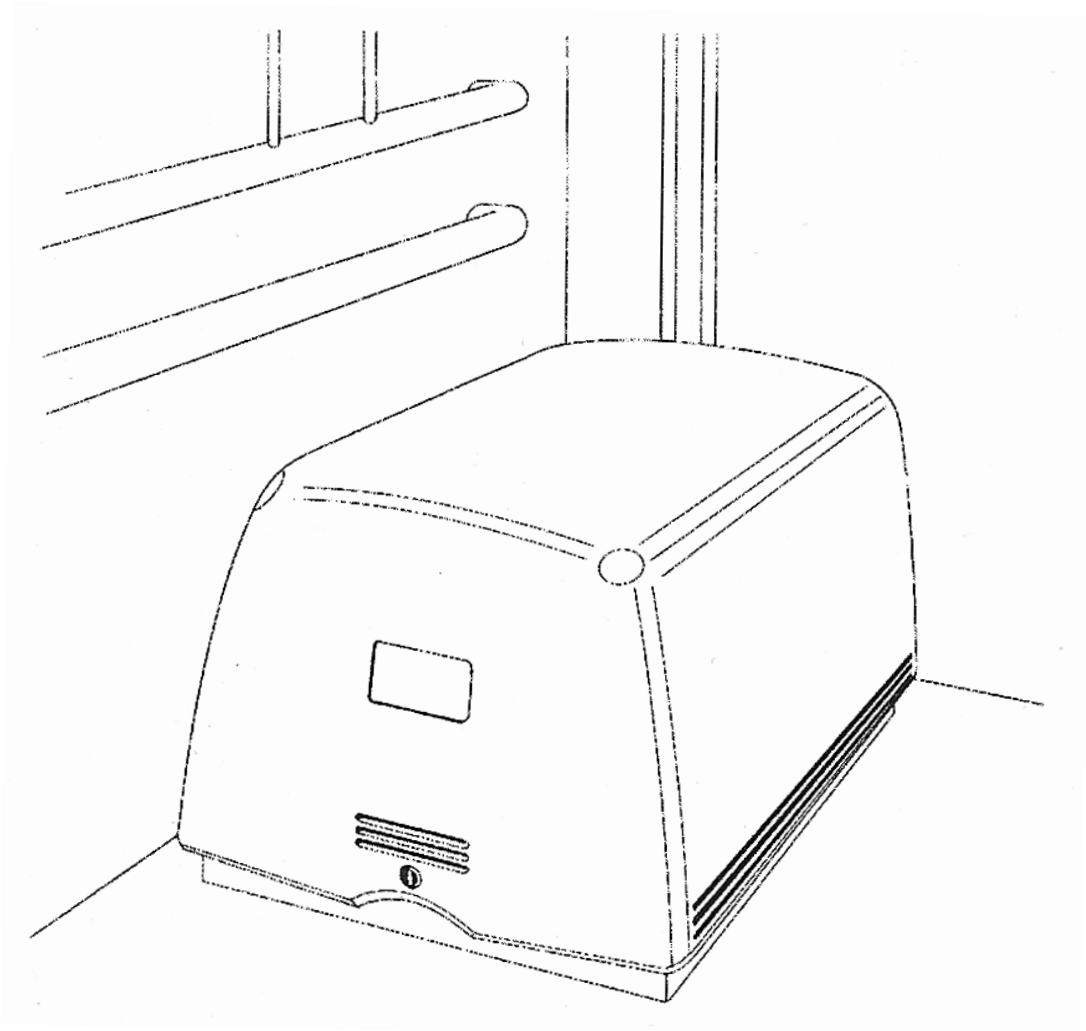
Dimplex

CE

INSTALLATION and OPERATING INSTRUCTIONS

Water-Water Heat Pump for indoor installation

WI 40CG WI 90CG



Order No.: 452225.66.94 FD 8209

1 PLEASE READ IMMEDIATELY

1.1 Important notes

CAUTION ! **During transport the heat pump must not be inclined to any side by more than 45°.**

CAUTION ! **The heat pump is not attached to the wooden grating.**

CAUTION ! **Disconnect all voltage supplies prior to opening the unit.**

CAUTION ! **Service of the heat pump must be performed by authorized and experienced service personnel only.**

CAUTION ! **The working fluid R407C is free of CFC, does not disturb ozone and is non-combustible.**

CAUTION ! **Ensure the clockwise rotating field when connecting the supply cable.**

CAUTION ! **The covering hood can not be painted.**

CAUTION ! **The well water must be of the water quality specified.**

CAUTION ! **The startup procedure must follow the Installation and Operanting Instructions for the heat pump control.**

CAUTION ! **After cleaning it is essential to neutralize the system by suitable means in order to prevent secondary damages to the heating system.**

CAUTION ! **The heat pump is not intended to meet the increased heat requirements of de-humidifying a building. Therefore it is necessary to use dedicated equipment provided by the client to generate the extra amount of heat needed for that purpose.**

1.2 Legal requirements and guidelines

The heat pump complies with all relevant DIN/ VDE regulations and EEC directives. These are listed in the attached CE conformity statement.

Electric wiring of the heat pump must comply with the applicable VDE, EN and IEC standards. Furthermore, the electrical supply conditions stipulated by the power provider must be observed.

The heat pump must be interconnected with the heat source and the heating system in compliance with the relevant regulations.

CAUTION ! **Service of the heat pump must be performed by authorized and experienced service personnel only.**

1.3 Energy-saving heat pump operation

By operating this heat pump you contribute to the protection of our environment. Proper dimensioning of the heating system and the heat source are of prime importance for the efficiency of heat pump operation. Low water inlet temperatures are of particular importance. Therefore, all connected heat consumers must be suitable for low water inlet temperatures. An increase in the heating water temperature by 1 K causes an increase in the electrical power consumption by approx. 2.5%. An underfloor heating system with forward temperatures between 30 and 40 °C is particularly well suited for energy-saving operation.

2 APPLICABILITY OF THE HEAT PUMP

2.1 Field of application

The water-water heat pump can be used in existing or new heating plant installations. Water is used as the heat transfer medium. The water may be supplied from a well or similar sources.

CAUTION ! **The well water must be of the water quality specified.**

Under normal conditions an intermediate circuit has to be provided. If the system is to operated without an intermediate circuit it is, independent of the leagl requirements, necessary to perform a water analysis in order to be able to detzermine the compatability of the ground water with the evaporator of the heat pump (refer to the project designing and installation manual for heating heat pumps).

2.2 Mode of operation

A well pump feeds the water to the evaporator of the heat pump. There its thermal content is transferred to the working fluid (refrigerant) in the refrigeration circuit.

Then the working fluid is sucked into the electrically powered condensor, where it is condensed , i.e. "pumped" to a higher temperature level. How-ever, the electric energy used to drive this process is not lost but is also transferred to the working fluid.

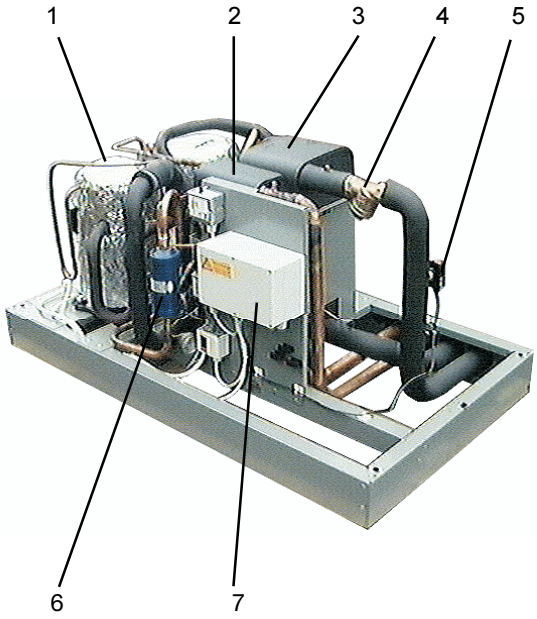
Finally, the working fluid reaches the liquefier unit where its thermal energy is transferred to the water circulating through the heating water system. Depending on the operating point, the temperature in the heating water system may rise up to 55 °C.

3 BASIC UNIT

The basic unit consists of the heat pump for indoor installation, covering hood and basic control and is delivered ready for installation. The refrigerating circuit is filled with the refrigerant R407C. The covering hood is lined with sound insulating material.

The basic control contains all components that are required for heat pump operation. The power cable and the load cable (accessories) between heat pump and basic control have to be installed by the client.

The well pump, that is also provided by the client, has to be interfaced with the basic control. Make sure that the rating of the motor protector istalled by the client is sufficient for the pump in use.



1) Condensor
2) Liquefier
3) Evaporator
4) Dirt trap
5) Flow switch
6) Terminalbox
7) Filter dryer

CAUTION ! **The working fluid R407C is free of CFC, does not disturb ozone and is non-combustible.**

CAUTION ! **The covering hood can not be painted.**

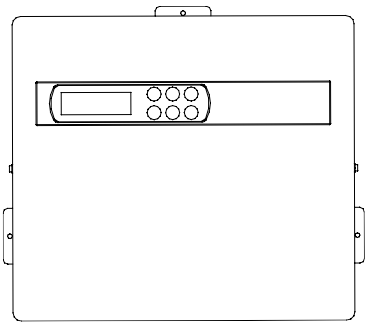
4 ACCESSORIES

4.1 Control cable

Two control cables serve to interconnect the heat pump control and the basic control unit as well as the basic control unit and the terminal box of the heat pump. These cables are available in several lengths.

4.2 Heat pump control

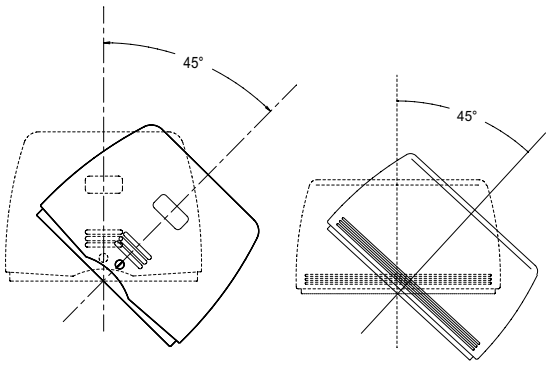
The use of a heat pump control from our product line is mandatory for the operation of your water-water heat pump. The heat pump control is a comfortable electronic control device. It is available as an accessory. The heat pump control regulates and monitors the entire heating system in regard to outdoor temperatures, hot water heating process and safety-relevant equipment. The functional method and the operation of the heat pump control is described in detail in the accompanying Installation and Operating Instructions.

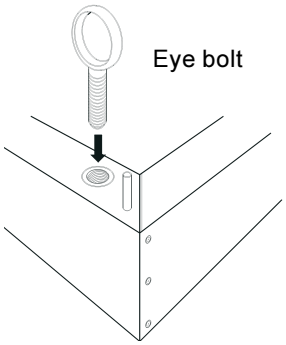


5 TRANSPORT

A lift truck can be used for transporting the heat pump over smooth surfaces. Carrier belts should be used where it must be transported across uneven surfaces or through staircases. The belts can be inserted directly through the wooden grate. As an alternative the unit may be lifted by means of eyebolts that can be screwed into the corners of the base frame.

CAUTION ! **The heat pump is not attached to the wooden grate.**





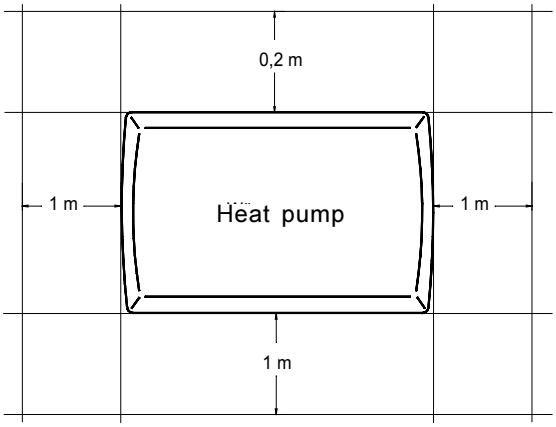
CAUTION ! **The heat pump must not be inclined by more than 45° (to any side).**

6 INSTALLATION SITE

6.1 General notes

The heat pump is intended for indoor installation. The mounting surface must be smooth, solid and load-bearing. If necessary, the heat pump must be levelled by shimming.

The installation site of the heat pump must be chosen so that service work can be performed easily. This is ensured by a free space of about 1 m at the front and both sides of the heat pump.



