Daikin Altherma high temperature split Technical Data EPBX10A4V / EPBX10A9W / EPBX14A4V / EPBX14A9W

EEDEN25

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EPBX10A4V / EPBX10A9W / EPBX14A4V / EPBX14A9W

1 Features

1 - 1 EPBX10A4V, EPBX10A9W, EPBX14A4V, EPBX14A9W

- › New intuitive MMI 5» touchscreen for better user experience
- › Inclusion of all hydraulic components means no third party components are required
- › PCB board and hydraulic components are located in the front for easy access
- › Compact dimensions allows for small installation space, as almost no side clearances are required.
- › The unit's sleek design blends in with other household appliances.
- › Combine with a stainless steel tank or ECH2O thermal store.
- › Integrated back-up heater of 4.5 or 9 kW

-28°

Guaranteed operation down to -28°C

Onecta app (optional)

Online controller

2 Specifications

2 - 1 Specifications

Technical specifications					EPBX10A4V
Heater capacity	Step 3			kW	4.5
Casing	Colour				White + Black
	Material				Resin, sheet metal
Dimensions	Unit	Height		mm	840
		Width		mm	440
		Depth		mm	390
	Packed unit	Height		mm	450
		Width		mm	650
		Depth		mm	1,016
Weight	Unit			kg	33
	Packed unit			kg	38
Packing	Material				Carton / PP (Straps) / EPS
	Weight			kg	5
Pump	Type				Grundfos UPM4L LIN 25-75
	Nr of speeds				LIN
	Power input			W	75
Water side Heat exchanger	Water flow rate	Min.		l/min	22 (1)
Expansion vessel	Volume			l	7
	Max. water pressure			bar	3
	Pre pressure			bar	1
Water filter	Diameter perforations			mm	0.8
	Material				Stainless steel / Plastic
General	Supplier/	Name or trademark			Daikin Europe N.V.
	Manufacturer details	Name and address			Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium
Water circuit	inch			in	G 1" (female)
	Piping material				Stainless steel
	inch			in	1"
	inch			in	1"
	Safety valve			bar	3
	Manometer				Digital
	Drain valve / fill valve				No
	Shut off valve				Yes
	flowswitch				No
	Air purge valve				Yes
	Pressure	Heating	Max.	bar	3
	Minimum water volume in the system for cooling			l	25 (2)
Water circuit	Minimum water volume in the system for heating			l	55 (2)
Sound power level	Nom.			dBA	45 (5)
Sound pressure level	Nom.			dBA	31 (6)
Operation range	Heating	Ambient	Min.	°C	0 (3)
			Max.	°C	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Indoor installation	Ambient	Min.	°CDB	5
			Max.	°CDB	35 (4)
	Cooling	Ambient	Min.	°CDB	0 (3)
			Max.	°CDB	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Domestic hot water	Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
Installation place					Indoor
Safety devices	Item	01			Thermal cut out

Electrical specifications				EPBX10A4V
Power supply	Name			See note 7
	Phase			1~/3~
	Frequency		Hz	50
	Voltage		V	230/400
	Voltage range	Min.	%	-10
		Max.	%	10
IP class	IP			IP X0B
Electric heater	Power supply	Name		4V
		Phase		1~ / 3~
		Frequency	Hz	50
		Voltage	V	230/400
	Current	Minimum Ssc value		Equipment complying with EN/IEC 61000-3-12
	Recommended fuses		A	0 (8)

2 Specifications

2 - 1 Specifications

Electrical specifications			EPBX10A4V
Wiring connections	Communication cable	Quantity	3+GRD
		Remark	1.5 mm²
	Electric meter	Quantity	2
		Remark	Minimum 0.75 mm² (16VDC pulse detection) ..
	Preferential kWh rate power supply	Quantity	Power: 2
		Remark	Power 6.3A (Select diameter and type according to national and local regulations)
	Domestic hot water pump	Quantity	3
		Remark	Minimum 0.75 mm² (2A inrush, 1A continuous)
	For connection with R6T	Quantity	2
		Remark	Minimum 0.75 mm²
	For connection with A3P	Quantity	Depends on thermostat type, cf. installation manual
		Remark	Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with M2S	Quantity	2
		Remark	Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with optional FWXV* (demand input and output)	Quantity	4
		Remark	100 mA, minimum 0.75 mm²

(1)Operation area is extended to lower flow rates only in case the unit operates with heat pump only. (Not in startup, no BUH operation, no defrost operation). |
(2)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |
(3)Refer to operation range of the unit. |
(4)Depends on operation mode, refer to installation manual. |
(5)Measured with a pressure drop of 10 kPa in the heating system at an operating condition of leaving water 47-55°C in a room with an ambient of 20°C. DB/WB 7°C/6°. |
(6)Value measured in an anechoic room at 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. The sound pressure level mentioned is measured with a pressure drop of 10 kPa in the heating system at an operatin |
(7)Above mentioned power supply of the hydrobox is for the backup heater only. The switch box and the pump of the hydrobox are supplied via the outdoor unit. The optional domestic hot water tank has a separate power supply. |
(8)Refer to wiring diagram and installation manual for correct recommended fuse depending on power supply and grid connection

Technical specifications				EPBX10A9W
Heater capacity	Step 3		kW	9
Casing	Colour			White + Black
	Material			Resin, sheet metal
Dimensions	Unit	Height	mm	840
		Width	mm	440
		Depth	mm	390
	Packed unit	Height	mm	450
		Width	mm	650
		Depth	mm	1,016
Weight	Unit		kg	33
	Packed unit		kg	38
Packing	Material			Carton / PP (Straps) / EPS
	Weight		kg	5
Pump	Type			Grundfos UPM4L LIN 25-75
	Nr of speeds			LIN
	Power input		W	75
Water side Heat exchanger	Water flow rate	Min.	l/min	22 (1)
Expansion vessel	Volume		l	7
	Max. water pressure		bar	3
	Pre pressure		bar	1
Water filter	Diameter perforations		mm	0.8
	Material			Stainless steel / Plastic
General	Supplier/ Manufacturer details	Name or trademark		Daikin Europe N.V.
		Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium

