



Installation plan

PFD 409 Offshore

Contents

Installation notes	3
Installation requirements.....	3
Installation	3
Environmental requirements.....	3
Electrical connection.....	4
Water connection	5
Connecting an external dispensing system	5
Appliance dimensions.....	6
Connections	7
Connections on the back of the machine	7
On-site connections	8
External dispensing	9
Technical data	10
Electrical connection	10
Water inlet	11
Drainage.....	11
Dispensing.....	11
Dimensions	12
Weights.....	12
Emission values	12
Operating conditions	12
Storage and transportation conditions	12
Weights including packaging	12

Installation notes

For safe installation and commissioning of the dishwasher please read the installation plan, the service documentation and the operating instructions.

This installation plan includes the dimensions of the appliance, the technical data and the requirements to be met on site for the installation of the dishwasher.

Installation requirements

This dishwasher must only be installed and commissioned by the Miele Customer Service Department, a Miele authorised dealer or a suitably qualified specialist.

Installation should only be performed in accordance with valid regulations, relevant standards and health and safety codes.

Installation

Freestanding machine

To secure the dishwasher against tilting or movement, the two adjustable feet at the back must be fixed using the BBF-80 floor anchoring.

Built-under machine

To secure the dishwasher against tilting, it must be bolted to a continuous worktop.

Environmental requirements

Condensate can build up in the area surrounding the dishwasher. Any furniture and fittings in the room must therefore be suitable for purpose.

Vapour barrier for built-under machines

The vapour barrier supplied protects the worktop from damage caused by steam when the door is opened. Fit the vapour barrier above the door under the worktop.

Installation notes

Electrical connection

All work on the electrical connection must be carried out by the Miele Customer Service Department, an authorised Miele dealer or a qualified electrician.

Main switch

Install a main switch on the customer's site that is capable of disconnecting the machine at all poles. The main switch must:

- Have a contact gap of at least 3 mm
- Be designed to operate at the rated current of the machine
- Be able to be locked in the zero position
- Be accessible after the machine has been installed

The mains connection cable must be laid protected from the risk of thermal damage.

Plug connection

The machine should be connected to the electricity supply via a CEE socket.

Hard-wired

Alternatively, the machine can be connected via a hard-wired connection.

Residual current device

For added safety, every dishwasher should be protected by a type B residual current device with a trip current of 30 mA. The residual current device must be installed so that it is easily accessible.

Equipotential bonding

There is a screw connection point for equipotential bonding at the back of the dishwasher. Equipotential bonding should be carried out if possible on site.

Stand-alone power system

Temporary or permanent operation on an autonomous power supply system or a power supply system that is not synchronised with the mains power supply (e.g. island networks, back-up systems) is possible. A prerequisite for operation is that the power supply system complies with the specifications of EN 50160 or an equivalent standard.

The function and operation of the protective measures provided in the domestic electrical installation and in this Miele product must also be maintained in isolated operation or in operation that is not synchronised with the mains power supply, or these measures must be replaced by equivalent measures in the installation. As described, for example, in the current version of BS OHSAS 18001–2 ISO 45001.

Water connection

The dishwasher must only be connected to fully vented pipework. A brief increase in the water pressure can damage components of the dishwasher.

Water inlet

The quality of the incoming water must correspond to the drinking water specification of the country in which the dishwasher is being operated.

The dishwasher must be connected to the water supply in strict accordance with current local and national water authority regulations. The dishwasher is connected to cold and hot water supplies. If hot water is not available, the two water inlet hoses (for cold and hot water) must be connected to the cold water supply via a Y-piece.

The stopcocks should remain accessible once the dishwasher has been installed so that the water inlet can be shut off whenever the appliance is not in use.

Drain

The dishwasher drain hose should be connected to a separate on-site drainage system for the dishwasher only. If a separate connection is not available, we recommend connecting the hose to a dual-chamber siphon.