6.2 Sound emission

Owing to the sound insulation the heat pump emits very little noise. But placing a suitable decoupled rubber mat underneath the heat pump base frame is recommended in order to prevent any sound conductance to the foundation, especially in case of uneven foundations.

7 INSTALLATION

7.1 Connection of the heating system

Before connecting the heat pump to the heating system, the heating plant should be flushed thoroughly to prevent any particles to flow through the heating circuit which could impair smooth heatpump operation.

Flexible pressure hoses should be used for connections in order to prevent noise from being conducted to the heating circuit.

The completed heating circuit must be filled, ventilated and checked for leakage. Where the risk of frost exists the filled system must remain in operation continuously so that frost damage is precluded.

7.2 Connection of the heat source

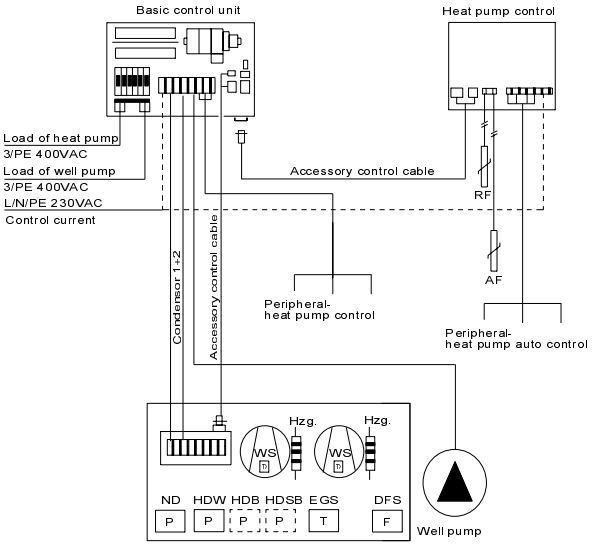
Connect the water lines from the well to the flow and return lines of the heat source.

For this observe the refrigeration and hydraulic plans.

CAUTION !

The well water must be of the water quality specified.

7.3 Connection to power supply



All components needed for connecting the electric supply to the heat pump are located in the basic control unit. Mount this unit to a smooth wall surface of the building. A heat pump control is necessary for controlling these components. The wiring of the descrete components contained in the basic control unit and in the heat pump control must be provided by the client (plug connectors).

Power supply for the basic control unit
A breaker controlling all poles with at least 3 mm contact gap (e.g. EVU blocking contactor, power contactor) and a three pole automatic circuit breaker separating simultaneously all external leads must be provided in the power feed to the basic control unit. Select the wiring cross section according to the power consumption of the heat pump, the technical power connecting requirements stipulated by the respective power provider and the requirements of VDE 0100. The power consumption of the heat pump is specified in the technical documentation. The terminals (X1-L1/L2/L3 at the circuit breaker) are rated for a maximum wire gauge of 16 mm².

It must be ensured that the the power supply to the terminals of the well pump will not be turned off by the tariff contactor to make sure that the cutoff delay of the well pump remains effective.The motor protector installed by the client must be adjusted according to the data specified by the pump manufacturer. The terminals for the power supply to the well pump are X1-L11/L21/L31.

Control voltage
The basic control unit is powered by the heat pump control via the control cable. A separate cable to the basic control unit is not required.

Connection between the basic control unit and the terminal box of the heat pump
The connection between the terminal box of the heat pump and the basic control unit as well as between the brine pump and the basic control unit must be provided by the client.

Select the cable cross section according to the power consumption of the heat pump (see technical specifications) and the power consumption of the used brine circulating pump.

Run the power cables in the existing plastic tubing.

Terminals of the condenser:

X1-1/2/3/PE

X1-4/5/6/PE

Terminals of the well pump:

X1-7/8/9/PE

Control cable between the basic control unit and the terminal box of the heat pump
The control cable between the terminal box of the heat pump and the basic control unit is available as a custom-made cable (see price list). Connect the round 16-pole connector of the control cable to the basic control unit. Slightly rotate the connector ccw and cw to feel for the anti-rotation lock. Then insert the connector until the ring nut of the contactor catches. Turn the ring nut clockwise to secure the connector in its position. Feed both the rectangular connec-tors through the opening in the bottom right corner of the basic control unit and plug them into the matching connectors (non-interchange-able). Use the strain relief to secure the control cable in the basic control unit . Any excessive cable length should be kept in the cable duct or as a loop on the wall.

Connection between the heat pump control and the basic control unit (using the 1.5 m control cable, see price list)

The power for the heat pump control can be provided from the basic control unit. Plug the round connector of the cable into the basic control unit and connect the two rectangular connectors to the heat pump control. A more detailed description is contained in the instal-lation and operating instructions for the heat pump control.

CAUTION !

Ensure the clockwise rotating field when connecting the supply cable. (If the field rotates ccw the heat pump generates no power and is very loud.)

8 STARTUP

8.1 General notes

For reasons of warranty, comissioning of the heat pump should be performed by authorized service personnel.

8.2 Preparation

Confirm the following prior to startup:

- The heat source system and the heating water circuit must have been filled and tested.
- The shut-off valves in the well and heating circuits must be in the correct position.
- The power supply field must rotate in the cw direction.
- The heat pump control must have been prepared according to the relevant installation and operating instructions.

CAUTION !

The startup procedure must follow the installation and operating instructions for the heat pump control.

9 MAINTENANCE/ CLEANING

9.1 Maintenance

The heat pump operates maintenance-free. Make sure that the heat source and heating circuits are kept free from impurities to prevent malfunction of the heat pump due to dirt collections in the heat exchangers. Should a malfunction of that type occur, clean the unit as described below.

CAUTION ! **Disconnect all voltage supplies prior to opening the unit.**

9.2 Cleaning the heating side

Oxygen may cause the formation of oxydation products (rust) in the hot water circuit. Pipe connections must not allow oxygen diffusion which applies particularly to pipes used in underfloor heating. Remnants of lubricants and sealants may also contaminate the heating water.

If contamination is so bad that the performance of the liquefier in the heat pump is degraded, the installation must be cleaned by a specialist.

Based on today's experience we suggest to use 5% phosphorous acid for general cleaning or, if cleaning is required in shorter intervals, 5% formic acid .

In both cases the cleaning liquid should be used at room temperature. Scavenging the heat exchanger in the direction opposite to the normal flow is recommendable.

In order to prevent acid-containing cleaning liquid from entering the heating water circuit we suggest to connect the scavenging unit directly to the forward and return lines of the liquefier in the heat pump.

Following that it is essential to thoroughly rinse the system with a suitable neutralizing agent so that all remnants of the cleaning agent are removed from the system.

Handle acids with care. Always follow the instructions of the occupational associations.

In case of doubt consult with the manufacturer of the cleaning agent!

CAUTION ! **After cleaning it is essential to neutralize the system by suitable means in order to prevent secondary damages to the heating system.**

CAUTION ! **Attention - heating plant installers - Depending on the fill water quality and volume occasional dirt collection (rust sludge, calcerous deposits) may occur especially in case of mixed installations and plastic piping so that the performance of the heating system may be compromized. This is due to the water hardness and the oxygen solved in the fill water and the oxygen in the air that may enter the system at valves, fittings and plastic pipes (oxygen diffusion). To prevent this from happening we recommend the use of a physical water treatment device like e.g. ELYSATOR .**

9.3 Cleaning the heat source side

Install the enclosed dirt trap in the heat source inlet of the heat pump in order to protect the evaporator from impurities. After the initial startup the filter screen of the dirt trap should be cleaned regularly in relatively short intervalst. As soon as detectable impurities become less the intervalls can be extended accordingly.

10 MALFUNCTIONS/ TROUBLE SHOOTING

10.1 Eliminating minor faults

This heat pump is a maintenance-free high-quality product and should run without any problems. Most faults that may occur can be remedied by the user. Please refer to chapter 'Malfunctions and Troubleshooting' in the installation and operating instructions for the heat pump control.

If you are not successful in eliminating a fault please contact your customer service.

CAUTION ! **Service of the heat pump must be performed by authorized and experienced service personnel only.**

11 SHUTDOWN

11.1 Shutdown during summer

Heat pumps used exclusively for heating purposes can be shut down for the summer time (no hot water service). This is done by means of the operating mode selector of the heat pump control. Please observe the Installation and Operating Instructions.

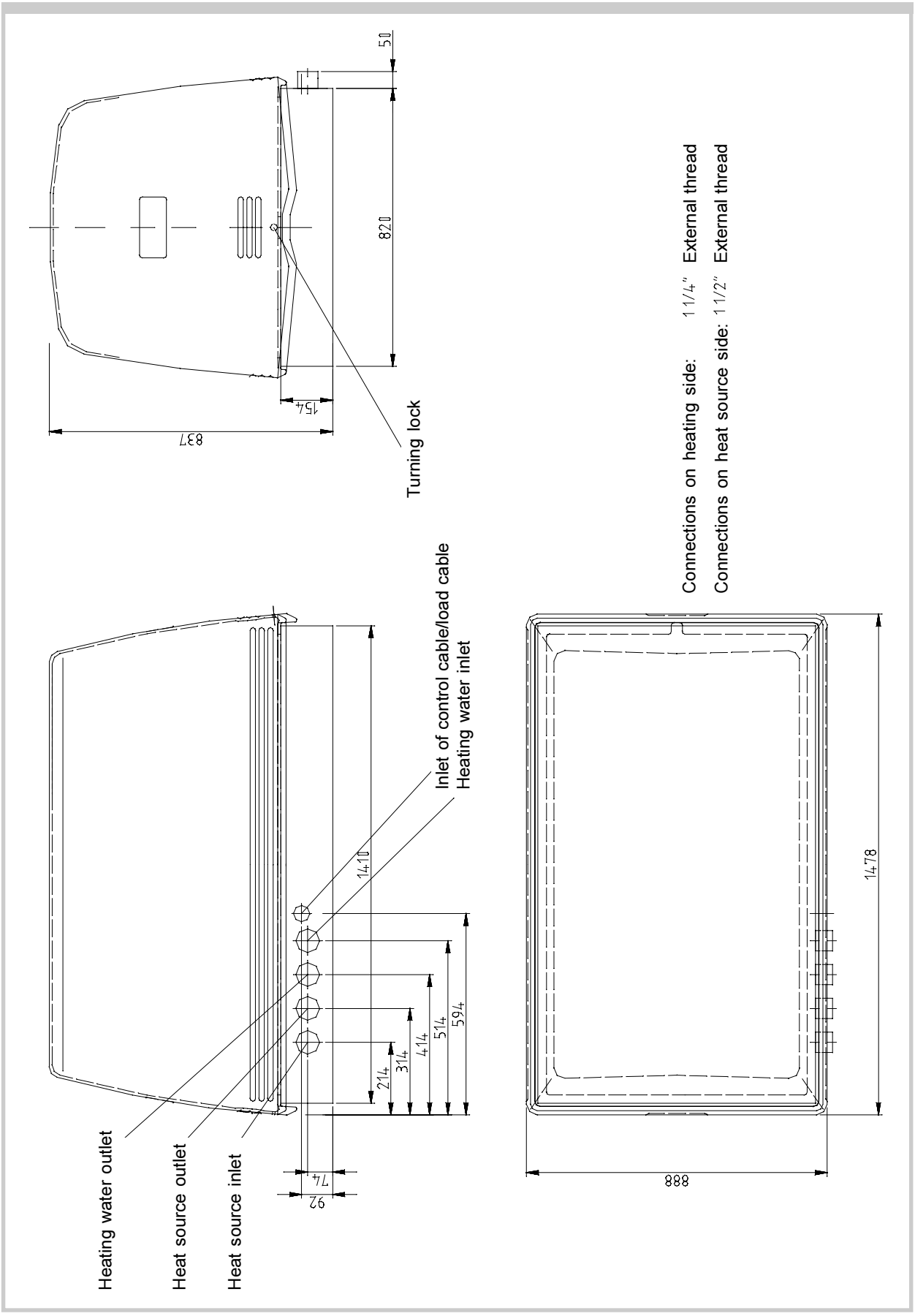
Due to the risk of frost damages, shutdown without draining the heating circuit is permissible only in regions where outdoor temperatures do not drop below 0 °C .