2 Specifications

2 - 1 Specifications

Technical specifications					EPBX10A9W
Water circuit	inch			in	G 1" (female)
	Piping material				Stainless steel
	inch			in	1"
	inch			in	1"
	Safety valve			bar	3
	Manometer				Digital
	Drain valve / fill valve				No
	Shut off valve				Yes
	flowswitch				No
	Air purge valve				Yes
	Pressure	Heating	Max.	bar	3
	Minimum water volume in the system for cooling			l	25 (2)
Water circuit	Minimum water volume in the system for heating			l	55 (2)
Sound power level	Nom.			dBA	45 (5)
Sound pressure level	Nom.			dBA	31 (6)
Operation range	Heating	Ambient	Min.	°C	0 (3)
			Max.	°C	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Indoor installation	Ambient	Min.	°CDB	5
			Max.	°CDB	35 (4)
	Cooling	Ambient	Min.	°CDB	0 (3)
			Max.	°CDB	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Domestic hot water	Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
Installation place					Indoor
Safety devices	Item	01			Thermal cut out

Electrical specifications					EPBX10A9W
Power supply	Name				See note 7
	Phase				1~/3~
	Frequency			Hz	50
	Voltage			V	230/400
	Voltage range	Min.		%	-10
		Max.		%	10
IP class	IP				IP X0B
Electric heater	Power supply	Name			9W
		Phase			1~ / 3~
		Frequency		Hz	50
		Voltage		V	230/400
	Current	Minimum Ssc value			Equipment complying with EN/IEC 61000-3-12
	Recommended fuses			A	0 (8)
Wiring connections	Communication cable	Quantity			3+GRD
		Remark			1.5 mm^2
	Electric meter	Quantity			2
		Remark			Minimum 0.75 mm^2 (16VDC pulse detection) ..
	Preferential kWh rate power supply	Quantity			Power: 2
		Remark			Power 6.3A (Select diameter and type according to national and local regulations)
	Domestic hot water pump	Quantity			3
		Remark			Minimum 0.75 mm^2 (2A inrush, 1A continuous)
	For connection with R6T	Quantity			2
		Remark			Minimum 0.75 mm^2
	For connection with A3P	Quantity			Depends on thermostat type, cf. installation manual
		Remark			Voltage: 230V / Max. current: 100mA / Min. 0.75mm^2
	For connection with M2S	Quantity			2
		Remark			Voltage: 230V / Max. current: 100mA / Min. 0.75mm^2
	For connection with optional FWXV* (demand input and output)	Quantity			4
		Remark			100 mA, minimum 0.75 mm^2

(1)Operation area is extended to lower flow rates only in case the unit operates with heat pump only. (Not in startup, no BUH operation, no defrost operation). |
(2)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

2 Specifications

2 - 1 Specifications

(3)Refer to operation range of the unit. |
(4)Depends on operation mode, refer to installation manual. |
(5)Measured with a pressure drop of 10 kPa in the heating system at an operating condition of leaving water 47-55°C in a room with an ambient of 20°C. DB/WB 7°C/6°. |
(6)Value measured in an anechoic room at 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. The sound pressure level mentioned is measured with a pressure drop of 10 kPa in the heating system at an operatin |
(7)Above mentioned power supply of the hydrobox is for the backup heater only. The switch box and the pump of the hydrobox are supplied via the outdoor unit. The optional domestic hot water tank has a separate power supply. |
(8)Refer to wiring diagram and installation manual for correct recommended fuse depending on power supply and grid connection

Technical specifications					EPBX14A4V
Heater capacity	Step 3			kW	4.5
Casing	Colour				White + Black
	Material				Resin, sheet metal
Dimensions	Unit	Height		mm	840
		Width		mm	440
		Depth		mm	390
	Packed unit	Height		mm	450
		Width		mm	650
		Depth		mm	1,016
Weight	Unit			kg	34
	Packed unit			kg	39
Packing	Material				Carton / PP (Straps) / EPS
	Weight			kg	5
Pump	Type				Grundfos UPM10XL LIN 25-125
	Nr of speeds				LIN
	Power input			W	180
Water side Heat exchanger	Water flow rate	Min.		l/min	24 (1)
Expansion vessel	Volume			l	7
	Max. water pressure			bar	3
	Pre pressure			bar	1
Water filter	Diameter perforations			mm	0.8
	Material				Stainless steel / Plastic
General	Supplier/	Name or trademark			Daikin Europe N.V.
	Manufacturer details	Name and address			Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium
Water circuit	inch			in	G 1" (female)
	Piping material				Stainless steel
	inch			in	1"
	inch			in	1"
	Safety valve			bar	3
	Manometer				Digital
	Drain valve / fill valve				No
	Shut off valve				Yes
	flowswitch				No
	Air purge valve				Yes
	Pressure	Heating	Max.	bar	3
	Minimum water volume in the system for cooling			l	30 (2)
Water circuit	Minimum water volume in the system for heating			l	65 (2)
Sound power level	Nom.			dBA	45 (5)
Sound pressure level	Nom.			dBA	31 (6)
Operation range	Heating	Ambient	Min.	°C	0 (3)
			Max.	°C	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Indoor installation	Ambient	Min.	°CDB	5
			Max.	°CDB	35 (4)
	Cooling	Ambient	Min.	°CDB	0 (3)
			Max.	°CDB	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Domestic hot water	Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
Installation place					Indoor
Safety devices	Item	01			Thermal cut out

Electrical specifications				EPBX14A4V
Power supply	Name			See note 7
	Phase			1~/3~
	Frequency		Hz	50
	Voltage		V	230/400
	Voltage range	Min.	%	-10
		Max.	%	10
IP class	IP			IP X0B