If the hose is to be fitted directly to the drainage system on site, use the hose clip supplied with the dishwasher.

The on-site connector for the drain hose can be adapted to different hose diameters. If the connector extends more than 30 mm into the drain hose, it must be shortened. Otherwise, the drain hose can become blocked.

Lay the drain hose so that it does not kink and is not being subjected to pressure or tension.

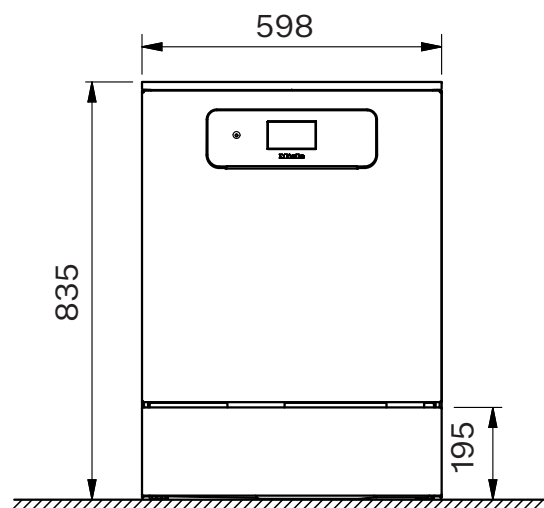
If the on-site drain connection is situated lower than the guide path for the lower basket rollers in the open door, a siphoning effect during a programme can cause the wash cabinet to empty itself of water. In this case, lay the drain hose with a bend in it so that its highest point is at least level with the guide path for the lower basket rollers. For AU, NZ the drain should be connected in accordance with AS/NZS 3500.2.

Connecting an external dispensing system

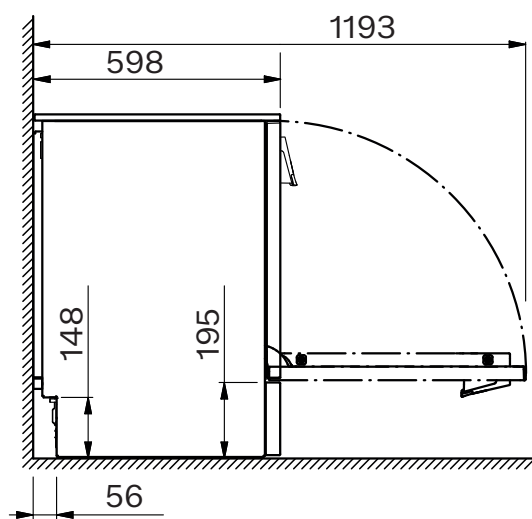
Up to two dispensing systems for liquid cleaning agents and rinsing agents can be connected to the back of the dishwasher. Machines with integrated dispensing systems have an external connection for rinsing agents.

Appliance dimensions

Front view



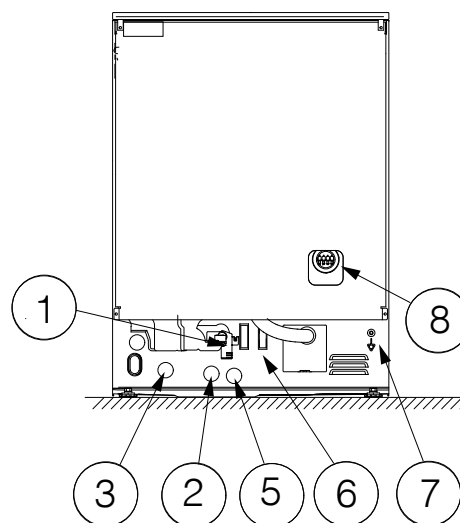
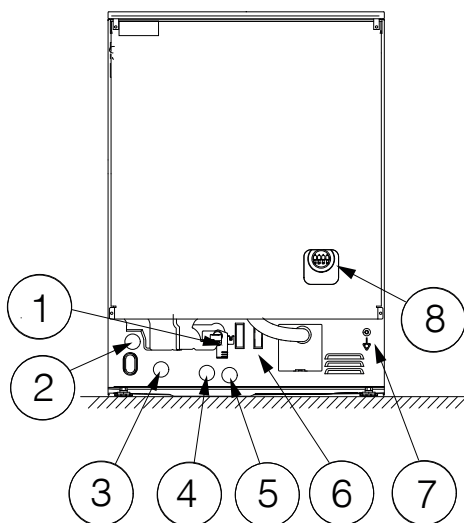
Side view



