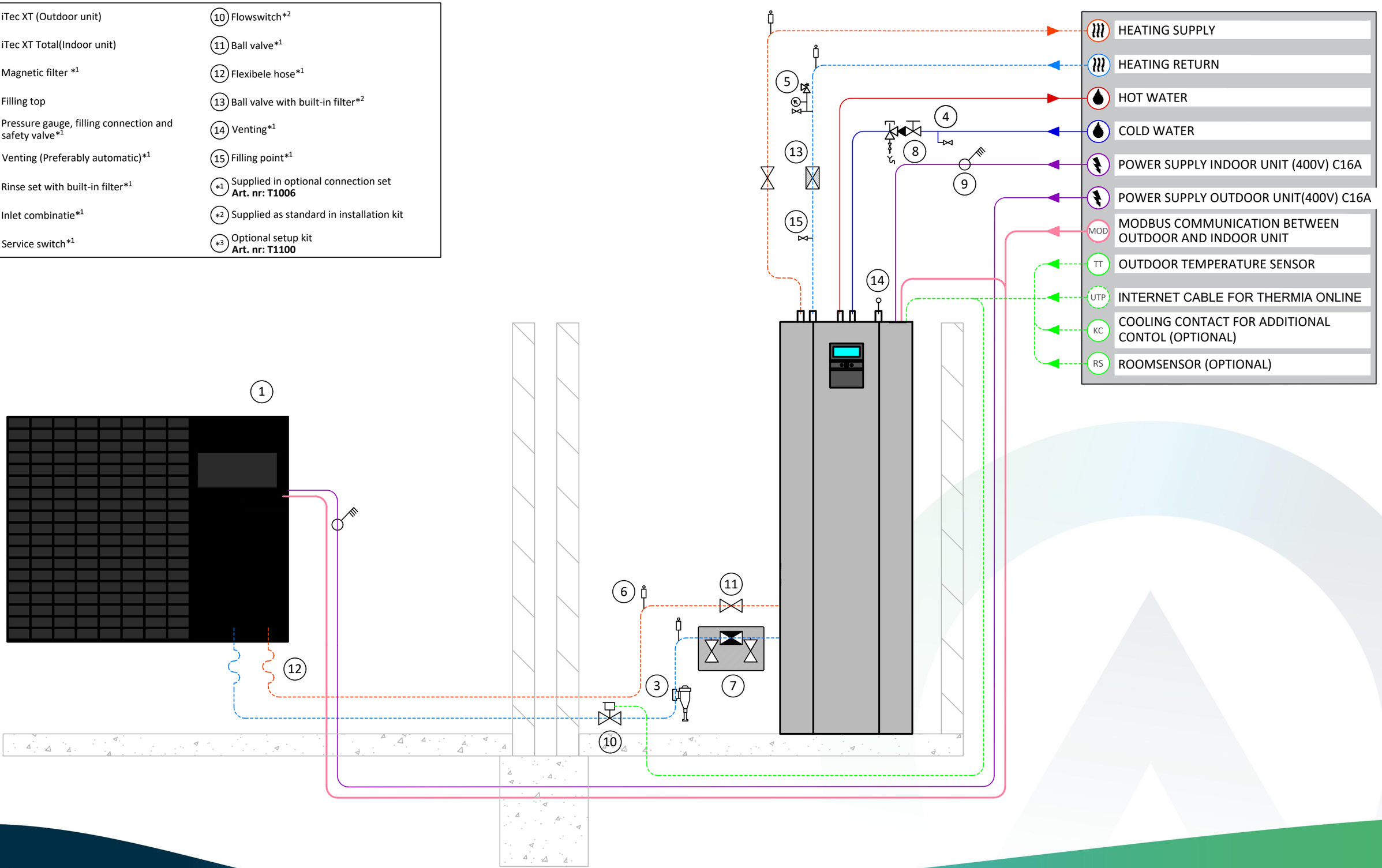
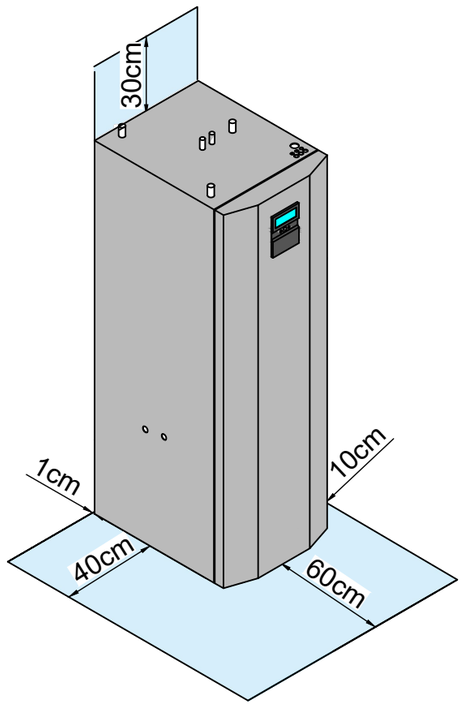
