



NOXA Heat

NOXA PRO

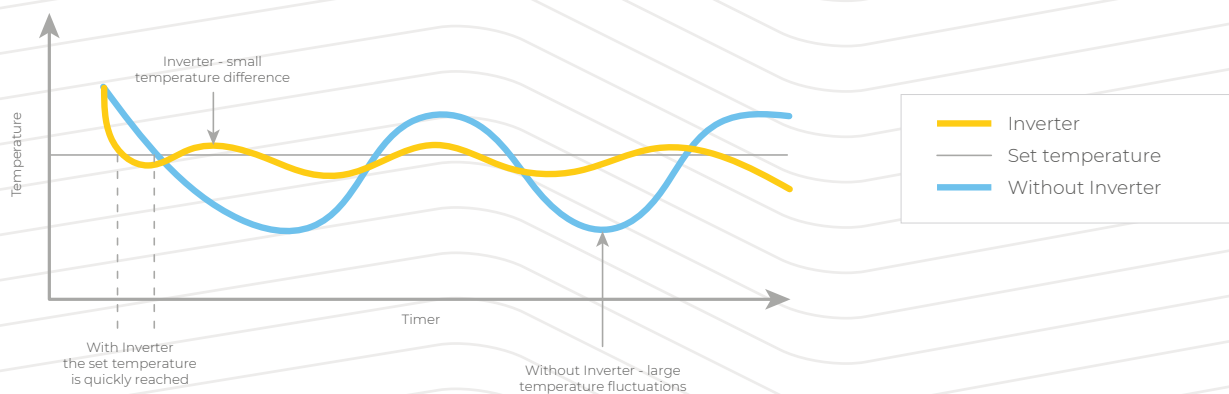


INVERTER TECHNOLOGY

Increased rotation speed of the compressor motor through the operation frequency control, ensures higher starting power, brings temperature to the comfort zone much quicker than units without inverter. Cooling down or heating up the air-conditioned rooms is accomplished faster and with increased efficiency.

Compressor motor operation frequency and room temperature changes are monitored in order to designate the most efficient waveform for maintaining temperature in the comfort zone. This allows to eliminate large temperature fluctuations, typical for on-off systems and provides pleasant, comfortable room conditions.

COMPARATIVE DIAGRAM OF INVERTER AND ON-OFF TECHNOLOGIES

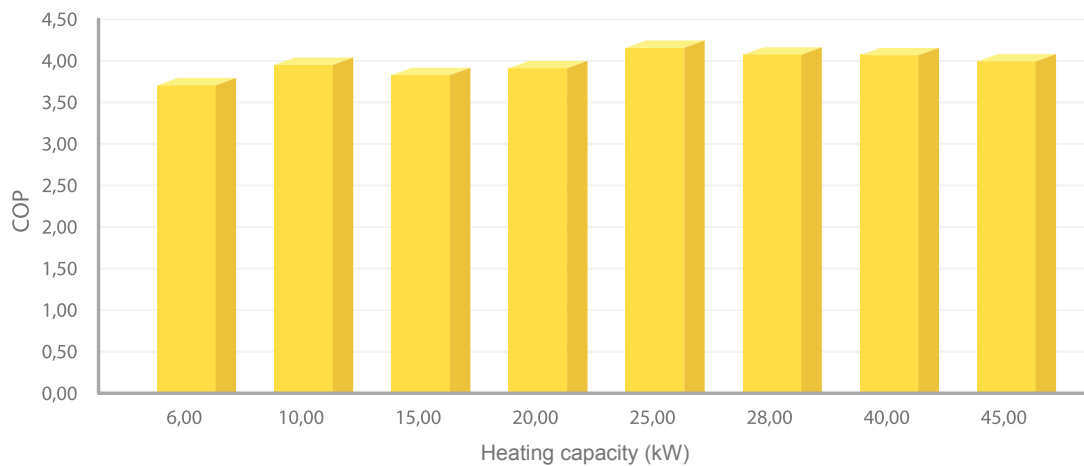


HIGH ENERGY EFFICIENCY

Application of the latest inverter technologies enables automatic adjustment of the units load, according to the requirement. This allows to achieve high parameters using an energy efficiency classification, contributing to reduction of energy

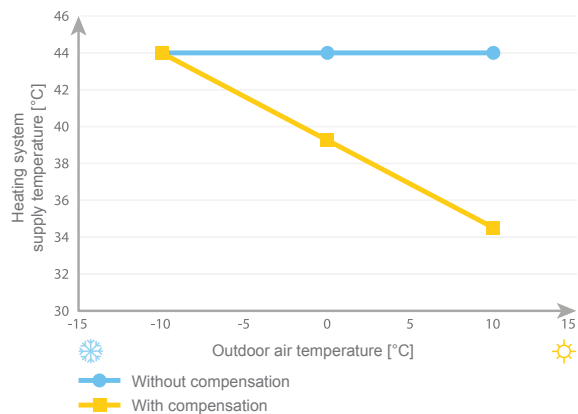
consumption in single family houses and many more objects. The energy efficiency of the heat pumps offered by NOXA is above 3.1 in A2/W35 point, and the SCOP coefficient is compliant with PN-EN 14825 standard and exceeds 3.4.

ENERGY EFFICIENCY COMPARISON



TEMPERATURE COMPENSATION CURVE - HEATING CURVE

As the outdoor temperature increases, the building heat load gets lower and the heating system supply temperature can be lowered in accordance with the current building heat load. The building heating curve obtained this way indicates what is the heating water temperature that should supply the heating system at the specified outdoor temperature. This approach allows to save building maintenance costs, because together with decrease of the heating system supply temperature, the heat pump energy efficiency increases. The NOXA Pro heat pumps offers the possibility to control the heat pump with use of the heating curve, which can be individually defined by the user in the range



of outdoor temperatures from -20°C to 40°C. This helps reducing the building operating costs up to 15%.

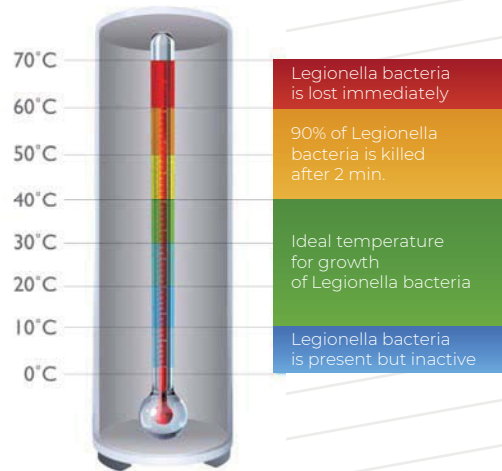
HEAT PUMPS WITH CAPACITY ABOVE 45 KW IN SPLIT VERSION

NOXA company offers a range of heat pumps with heating capacity over 45 kW and energy efficiency above 4.26.



