en

Installation, User and Service Manual

Reversible air/water "Split Inverter" heat pump

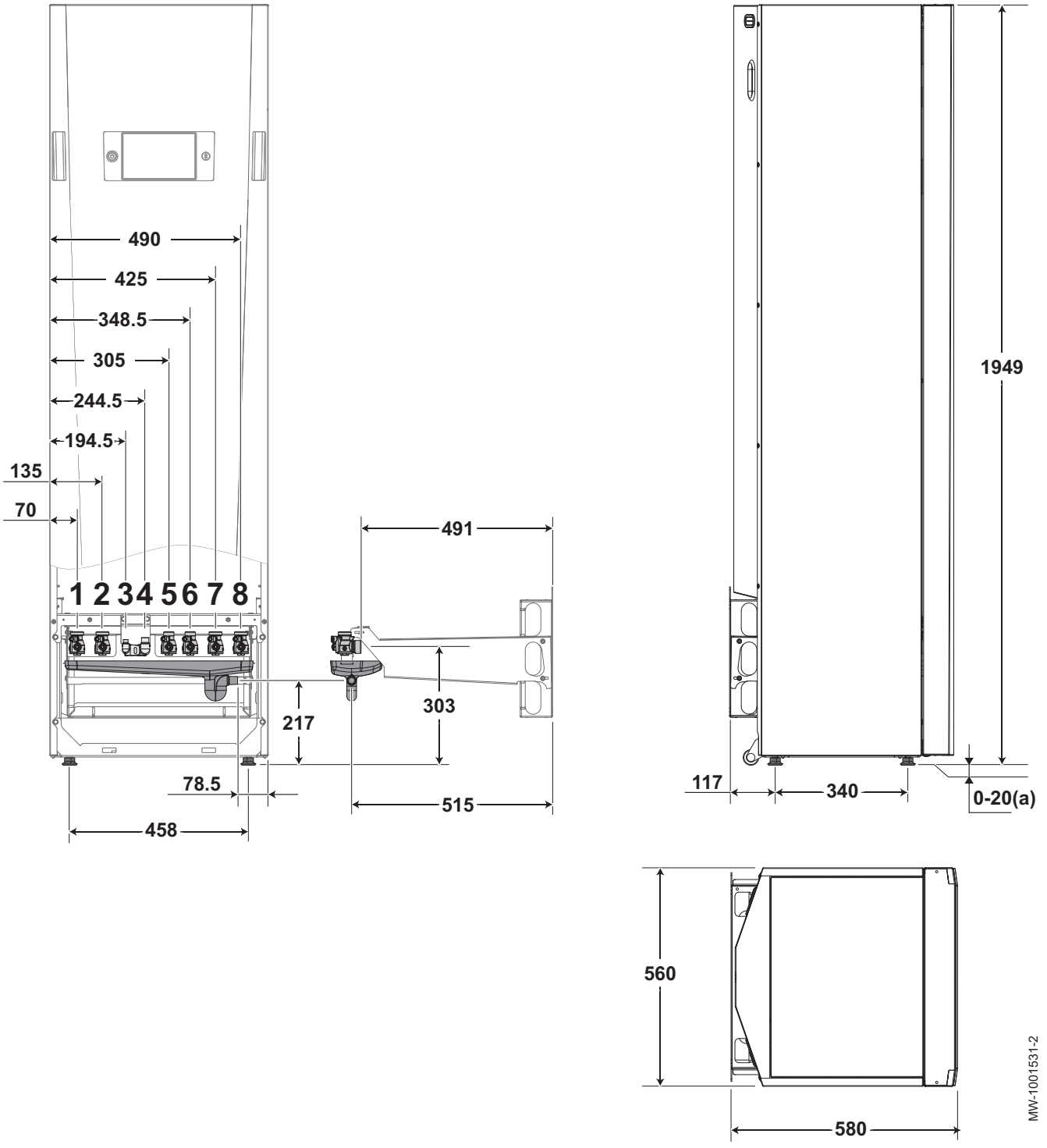
Platinum BC iPlus V200 Smart

MIC V200

3 3/8" refrigerant fluid connection – liquid line
4 5/8" refrigerant fluid connection – gas line
5 Domestic hot water flow
6 Domestic cold water inlet
7 System A flow
8 System A return