2 Specifications

2 - 1 Specifications

Electrical specifications				EPBX14A4V
Electric heater	Power supply	Name		4V
		Phase		1~ / 3~
		Frequency	Hz	50
		Voltage	V	230/400
	Current	Minimum Ssc value		Equipment complying with EN/IEC 61000-3-12
	Recommended fuses		A	0 (8)
Wiring connections	Communication cable	Quantity		3+GRD
		Remark		1.5 mm²
	Electric meter	Quantity		2
		Remark		Minimum 0.75 mm² (16VDC pulse detection) ..
	Preferential kWh rate power supply	Quantity		Power: 2
		Remark		Power 6.3A (Select diameter and type according to national and local regulations)
	Domestic hot water pump	Quantity		3
		Remark		Minimum 0.75 mm² (2A inrush, 1A continuous)
	For connection with R6T	Quantity		2
		Remark		Minimum 0.75 mm²
	For connection with A3P	Quantity		Depends on thermostat type, cf. installation manual
		Remark		Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with M2S	Quantity		2
		Remark		Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with optional FWXV* (demand input and output)	Quantity		4
		Remark		100 mA, minimum 0.75 mm²

(1)Operation area is extended to lower flow rates only in case the unit operates with heat pump only. (Not in startup, no BUH operation, no defrost operation). |
(2)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |
(3)Refer to operation range of the unit. |
(4)Depends on operation mode, refer to installation manual. |
(5)Measured with a pressure drop of 10 kPa in the heating system at an operating condition of leaving water 47-55°C in a room with an ambient of 20°C. DB/WB 7°C/6°. |
(6)Value measured in an anechoic room at 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. The sound pressure level mentioned is measured with a pressure drop of 10 kPa in the heating system at an operatin |
(7)Above mentioned power supply of the hydrobox is for the backup heater only. The switch box and the pump of the hydrobox are supplied via the outdoor unit. The optional domestic hot water tank has a separate power supply. |
(8)Refer to wiring diagram and installation manual for correct recommended fuse depending on power supply and grid connection

Technical specifications				EPBX14A9W
Heater capacity	Step 3		kW	9
Casing	Colour			White + Black
	Material			Resin, sheet metal
Dimensions	Unit	Height	mm	840
		Width	mm	440
		Depth	mm	390
	Packed unit	Height	mm	450
		Width	mm	650
		Depth	mm	1,016
Weight	Unit		kg	34
	Packed unit		kg	39
Packing	Material			Carton / PP (Straps) / EPS
	Weight		kg	5
Pump	Type			Grundfos UPM10XL LIN 25-125
	Nr of speeds			LIN
	Power input		W	180
Water side Heat exchanger	Water flow rate	Min.	l/min	24 (1)
Expansion vessel	Volume		l	7
	Max. water pressure		bar	3
	Pre pressure		bar	1
Water filter	Diameter perforations		mm	0.8
	Material			Stainless steel / Plastic
General	Supplier/ Manufacturer details	Name or trademark		Daikin Europe N.V.
		Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium

2 Specifications

2 - 1 Specifications

Technical specifications					EPBX14A9W
Water circuit	inch			in	G 1" (female)
	Piping material				Stainless steel
	inch			in	1"
	inch			in	1"
	Safety valve			bar	3
	Manometer				Digital
	Drain valve / fill valve				No
	Shut off valve				Yes
	flowswitch				No
	Air purge valve				Yes
	Pressure	Heating	Max.	bar	3
	Minimum water volume in the system for cooling			l	30 (2)
Water circuit	Minimum water volume in the system for heating			l	65 (2)
Sound power level	Nom.			dBA	45 (5)
Sound pressure level	Nom.			dBA	31 (6)
Operation range	Heating	Ambient	Min.	°C	0 (3)
			Max.	°C	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Indoor installation	Ambient	Min.	°CDB	5
			Max.	°CDB	35 (4)
	Cooling	Ambient	Min.	°CDB	0 (3)
			Max.	°CDB	0 (3)
		Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
	Domestic hot water	Water side	Min.	°C	0 (3)
			Max.	°C	0 (3)
Installation place					Indoor
Safety devices	Item	01			Thermal cut out

Electrical specifications					EPBX14A9W
Power supply	Name				See note 7
	Phase				1~/3~
	Frequency			Hz	50
	Voltage			V	230/400
	Voltage range	Min.		%	-10
		Max.		%	10
IP class	IP				IP X0B
Electric heater	Power supply	Name			9W
		Phase			1~ / 3~
		Frequency		Hz	50
		Voltage		V	230/400
	Current	Minimum Ssc value			Equipment complying with EN/IEC 61000-3-12
	Recommended fuses			A	0 (8)
Wiring connections	Communication cable	Quantity			3+GRD
		Remark			1.5 mm²
	Electric meter	Quantity			2
		Remark			Minimum 0.75 mm² (16VDC pulse detection) ..
	Preferential kWh rate power supply	Quantity			Power: 2
		Remark			Power 6.3A (Select diameter and type according to national and local regulations)
	Domestic hot water pump	Quantity			3
		Remark			Minimum 0.75 mm² (2A inrush, 1A continuous)
	For connection with R6T	Quantity			2
		Remark			Minimum 0.75 mm²
	For connection with A3P	Quantity			Depends on thermostat type, cf. installation manual
		Remark			Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with M2S	Quantity			2
		Remark			Voltage: 230V / Max. current: 100mA / Min. 0.75mm²
	For connection with optional FWXV* (demand input and output)	Quantity			4
		Remark			100 mA, minimum 0.75 mm²

(1)Operation area is extended to lower flow rates only in case the unit operates with heat pump only. (Not in startup, no BUH operation, no defrost operation). |
(2)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