ANTI-LEGIONELLA MODE

NOXA Pro heat pumps are equipped with a program that fights Legionella bacteria. Each week the unit reheats the DHW tank at temperature exceeding 70°C, thus protecting the domestic hot water against occurrence of the strain of Legionella bacteria.



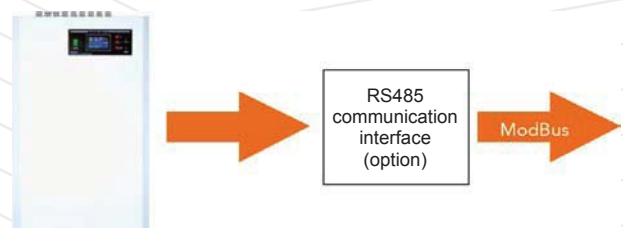
STAINLESS STEEL HEAT EXCHANGER

Stainless steel exchanger in ASI 316 corrosion resistance class and ASI 316 L solder resistance class allows the heat pump to operate in aggressive environment, that is with use of glycol solution or when heating the chlorinated water in swimming pools.



BMS COMMUNICATION

Heat pumps can be connected to the BMS building central control system through the ModBus protocol. Additional information necessary during order placement.



POLISH INTERFACE

NOXA Pro heat pump is equipped with a controller that supports Polish language. Besides basic functions like: building heating system control, domestic hot water heating and

swimming pool heating, we are able to program the automatic unit operation and the building heating curve.



HEATING IN THE EQUITHERM MODE

The NOXA Pro heat pumps are equipped with an automatic operation in the equitherm mode. It is up to user to decide which water supply temperature shall correspond to the specific ambient temperature. The available range of outlet water temperature is 20-60 °C.

Ustawienia Ogrzewania				
COFNIJ	+20 C	-	25.0	+
TRYB. EKWITERMALNY	+10 C	-	29.0	+
TRYB. BOOST 5 MIN	0 C	-	34.0	+
ZEWN. OFF	-10 C	-	44.0	+
TERMOSTAT	-20 C	-	48.0	+
ZAPISZ/WYJDŹ				

HEATING IN THE SWIMMING POOL MODE

It is impossible to use the swimming pool in the mid-seasons because of too low water temperature. Using the NOXA Pro heat pump allows to heat up the swimming pool water in the cost efficient manner and make use of the pool even in colder days. Special heat exchanger made of stainless steel, ensures operation even in case of chemically treated water. Temperature can be adjusted in the range of: 20~60°C - and additionally it is possible to shorten the heating time by

Ogrzewanie Basenowe		
COFNIJ		
ZAŁĄCZ/WYŁĄCZ		
TRYB. BOOST OFF		
ZAPISZ/WYJDŹ		
	TEMP. WYJ.	
	35.0	

using the bivalent source (available capacity range: 0-2-4-6 kW).

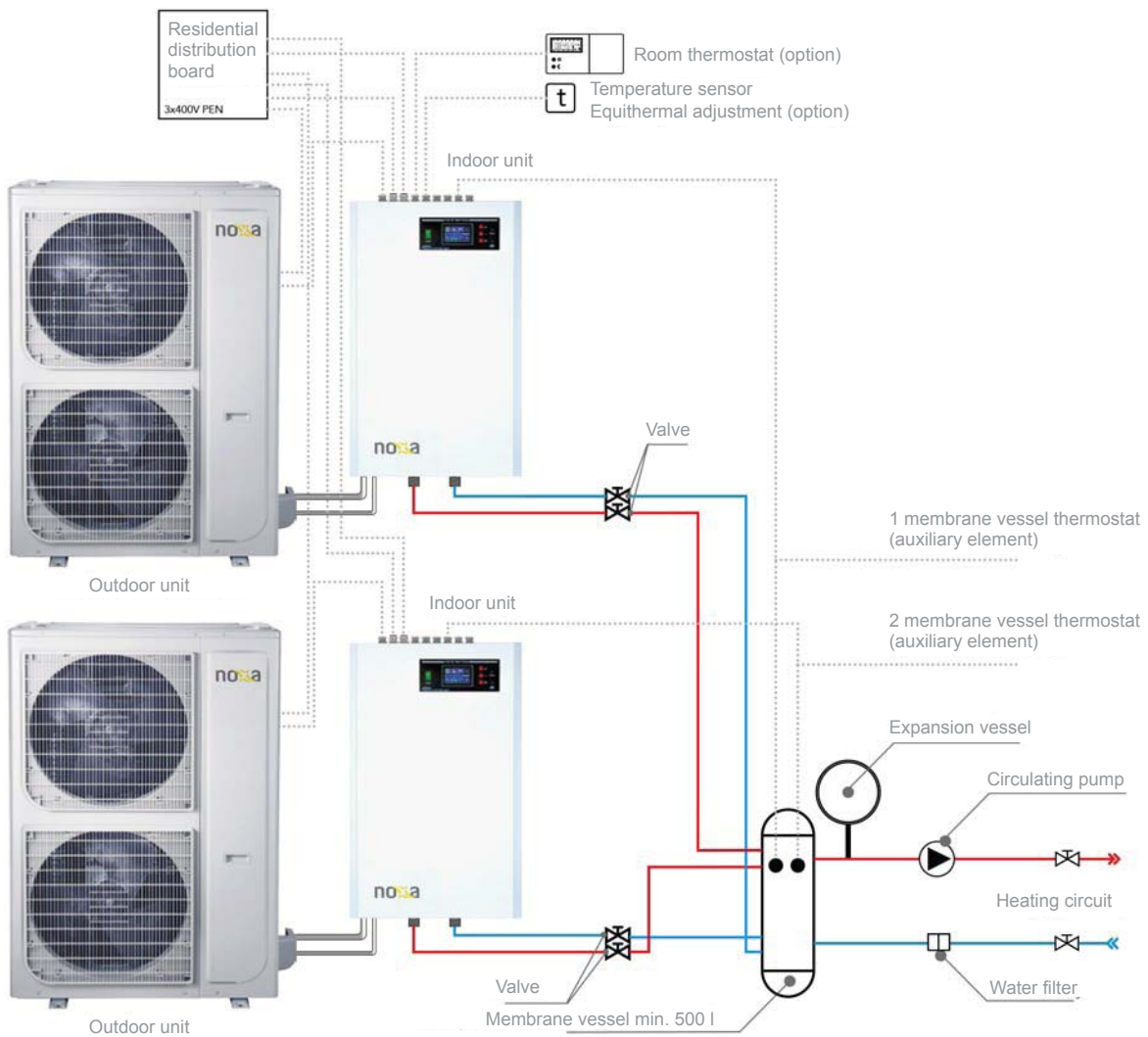
CASCADE OPERATION

The NOXA Pro heat pumps can be equipped with a possibility to connect their units in a cascade. This functionality enables to connect 2 pumps in a single heating system. If you wish to use the cascade functionality and connect more heat pumps, in order to create a more extensive

heating system with higher capacity, please contact our Technical and Sales Consultant.