Connections on the back of the machine

440 V/220 V

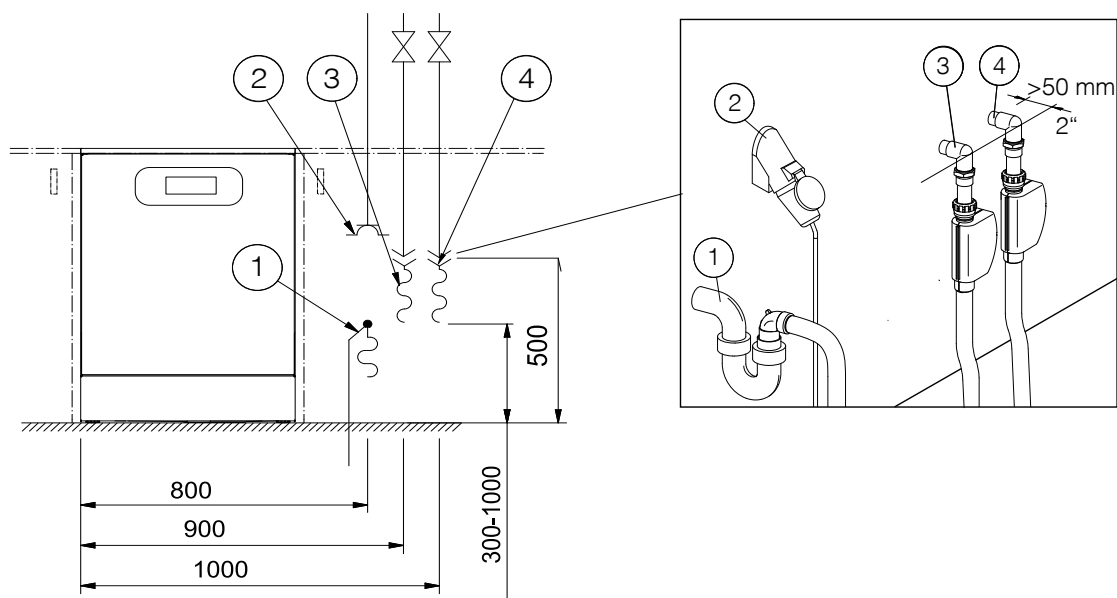
220 V



- ① Waste water
- ② Mains connection cable 220 V
- ③ Cold water
- ④ Mains connection cable 440 V
- ⑤ Hot water
- ⑥ External dispensing, power supply connection
- ⑦ Equipotential bonding
- ⑧ External dispensing, connection for dispensing hose