3.3.2 Indoor module

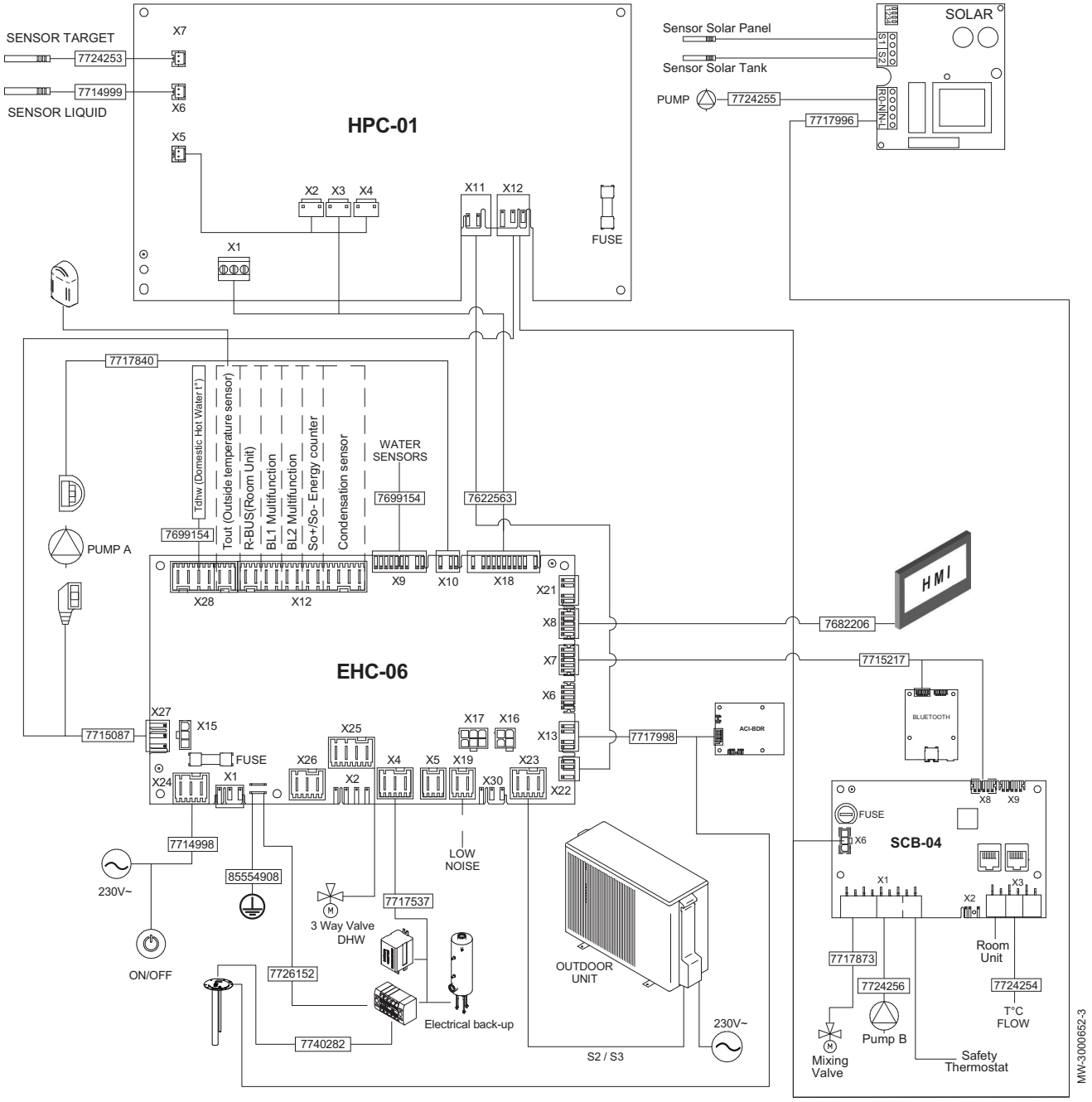
Fig.8 Dimensions and connections of the indoor module



1 Heating circuit B return (option) or solar circuit flow (option)
2 Heating circuit B flow (option) or solar circuit return (option)
3 Refrigerant fluid connection 3/8" - liquid line
4 Refrigerant fluid connection 5/8" - gas line
5 Domestic hot water outlet G3/4
6 Domestic cold water inlet G3/4"
7 Direct heating circuit A flow
8 Direct heating circuit A return
(a) Adjustable feet

3.4 Electrical diagram

Fig.12



Tab.17 Electrical diagram legend

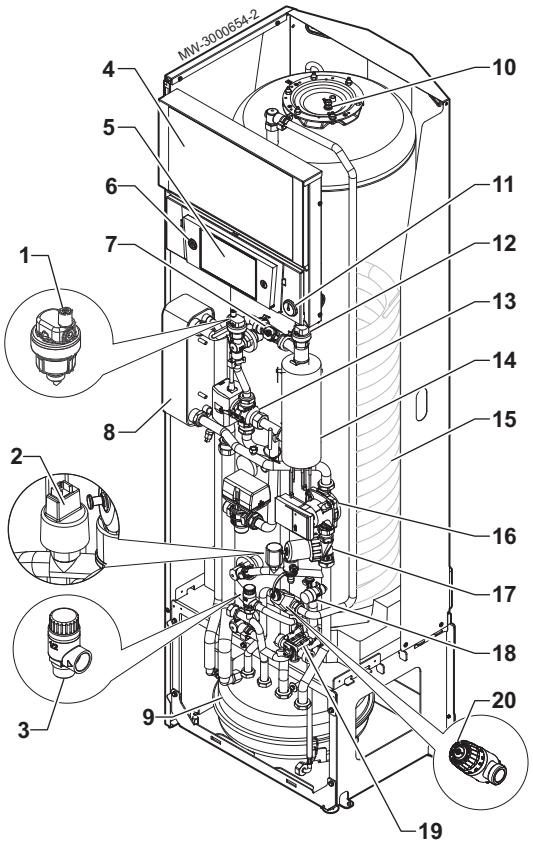
ACI-BDR Option	Impressed current anode (option)
BL1 Multifunction	BL1 multifunction input
BL2 Multifunction	BL2 multifunction input
BLUETOOTH	Bluetooth card
Condensation sensor	Condensation sensor
EHC–06	Heat pump control system central unit PCB
Electrical back-up	Electrical back-up
FUSE	Fuse
HMI	User interface
HPC–01	HPC–01 PCB (interface for the outdoor unit)
LOW NOISE	Optional connection cable for Silent mode
Mixing Valve	Heating circuit mixer valve
ON/OFF	On/off