DIAGRAM OF THE CASCADE HEAT PUMP CONNECTIONS

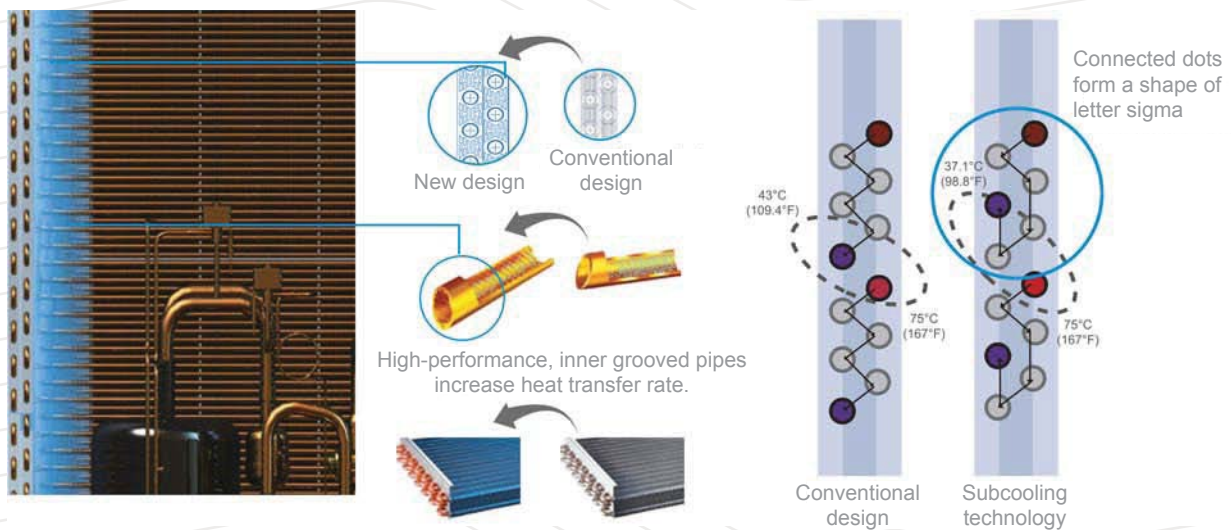
SCHEMATIC DIAGRAM - THE REAL STATE MAY DIFFER DEPENDING ON THE METHOD, PLACE AND SIZE OF INSTALLATION.



HIGH PERFORMANCE, SIGMA TYPE HEAT EXCHANGER WITH HYDROPHILIC COATING

The exchanger fins are factory covered with hydrophilic layer, which protects the exchanger against corrosion and prevents deposition of drops of water on its surface. This increases the operation periods after the exchanger is being

defrosted and expands the unit's lifespan, while maintaining its capacity and efficiency. Larger heat exchange surface, as a result of pipes ribbed from the refrigerant side, ensures high energy efficiency.



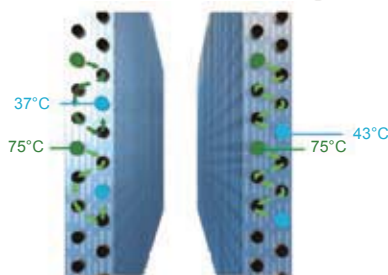
The Sigma technology features high heat exchange efficiency. Newly designed exchangers and fins with the hydrophilic layer, ensures

high-performance heat exchange in any operation mode of the unit.

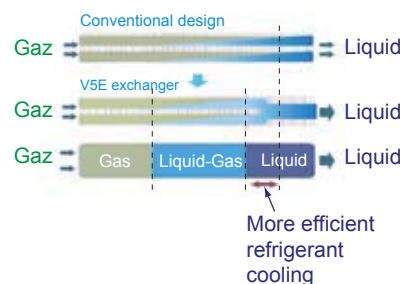
EXAMPLE

An exchanger with the traditional refrigerant flow enables to cool down the medium up to 43°C at the ambient temperature of +35°C. The Sigma technology, in the same conditions, cools

the refrigerant down to 37,1°C. This way, the condenser fan consumes less electric energy, and the refrigerant becomes subcooled.



delta type exchanger



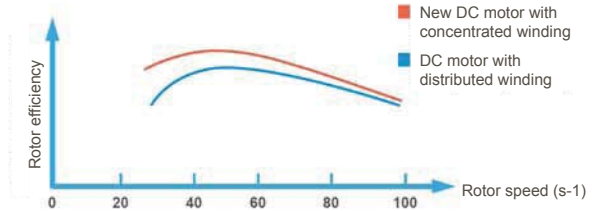
Improved heat exchange efficiency and savings on running costs, was obtained by changing the location of exchanger fins. Enlarged heat

exchange surface and decreased airflow resistance, resulted in more efficient unit operation.

HIGH PERFORMANCE DC INVERTER COMPRESSOR

NOXA units achieve the best energy efficiency class on the market: EER for cooling and COP for heating, by using a DC brushless reluctance compressor motor, DC fan motor and an exchanger with increased capacity. These advan-

tages allow up to 25% saving of energy consumption. Strong magnets ensure high torque and capacity, reflecting in 70% reduction of the unit size.



AUTOMATIC SNOW BLOWING OFF FUNCTION

During winter snow can accumulate on the outdoor unit, resulting in reduced system efficiency. The function of automatic snow blowing off is used to remove the accumulated snow-

fall, thus maintaining the highest system efficiency - even in regions with heavy snowfalls.



