



NIBE air source heat pumps from Nu-Heat

Heat pumps designed to supply the home with inexpensive and environmentally friendly heating.

NIBE ASHP range

Nu-Heat supplies the NIBE F2040-6, 8, 12 and 16 air source heat pump range for residential use. The range can cover building heating power demand from 3–16kW and has been developed to make installation as smooth as possible.

Up to nine units can be linked if required in domestic properties.



F2040 FEATURES

Heat pumps supplied by Nu-Heat meet all relevant UK and European standards and are MCS Approved.

- ✓ Outdoor unit with compact dimensions
- ✓ Nine units can be linked for larger domestic properties
- ✓ MCS approved for RHI applications
- ✓ Quiet operation
- ✓ NIBE Uplink offers remote monitoring and adjustment of the system (internet connection will be needed)
- ✓ Four sizes of air source heat pump: F2040-6, F2040-8, F2040-12 and F2040-16 (twin fan)
- ✓ 7-year warranty as standard*
- ✓ CoP of up to 4.5 at 7/35 °C** (12kW model)
- ✓ Well insulated for improved energy efficiency

* Warranty – 7-year warranty as standard when commissioned by Nu-Heat or an approved NIBE VIP installer. For more information on warranty terms and conditions please visit: www.nu-heat.co.uk/nibe-tandc.

** In accordance with EN 14511.

Control Modules

Control modules operate both heating and domestic hot water and feature a multicolour display showing user instructions, clear information about status, operating time and all temperatures. Modules are compatible with NIBE Uplink™.

The SMO20 and SMO40 control modules are rated as Class III under EU Commission Delegated Regulation No. 811/2013 when used as part of a heating package supplied by Nu-Heat. Class III = +1.5%.

SMO20: Supplied with single heat pump systems, the SMO20 is a standard control module that enables flexible operation.

SMO40: The advanced SMO40 is supplied with multiple heat pump systems for domestic properties and can control up to nine heat pumps in commercial projects.

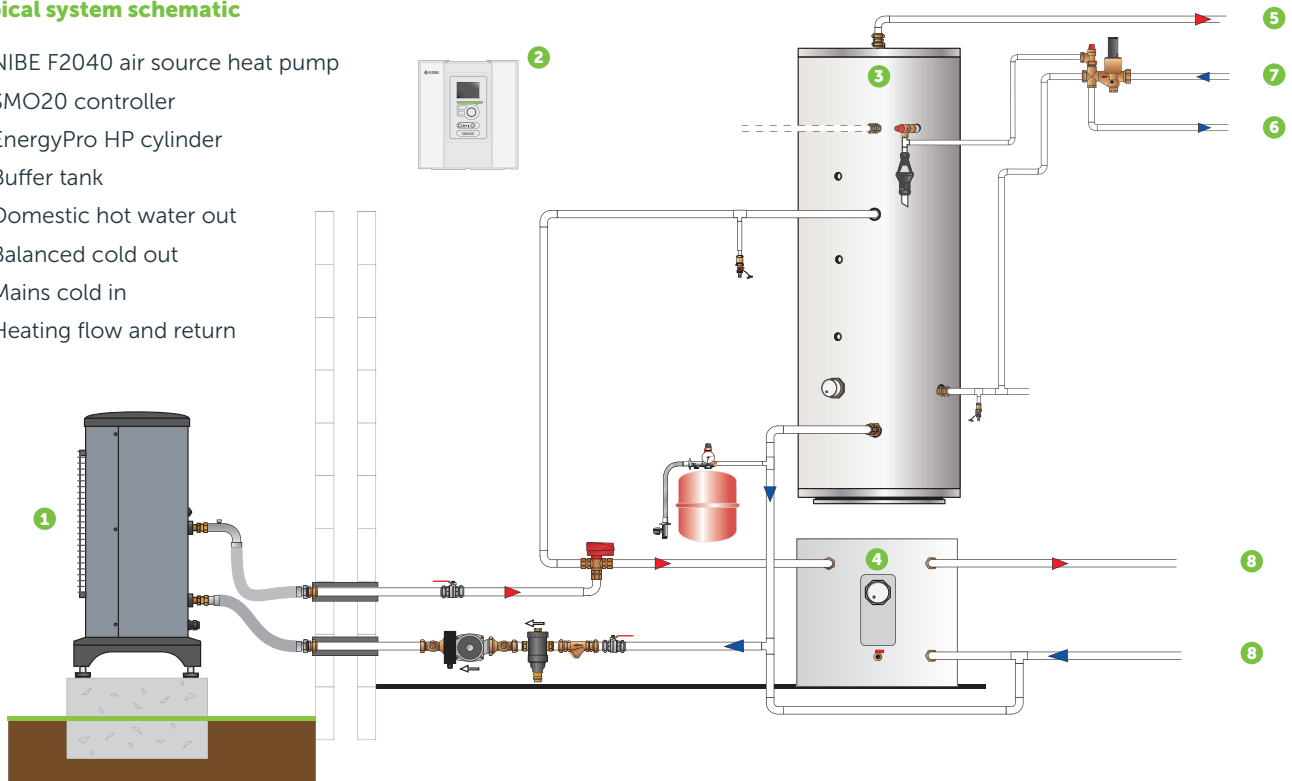
Internet control with NIBE Uplink™ – freedom; anytime, anywhere

NIBE Uplink™ allows access to a quick overview and/or more detailed information on the present status of your heat pump operation via the Internet.

