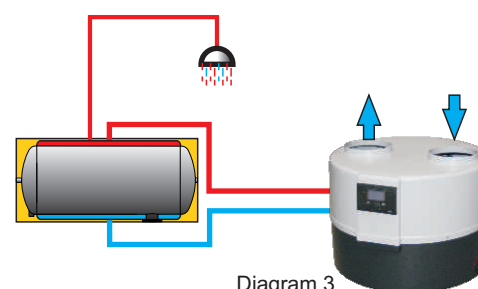


Diagram 3

The above values of COP and heating times were established in the following conditions:

- Drawn air temperature: 20,35 °C
- Pump connected directly to the water tank (Diagram 2)
- Air drawn directly from the room

In different conditions the above values may change.

Typ	Remarks	Cat. no.
DROPS M4.1 heat pump	Standard controller	420 000 015
DROPS D4.1 heat pump	Touch controller	420 000 019
Wall mount frame		690 800 013