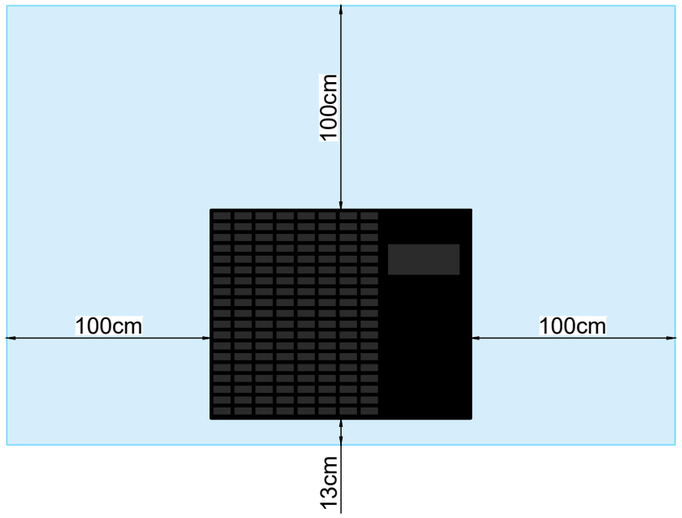
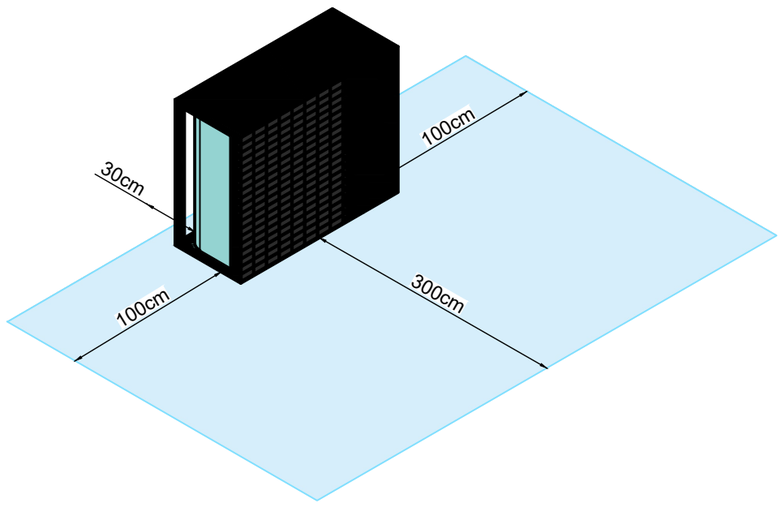
NordicEnergy Solutions