OUTDOOR UNIT	Outdoor unit
PUMP A / PUMP B	Circulating pump A/Circulating pump B
R-Bus (Room unit)	BAXI CONNECT TXM connected room thermostat, on/off thermostat or OpenTherm thermostat
Safety thermostat	Safety thermostat
SCB-04	PCB for controlling a second heating circuit
SENSOR LIQUID	Refrigerant fluid temperature sensor in the plate heat exchanger
SENSOR SOLAR PANEL	Solar collector temperature sensor
SENSOR SOLAR TANK	Domestic hot water tank temperature sensor
SENSOR TARGET	Water temperature sensor on the plate heat exchanger outlet
So+/So- Energy counter	Electrical energy meter
SOLAR	PCB for controlling a solar circuit (option)
S2/S3	Bus for communicating with the outdoor unit
Tdhw (Domestic Hot Water t°)	Domestic hot water temperature sensor
Tout (Outside temperature sensor)	Outdoor temperature sensor
T°C FLOW	Flow temperature sensor
WATER SENSORS	Temperature sensors
3 Way Valve DHW	Heating/domestic hot water reversing valve

4 Description of the product

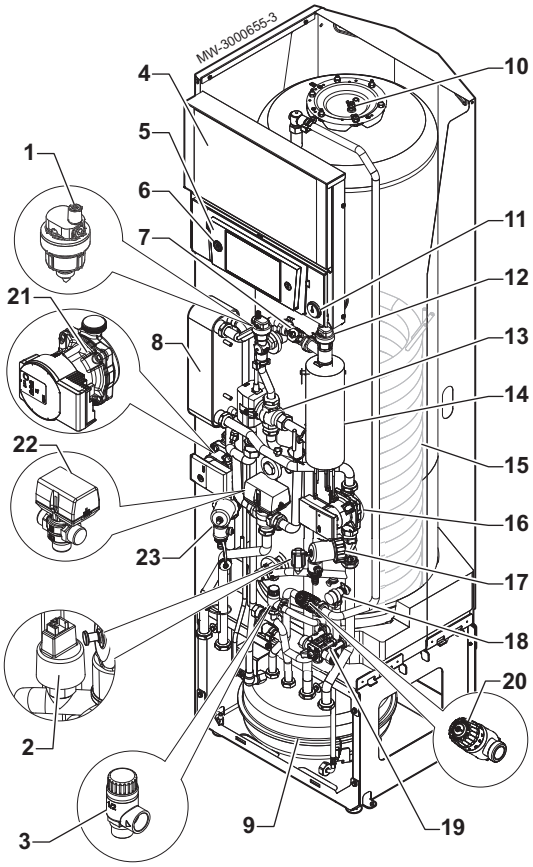
4.1 Main components

Fig.13 MIC V200



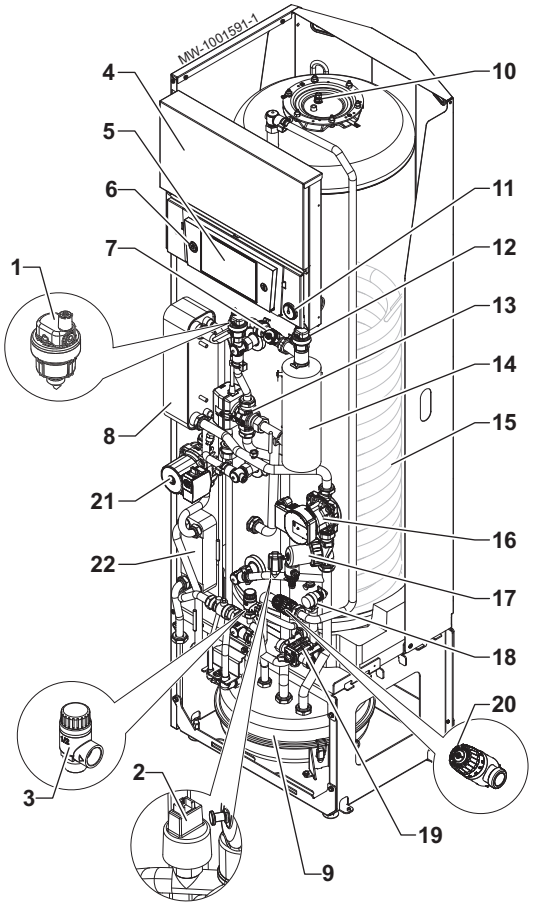
1 Air vent
2 Electronic pressure gauge
3 Domestic water circuit safety valve (7 bar)
4 Electric panel
5 User interface
6 ON/OFF button
7 Flow meter
8 Plate heat exchanger (condenser)
9 12 L expansion vessel
10 Magnesium anode (or optional titanium anode)
11 Mechanical pressure gauge
12 Air vent
13 Three-way valve with reversal motor for heating/domestic hot water
14 3 kW electrical back-up
15 Heat exchanger for the production of domestic hot water in the tank (coil)
16 Main circulating pump
17 Magnetic filter
18 Heating circuit safety valve (3 bar)
19 Disconnector
20 Thermostatic mixing valve