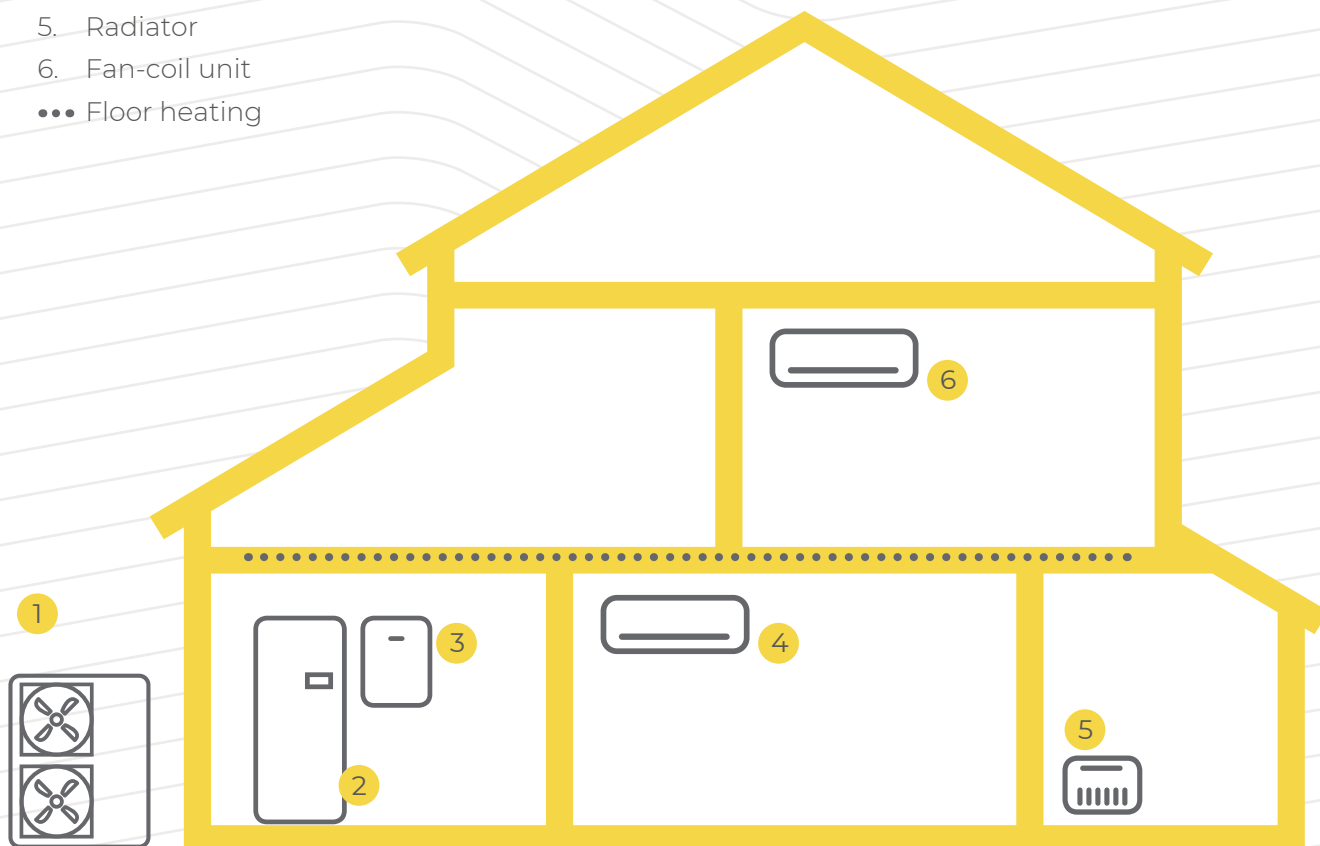
Noxa PRO



Another brand

INSTALLATION EXAMPLE

1. Outdoor unit
 2. Tank
 3. Indoor unit
 4. Fan-coil unit
 5. Radiator
 6. Fan-coil unit
- Floor heating



TECHNICAL DATA



Model			NXPRO-V800-V1	NXPRO-V1100-V1	NXPRO-V1400-V1
Heating capacity A7/W35*		kW	7,1	14,5	17,5
Power input A7/W35*		kW	1,92	3,54	4,60
COP for A7/W35*		-	3,70	4,10	3,80
Heating capacity A2/W35*		kW	5,3	10,8	14,5
Power input A2/W35*		kW	1,61	3,27	4,51
COP for A2/W35*		-	3,30	3,30	3,22
SCOP		-	3,65	3,86	3,60
Energy efficiency class		-	A++	A+++	A++
Cooling capacity A35/W10		kW	4,2	7,9	13,4
Electrical power absorption A35/W10		kW	1,29	2,45	4
EER A35/W10		-	3,26	3,22	3,35
Indoor unit			H800Vi	HT100Vi	HT1400Vi
Power supply		V~/Hz	400/3/50	400/3/50	400/3/50
Electrical protection		A	25	20	20
Dimensions	height	mm	805	805	805
	depth	mm	500	500	500
	width	mm	168	168	168
Weight		kg	51	52	52
Sound pressure level		dB(A)	23	25	25
Supply water temperature range	heating	°C	20 ~ 60	20 ~ 60	20 ~ 60
	cooling	°C	10 ~ 20	7 ~ 20	7 ~ 20
Operating temperature range for DHW		°C	-	-	-
Hydraulic connections (inlet/outlet)		cal (mm)	1 (DN 25)	1 (DN 25)	1 (DN 25)
Electric heaters power		kW	6	6	6
Electric heaters operating range		kW	2/4/6	2/4/6	2/4/6
Heat exchanger	manufacturer	-	Alfa Laval	Alfa Laval	Alfa Laval
	type	-	plate	plate	plate
Outdoor unit			NXOL-70B-11B	NXOL-100B-31B	NXOL-140B-31B
Power supply		V~/Hz	230/1/50	400/3/50	400/3/50
Electrical protection		A	16	20	20
Dimensions	height	mm	702	810	1333
	depth	mm	363	410	415
	width	mm	845	946	952
Weight		kg	66,8	81,5	106,7
Sound pressure level		dB(A)	62	64	66
Compressor	type	-	rotary	rotary	rotary
	technology	-	inverter	inverter	inverter
Recommended temperature range	heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24
	cooling	°C	-15 ~ 50	-15 ~ 50	-15 ~ 50
Refrigerant installation	liquid/gas	mm	ø9.52/ø15.9	ø9.52/ø15.4	ø9.52/ø15.9
Refrigerant	type	-	R32	R32	R32
	amount	kg	1,50	2,4	2,8

Parameters are based on the following conditions:
A7/W35: user side water temperature 30/35 °C, outdoor air temperature 7 °C,
A2/W35: user side water temperature 30/35 °C, outdoor air temperature 2 °C,
Sound pressure level measured at a distance of 1 m (according to PN EN 11203)