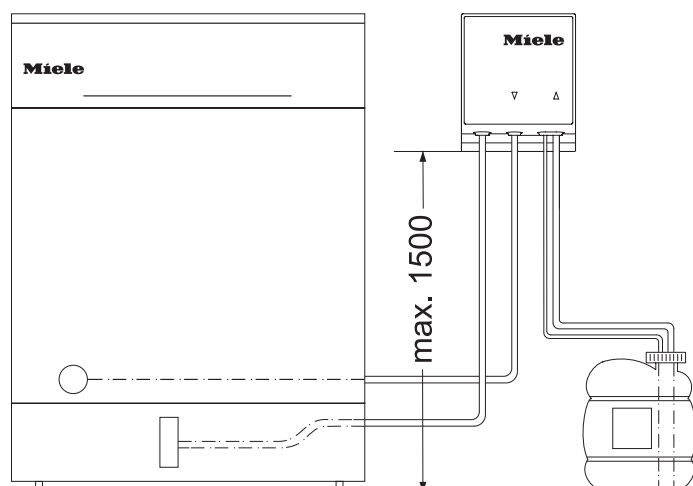
Connections

On-site connections



- ① Waste water
- ② Mains connection cable
- ③ Hot water
- ④ Cold water

External dispensing



Max. delivery head	1.5 m
Length of dispensing hose, DOS module to suction lance	1.8 m
Length of dispensing hose, back of machine to DOS module	2.8 m
Length of mains connection cable, back of machine to DOS module	2.8 m

Place the container on the floor beside the dishwasher or in an adjacent cabinet.
The container must not be placed on top of the dishwasher or above the dishwasher.

Technical data

Electrical connection

Option 1	Heating	Controls
Voltage	3 AC 440 V	AC 220 V
Frequency	60 Hz	60 Hz
Fuse rating	3 x 16 A	4 A
Mains plug	—	Typ-F
Mains connection cable length	1.9 m	1.9 m
Mains connection cable cross-section	4 x 2,5 mm ²	3 x 1.5 mm ²
Power	9 kW	0.4 kW

Option 2	Standard	Voltage variant *
Voltage	3 AC 220 V	AC 220 V
Frequency	60 Hz	60 Hz
Fuse rating	3 x 20 A	1 x 16 A
Mains plug	—	Typ-F
Mains connection cable length	1.9 m	1.9 m
Mains connection cable cross-section	4 x 2.5 mm ²	3 x 1.5 mm ²
Heater rating	6.1 kW	2.3 kW
Total rated load	6.5 kW	2.7 kW

* Conversion work done by Miele Customer Service

Water inlet

Max. water temperature cold water	20 °C
Max. water temperature hot water	65 °C
Max. water hardness	10.71 mmol/l
Max. water hardness	60 °dH
Water connection pressure	
Cold water	100–1000 kPa
Hot water	40-1000 kPa
Flow rate	7.5 l/min
On-site threaded union (flat seal)	3/4 inch
Connection hose length	1.5 m
Connection hose extension *	1.5 m

* Optional accessories

Drainage

Max. water temperature	85
Drain hose length	1.5 m
Max. drain hose length	4 m
Max. delivery head	1 m
Max. transient flow rate	16 l/min
Hose inner diameter (Ø)	22 mm
On-site hose sleeve (Ø x length)	22 x 30 mm

Dispensing

External dispenser pump

Max. delivery head	1.5 m
Length of dispenser hose, DOS module to suction lance	approx. 1.8 m
Length of dispenser hose, back of appliance to DOS module	approx. 2.8 m
Length of power cable, back of appliance to DOS module	approx. 2.8 m

Technical data

Dimensions

Height	835 mm
Height adjustment	60 mm
Width	598 mm
Depth	598 mm
Depth including control panel	638 mm
Depth with door open	1198 mm

Weights

Freestanding machine	78 kg
Max. floor load	1200 N

Emission values

Sound power level	57 dB(A) re 1 pW
Sound pressure level in the workplace	45 dB(A)
Heat output into the room	1.44 MJ/h

Operating conditions

Ambient temperature	+5 to +40 °C
Relative humidity:	
Up to 31 °C, maximum	80 %
Linear decreasing to 40 °C	50 %
Max. altitude above sea level up to	2000 m

Storage and transportation conditions

Ambient temperature	-20 to +75 °C
Relative humidity	10–85 %
Air pressure	500–1060 hPa

Min. site access dimensions including transport pallet

Height	920 mm
Width	670 mm
Depth	740 mm

Weights including packaging

Freestanding machine	88 kg
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