2 Specifications

2 - 1 Specifications

(3)Refer to operation range of the unit. |
(4)Depends on operation mode, refer to installation manual. |
(5)Measured with a pressure drop of 10 kPa in the heating system at an operating condition of leaving water 47-55°C in a room with an ambient of 20°C. DB/WB 7°C/6°. |
(6)Value measured in an anechoic room at 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. The sound pressure level mentioned is measured with a pressure drop of 10 kPa in the heating system at an operatin |
(7)Above mentioned power supply of the hydrobox is for the backup heater only. The switch box and the pump of the hydrobox are supplied via the outdoor unit. The optional domestic hot water tank has a separate power supply. |
(8)Refer to wiring diagram and installation manual for correct recommended fuse depending on power supply and grid connection

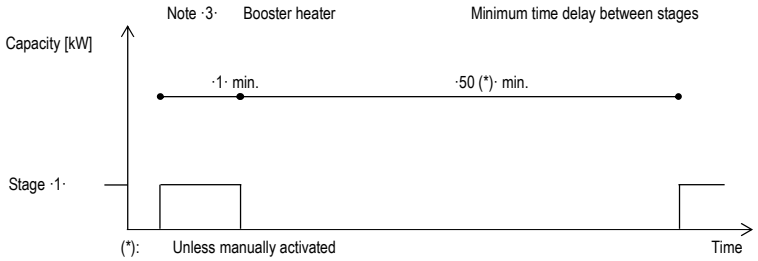
3 Electrical data

3 - 1 Electrical Data

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

Electrical specifications of the backup heaters and booster heaters

Backup heater	Type				**9W**			**4V**				
	Capacity setting			[kW]	**1 - 9**	**1 - 6**		**1 - 4.5**				
	Capacity stage · ·				**9**	**6**		**9**				
	Capacity stage ·1·			kW	**1**	**1**		**0.5**				
	Capacity stage ·2·			kW	**2**	**2**		**1**				
	Capacity stage ·3·			kW	**3**	**3**		**1.5**				
	Capacity stage ·4·			kW	**4**	**4**		**2**				
	Capacity stage ·5·			kW	**5**	**5**		**2.5**				
	Capacity stage ·6·			kW	**6**	**6**		**3**				
	Capacity stage ·7·			kW	**7**	**-**		**3.5**				
	Capacity stage ·8·			kW	**8**	**-**		**4**				
	Capacity stage ·9·			kW	**9**	**-**		**4.5**				
	Minimum time delay between stages	Max net change ≤ ·1· kW			10s							
		Max net change ≤ ·2· kW			40s							
		Max net change > ·2· kW			150s							
	Power supply (1)	Voltage			390 - 410V	220 - 240V		390 - 410V	220 - 240 V			
		Capacity			9kW	6kW		4.5kW				
		Rated current			13A	13A	26.1A(2)	6.5A	13A	19.6A(2)	17A(2)	19.6A(2)
		Phase			3N~	1N~		3N~	1N~		3~	2~
		Frequency			50Hz							
	Type of wires				Must comply with national wiring regulation							
					Min. ·2.5· mm²		Min. ·6· mm²	Min. ·2.5· mm²		Min. ·4· mm²	Min. ·2.5· mm²	Min. ·4· mm²
					·5·-wire cable		·3·-wire cable	·5·-wire cable		·3·-wire cable	·4·-wire cable	·3·-wire cable
					3L+N+GND	2L+2N+GND	L+N+GND	3L+N+GND	2L+2N+GND	L+N+GND	3L+GND	2L+GND
	Recommended overcurrent protection				4-pole ·16· A		2-pole ·32· A	4-pole ·10· A	4-pole ·16· A	2-pole ·25· A	4-pole ·20· A	2-pole ·25· A
	Earth leakage circuit breaker				Must comply with national wiring regulation							
Booster heater (optional)(·*KHW*· models)	Capacity setting			[kW]	**3**							
	Capacity stage · ·				**1**							
	Minimum time delay between stages				**Note ·3·**							
	Nominal running current		+EK*V3	A	13							
Notes	(1)	The above-mentioned power supply of the hydrobox is for the backup heater only. The optional domestic hot water tank has a separate power supply.										
	(2)	The equipment complies with EN/IEC 61000-3-12.										
	EN/IEC 61000-3-12	European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase.										



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3 Electrical data

3 - 1 Electrical Data

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

* Electrical meter specification

- Pulse meter type/voltage-free contact for 5 V DC detection by PCB.
- Possible number of pulses
  - ·0.1· pulse/kWh
  - ·1· pulse/kWh
  - ·10· pulse/kWh
  - ·100· pulse/kWh
  - ·1000· pulse/kWh
- Pulse duration
  - minimum On time: ·40ms·
  - Minimum OFF time: ·100ms·
- Measurement type (depending on installation)
  - Single-phase AC meter
  - Three-phase AC meter
    - Balanced loads
  - Three-phase AC meter
    - Unbalanced loads

* Electrical meter installation guideline

- It is the responsibility of the installer to cover the complete power consumption with electrical meters (combination of estimation and metering is not allowed).

- Required number of electrical meters

Outdoor unit type		EPSK(06/08/10)A*V3						EPSK(08/10)A*W1						EPSK(12/14)A*W1					
Indoor unit type		EPBX10A*												EPBX14A*					
	Backup heater type	4V				9W		4V				9W		4V				9W	
	Backup heater power supply	1~ 230V	3~ 400V	3~ 230V	2~ 230V	1~ 230V	3~ 400V	1~ 230V	3~ 400V	3~ 230V	2~ 230V	1~ 230V	3~ 400V	1~ 230V	3~ 400V	3~ 230V	2~ 230V	1~ 230V	3~ 400V
	Backup heater configuration	Step ·0,5kW·				Step ·1kW·		Step ·0,5kW·				Step ·1kW·		Step ·0,5kW·				Step ·1kW·	
	Indoor unit supplied separately or from outdoor unit (normal kWh rate power supply)																		
Electrical meter type	1~	1	-			1	-	-	-			-	-	-	-			-	-
	3~ balanced	-	-			-	-	-	-			-	-	-	-			-	-
	3~ unbalanced	-	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1
	Indoor unit supplied separately (preferential kWh rate power supply)																		
Electrical meter type	1~	2	1			2	1	1	-			1	-	1	-			1	-
	3~ balanced	-	-			-	-	-	-			-	-	-	-			-	-
	3~ unbalanced	-	1	2	2	-	1	1	2	2	2	1	2	1	2	2	2	1	2
	Indoor unit supplied from outdoor unit (preferential kWh rate power supply) (1)																		
Electrical meter type	1~	1	-			1	-	-	-			-	-	-	-			-	-
	3~ balanced	-	-			-	-	-	-			-	-	-	-			-	-
	3~ unbalanced	-	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1