TECHNICAL DATA



Model			NXPRO-VI500-VI	NXPRO-VI600-VI	NXPRO-VI800-VI
Heating capacity A7/W35*		kW	21,0	28,0	32,0
Power input A7/W35*		kW	5,38	6,83	8,00
COP for A7/W35*		-	3,90	4,11	4,00
Heating capacity A2/W35*		kW	17,8	25,0	25,5
Power input A2/W35*		kW	5,74	8,06	9,19
COP for A2/W35*		-	3,10	3,10	3,10
SCOP		-	3,58	-	-
Energy efficiency class		-	A++	-	-
Cooling capacity A35/W10		kW	15,9	22,10	27,10
Electrical power absorption A35/W10		kW	4,76	6,25	7,68
EER A35/W10		-	3,34	3,54	3,53
Indoor unit			H1500Vi	H1600Vi	H1800Vi
Power supply		V~/Hz	400/3/50	400/3/50	400/3/50
Electrical protection		A	25	25	32
Dimensions	height	mm	805	805	815
	depth	mm	500	500	570
	width	mm	168	168	210
Weight		kg	54	55	65
Sound pressure level		dB(A)	25	25	28
Supply water temperature range	heating	°C	20 ~ 60	20 ~ 60	20 ~ 60
	cooling	°C	7 ~ 20	7 ~ 20	7 ~ 20
Operating temperature range for DHW		°C	-	-20 ~ +24	-20 ~ +24
Hydraulic connections (inlet/outlet)		cal (mm)	1 (DN 25)	1 (DN 25)	1 1/2 (DN 40)
Electric heaters power		kW	6	18	18
Electric heaters operating range		kW	2/4/6	6/12/18	6/12/18
Heat exchanger	manufacturer	-	Alfa Laval	Alfa Laval	Alfa Laval
	type	-	plate	plate	plate
Outdoor unit			NXOL-160B-3IB	NXOV-252A-3I5E	NXOV-280A-3I5E
Power supply		V~/Hz	400/3/50	400/3/50	400/3/50
Electrical protection		A	25	25	25
Dimensions	height	mm	1333	1635	1635
	depth	mm	415	790	790
	width	mm	952	990	990
Weight		kg	111,3	219,0	219,0
Sound pressure level		dB(A)	66	59	63
Compressor	type	-	rotary	scroll	scroll
	technology	-	inverter	inverter	inverter
Recommended temperature range	heating	°C	-15 ~ 24	-20 ~ 24	-20 ~ 24
	cooling	°C	-15 ~ 50	-5 ~ 48	-5 ~ 48
Refrigerant installation	liquid/gas	mm	ø9.52/ø15.9	ø12.7/ø25.4	ø12.7/ø25.4
Refrigerant	type	-	R32	R410A	R410A
	amount	kg	2,95	9,00	9,00

Parameters are based on the following conditions:

A7/W35: user side water temperature 30/35 °C, outdoor air temperature 7 °C,

A2/W35: user side water temperature 30/35 °C, outdoor air temperature 2 °C,

Sound pressure level measured at a distance of 1 m (according to PN EN 11203)

TECHNICAL DATA

Model			NXPRO-V2100-VI	NXPRO-V2200-VI
Heating capacity A7/W35*		kW	44,0	49,0
Power input A7/W35*		kW	11,00	12,56
COP for A7/W35*		-	4,00	3,90
Heating capacity A2/W35*		kW	38,1	42,7
Power input A2/W35*		kW	12,29	13,77
COP for A2/W35*		-	3,10	3,10
SCOP		-	-	3,86
Energy efficiency class		-	-	-
Cooling capacity A35/W10		kW	35,60	39,80
Electrical power absorption A35/W10		kW	13,39	11,74
EER A35/W10		-	3,43	3,39
Indoor unit			H2100Vi	H2200Vi
Power supply		V/~ /Hz	400/3/50	400/3/50
Electrical protection		A	40	50
Dimensions	height	mm	815	815
	depth	mm	570	570
	width	mm	210	210
Weight		kg	67	67
Sound pressure level		dB(A)	28	28
Supply water temperature range	heating	°C	20 ~ 60	20 ~ 60
	cooling	°C	7 ~ 20	7 ~ 20
Operating temperature range for DHW		°C	-20 ~ +24	-20 ~ +24
Hydraulic connections (inlet/outlet)		cal (mm)	1 1/2 (DN40)	1 1/2 (DN40)
Electric heaters power		kW	18	18
Electric heaters operating range		kW	6/12/18	6/12/18
Heat exchanger	manufacturer	-	Alfa Laval	Alfa Laval
	type	-	plate	plate
Outdoor unit			NXOV-400A-315E	NXOV-450A-315E
Power supply		V/~ /Hz	400/3/50	400/3/50
Electrical protection		A	30	35
Dimensions	height	mm	1635	1635
	depth	mm	790	790
	width	mm	1340	1340
Weight		kg	297,0	297,0
Sound pressure level		dB(A)	66	66
Compressor	type	-	scroll	scroll
	technology	-	inverter	inverter
Recommended temperature range	heating	°C	-20 ~ 24	-20 ~ 24
	cooling	°C	-5 ~ 48	-5 ~ 48
Refrigerant installation	ciecz/gaz	mm	ø15.9/ø31.8	ø15.9/ø31.8
Refrigerant	type	-	R410A	R410A
	amount	kg	13,00	13,00

Parameters are based on the following conditions:
A7/W35: user side water temperature 30/35 °C, outdoor air temperature 7 °C,
A2/W35: user side water temperature 30/35 °C, outdoor air temperature 2 °C,
Sound pressure level measured at a distance of 1 m (according to PN EN 11203)