The heating and domestic hot water system can be monitored and controlled remotely for perfect comfort. If the heat pump's operation is interrupted an alert is issued via e-mail allowing you to react quickly.

Typical system schematic

- 1 NIBE F2040 air source heat pump
- 2 SMO20 controller
- 3 EnergyPro HP cylinder
- 4 Buffer tank
- 5 Domestic hot water out
- 6 Balanced cold out
- 7 Mains cold in
- 8 Heating flow and return



Which unit will I need?

Factors such as the size of the property, location and domestic hot water demand will be used by Nu-Heat to determine the size of heat pump unit that is appropriate for each individual project.

Technical specification



Model	F2040-6	F2040-8	F2040-12	F2040-16
CoP at 7/35 °C*	3.5	4.3	4.5	4.53
Power output at 7/35 °C (kW)	7.0	9.2	12.5	16.9
Operating voltage	230V 50Hz			
Max. outgoing heating medium temp.	58 °C			
Refrigerant quantity (R410A) (kg)	1.5	2.55	2.90	4.00
Height with stand (mm)	791	945	1045	1500
Width (mm)	993	1035	1145	1145
Depth (mm)	364	422	452	452
Weight (kg)	66	90	105	135
Sound pressure level at 2m free standing* (dB(A))	36	40	43	47
Sound pressure level at 6m free standing* (dB(A))	26.5	30.5	33.5	37.5
Sound pressure level at 10m free standing* (dB(A))	22	26	29	33
Max sound power level Lw(A)***	50	54	57	61

* In accordance with EN 14511 for heat source entry at 7 °C / hot water flow at 35 °C.