(1) only if the electricity company demands to consume a limited amount of electricity and does not shut down the power supply

4D154620

4 Combination table

4 - 1 Combination Table

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

Factory-mounted equipment for ·EPBX(10/14)AF(4V/9W)·

Description	EPBX(10/14)AF*	
Reversible model ·EPBX·	4V	9W
Backup heater ·4.5KW 1N~230V·	o	-
Backup heater ·4.5KW 3~400V·	o	-
Backup heater ·6-9KW 1N~230V·	-	o
Backup heater ·6-9KW 3N~400V·	-	o

Kit availability for indoor units

Reference	Description		EPBX(10/14)AF*	
EPBX*	Reversible indoor unit		4V	9W
BRC1HHDA*	HCI (Human Comfort Interface)		o	o
EKPCCAB4	PC cable	*(1)	o	o
KRCS01-1	Remote indoor sensor	*(2)	o	o
EKRSCA1	Remote sensor for outdoor	*(2)	o	o
FWXV10-15-20ABTV3(R)	Heat pump convector	*(3)	o	o
FWXT10-15-20ABTV3*	Heat pump convector	*(3)	o	o
FWXM10-15-20AATV3(R)	Heat pump convector	*(3)	o	o
EKRTWA	Wired room thermostat		o	o
EKRTRB	Wireless room thermostat		o	o
EKRTETS	External sensor room thermostat	*(4)	o	o
EKWUFHTA1V3	Multi-zoning base unit 230 V	*(5)	o	o
EKWCTRDI1V3	Digital thermostat 230 V	*(5)	o	o
EKWCTRAN1V3	Analogue thermostat 230 V	*(5)	o	o
EKWCVATR1V3	Actuator 230 V	*(5)	o	o
EKRRVATR2BA	Radiator Thermostat	*(6)	o	o
EKRUFHT61V3	Floor Heating Controller	*(6)	o	o
EKRACPUR1PA	Access Point	*(6)	o	o
EKRMIBEV1V3	Multi IO Box	*(6)	o	o
EKRSIBDI1V3	Basic IO Box	*(6)	o	o
EKRCTRDI2BA	Room Thermostat — ·1·	*(6)	o	o
EKRCTRDI3BA	Room Thermostat — ·2·	*(6)	o	o
EKRSENDI1BA	Room Sensor	*(6)	o	o
EKRELSG	Relay for Smart Grid		o	o
AFVALVE125	Freeze protection valve		o	o
ESAE04A*	Daikin Residential Controller		o	o
EKBUKRW1	BUH Rewiring kit		o	
EKBUKRW3	BUH Rewiring kit		o	
EKMIKPOAF	Mixing kit – PCB only	*(7)	o	o
EKMIKPHAF	Mixing kit – PCB with hydraulics	*(7)	o	o
EKMIKHMAF	Hydraulics – mixed pump group		o	o
EKMIKHUAF	Hydraulics – unmixed pump group	*(8)	o	o
EKMIKBVAF	Balancing vessel		o	o
EKMIKDIAF	Distributor for balancing vessel		o	o

Outdoor combination table for ·EPBX(10/14)AF*·

Description		EPSK06ARV3	EPSK(08/10)AR(V3/W1)	EPSK(12/14)ARW1
EPBX10AF*	Reversible	o	o	-
EPBX14AF*	Reversible	-	-	o

Kit availability for outdoor units

Reference	Description	EPSK06ARV3	EPSK(08/10)AR(V3/W1)	EPSK(12/14)ARW1
EKMST4	Mounting stand	o	o	o

Reference	Description		EPBX(10/14)AF*	
EPBX*	Reversible indoor unit		4V	9W
EKHWS(P)150D3V3	Domestic hot water tank ·150 l 1~230 V·		o	o
EKHWS(P)180D3V3	Domestic hot water tank ·180 l 1~230 V·		o	o
EKHWS(P)200D3V3	Domestic hot water tank ·200 l 1~230 V·		o	o
EKHWS(P)250D3V3	Domestic hot water tank ·250 l 1~230 V·		o	o
EKHWS(P)300D3V3	Domestic hot water tank ·300 l 1~230 V·		o	o
EKHWSU150D3V3	Domestic hot water tank ·150 l 1~230 V·		o	o
EKHWSU180D3V3	Domestic hot water tank ·180 l 1~230 V·		o	o
EKHWSU200D3V3	Domestic hot water tank ·200 l 1~230 V·		o	o
EKHWSU250D3V3	Domestic hot water tank ·250 l 1~230 V·		o	o
EKHWSU300D3V3	Domestic hot water tank ·300 l 1~230 V·		o	o
EKHWP500BA	Domestic hot water tank with solar connection	*(9)(10)	o	o
EKHWP500PBA	Domestic hot water tank with solar connection	*(9)(10)	o	o
EKHWP300BA	Domestic hot water tank with solar connection	*(9)(10)	o	o
EKHWP300PBA	Domestic hot water tank with solar connection	*(9)(10)	o	o
EKHY3PART	Third-party tank connection kit for thermistor pocket	*(11)	o	o
EKHY3PART2	Third-party tank connection kit for thermostat contact	*(12)	o	o

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4 Combination table

4 - 1 Combination Table

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

Kit availability for domestic hot water tanks

Reference	Description	*KHWP*			
KHWP	Domestic hot water tank with solar connection	500BA	500PBA	300BA	300PBA
*KSRPS4A	Solar pump station	o	o	o	o
EKEPRHLT3HX	Dedicated connection kit available.			o	o
EKEPRHLT5X	Only for reversible models	o	o		