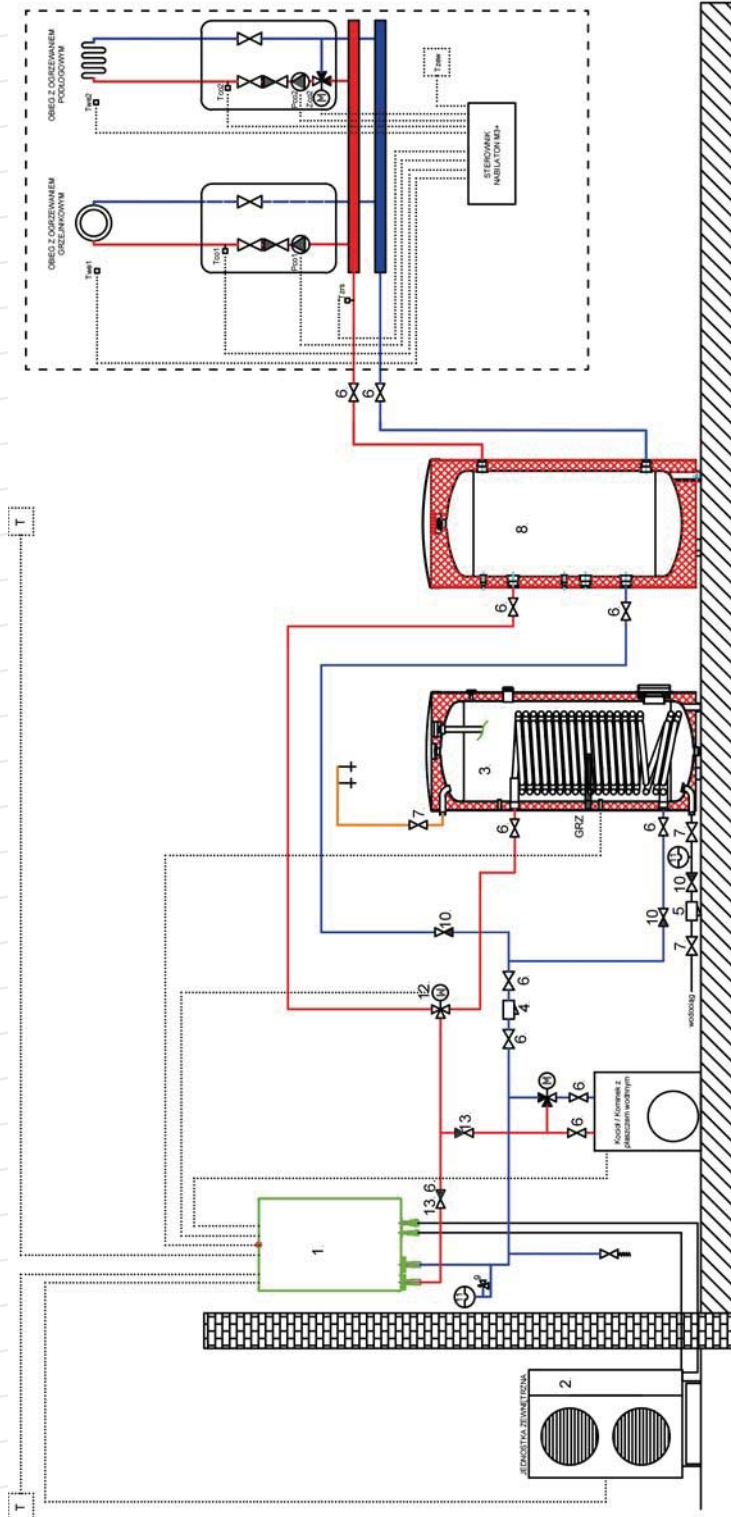
ACCESSORIES

Accessories	
Symbols	Description
S-type 816	Simple room thermostat
W-type 908	Room thermostat with weekly timer
SD-type 816	Simple room thermostat with remote communication
KD-type 918	Room thermostat with current temperature display and remote communication
WD-type 908	Room thermostat with weekly timer and remote communication
Evo System	Heating systems controller
NOXA M3+	Heating circuits controller

Accessories	
Symbols	Description
NAB-3W-F-25	3-way valve 1"
NAB-3W-F-40	3-way valve 1 1/2"
NAB-9310-230	3-way valve actuator

Accessories	
Symbols	Description
Modbus RS-232	Heat pump equipped with Modbus RS-232 communication module
Modbus RS-485	Heat pump equipped with Modbus RS-485 communication module

