



NordicLIGHT 161 eiNVi EVI Inverter air-to-water heat pump



MAIN FEATURES

Copeland EVI Inverter compressor provides high energy efficiency and guarantees availability of sufficient heating (up to 9kw) during -20C winter weather

Out-put water +20 to +60 at Air -20 to +35

High COP: 4.2 at Air +2C / Water +35C

Low noise level: 35-50dB at 1m (depend on Air temperature)

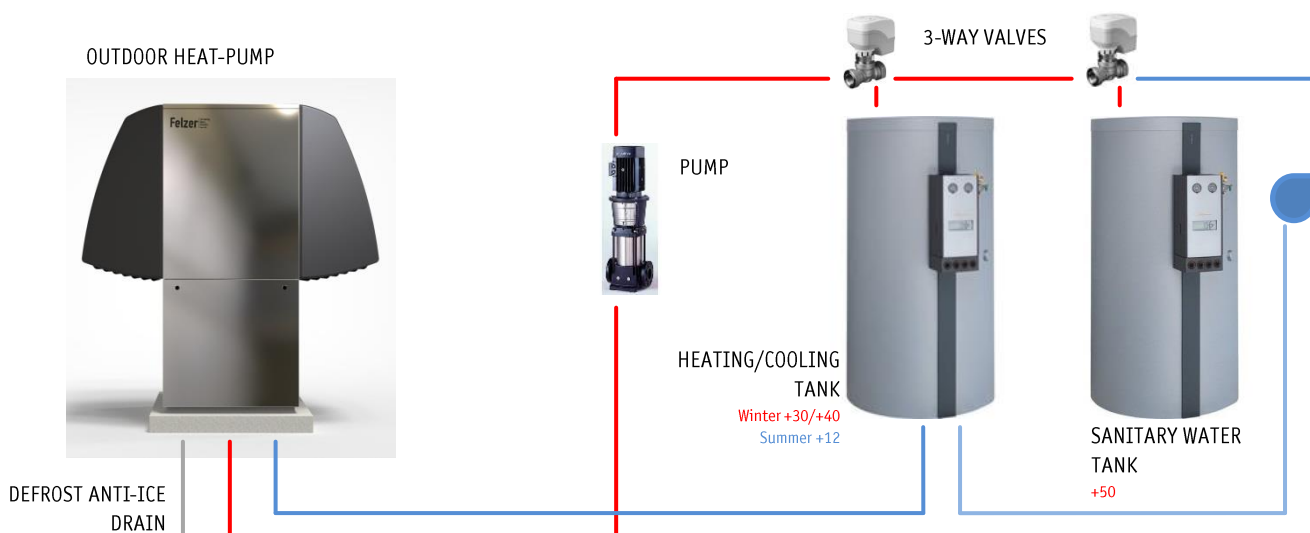
Stainless steel and Aluminium cabinet with (optional) multiple decorative panels results in aesthetic appearance and long life of the NordicLIGHT heat pump units

NO ICE / NO BACKUP HEATING NEEDED / NO REFRIGERANT PIPES OUTSIDE THE UNIT

OUT-DOOR and IN-DOOR installation available

STANDART INSTALLATION AND CONNECTIONS

In the winter mode the unit heats the water for spaces heating (+35C to +45C) or for sanitary water heating (+60C). In the summer mode the unit cools the fancoils (+7C) or heats the sanitary water. Pumps and valves can be controlled from the unit controller.



See the installation manual for detailed connection and control schemes.

TECHNICAL LAYOUT

Nordic LIGHT	161A: Outdoor installation 161L: Indoor ducted installation. Left airflow 161R: Indoor ducted installation. Right airflow
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Performance Date

Water supply 35C

Outdoor Air	heating cap	COP
+7C	5.6-16.1 kw	4.76 (at 9.5 kw)
+2C	4.0-12.5 kw	4.02 (at 7.6 kw)
-7C	4.0-12.5 kw	2.94 (at 12.5 kw)
-20C	4.0-9.0 kw	
<-20C	9.0 kw	1.0 (flow throw heating)

Water supply 55C

Outdoor Air	heating cap	COP
+7C	6.5-17.1 kw	3.31 (at 12 kw)
-7C	4.0-13.4 kw	2.30 (at 13.4 kw)
-20C	4.0-9.0 kw	
<-20C	9.0 kw	1.0 (flow throw heating)

Technical Data

Dimensions

	H	W	L
Outdoor (161A)	1780	1050	1900
Indoor ducted (161L/R)	1780	1050	800

Weight: 300 kg

Power supply

HP: 3Ph/N/PE/400V/50Hz (C25)

Control board: 1Ph/N/PE/400V/50Hz (B16)

Electrical heater: 3Ph/N/PE/400V/50Hz (B16)

Max. power consumption: 9 kw (8 kw at heat pump mode) + 0.1 kw pump

Max. current: 22A +0.7A pump

Refrigerant: R410a / 3.8 kg

APPLICATIONS PATTERNES



Summer operation Air above +10C

HEAT PUMP 35 dB at 1 m. Fans and compressors work at reduced speed.
Sanitary water heating up to +65C
Pool heating. Typically one NordicLIGHT HP is sufficient for 25 sq. m water surface +27C exposed to ambient air +12C (calculation of local specialist is required)

WATER CHILLER

NordicLIGHT can be used in chiller mode for all air-conditioning applications



Midseason – Southern winter operation Air from 0C to +10C

HEAT PUMP 45-55 dB at 1 m. Fan works at full speed and compressor works at reduced speed. Very low noise for comfort heating
EVI compressor and evaporator of special design decrease defrost time, while increasing net COP

Under-floor heating +35C
Convection or air-blower heating +45C to +55C
Sanitary water heating up to +65C



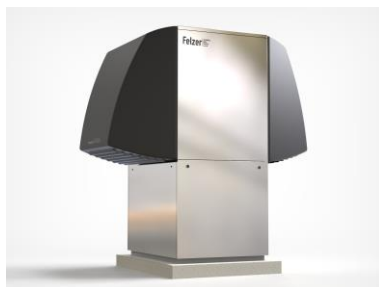
Northern winter - mountains operation Air below 0C

HEAT PUMP Long operation under below-zero weather conditions with no frost. All water is drained from the unit. Under-floor/underground piping and flow through heater for all winter antifreeze operation
EVI compressor and evaporator of special design decrease defrost time, while increasing net COP
Low capacity drop due to possibility to increase the compressor speed. Only COP is reduced

Under-floor heating +35C
Convection or air-blower heating +45C to +55C
Sanitary water heating up to +65C

OUTDOOR DESIGN

You can choose the design of panels that suits best Your outdoor environment.



stainless steel panels



aluminium panels



corten steel panels



decorative panels
(incl. photos on aluminium)

FELZER PARTNERS

NordicLIGHT heat pump is developed by Felzer SIA with Copeland EVI scroll compressor inside. External design made by FORMA.

OUR CONTACTS

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