11.2 Final decommissioning/disposal

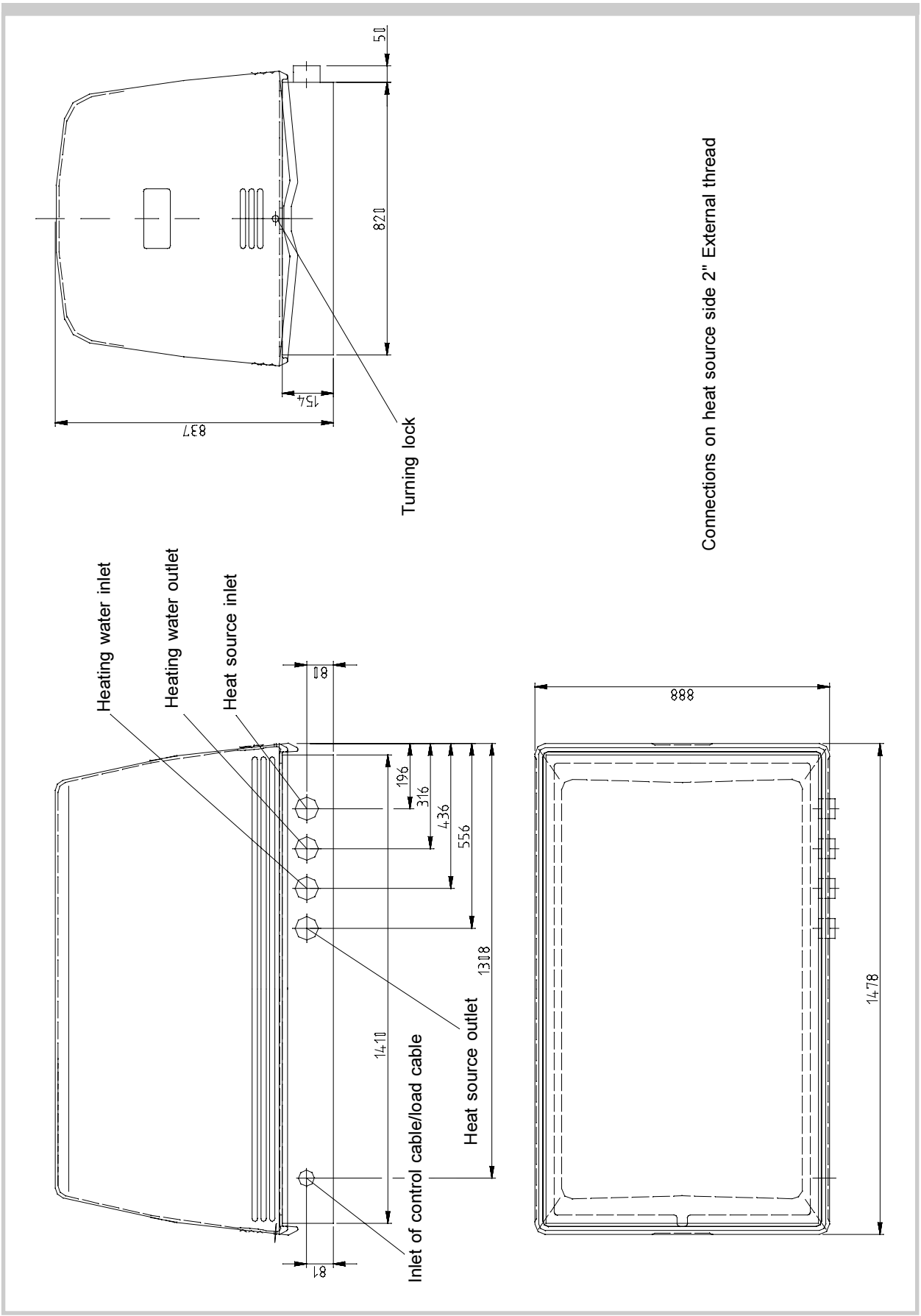
Before removing the heat pump it is necessary to disconnect all cables as well as the connections to the heat source and the heating system. Furthermore, all electrical supplies must be switched off and all valves must be closed. Please observe the applicable environmental regulations in regard to recycling, reuse and disposal of working materials and fluids according to DIN EN 378, when taking the heat pump out of operation. Especially the disposal of refrigerants and refrigeration machine oil must comply with the relevant regulations.

12 ANNEXE

12.1.1 Heat pump ..40C



12.1.2 Heat pump ..90C



Equipment data

EQUIPMENT DATA for water/water heating heat pump					
1.	TYPE AND MARKETING DESIGNATION			..40C	..90C
2.	MODEL				
2.1	Type of protection according to EN 60 529			IP 24	IP 24
2.2	Site of installation			indoors	indoors
3.	PERFORMANCE DATA				
3.1	Temperature ranges for operation Heating water flow Cold water (heat source)		 °C °C	 up to 55 +7 to +25	 up to 55 +7 to +25
3.2	Heating water temperature swing at B0 / W 35		K	9.6	9.6
3.3	Heating efficiency / performance figure at W7 / W55 [1]		kW/-- [5] kW/-- [6]	18.1 / 3.0 38.6 / 3.2	40.3 / 3.2 80.1 / 3.2
		at W10 / W50 [1]	kW/-- [5] kW/-- [6]	20.6 / 3.8 43.0 / 4.0	45.8 / 4.0 88.1 / 3.8
		at W10 / W35 [1]	kW/-- [5] kW/-- [6]	23.4 / 5.9 44.4 / 5.7	49.8 / 5.9 91.2 / 5.4
3.4	Sound power level		dB(A)	59	70
3.5	Heating water flow at internal pressure difference		m³/h / Pa	3.5 / 14,000	8.0 / 13,000
3.6	Brine flow at internal pressure difference (heat source)		m³/h / Pa	9.5 / 17,500	20.0 / 19,000
3.7	Refrigerant; total filling weight		type/kg	R407C / 6.7	R407C / 15.0
4.	DIMENSIONS; CONNECTORS AND WEIGHT				
4.1	Unit dimensions without connectors		WxBxL mm	830 x 1480 x 890	830 x 1480 x 890
4.2	Unit connectors for heating circuit		inch	G 1 ¼" outside	G 2" outside
4.3	Unit connectors for heat source		inch	G 1 ½" outside	G 2" outside
4.4	Weight of transport unit(s) incl. packaging		kg	309	460
5.	ELECTRIC POWER CONNECTION				
%:!	Nominal voltage (fused)		V / A	400 / 35	400 / 63
5.2	Nominal power consumption [1]	W10 / W35	kW	7.81	16.97
5.3	Starting current with soft starter		A	26	60
5.4	Nominal current W10 / W35 / cosφ [5]		A / --	14.1 / 0.8	30.7 / 0.8
6.	COMPLIES WITH EUROPEAN SAFETY REGULATIONS			[3]	[3]
7.	OTHER DESIGN CHARACTERISTICS				
7.1	Water inside unit is protected from freezing			no	no
7.2	Power settings			2	2
7.3	Controller internal/external			external	external

[1] These data characterize the size and performance of the system. Method switch-over point and control system must be considered for economy and energy considerations. In this context the specification like e.g. W10 / W55 means 10 °C heat source temperature and 55 °C water flow temperature.

[2] Not required for installation in frost-proof locations.

[3] See CE Conformity Certificate:

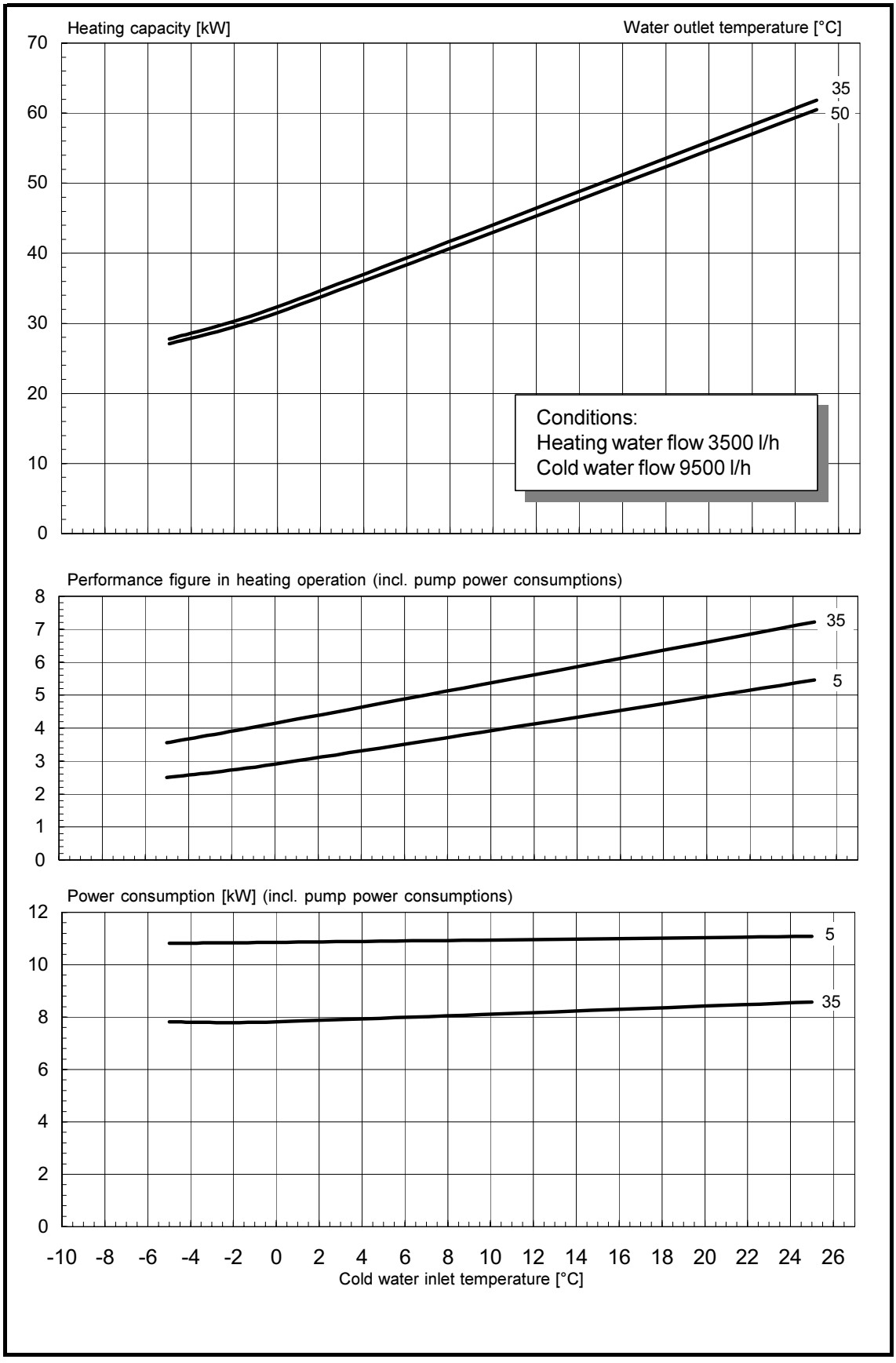
[4] Please note that more space is required for pipe connections, operation and maintenance.

[5] Operation with two condensers.