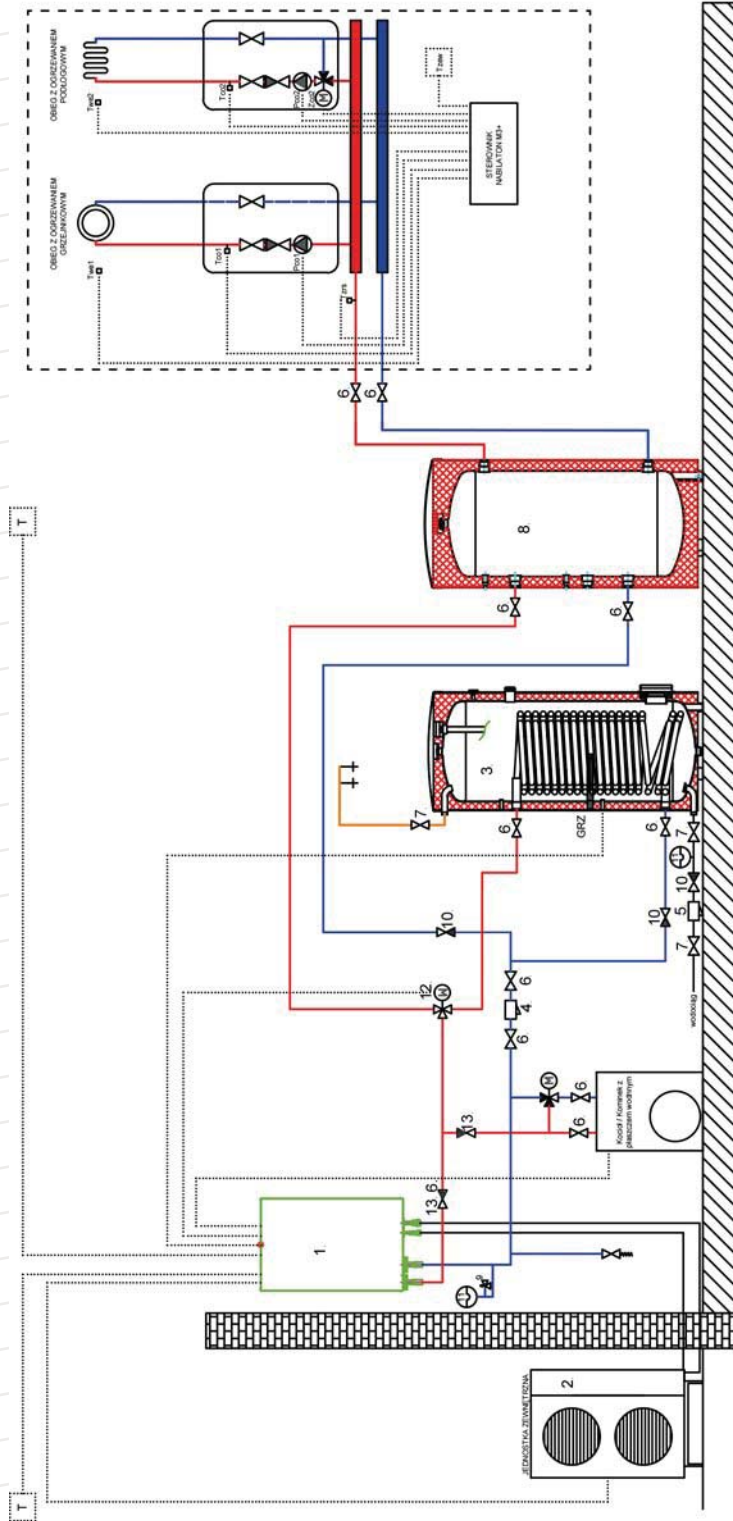
BOILER ROOM DIAGRAM



No.	Installation equipment	Q-ty	Heating power 6 kW	Heating power 10 kW	Heating power 15 kW	Heating power 20 kW	Heating power 25 kW	Heating power 28 kW	Heating power 40 kW	Heating power 45 kW
1.	Internal hydraulic module	1 pc	H800VI	H1100VI	HL400VI	H1500VI	HL600VI	H1800VI	H2100VI	H2200VI
2.	Outdoor unit	1 pc	NXOL-70B-1IB	NXOL-100B-3IB	NXOL-140B-3IB	NXOL-160B-3IB	NXOV-252A-3ISE	NXOV-280A-3ISE	NXOV-400A-3ISE	NXOV-450A-3ISE
3.	DHW VPB tank	1 pc	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R
4.	Mesh strainer, type Y	1 pc	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
5.	Mesh strainer, type Y	1 pc	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
6.	Shut-off valve	11 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
7.	Shut-off valve	3 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
8.	Buffer tank	1 pc	select	select	select	select	select	select	select	select
9.	Safety valve	1 pc	select	select	select	select	select	select	select	select
10.	Check valve	3 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
11.	Expansion vessel	2 pcs	select	select	select	select	select	select	select	select
12.	3-way valve	1 pc	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"
13.	Check valve	2 pcs	1"	1"	1"	1"	1"	1"	1"	1"

In order to obtain some of the functions, unit shall be equipped with additional options. Please contact the Technical-Sales Consultant for the selection of required components.

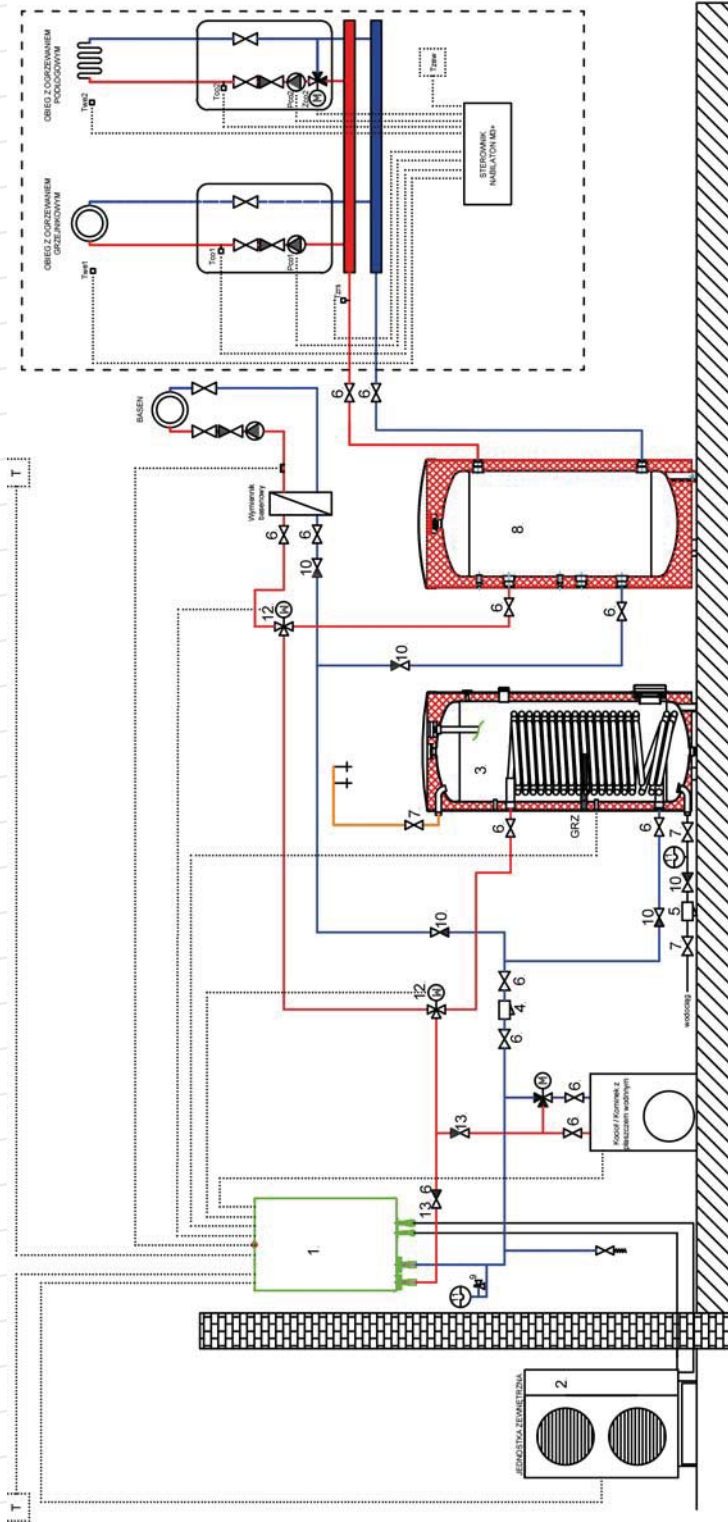
BOILER ROOM DIAGRAM



No.	Installation equipment	Q-ty	Heating power 6 kW	Heating power 10 kW	Heating power 15 kW	Heating power 20 kW	Heating power 25 kW	Heating power 28 kW	Heating power 40 kW	Heating power 45 kW
1.	Internal hydraulic module	1 pc	H800VI	H1100VI	H1400VI	H1500VI	H1600VI	H1800VI	H2100VI	H2200VI
2.	Outdoor unit	1 pc	NXOL-70B-1IB	NXOL-100B-3IB	NXOL-140B-3IB	NXOL-160B-3IB	NXOV-252A-3ISE	NXOV-280A-3ISE	NXOV-400A-3ISE	NXOV-450A-3ISE
3.	DHW VPB tank	1 pc	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R
4.	Mesh strainer, type Y	1 pc	1"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
5.	Mesh strainer, type Y	1 pc	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
6.	Shut-off valve	11 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
7.	Shut-off valve	3 pcs	select	select	select	select	select	select	select	select
8.	Buffer tank	1 pc	select	select	select	select	select	select	select	select
9.	Safety valve	1 pc	select	select	select	select	select	select	select	select
10.	Check valve	3 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
11.	Expansion vessel	2 pcs	select	select	select	select	select	select	select	select
12.	3-way valve	1 pc	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"
13.	Check valve	2 pcs	1"	1"	1"	1"	1"	1"	1"	1"

In order to obtain some of the functions, unit shall be equipped with additional options. Please contact the Technical-Sales Consultant for the selection of required components.