1 iTec XT (Outdoor unit)	10 Flowswitch*2
2 iTec XT Total(Indoor unit)	11 Ball valve*1
3 Magnetic filter *1	12 Flexibele hose*1
4 Filling top	13 Ball valve with built-in filter*2
5 Pressure gauge, filling connection and safety valve*1	14 Venting*1
6 Venting (Preferably automatic)*1	15 Filling point*1
7 Rinse set with built-in filter*1	*1 Supplied in optional connection set **Art. nr: T1006**
8 Inlet combinatie*1	*2 Supplied as standard in installation kit
9 Service switch*1	*3 Optional setup kit **Art. nr: T1100**









POINTS TO CONSIDER FOR DESIGN AND INSTALLATION

PLACING THE ITEC XT OUTDOOR UNIT

The outdoor unit should be raised on a foundation with sufficient load-bearing capacity. This can be achieved using a concrete pedestal or the optionally supplied mounting beam (*3). A filled iTec XT outdoor unit weight approximately 136kg.

Always maintain the minimum distances to ensure an unobstructed airflow. An obstructed airflow can result in loss of power, efficiency, noise nuisance or damage to structures.

Do not place the iTec XT outdoor unit directly near or under an open window or near an intake grille/duct of a ventilation system.

The distance between the outdoor unit and the indoor unit should be kept as small as possible to minimize temperature loss. The maximum pipe lenght between the iTec XT outdoor unit and the iTec XT Total EQ indoor unit is 20 meters with a diameter of 28mm copper or 32mm plastic.

During the defrost cycle, large amounts of water are released. The condensate drain is located at the bottom of the iTec XT outdoor unit. To discharge the condensate water, it can be infilltrated into the ground through a gravel bed or infilltration crate directly under the iTec XT outdoor unit.

Place a 25A-4-pole service switch within reach of the iTec XT outdoor unit at a maximum distance of 1 meter.

For the operation of the iTec XT outdoor unit, it is crucial to place the flow switch in the flow direction. Ensure a minimum distance behind the flow switch of 5 x DN size and in front of the flow switch 2 x DN size.

PLACING THE ITEC XT TOTAL EQ INDOOR UNIT

The iTec XT Total EQ indoor unit should be placed on a foundation with sufficient load-bearing capacity of approximately 300kg.

The heating supply & return pipes to indoor unit (7 and 8, see next page) can be connected either on the left or right side of the iTec XT Total EQ indoor unit. These instructions assume a left-side connection.

The specified free space of 40 cm to the left of the iTec XT Total EQ indoor unit can be used for placing fitting 3, 6, 7, 10 & 11.

Place a 25A, 4-pole serviced switch within reach of the iTec XT Total EQ indoor unit at a maximum distance of 1 meter.

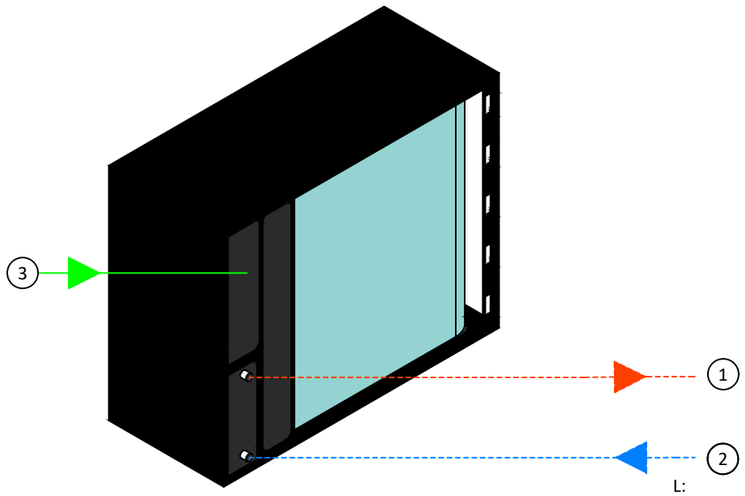
PREPARATION FOR COMMISSIONING

The heatpump is very sensitive to air present in the system. Therefore, follow the procedure below to fill the system:

- Vent the coil through the vent on top of the iTec XT Total EQ indoor unit, see fitting 14;
- Vent the entire heating installation (manifolds, etc.) if manual vents are present;
- Rinse the entire outdoor installtion through the rinse set, fitting 7.

1. iTec XT

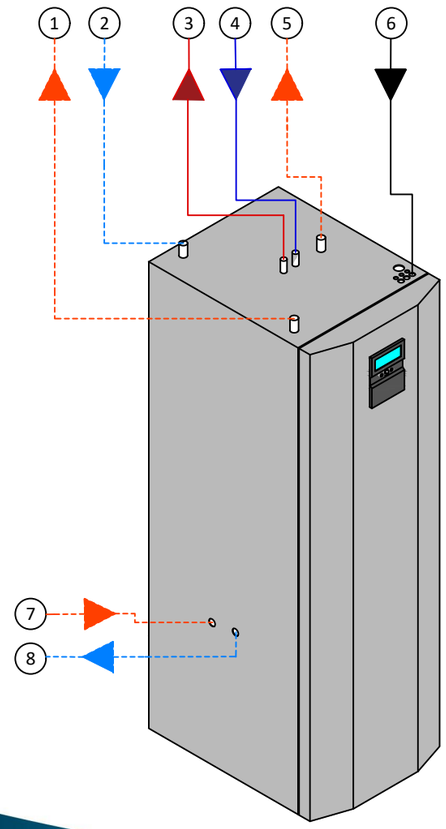
1. Heating supply indoor unit 1"
2. Heating return indoor unit 1"
3. Electrical connections