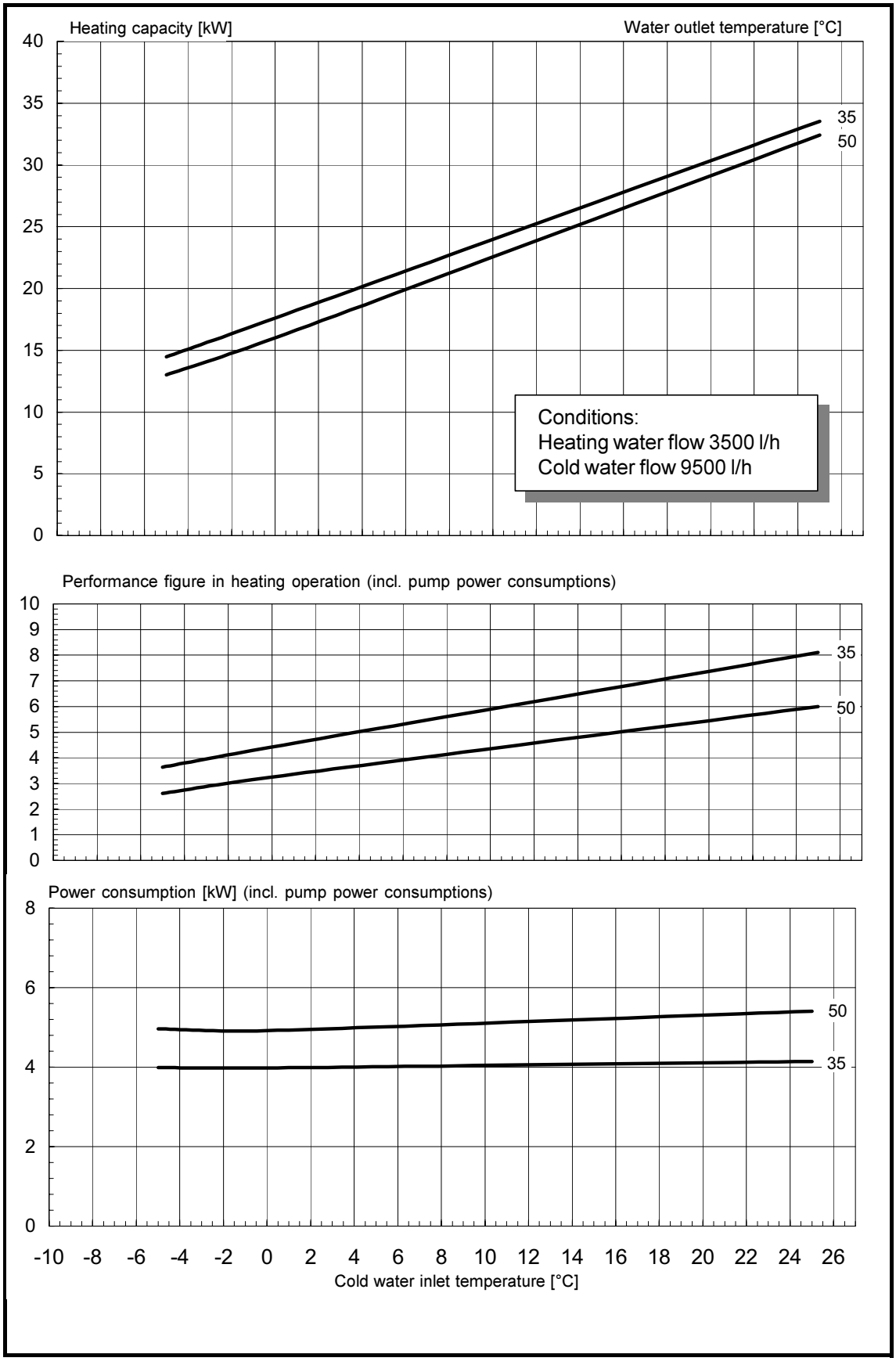
6) Operation with one consdenser

Technical modifications reserved Issued: March 13, 2002

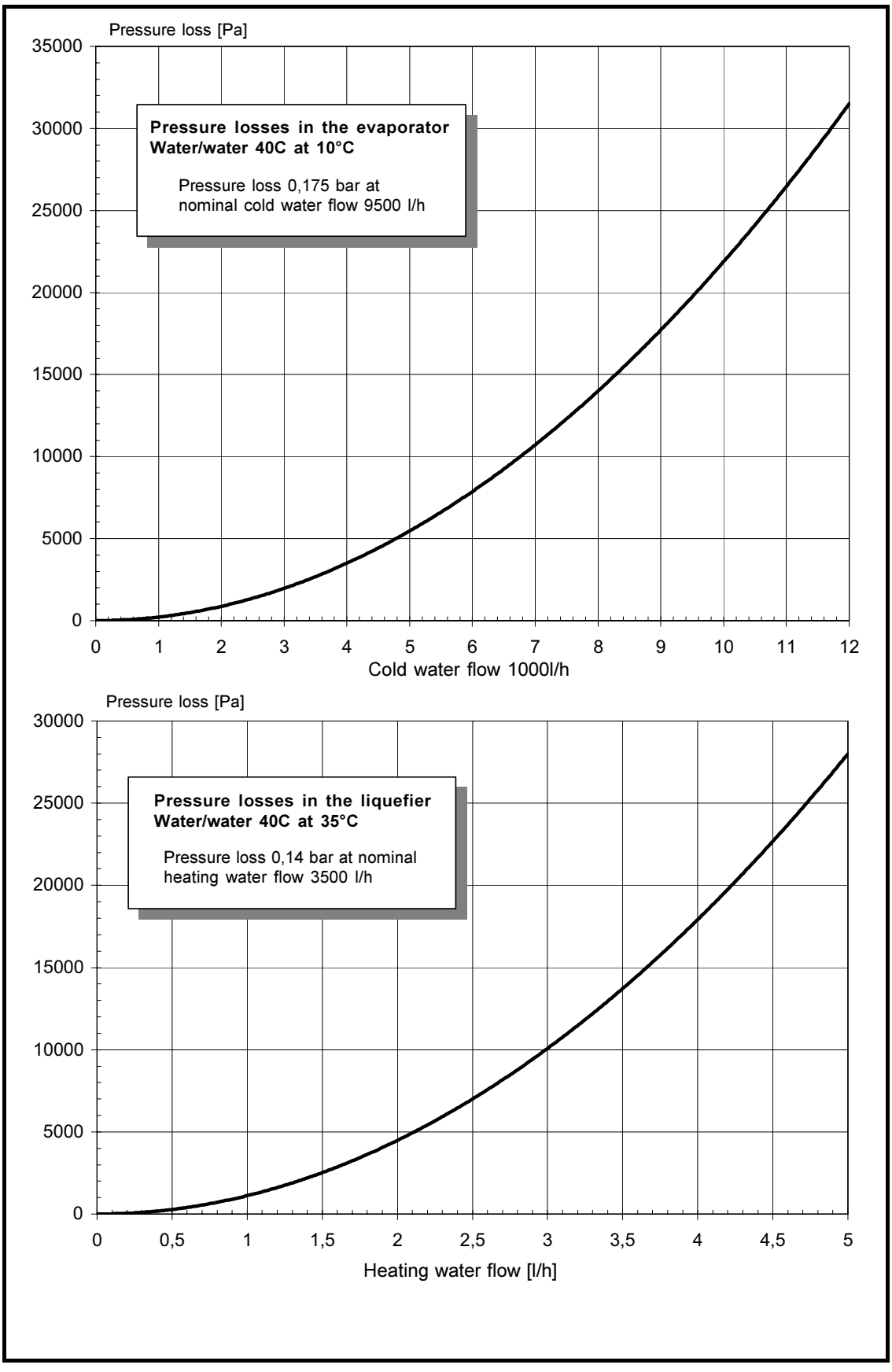
12.3.1 Characteristics ..40C / 2 condensers



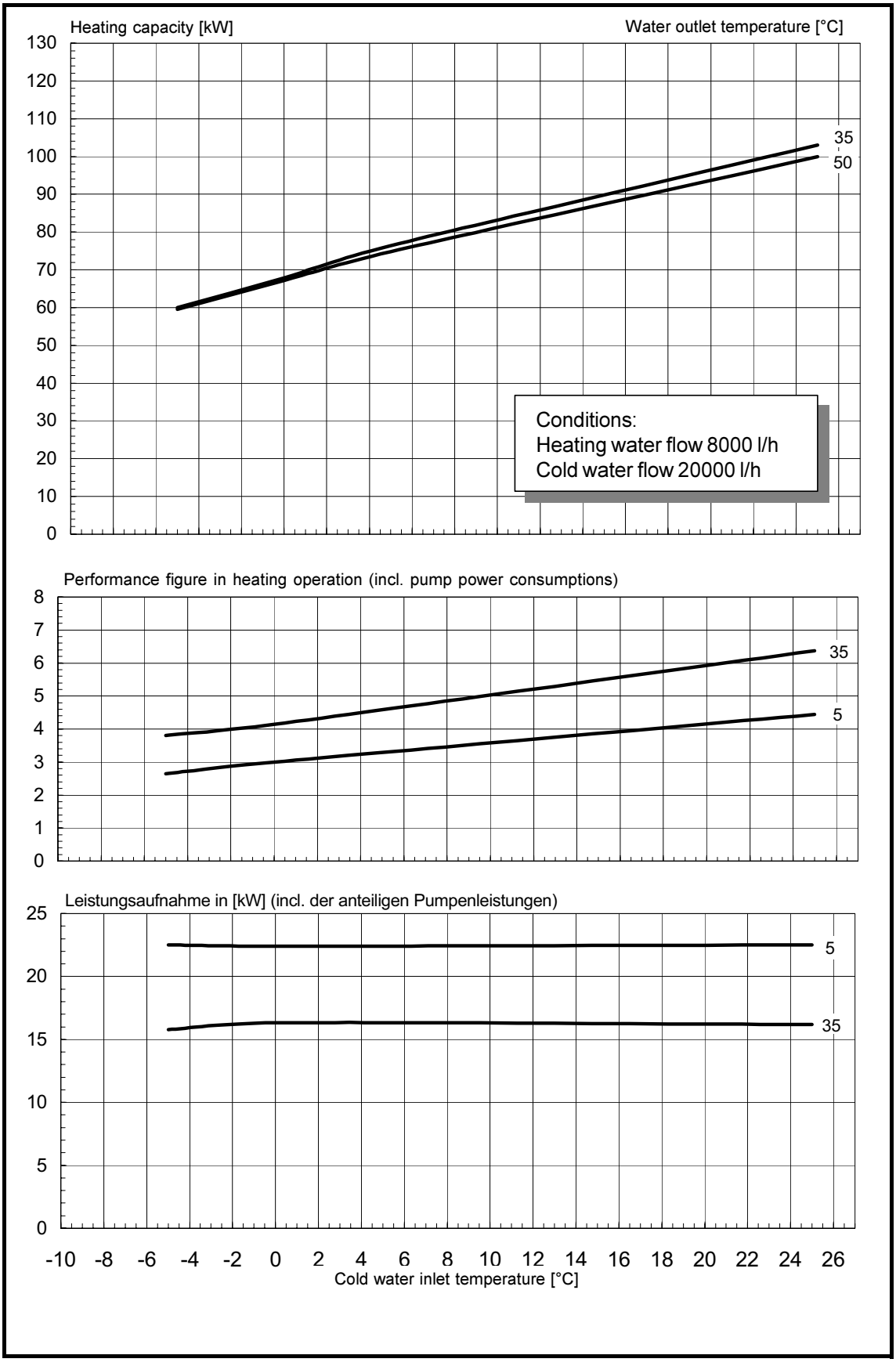
12.3.2 Characteristics ..40C / 1 condenser