Fig.14 **MIC V200 with second circuit option**



1 Air vent
2 Electronic pressure gauge
3 DHW circuit safety valve
4 Electric panel
5 User interface
6 ON/OFF button
7 Flow meter
8 Plate heat exchanger (condenser)
9 Expansion vessel
10 Magnesium anode (or optional titanium anode)
11 Mechanical pressure gauge
12 Air vent
13 Three-way valve with reversal motor for heating/domestic hot water
14 Electrical back-up
15 Heat exchanger for the production of domestic hot water in the tank (coil)
16 Main circulating pump
17 Magnetic filter
18 Heating circuit safety valve
19 Disconnector
20 Thermostatic mixing valve
21 Circulating pump on the second heating circuit
22 Motorised mixing valve
23 Magnetic filter

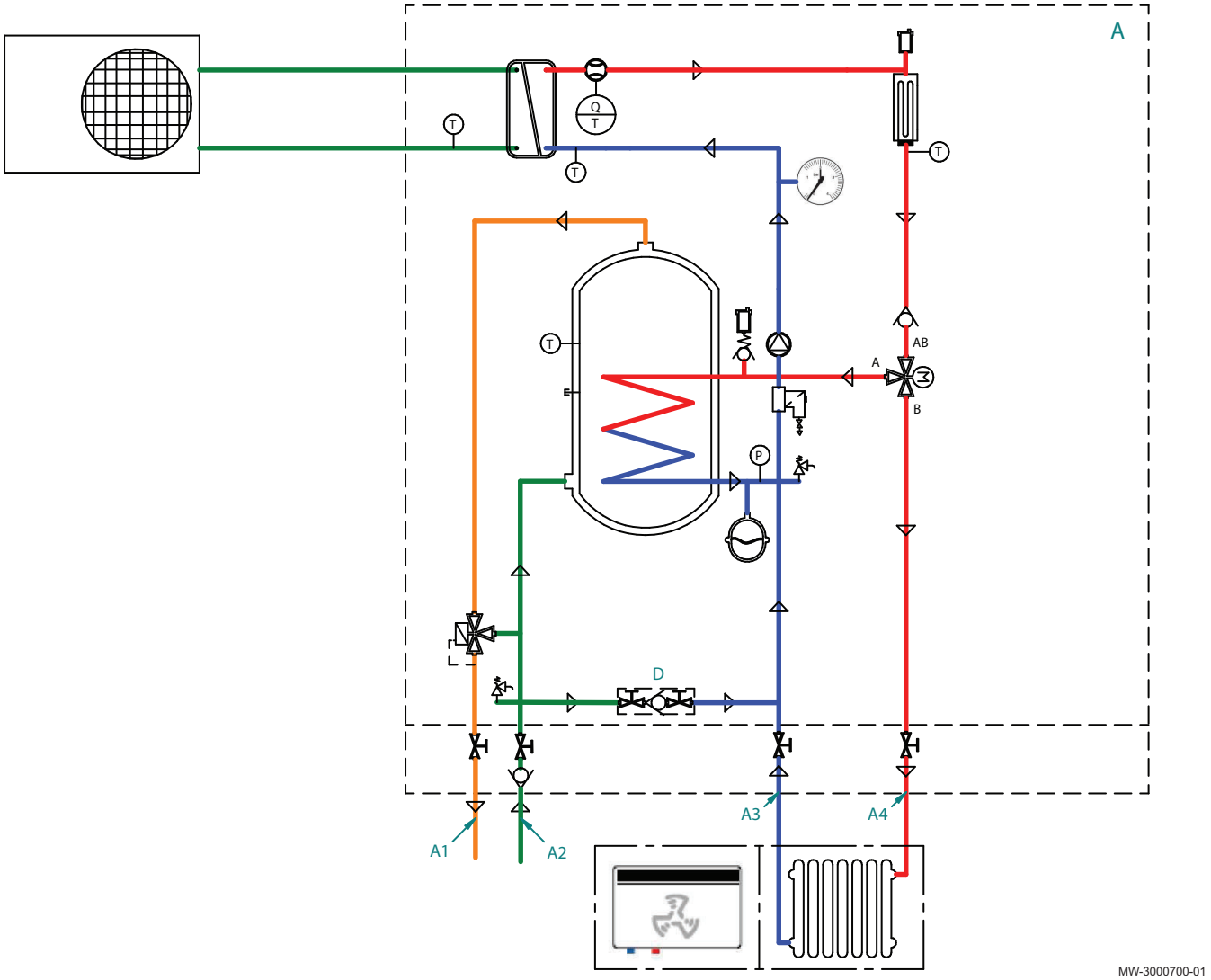
Fig.15 MIC V200 with solar circuit option