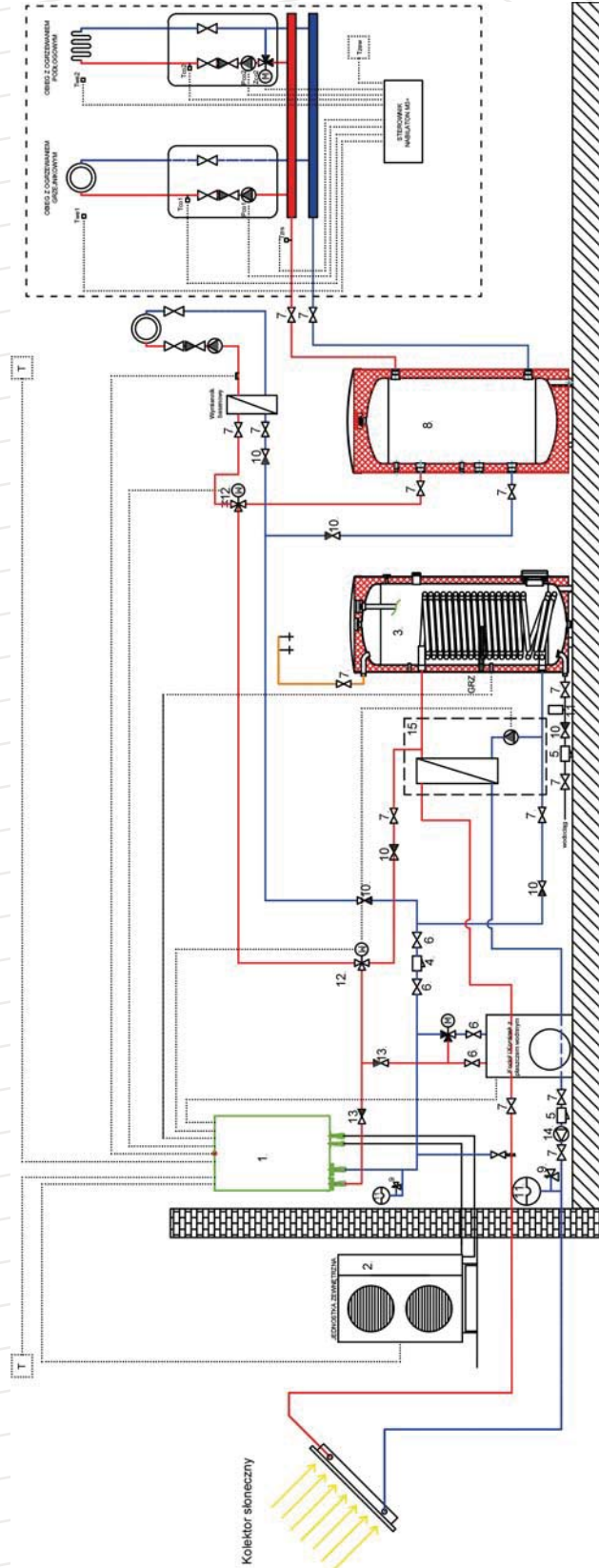
BOILER ROOM DIAGRAM



No.	Installation equipment	Q-ty	Heating power	Heating power	Heating power	Heating power	Heating power	Heating power	Heating power	Heating power	
1.	Internal hydraulic module	1 pc	H800Vf	6 kW	10 kW	15 kW	20 kW	25 kW	28 kW	40 kW	45 kW
2.	Outdoor unit	1 pc	NXOL-70B-1B	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	NXOV-400A-3I5E	NXOV-450A-3I5E
3.	DHW/VPB tank	1 pc	VPB 300 R	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	VPB 300 R
4.	Mesh strainer, type Y	1 pc	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
5.	Mesh strainer, type Y	1 pc	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
6.	Shut-off valve	13 pcs	1"	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
7.	Shut-off valve	3 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
8.	Buffer tank	1 pc	select	select	select	select	select	select	select	select	select
9.	Safety valve	1 pc	select	select	select	select	select	select	select	select	select
10.	Check valve	5 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
11.	Expansion vessel	2 pcs	select	select	select	select	select	select	select	select	select
12.	3-way valve	2 pc	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1 1/2" - 1 1/2" - 1"	1 1/2" - 1 1/2" - 1"	1 1/2" - 1 1/2" - 1"
13.	Check valve	2 pcs	1"	1"	1"	1"	1"	1"	1"	1"	1"

In order to obtain some of the functions, unit shall be equipped with additional options. Please contact the Technical-Sales Consultant for the selection of required components.

BOILER ROOM DIAGRAM



No.	Installation equipment	Q-ty	Heating power 6 kW	Heating power 10 kW	Heating power 15 kW	Heating power 20 kW	Heating power 25 kW	Heating power 28 kW	Heating power 40 kW	Heating power 45 kW
1.	Internal hydraulic module	1 pc	H800VI	H1100VI	H1400VI	H1500VI	H1600VI	H1800VI	H2100VI	H2200VI
2.	Outdoor unit	1 pc	NXOL-70B-3IB	NXOL-100B-3IB	NXOL-140B-3IB	NXOL-160B-3IB	NXOV-252A-3ISE	NXOV-280A-3ISE	NXOV-400A-3ISE	NXOV-450A-3ISE
3.	DHW VPB tank	1 pc	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R	VPB 300 R
4.	Mesh strainer, type Y	1 pc	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
5.	Mesh strainer, type Y	2 pcs	1"	1"	1"	1"	1"	1"	1"	1"
6.	Shut-off valve	4 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
7.	Shut-off valve	14 pcs	select	select	select	select	select	select	select	select
8.	Buffer tank	1 pc	select	select	select	select	select	select	select	select
9.	Safety valve	2 pc	select	select	select	select	select	select	select	select
10.	Check valve	6 pcs	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
11.	Expansion vessel	3 pcs	select	select	select	select	select	select	select	select
12.	3-way valve	2 pc	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1" - 1" - 1"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"	1 1/2" - 1 1/2" - 1 1/2"
13.	Check valve	2 pcs	1"	1"	1"	1"	1"	1"	1"	1"
14.	Solar circuit pump	1 pc	select	select	select	select	select	select	select	select
15.	Solar Kit	1 pc	option	option	option	option	option	option	option	option

In order to obtain some of the functions, unit shall be equipped with additional options. Please contact the Technical-Sales Consultant for the selection of required components.