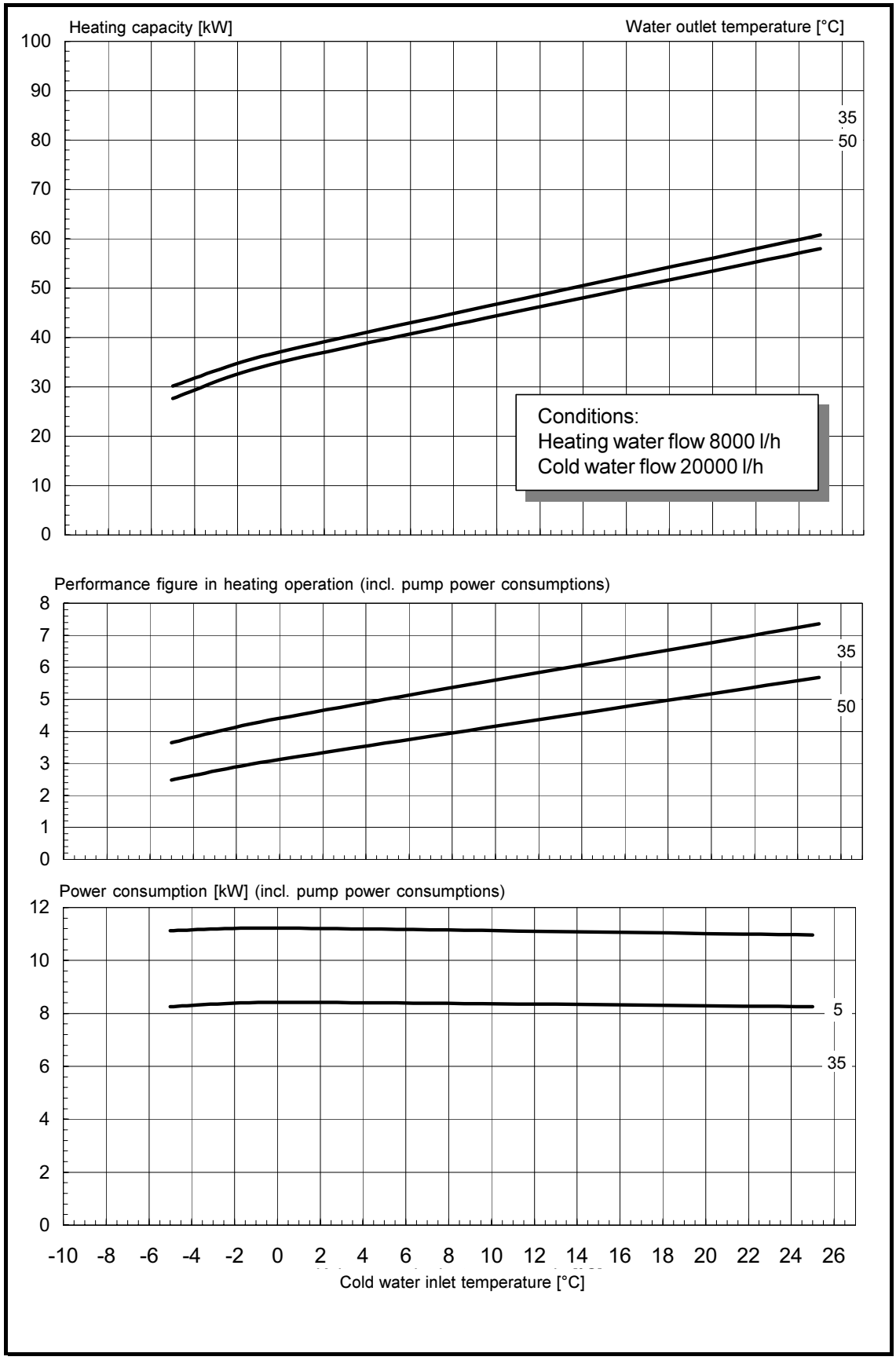
12.3.3 Pressure losses ..40C



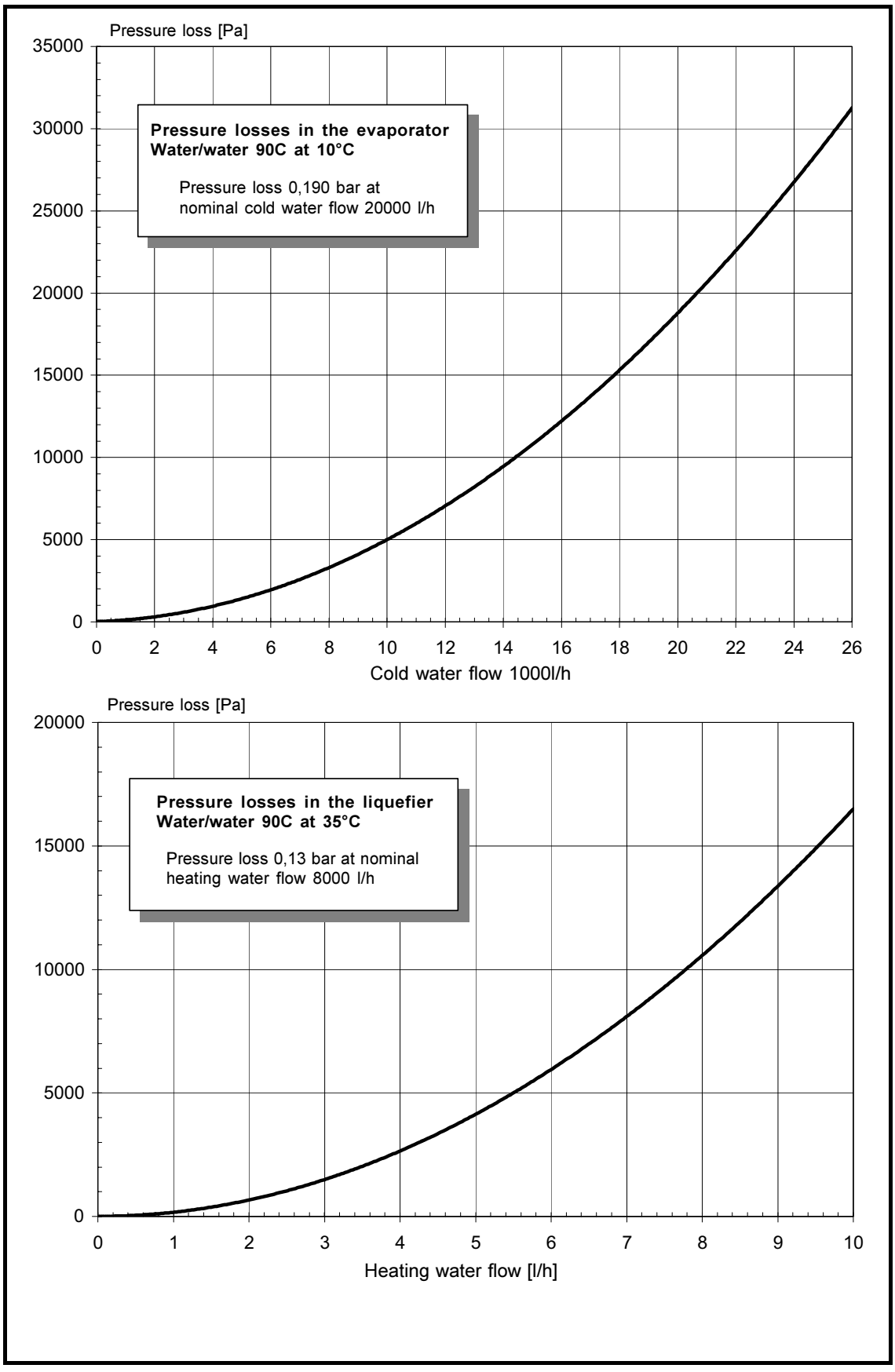
12.3.4 Characteristics ..90C / 2 condensers



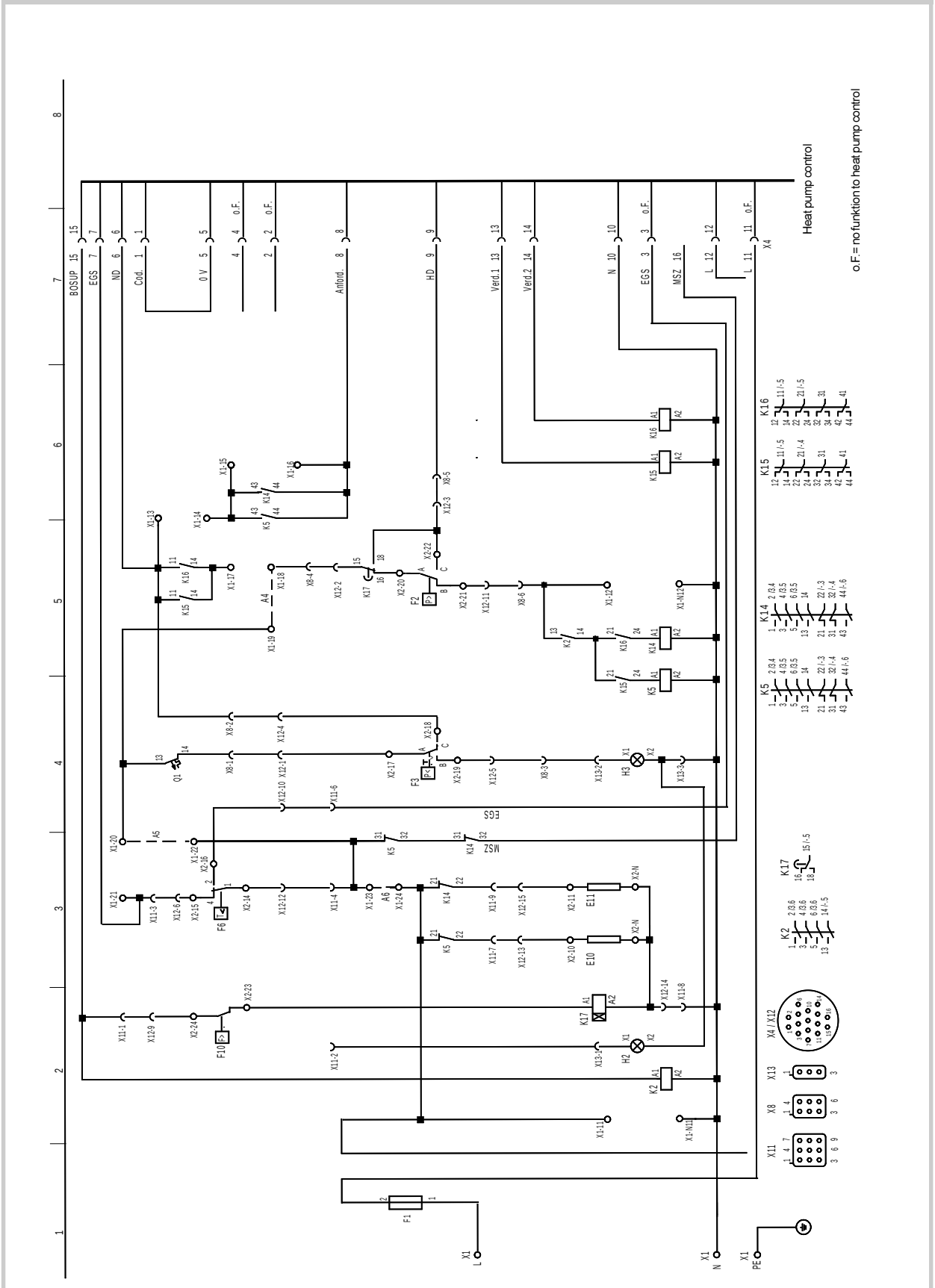
12.3.5 Characteristics ..90C / 1 condenser