1 Air vent
2 Electronic pressure gauge
3 DHW circuit safety valve
4 Electric panel
5 User interface
6 ON/OFF button
7 Flow meter
8 Plate heat exchanger (condenser)
9 Expansion vessel
10 Magnesium anode (or optional titanium anode)
11 Mechanical pressure gauge
12 Air vent
13 Three-way valve with reversal motor for heating/domestic hot water
14 Electrical back-up
15 Heat exchanger for the production of domestic hot water in the tank (coil)
16 Main circulating pump
17 Magnetic filter
18 Heating circuit safety valve
19 Disconnector
20 Thermostatic mixing valve
21 Solar circuit circulating pump
22 Plate heat exchanger (solar circuit)

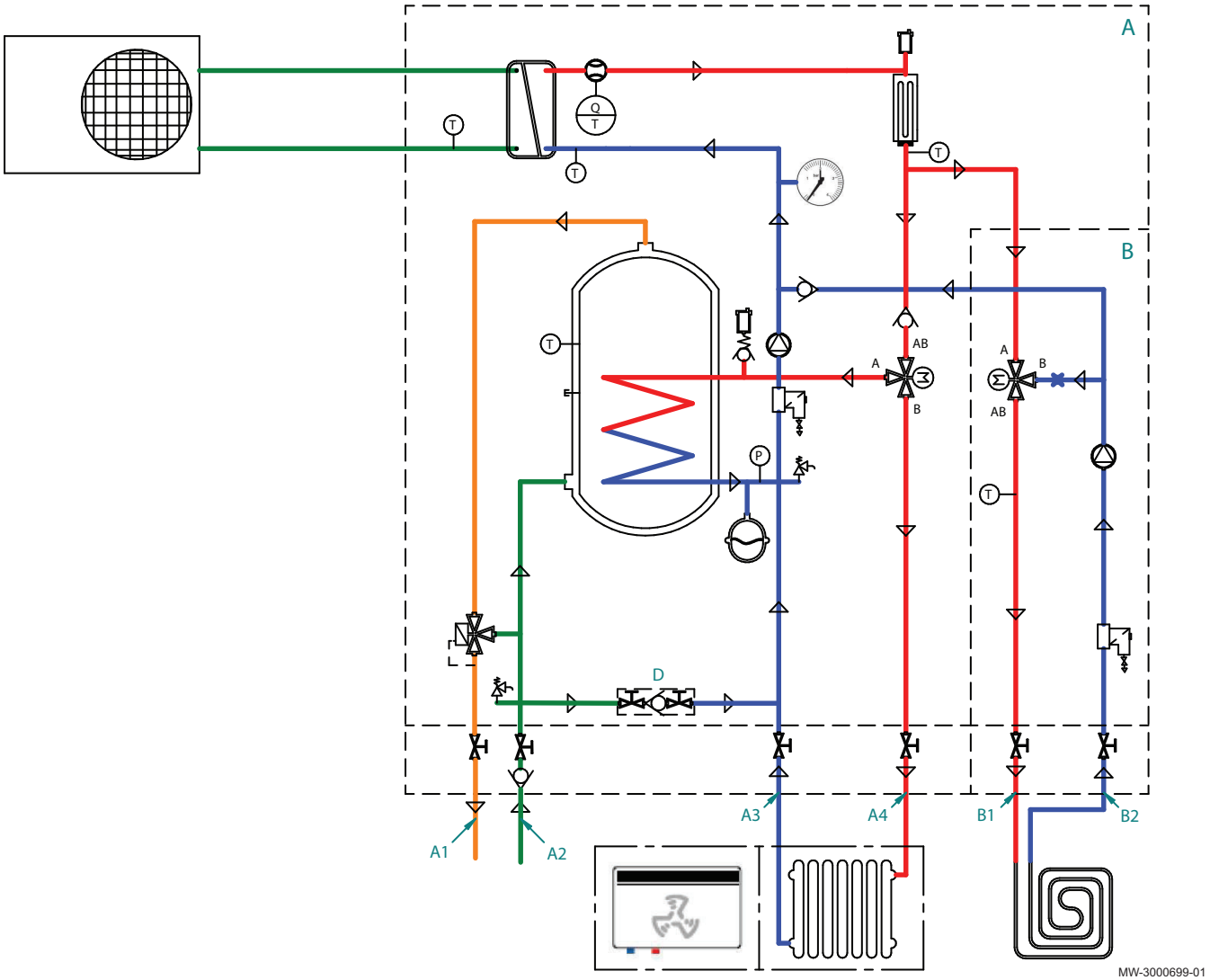
4.3 Schematic diagram

Fig.31 Indoor module with one heating circuit