** Free space

*** In accordance with EN-12102

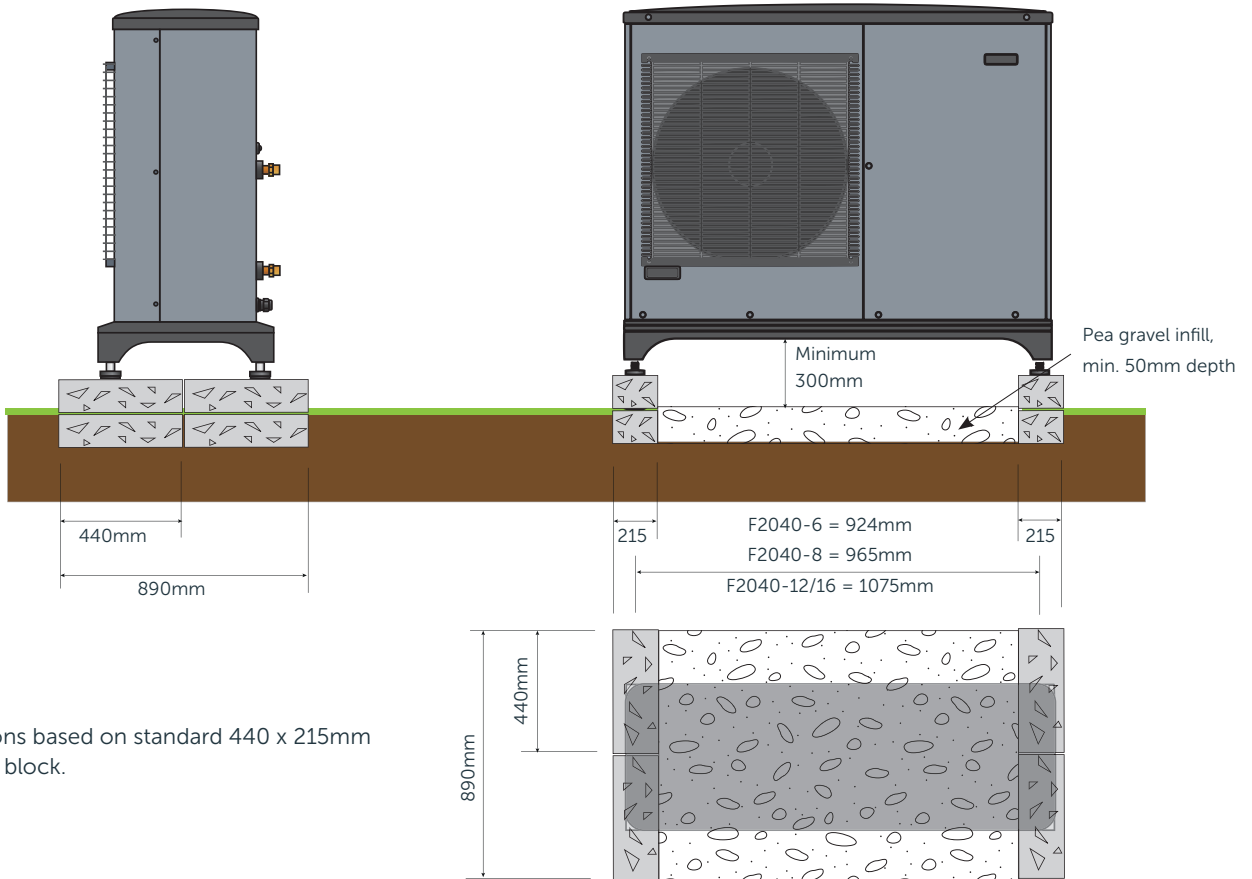


Positioning the unit

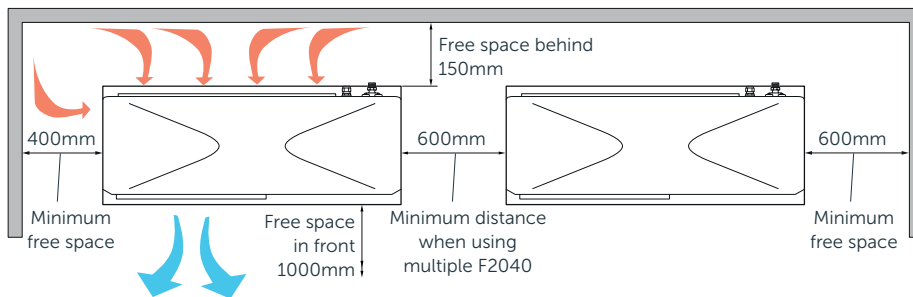
NIBE air source heat pumps can be installed on almost any kind of terrain and are supplied in a range of sizes to suit small, medium or large homes and even light commercial buildings.

- Place F2040 outdoors on a solid level base, preferably a concrete foundation; do not place it directly on a lawn or other non-solid surface. If used, concrete slabs must rest on tarmac or gravel.

- The foundation should be positioned so that the lower edge of the evaporator is at a minimum of 300mm above ground level. Areas that are prone to standing water or heavy snow should take this into consideration when selecting the appropriate height above ground level.
- The F2040 should not be positioned next to a habitable room or to inconvenience neighbours.
- Condensation water should be directed to a drain or similar.



Dimensions based on standard 440 x 215mm concrete block.



Distance from the property

For a heat pump using 32mm (DN25) insulated plastic pipe connections between the heat pump and property the maximum distance permitted is shown in the table. This will be checked at the design stage. If your project falls outside these criteria please speak to your Project Engineer.

Heat Pump	Max Distance
F2040-6	99m
F2040-8	99m
F2040-12	79m
F2040-16	23m

For full details please refer to the NIBE F2040 Installation Manual available at www.nibe.co.uk.

Energy efficiency fiche

Supplier's name	NIBE							
	F2040-6		F2040-8		F2040-12		F2040-16	
Model								
Temperature application (°C)	35	55	35	55	35	55	35	55
Seasonal space heating energy efficiency class, average climate	A++	A++	A++	A++	A++	A++	A++	A++
Rated heat output, average climate (kW)	5	5	8.2	7.0	11.5	10.0	14.5	14
Annual energy consumption for space heating, average climate (kWh)	2089	3091	3882	4447	5382	6136	6702	8431
Seasonal space heating energy efficiency, average climate (%)	188	138	172	127	174	132	176	134
Sound power level LWA indoors (dB)	35		35		35		35	
Rated heat output, cold climate (kW)	4	6	9.0	10.0	11.5	13.0	15.0	16.0
Rated heat output, warm climate (kW)	4	5	8.0	8.0	12.0	12.0	15.0	15.0
Annual energy consumption for space heating, cold climate (kWh)	2694	4610	6264	8844	7798	11197	10040	13629
Annual energy consumption for space heating, warm climate (kWh)	872	1398	1879	2333	2759	3419	3370	4183
Seasonal space heating energy efficiency, cold climate (%)	143	116	139	108	142	111	144	113
Seasonal space heating energy efficiency, warm climate (%)	252	179	225	180	229	185	235	189
Sound power level LWA outdoors (dB)	50		54		57		61	