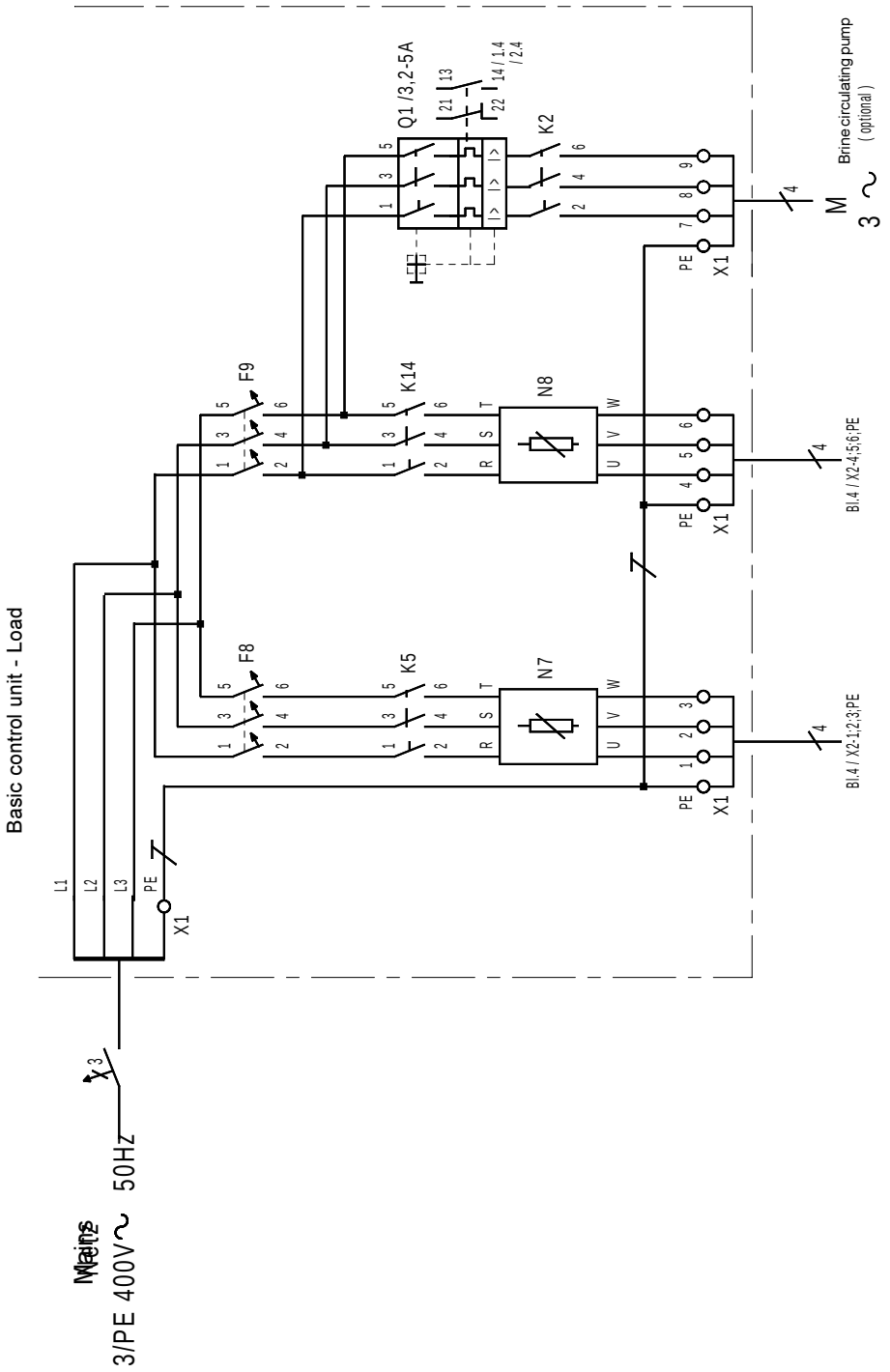
12.3.6 Pressure losses ..90C



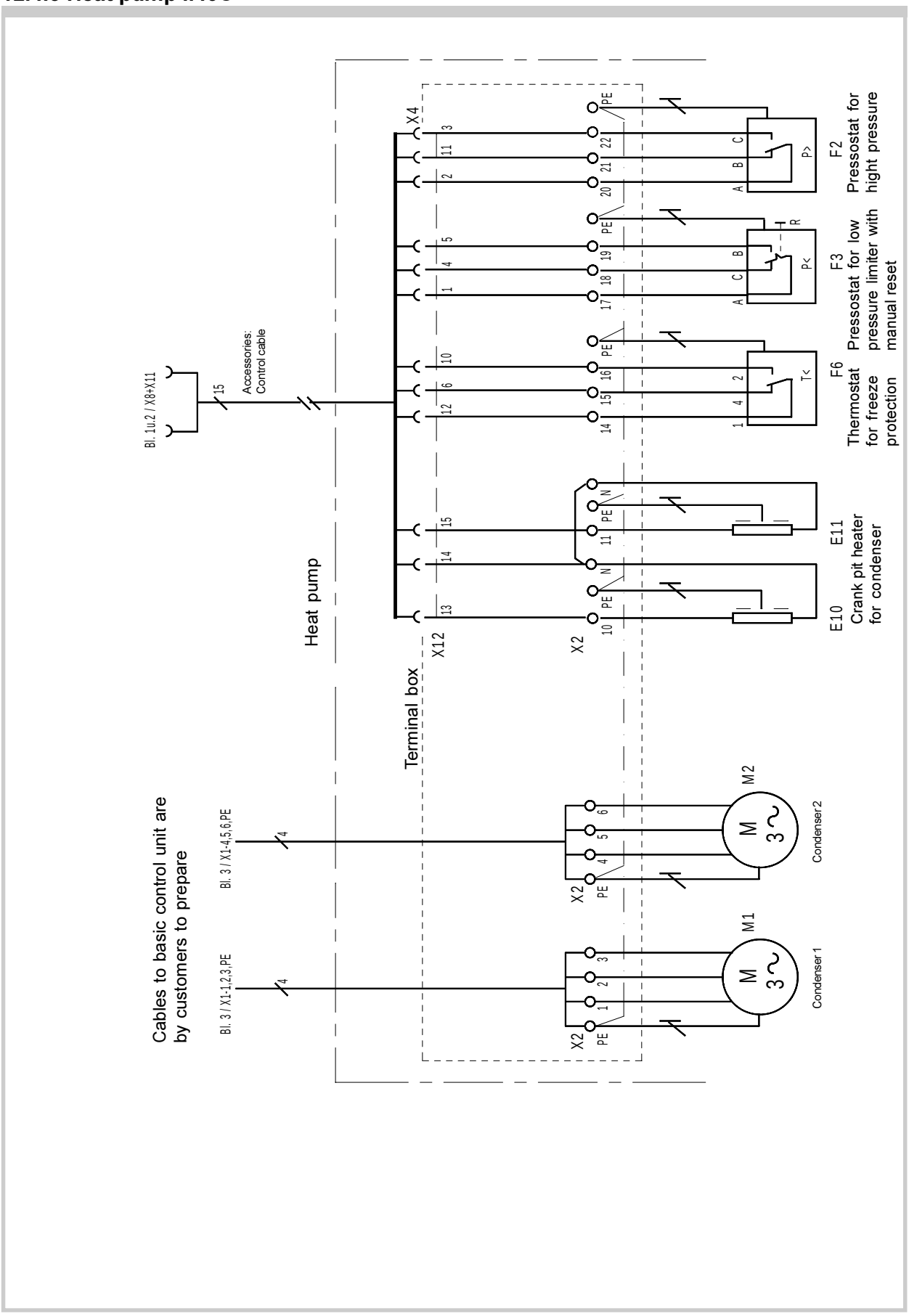
12.4.1 Control ..40C



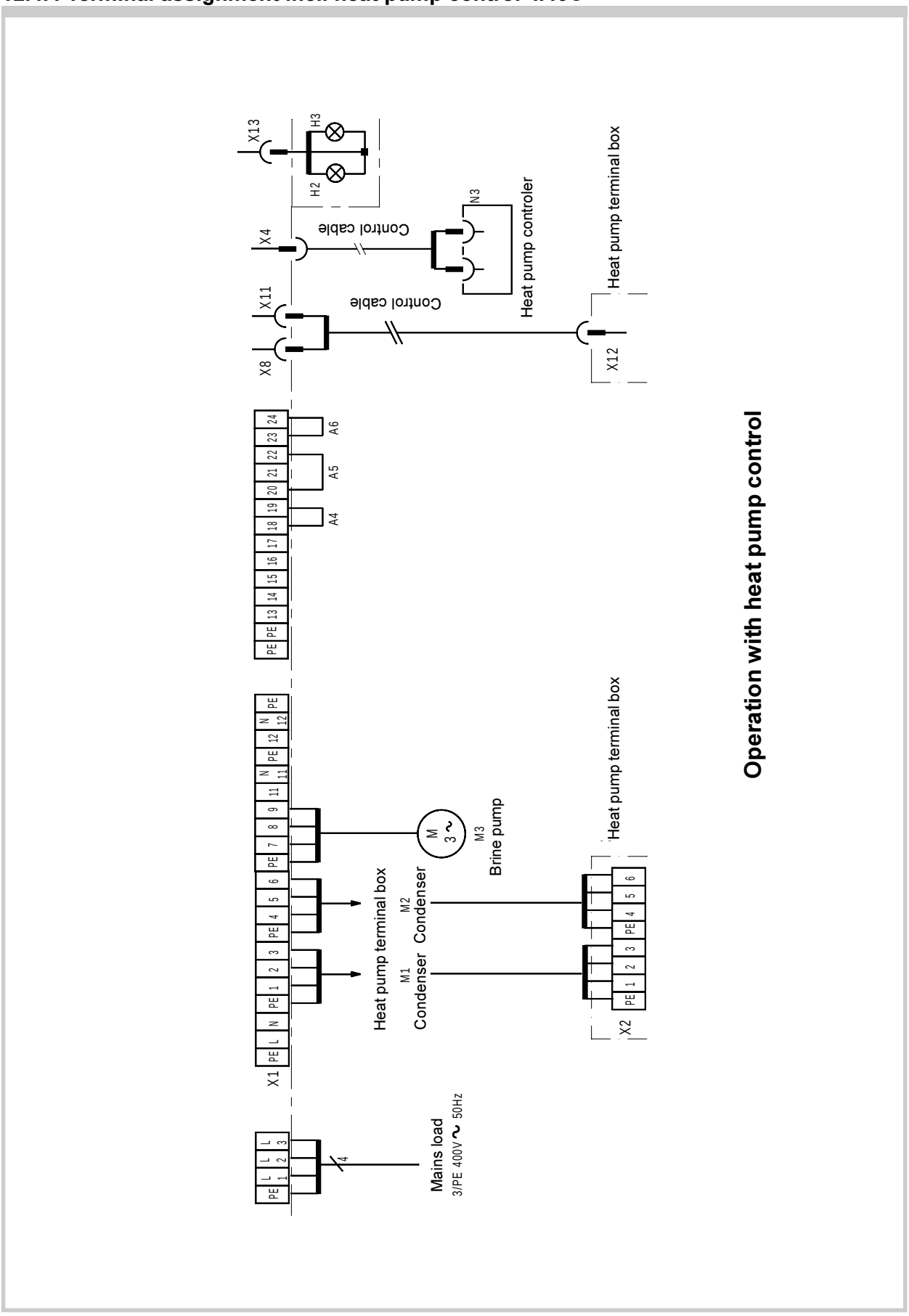
12.4.2 Control of load ..40C



12.4.3 Heat pump ..40C



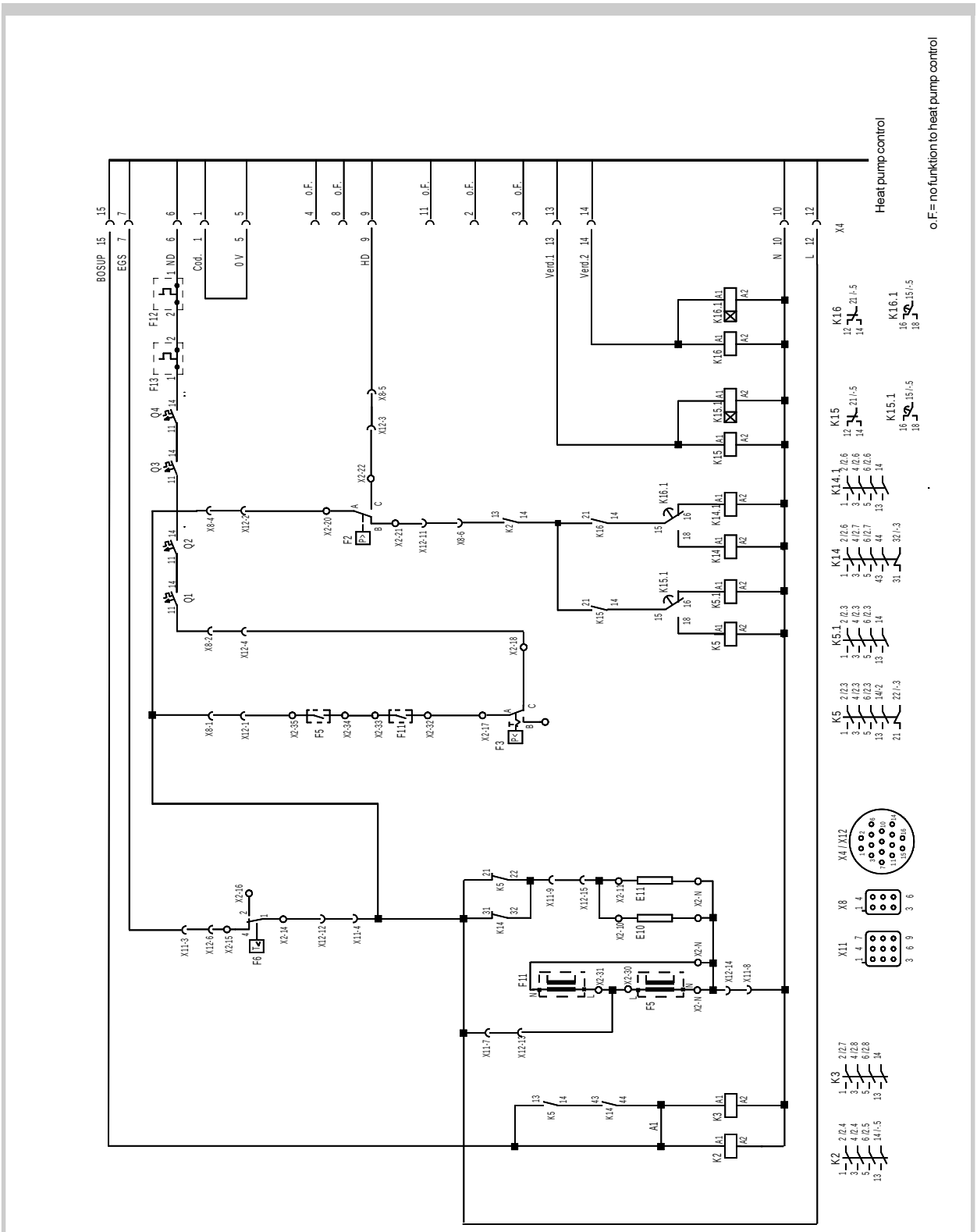
12.4.4 Terminal assignment incl. heat pump control ..40C