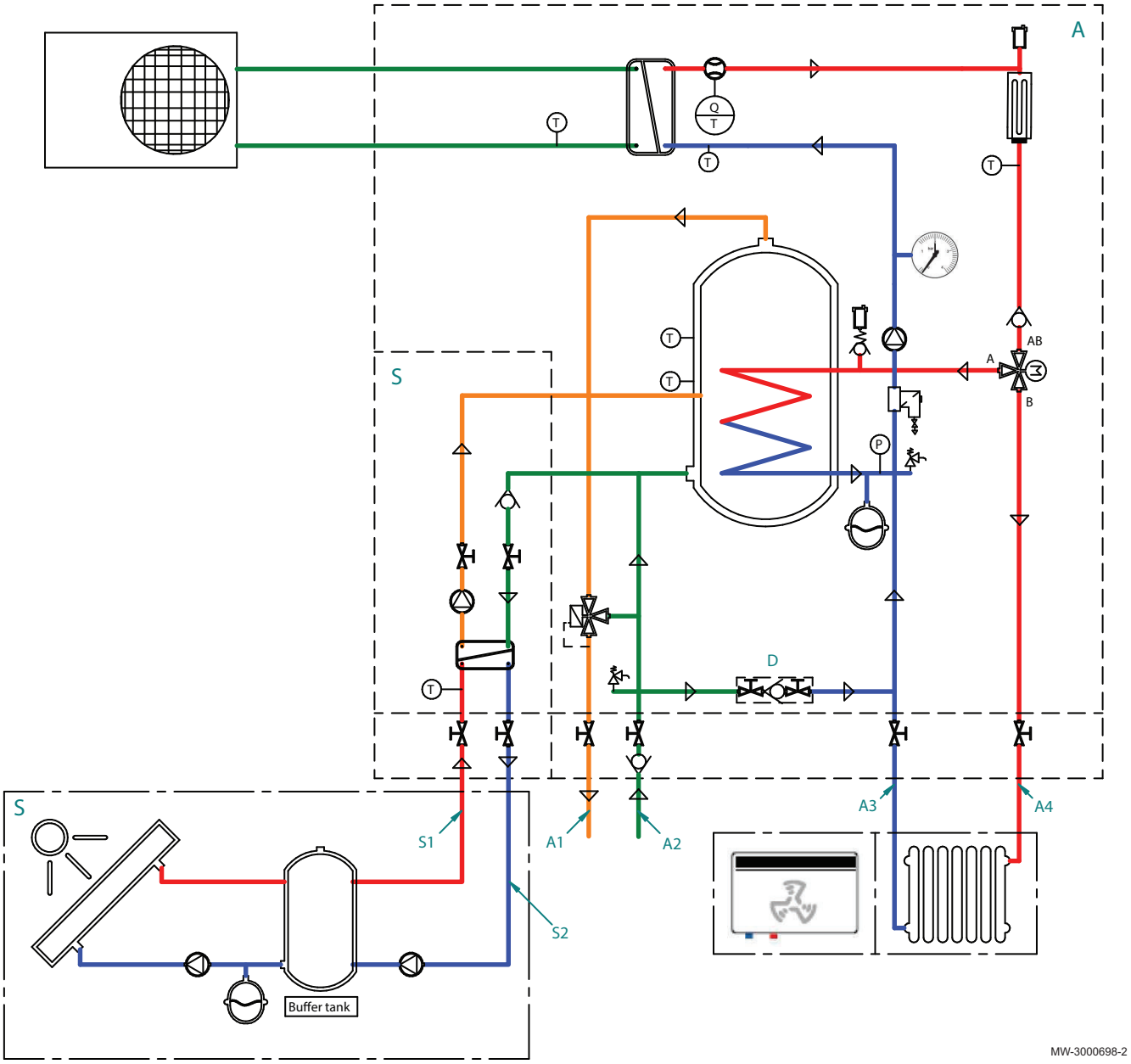
A1 Domestic hot water outlet
A2 Domestic cold water inlet
A3 Direct heating circuit A return
A4 Direct heating circuit A flow
D Disconnector

Fig.32 Indoor module with two heating circuits (second circuit optional)



A1 Domestic hot water outlet
A2 Domestic cold water inlet
A3 Direct heating circuit A return
A4 Direct heating circuit A flow
B1 Mixed heating circuit B flow
B2 Mixed heating circuit B return
D Disconnector

Fig.33 Indoor module with one optional solar circuit

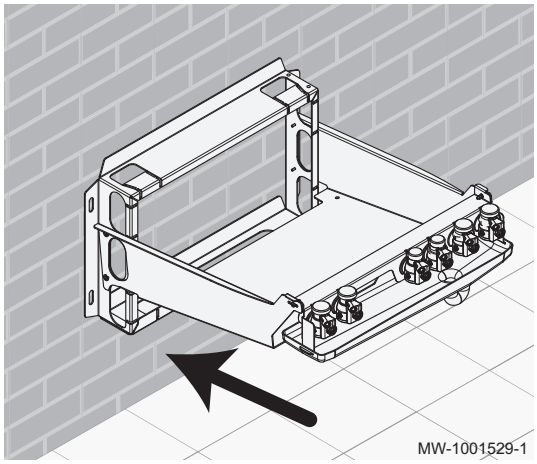


E Solar circuit
A1 Domestic hot water outlet
A2 Domestic cold water inlet
A3 Direct heating circuit A return
A4 Direct heating circuit A flow