Notes

(1) Data cable for connection with PC.
(2) Only 1 remote sensor can be connected: indoor OR outdoor sensor.
(3) The valve kit is mandatory if a heat pump convector is installed on a reversible model (not mandatory for heating only models).
(4) ·EKRTETS· can only be used in combination with ·EKRTRB·
(5) Multi-zoning wired controls
(6) Daikin Home Controls (wireless)
(7) Only possible in combination with ·EKMIKPOAF·
(8) Only possible in combination with ·EKMIKBVAF· and ·EKMIKPHAF· or ·EKMIKHUAF·
(9) Solar pump station
(10) Dedicated connection kit available: ·EKEP*·.
(11) ·EKHY3PART· can be used if you have a tank in which you can insert a thermistor.
(12) ·EKHY3PART2· can be used if you have a tank in which you cannot insert a thermistor.

Remark

Other combinations than mentioned in this combination table are prohibited.

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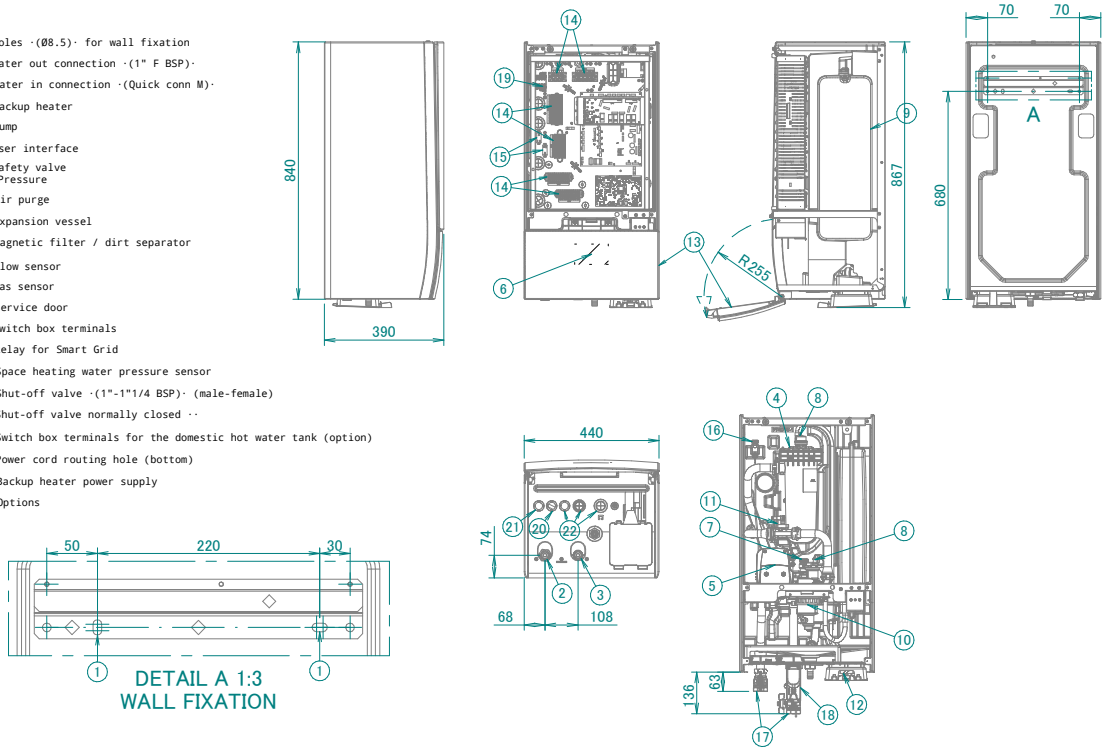
5 Dimensional drawings

5 - 1 Dimensional Drawings

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

1. Holes ·(Ø8.5)· for wall fixation
2. Water out connection ·(1" F BSP)·
3. Water in connection ·(Quick conn M)·
4. Backup heater
5. Pump
6. User interface
7. Safety valve Pressure
8. Air purge
9. Expansion vessel
10. Magnetic filter / dirt separator
11. Flow sensor
12. Gas sensor
13. Service door
14. Switch box terminals
15. Relay for Smart Grid
16. Space heating water pressure sensor
17. Shut-off valve ·(1"-1"1/4 BSP)· (male-female)
18. Shut-off valve normally closed ··
19. Switch box terminals for the domestic hot water tank (option)
20. Power cord routing hole (bottom)
21. Backup heater power supply
22. Options



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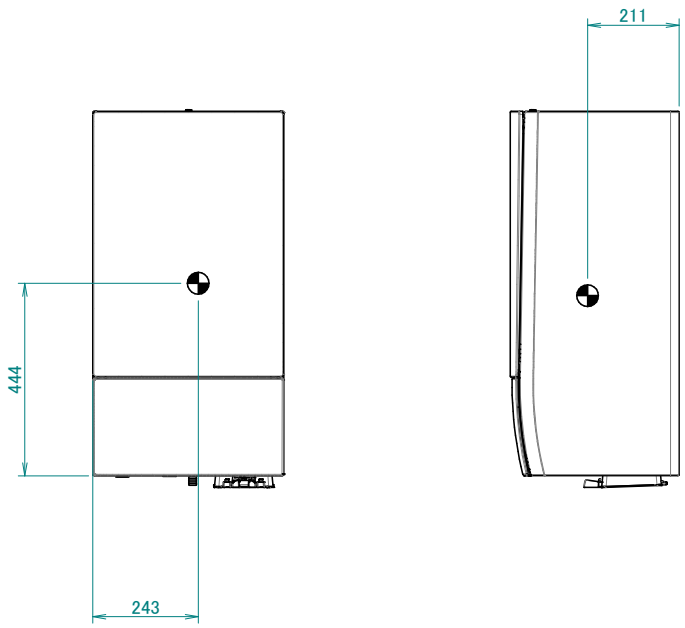
6 Centre of gravity