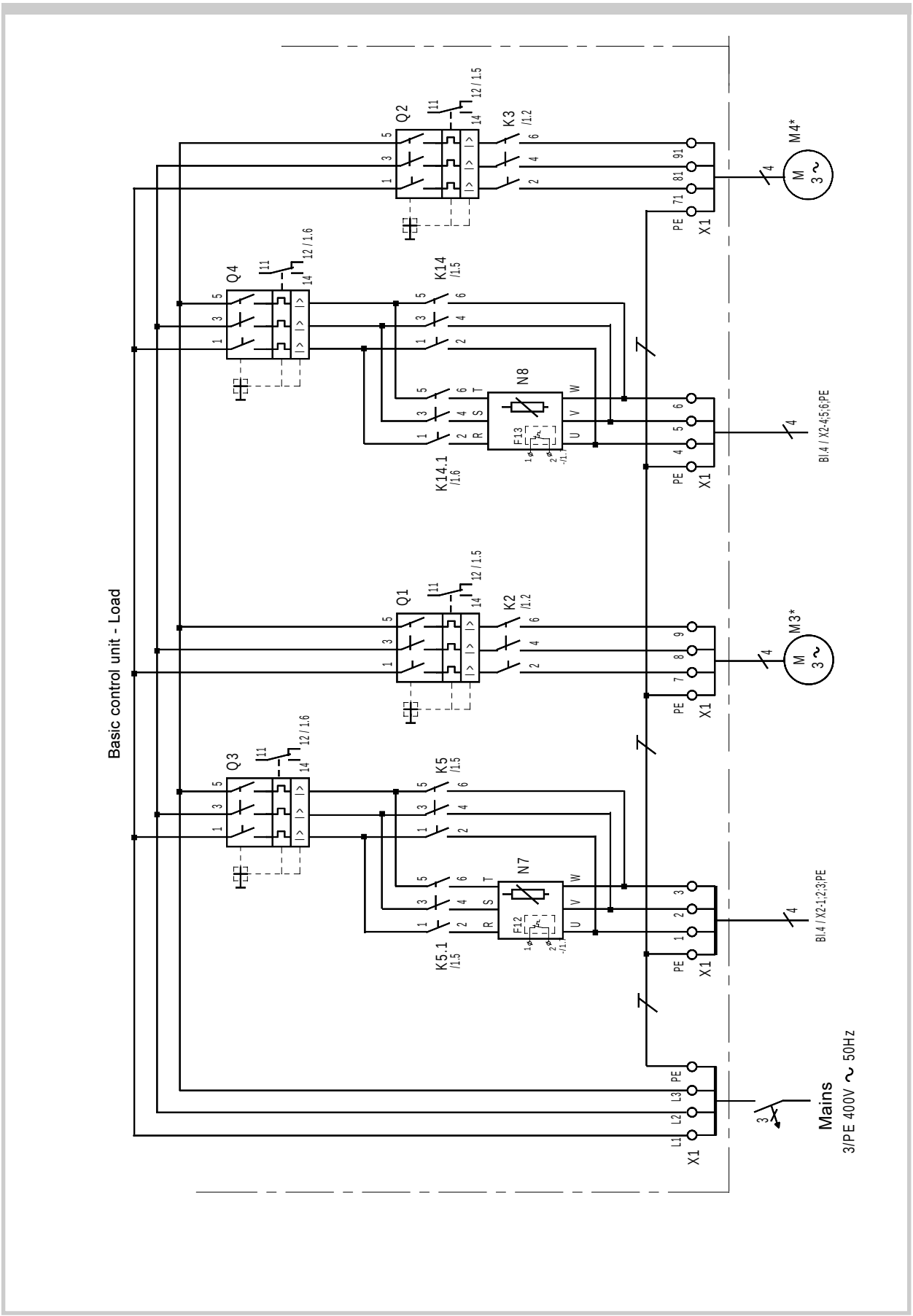
12.4.5 Legend ..40C

A4	Wire jumper for use of heat pump control
A5	Wire jumper for use of heat pump control
A6	Wire jumper for use of heat pump control
E10	Crank pit heater for condenser 1
E11	Crank pit heater for condenser 2
F1	Control fuse
F2	Pressostat for high pressure
F3	Pressostat for low pressure limiter with manual reset
F6	Thermostat for freeze protection
F8	Automatic circuit breaker for condenser 1
F9	Automatic circuit breaker for condenser 2
F10	Flow switch
H3	Pilot lamp for low pressure fault
K2	Contactor for well pump
K5	Contactor for condenser 1
K14	Contactor for condenser 2
K15	Relay condenser 1
K16	Relay condenser 2
K17	Time relay - flow switch
K11	EVU blocking contactor**
M1	Condenser 1
M2	Condenser 2
M3	Well pump*
M5	Buffer charging pump**
M6	Hot water circulating pump**
N3	Heat pump control*
N7	Soft start control
Q1	Power breaker for brine circulating pump
X1	Terminal strip for mains supply
X2	Terminal strip for heat pump (terminal box)
X4	Control cable connector (N3)
X8	Heat pump connector (basic control unit)
X11	Heat pump connector (basic control unit)
X12	Heat pump connector (terminal box)
X13	Pilot lights connector
*	Optionally usable devices or controls
**	Components are to be provided on site