L:	364 mm
B:	880 mm
H:	798 mm
Weight empty:	126 kg
Weight Filled:	136 kg

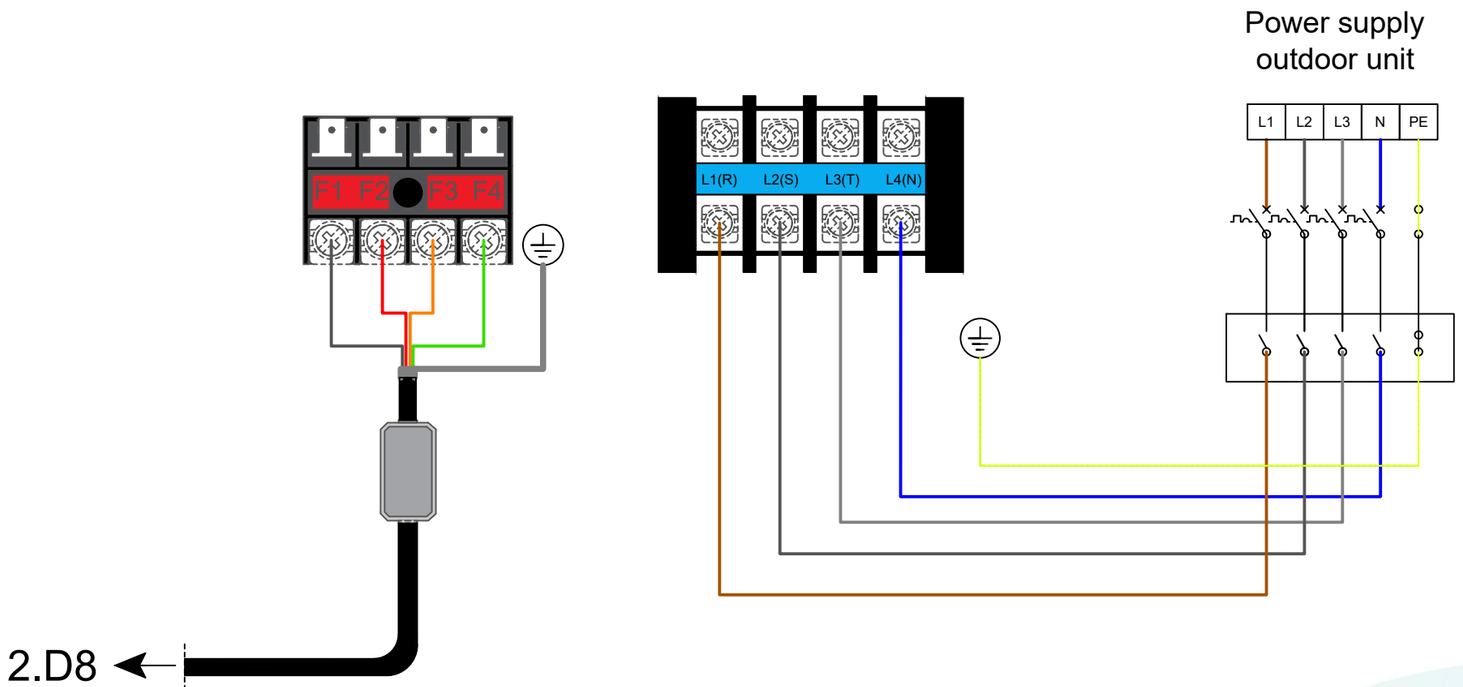
2. iTec XT Total

1. Heating supply ø28mm
2. Heating return ø28mm
3. Hot water ø22mm
4. Cold water ø22mm
5. Vent coil ø28mm
6. Electrical penetrations
7. Heating supply outdoor unit ø28mm
8. Heating return outdoor unit ø28mm