6 - 1 Centre of Gravity

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W



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7 Piping diagrams

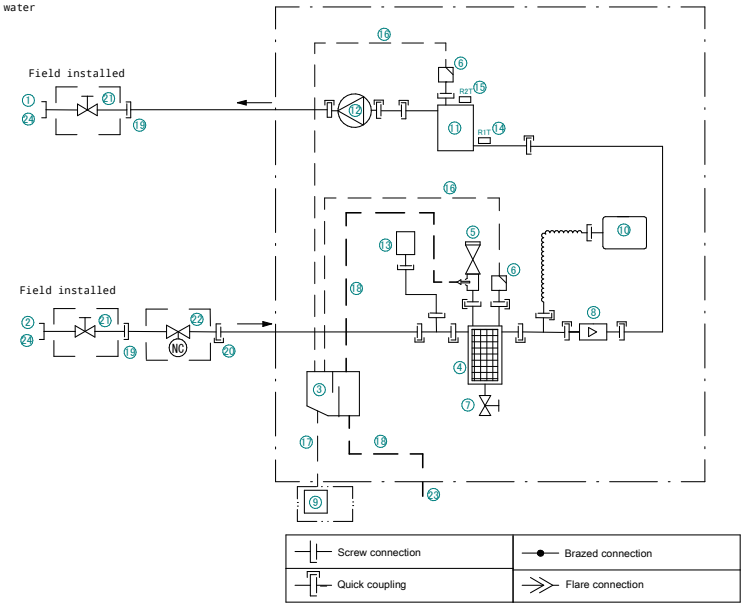
7 - 1 Piping Diagrams

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

① Space heating - water OUT
② Water IN connection
③ Gas separator
④ Magnetic filter / dirt separator
⑤ Safety valve
⑥ Air purge
⑦ Drain valve
⑧ Flow sensor
⑨ Gas sensor
⑩ Expansion vessel
⑪ Backup heater
⑫ Pump
⑬ Space heating water pressure sensor
⑭ R1T - Inlet water thermistor
⑮ R2T - Outlet water backup heater thermistor
⑯ Hose for air purge
⑰ Hose for gas
⑱ Drain hose for water

Field piping connections

⑲ Screw connection · 1" F·
⑳ Quick connection
㉑ Shut-off valve · 1"-1"1/4 · (male-female)
㉒ Shut-off valve normally closed ··
㉓ Drain outlet · ID18·
㉔ Screw connection · 1"1/4 F·



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8 Wiring diagrams

8 - 1 Notes & Legend

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W

NOTES to go through before starting the unit

X2M	: Main Terminal Outdoor Unit	X42M, X43M	: Field Wiring for High Voltage
X40M	: Main Terminal Indoor Unit	X44M + X45M	: Field Wiring for SELV
X41M	: Main Terminal Back-Up Heater	X7M, X8M	: BSH Power Supply Terminal

: Earth wiring
: Field supply
① : Several wiring possibilities
: Option
: Not mounted in switch box
: Wiring depending on model
: PCB

Note 1 : Connection point of the power supply for the BUH should be foreseen outside the unit.

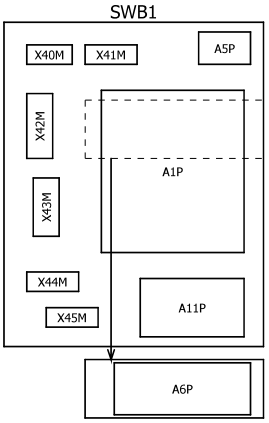
Backup heater power supply
- ☐ 4,5kW (1/N~, 230V)
- ☐ 4,5kW (3/N~, 400V)
- ☐ 4,5kW (3~, 230V)
- ☐ 4,5kW (2~, 230V)
- ☐ 6kW (1/N~, 230V)
- ☐ 9kW (3/N~, 400V)

User installed options:
- ☐ Remote User Interface
- ☐ Ext. indoor thermistor
- ☐ Ext. outdoor thermistor
- ☐ Safety thermostat
- ☐ Smartgrid kit
- ☐ W-LAN Cartridge
- ☐ Bizone Mixing Kit

Main LWT:
- ☐ On/OFF thermostat (wired)
- ☐ On/OFF thermostat (wireless)
  - ☐ Ext. thermistor
- ☐ Heat pump convector

Add LWT:
- ☐ On/OFF thermostat (wired)
- ☐ On/OFF thermostat (wireless)
  - ☐ Ext. thermistor
- ☐ Heat pump convector

POSITION IN SWITCH BOX



LEGEND

Translation can be found in the installation manual.

* : Optional
\# : Field supply

Part n°		Description
A1P		Hydro PCB
A2P	*	On/OFF thermostat (PC=power circuit)
A3P	*	Heat Pump Convector
A5P		Power Supply PCB
A6P		Multi-Step Back-Up Heater PCB
A9P		Daikin Eye (Status indicator)
A11P		Interface PCB
A12P		Display PCB
A14P	*	Remote User Interface
A15P	*	Receiver PCB (wireless On/OFF thermostat)
A30P	*	Bizone Mixing Kit PCB
B2L		Flow sensor
B4L		Gas Sensor
B1PW		Water pressure sensor
CN* (A5P)		Connector
E1H		Backup heater element
E2H		Backup heater element
E3H		Backup heater element
E4H		Backup heater element
E5H		Backup heater element
E6H	*	Booster heater element
E*P(A9P)		Indication LED
F1B	#	Overcurrent fuse backup heater
F2B	#	Overcurrent fuse Main
F3B	#	Overcurrent fuse Booster Heater
F1T		Thermal Fuse backup heater
FU1 (A1P)		Fuse T 5 A 250 V for PCB
K1A, K2A	*	High voltage smartgrid relay
K3M	*	Contactor booster heater
K*R (A*P)		Relay on PCB
K8* (A6P)		Relay on PCB
M1P		Unit Pump