S1 Solar circuit heating return
S2 Solar circuit heating flow
Buffer tank Solar circuit buffer tank
D Disconnector

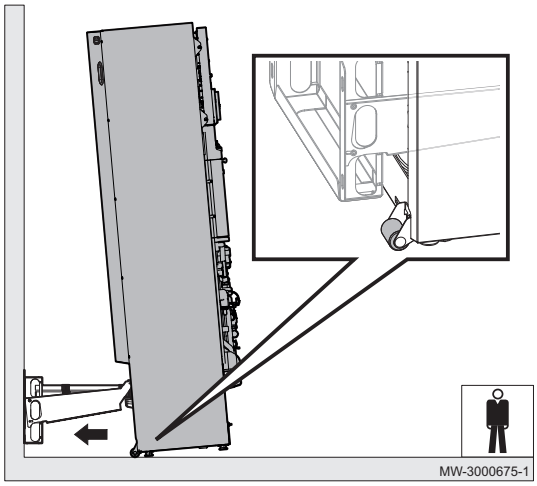
5.5.5 Positioning the indoor module

Fig.39 Installation of the connection plate



Before installing the indoor module, position the connection plate supplied separately. Follow the instructions supplied with the plate.

Fig.40 Fitting the indoor module

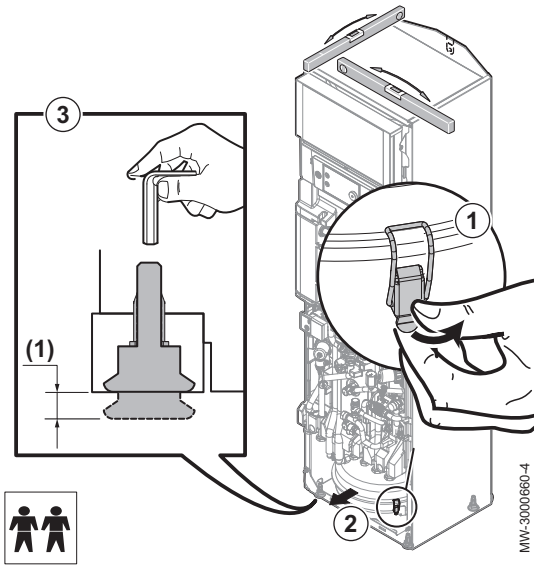


Fitting of the indoor module is facilitated by 2 castor wheels attached to the lower section.

5.5.6 Levelling the indoor module

Level the indoor module using the four adjustable feet.

Fig.41



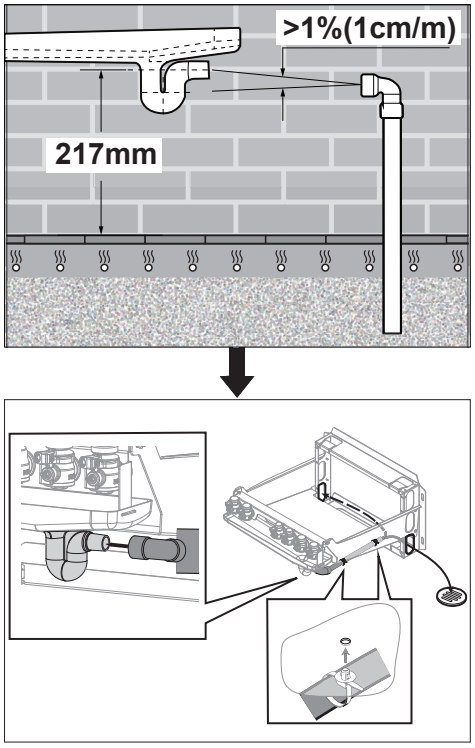
(1) Adjustable feet with minimum required space of 10 mm (adjustment range: 0 to 20 mm)

1. Open the hook on the expansion vessel to access the feet at the rear of the appliance.
2. Remove the expansion vessel.
3. Unscrew the feet using an Allen key.
4. Use a spirit level to check that the appliance is completely level.
5. Refit the expansion vessel in its housing and close the hook to immobilise the vessel.

5.5.7 Attaching the indoor module to the wall

To prevent the indoor module from tipping over, we recommend attaching it to the wall using the attachment provided on the top of the appliance.

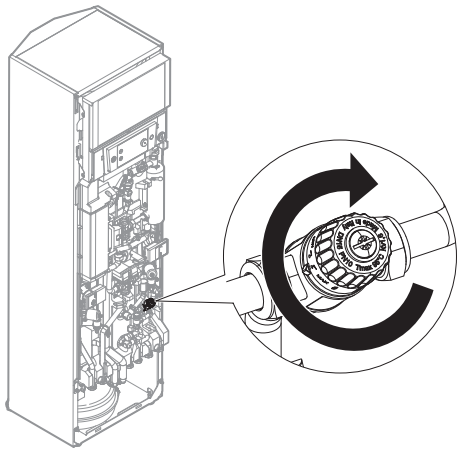
Fig.45



MW-3000737-01

5. Observe the minimum dimension for condensate outflow. If the condensate collector hose does not follow a continual downward gradient, use a lift pump.