L:	690 mm
B:	595 mm
H:	1845 mm
Weight empty:	142 kg
Weight filled:	300 kg

1. iTec XT outdoor unit

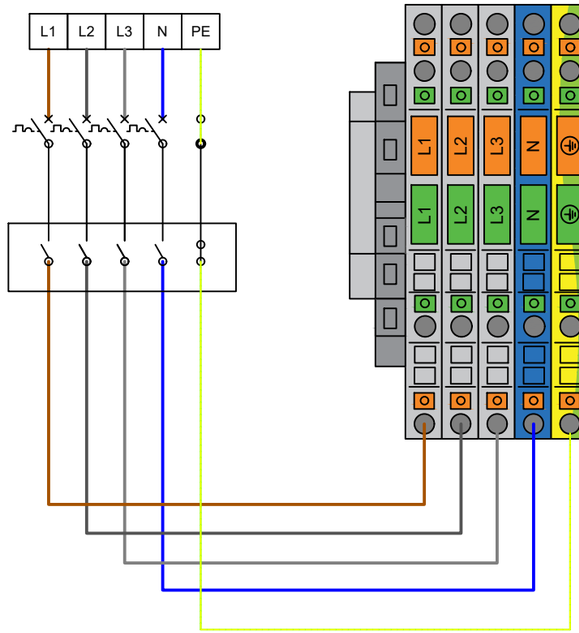


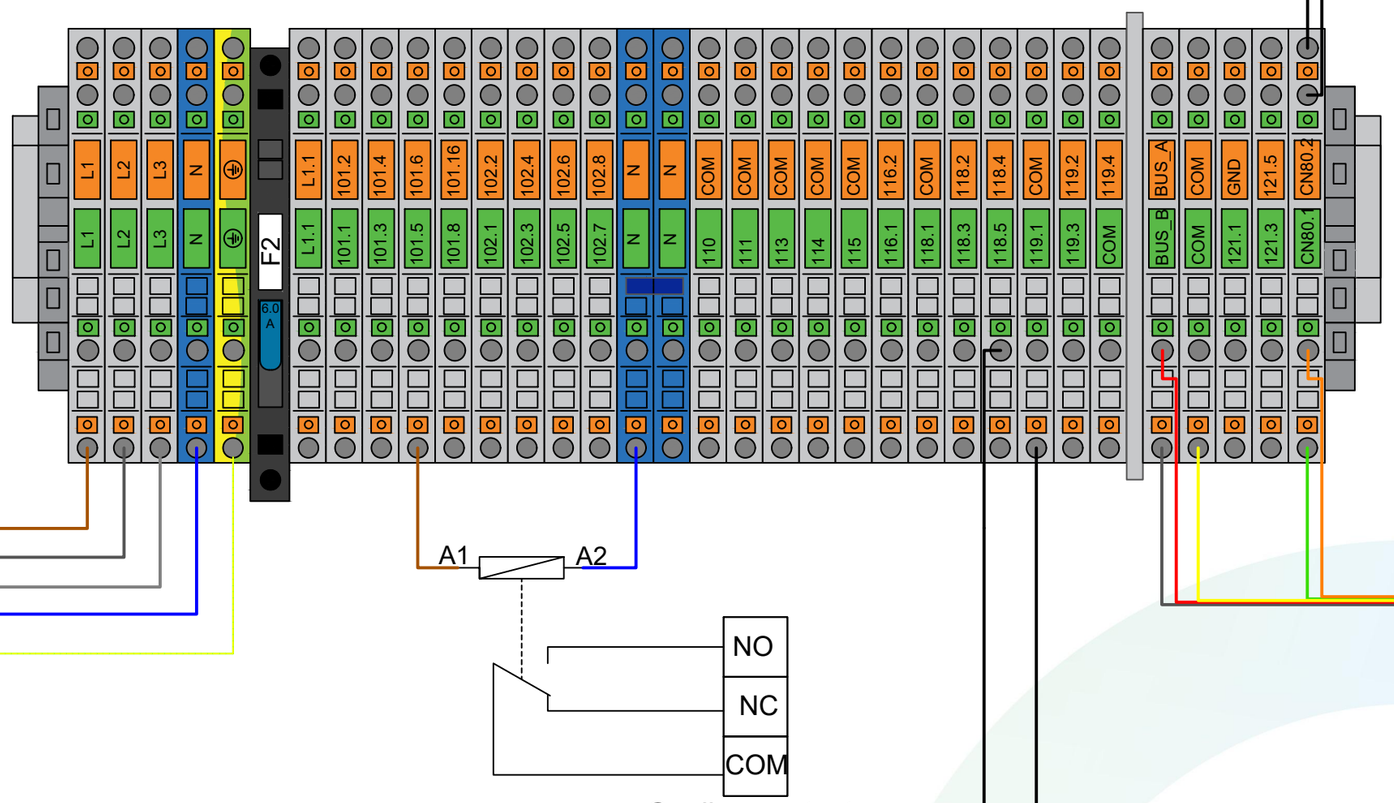
ELECTICAL CONNECTIONS DETAILS

Power supply iTec XT outdoor unit:	5x2,5 mm^2
Communicatiion cable between indoor and outdoor unit:	2x2x0,2 mm^2 afgeschermde twisted pair kabel (RS485 modbus)
iTec XT outdoor unit:	Place service switch within 1m of the machine.