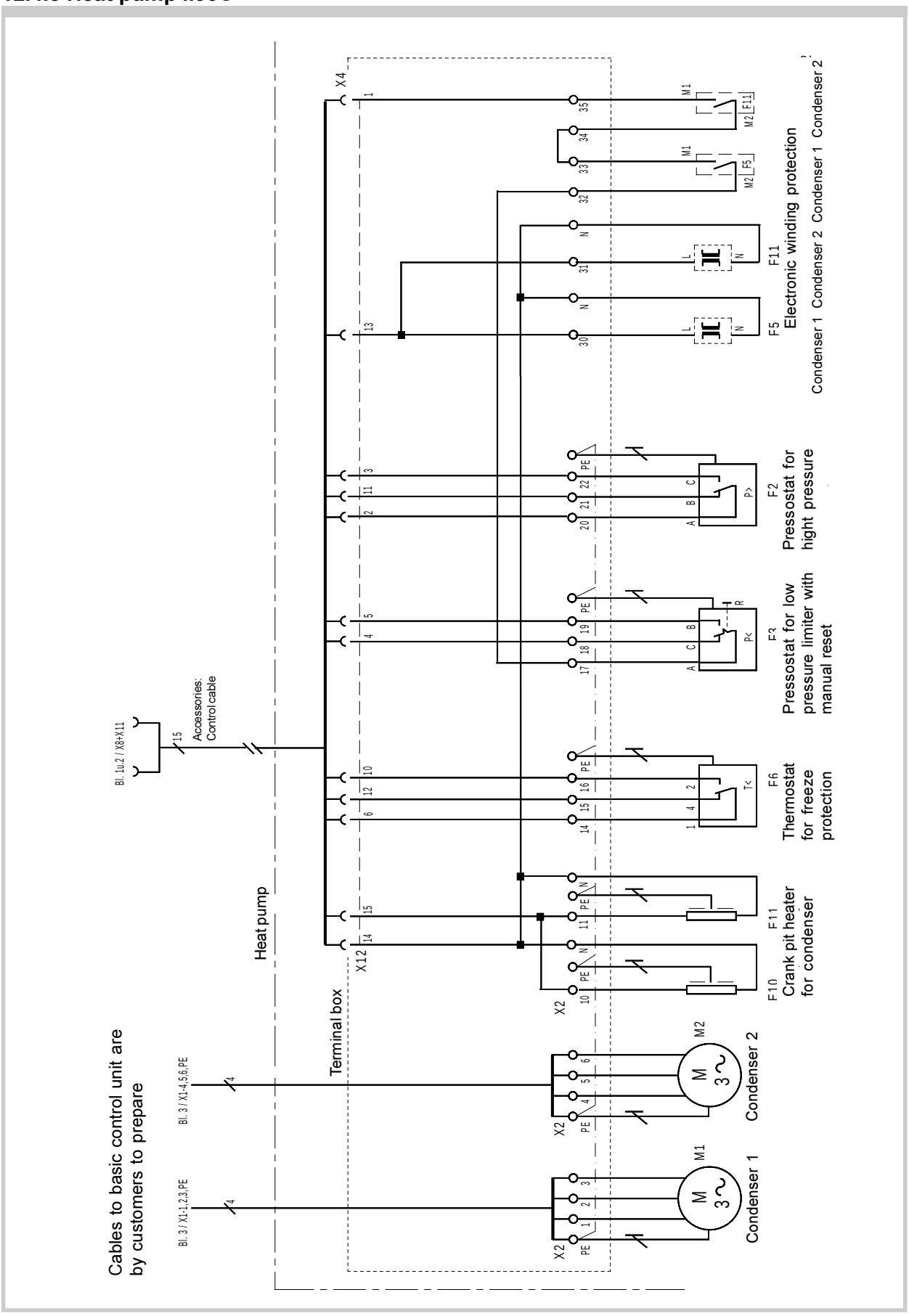
12.4.6 Control ..90C



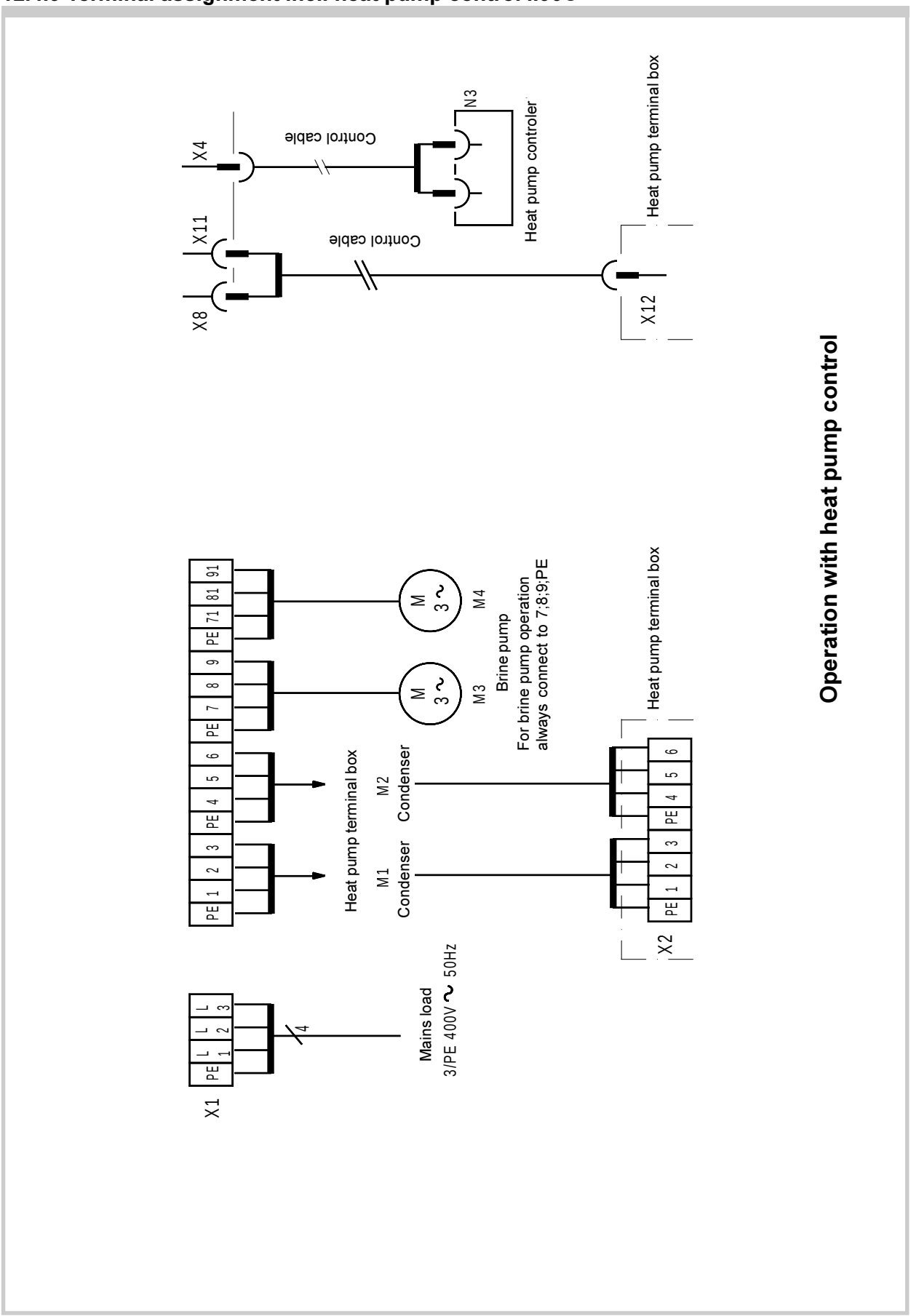
12.4.7 control of load ..90C



12.4.8 Heat pump ..90C



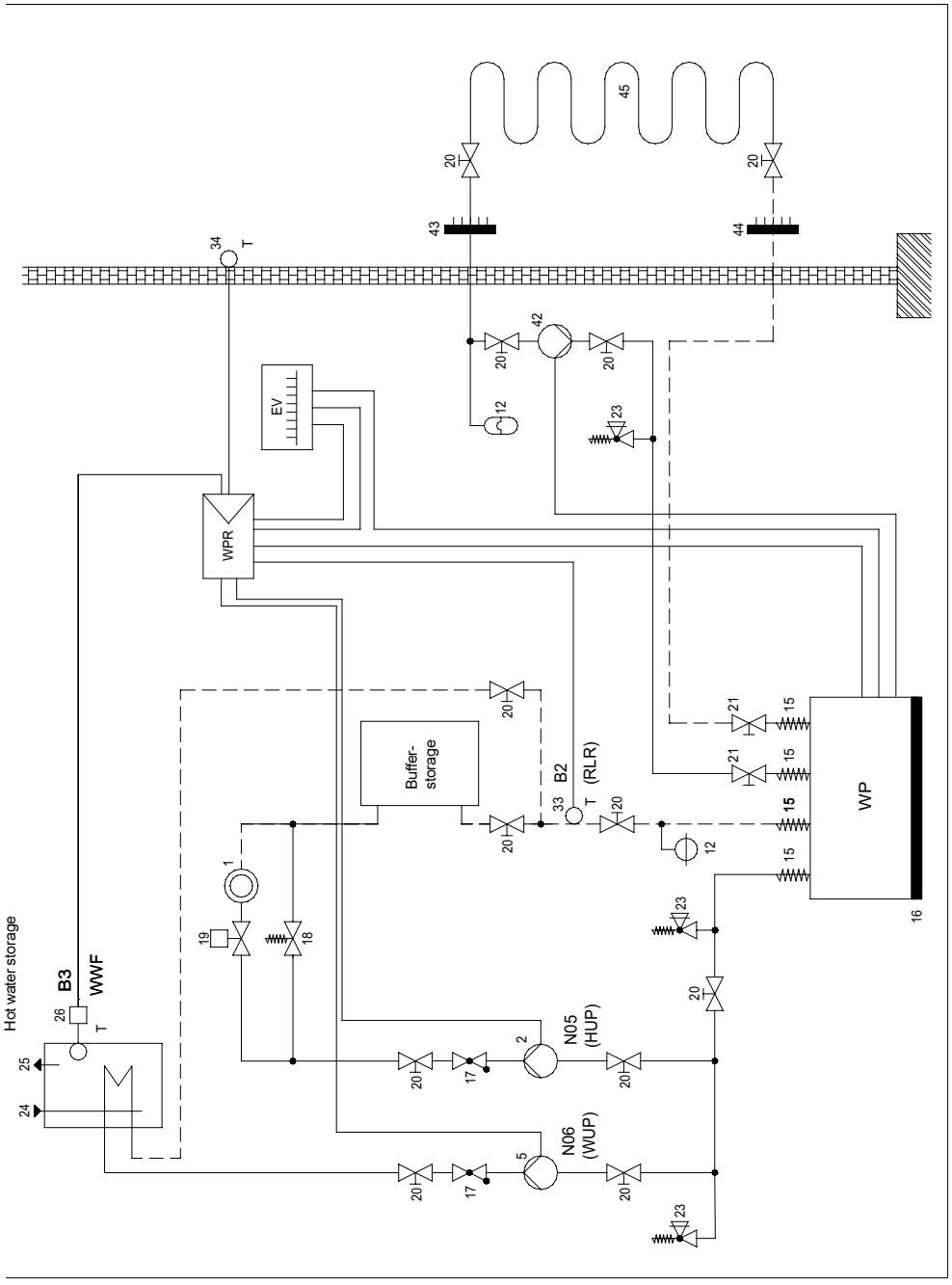
12.4.9 Terminal assignment incl. heat pump control ..90C



12.4.10 Legend ..90C

E10	Crank pit heater for condenser 1
E11	Crank pit heater for condenser 2
F2	Pressostat for high pressure detector
F3	Pressostat for low pressure limiter
F5	Electronic winding protection for condenser 1
F6	Thermostat for freeze protection
F10	Flow switch
F11	Electronic winding protection for condenser 2
F12	Temperature detector / N7
F13	Temperature detector / N8
K2	Contactor for well pump (M3)
K5	Contactor for condenser 1
K5.1	Starter contactor for condenser 1
K14	Contactor for condenser 2
K14.1	Starter contactor for condenser 2
K15	Relay for condenser 1
K15.1	Time-delay relay K5
K16	Relay for condenser 2
K16.1	Time-delay relay K14
M1	Condenser 1
M2	Condenser 2
M3	Well pump *
N3	Heat pump control*
N7	Soft start PC board for condenser 1
N8	Soft start PC board for condenser 2
Q1	Power breaker for well pump (M3)
Q2	Power breaker for condenser 1
Q3	Power breaker for condenser 2
X1	Terminal strip for basic control unit
X2	Terminal strip for heat pump (terminal box)
X4	Control cable connector (N3)
X8	Heat pump connector (basic control unit)
X11	Heat pump connector (basic control unit)
X12	Heat pump connector (terminal box)
*	Optionally usable components, devices or controls
**	Components are to be provided on site

Hydraulic schematic diagram (Example)



1 Heat consumer
2 Heating circulating pump
5 Hot water circulating pump
12 Expansion vessel
15 Flexible connection hoses
16 Structure- borne noise insulation
17 Non- return valve
18 Overflow valve
19 Thermostat valve
20 Shutoff valve for manual operation
21 Shutoff valve for manual operation and drain
23 Safety valve
24 Cold water supply
25 Hot water supply
26 Hot water control / sensor
33 Return line sensor
34 External wall probe
42 Brine pump
44 Return flow collector
45 Ground absorber

WP Heat pump
WPR Heat pump control
EV Electric distribution pane

CE CONFORMITY CERTIFICATE

CE EC Conformity Certificate

The undersigned

KKW Kulmbacher Klimageräte-Werk GmbH
Dimplex Divisiom
Am Goldenen Feld 18, 95326 Kulmbach, Germany

confirms that the unit(s) listed below comply with the requirements stipulated in the EC guidelines owing to their design and type and to the versions put on the market.

Any modifications of the unit(s) that are performed without our consent renders this certificate ineffective.

Name of the unit(s)	***EC Guidelines***
Brine/water heat pumps	*EC guideline on low voltage (73/23/EEC)*
for indoor installation with R407C	*EC Guideline on EMC (89/336/EEC)*
Water/water heat pumps	*Printing equipment guideline (97/23/EEC*
for indoor installation with R407C	

Type:	***Harmonized EN***	
SI 30CG	*EN255:1997*	
SI 70CG	*EN 378:1994*	
	DIN EN 603335-1 (VDE 0700, part I):1995-10	EN 60335-1:1994 +A11:1995
WI 40CG	DIN EN60335-1/A1 (VDE 0700, part 1/A1):1997-08	EN 60335 –1/A1:1996
WI 90CG	DIN EN 60335-1/A12 (VDE 0700, part 1/A12):1997-08	EN60335-1/A12:1996
	DIN EN 60335-1/A13 (VDE 0700, part 1/A13):1998-12	EN60335-1/A13:1998
	DIN EN 60335-1/A14 (VDE 0700, part 1/A14):1999-05	EN60335-1/A14:1998
	DIN EN 60335-2-40 (VDE 0700, part 40):1998-07	EN60335-2-40:1997
	DIN EN 55014-2 (VDE 0875, part 14-2):1997-10 Requirements of category II	EN 55014-2:1997
	DIN EN 55014-1 (VDE 0875, part 14-1):1999-10	EN 55014-1:1993+A1:1997+A2:1999
	DIN EN 61000-3-2 (VDE 0838, part 2):1998-10	EN 61000-3-2:1995+ Corrigendum:1997+A1:1998+A2:1998
	DIN EN 61000-3-2/A14 (VDE 0838, part 2/A14):2001-01	EN 61000-3-2:1995/A14:2000
	DIN EN 61000-3-3 (VDE 0838, part 3):1996-03	EN 61000-3-3:1995

Order number:	***National standards/guidelines***		
	D	*A*	*CH*
337 800	VBG20		SVT1
337 810			
337 820			
337 830			

Kulmbach, May 07, 2002

Wolfgang Weinhold
Managing Director

Mathias Huprich
Technical Manager

Warranty certificate (valid in Germany)

The following conditions, which describe the terms and conditions of our warranty, do not affect the obligations of the vendor to honor the warranty as specified in the sales contract with the end user. For the units, we offer warranty in accordance with the conditions below:

We remedy defects to the unit which are demonstrated to be the result of material or manufacturing faults when we are notified of these immediately following the discovery of such defects and within 24 months following delivery to the end user free of charge, subject to the following proviso. In the event that the defect becomes apparent within 6 months following delivery and commissioning (heating heat pump and central apartment ventilating systems) has been successfully performed by the authorized system engineering customer service, it can be assumed that the cause is a material or manufacturing fault.

The warranty conditions apply to this unit only when it is purchased by a contractor in one of the member countries of the European Union, is operated in Germany during the time at which the defect occurs, and warranty services can be performed in Germany.

The elimination of the defects which we recognize as legitimate claims against warranty encompasses, subject to our choice, the repair or replacement by flawless parts of the defective parts. We cannot assume extraordinary repair costs arising from the type or location or poor accessibility of the unit. Removed parts which we take back become our property. The warranty period for the rectification of defects and replacement parts ends with the elapsing of the original warranty period for the unit. The warranty does not extend to fragile parts which only impair the value or the usefulness of the unit insignificantly. The original proof of purchase must always be presented.

The warranty conditions cannot be honored if the end user or a third party fail to comply with the corresponding VDE provisions, the provisions of the local power supply companies, or our installation and operating instructions, as well as the notes or interconnection diagrams in the configuration documentation, or if the accessories required from us to implement a function are not used. In the event of unauthorized modifications or work performed by the end user or a third party, the manufacturer is no longer liable for the resulting consequences. The warranty extends to the unit and the parts provided by the supplier. Parts not delivered by the supplier and unit/system defects attributable to the use of parts not provided by the supplier do not fall under warranty claims.

In so far as we are not able to eliminate the defect, or we reject the rectification thereof or unreasonably delay the implementation thereof, the manufacturer will deliver a replacement unit free of charge or remunerate the reduced value. In the case of a replacement delivery, we reserve the right to make appropriate allowance for the use of the unit up to this time. Additional or more extensive claims, in particular such claims resulting the replacement of damage to objects other than the unit are, provided that liability has not been compulsorily ordered by law, excluded.

An extension of the warranty to 36 months for heating heat pumps and central ventilating systems, however a maximum of 38 months from the date of delivery from the factory, will be granted in accordance with the following conditions: prerequisite for the granting of the extended warranty is the commissioning, subject to cost, by the authorized system engineering customer service, with the commissioning certificate, within a time of operation (compressor running time) of less than 150 hours. Defects reported in the commissioning certificate must be eliminated without delay. This constitutes the basis for the warranty. The commissioning certificate must be sent to the address below, from which the warranty period extension is also confirmed, within one month of successfully commissioning the unit.

The charge for commissioning includes the commissioning itself and the costs of travel. No liability can be assumed for proper planning, dimensioning and the performnce of work on the overall system. The elimination of defects in the overall system and the service times required are special services.

The commissioning charge, which is currently € 320 net for heating heat pumps and € 450 net for ventilating systems, both per unit, is invoiced to the contractor by the system engineering customer service. We reserve the right to make adjustments to these prices.

In the event that customer service is required, the authorized system engineering customer service responsible for the customer site must be informed and will provide fast help to deal with the problem. The authorized system engineering customer service responsible for your region can be determined by contacting the service hotline for the Dimplex Division of the KKW Kulmbacher Klimageräte-Werk GmbH.

KKW Kulmbacher Klimageräte-Werk GmbH
Dimplex Division
System Engineering Customer Service
Am Goldenen Feld 18
95326 Kulmbach
Germany

Telephone:	+49 (0) 9221 709 562
Fax:	+49 (0) 9221 709 565
e-mail:	kundendienst@kkw.de
	kundendienst@dimplex.de
Internet:	www.kkw.de
	www.dimplex.de

The product number (**E.Nr.**) and the date of production (**FD**) of the unit are required in order to process the order. This information is given on the nameplate in the field marked with the heavy border.

.Customer service address

Notes

Notes