5.6.5 Setting the thermostatic mixing valve



MW-3000715-01

A thermostatic mixing valve is integrated into the domestic hot water flow pipe to limit the risk of being scalded. It can be adjusted to between 1 and 6.

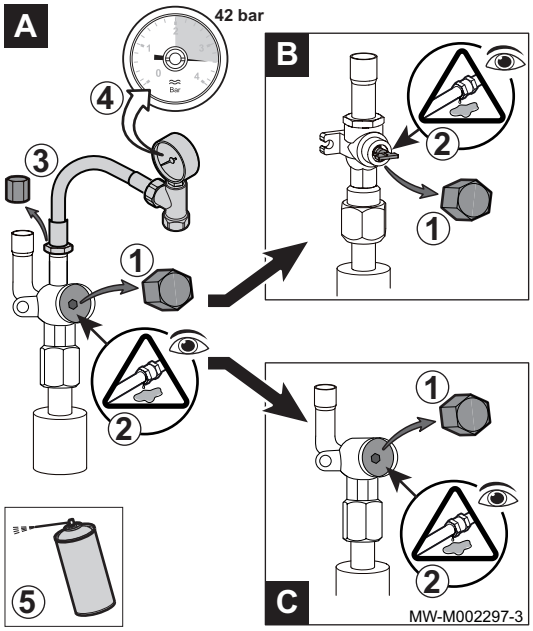
The thermostatic mixing valve is set in the factory to the MAX position (6) which corresponds to a temperature of 60 °C. Keep this setting.

5.6.6 Checking the heating circuit

1. Check the volume of the expansion vessel(s) is sufficient for the volume of water in the heating installation.
2. Check the inflation pressure of the expansion vessel(s).
3. Check that the heating circuit contains adequate water. If necessary, top up with more water.
4. Check that the water connections are properly sealed.
5. Check that the heating circuit has been correctly purged.
6. Check that the filters are not clogged. Clean them if necessary.
7. Check the level of fouling of the condensate collector box.
8. Check that the water flows correctly through the siphon.
9. Check that the valves and thermostatic radiator valves are open.
10. Check that all settings and safety devices are working correctly.

5.9.4 Testing the leak-tightness of the refrigerant connections

Fig.57

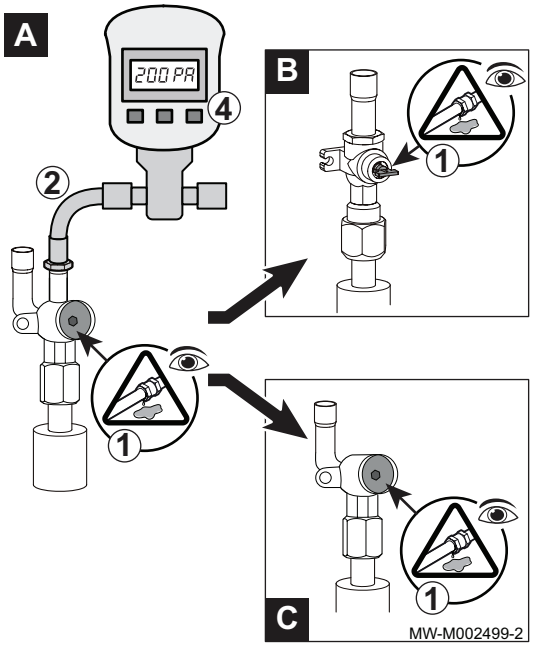


1. Remove the plugs from the stop valves **A** and **B / C**.
2. Check that **A** and **B / C** stop valves are closed.
3. Remove the plug from the service connection on **A** stop valve.
4. Connect the pressure gauge and the nitrogen bottle to the stop valve **A** then progressively build up the pressure in the refrigerant connection pipes and the indoor module to 42 bar, in 5 bar increments.
5. Check the leak-tightness of the fittings using a leak detector spray. If leaks appear, repeat the steps in order and check the leak-tightness once again.
6. Release the pressure and release the nitrogen.

5.9.5 Evacuation

Perform evacuation after checking that the refrigerant circuit is entirely free of leaks. Evacuation is necessary to remove air and moisture from the refrigerant circuit.

Fig.58



1. Check that the **A** and **B / C** stop valves are closed.
2. Connect the vacuum gauge and the vacuum pump to the service connection on **A** stop valve.
3. Produce a vacuum in the indoor module and the refrigerant connection pipes.
4. Check the pressure according to the recommendations table below:

Tab.27

Outdoor temperature	°C	≥ 20	10	0	- 10
Pressure to be reached	Pa (bar)	1000 (0.01)	600 (0.006)	250 (0.0025)	200 (0.002)
Evacuation time after reaching the pressure	h	1	1	2	3

5. Close the valve between the vacuum gauge / vacuum pump and **A** stop valve.
6. Disconnect the vacuum gauge and the vacuum pump after it has shut down.
7. Open the valves.

5.9.6 Opening the stop valves

Once the leak-tightness has been checked and the refrigerant circuit evacuated, open the stop valves to allow the refrigerant fluid to circulate.