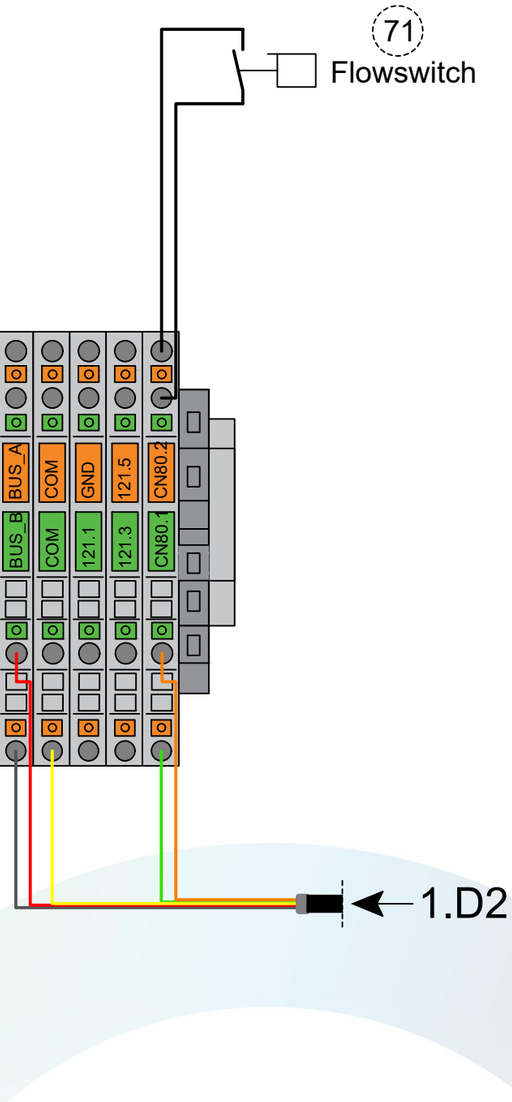
2. iTec XT Total EQ indoor unit

Power supply 400V
Fuse: C16A
Service switch: 4-pole25A



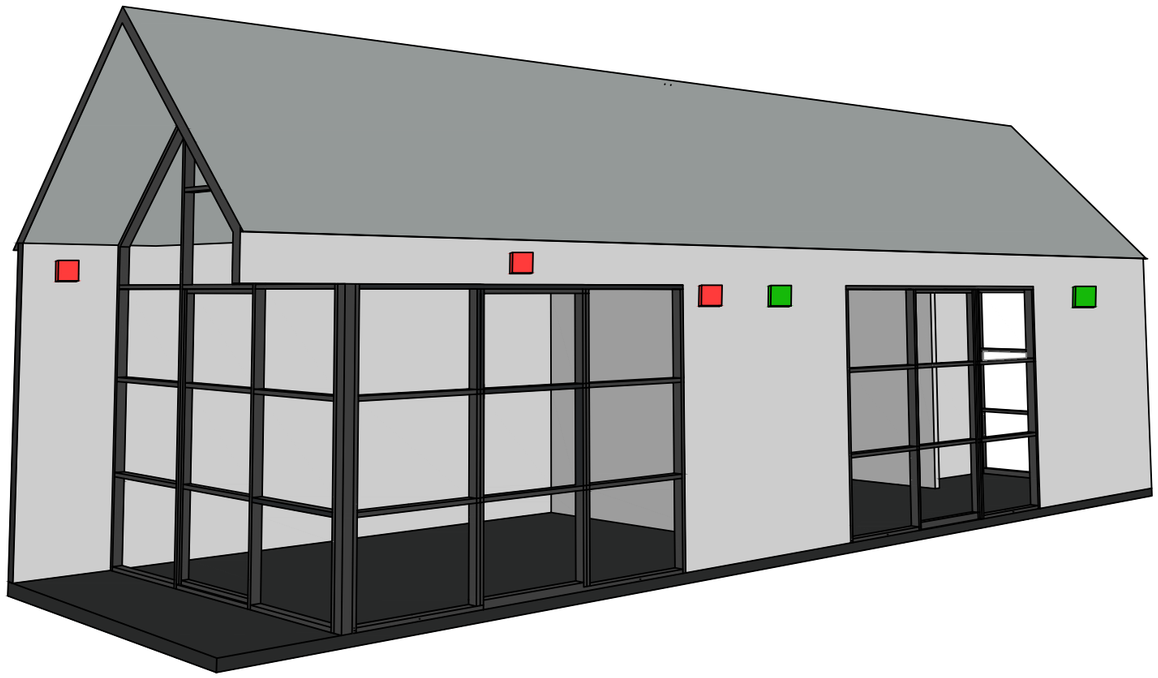


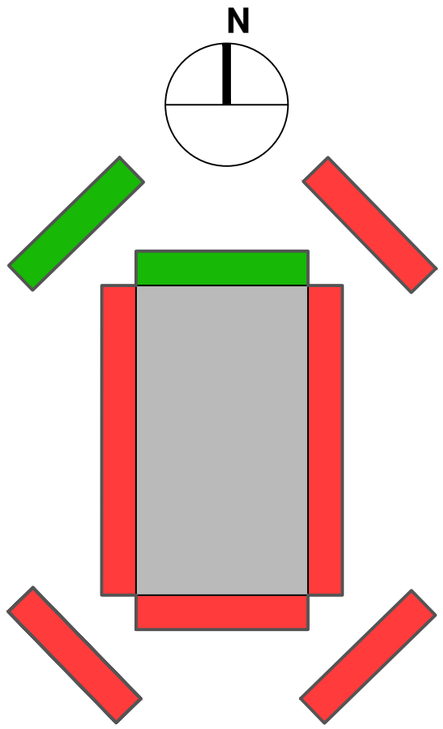
Cooling contact
Potential free



ELECTRICAL CONNECTION DETAILS

Power supplyiTec XT Total EQ indoor unit:	5x2,5 mm^2
Communication cable betweer indoor and outdoor unit:	2x2x0,2 mm^2 shielded twisted pair cable (RS485 modbus)
Outdoor sensor:	2x0,75 mm^2 (tot 50m)
Room sensor:	4x0,8 mm^2
iTec XT Total EQ indoor unit:	Place service switch 1m within the machine
To use the cooling contact:	relais (230V)





INSTALLATION OF THE OUTDOOR SENSOR

Install the outdoor sensor on the north wall. Deviation to the northwest wall is allowed.

Ensure the outdoor sensor is at least 0.5 meters away from any window, door, wall opening or ventilation opening.

Preferably install the outdoor sensor between the ground floor and the first floor.

Avoid installing the sensor on a wall with reflective or heat-absorbing cladding.

Do not place the sensor under an overhang or eaves.

Ensure the sensor is not installed directly under the roofline.

Oreferably use a two-wire cable with the following thicknesses:
- < 50 meters: 0,75mm^2
- > 50 meters: 1,5mm^2

Gebruik bij voorkeur een twee-aderige kabel, dikte:
- < 50 meter: 0,75 mm^2
- > 50 meter: 1,5 mm^2

There is no need to consider polarity (+ or -) when connecting to the terminal block.