Part n°		Description
M2P	#	Domestic hot water pump
M2S	#	2-Way valve for cooling mode
M4S	#	Shut off valve - Inlet Leak Stop
M5S	*	3-Way Valve for space heating / DHW
P* (A14P)	*	Terminal
P1M		Display
PC (A15P)	*	Power circuit
PHC-T (A6P)		Thermal cutout detection
Q*DI	#	Earth Leakage Circuit Breaker
Q1L		Thermal protector backup heater
Q2L		Thermal protector booster heater
Q4L	#	Safety thermostat
R1H (A2P)	*	Humidity sensor
R1T (A1P)		Outlet water heat exchanger thermistor
R1T (A2P)	*	Ambient sensor On/OFF thermostat
R1T (A14P)	*	Ambient sensor user interface
R2T (A1P)		Outlet backup heater thermistor
R2T (A2P)	*	External sensor (floor or ambient)
R5T		Domestic hot water thermistor
R6T	*	External in- or outdoor ambient thermistor
S1S	#	Preferential kWh rate PS contact
S2S	#	Electrical meter pulse input 1
S3S	#	Electrical meter pulse input 2
S4S	#	Smartgrid feed-in
S10S-S11S	#	Low voltage smartgrid contact
ST6 (A30P)	*	Connector
TS1		Touch Sensor
X*A, X*Y, X*Y*, X*H, X*H*		Connector
X*M		Terminal strip
Z*C		Noise Filter (Ferrite Core)

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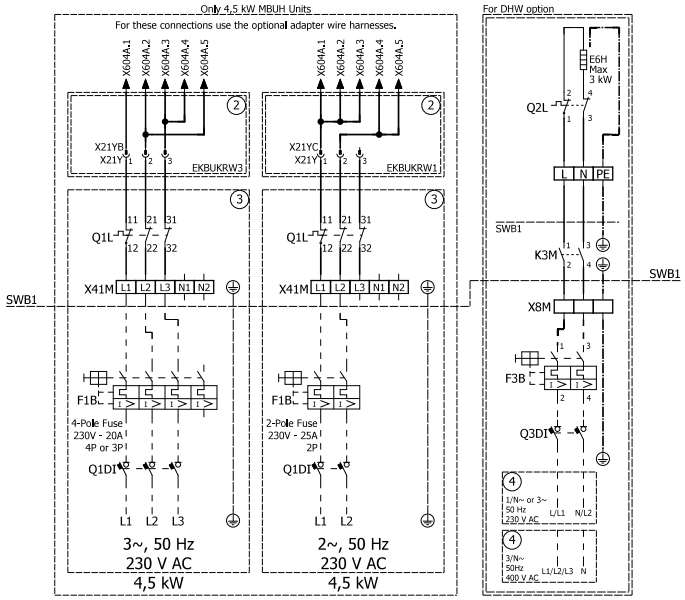
8 Wiring diagrams

8 - 2 Wiring Diagrams - Hydro Module

8

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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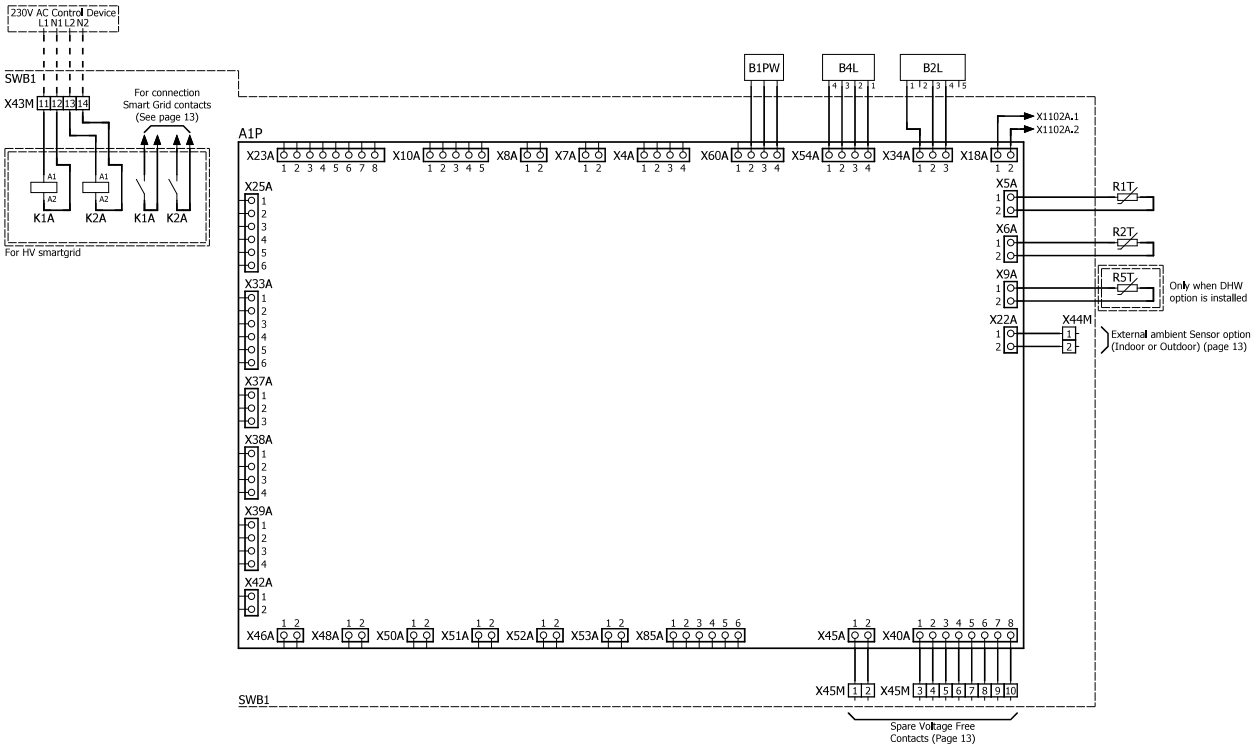
EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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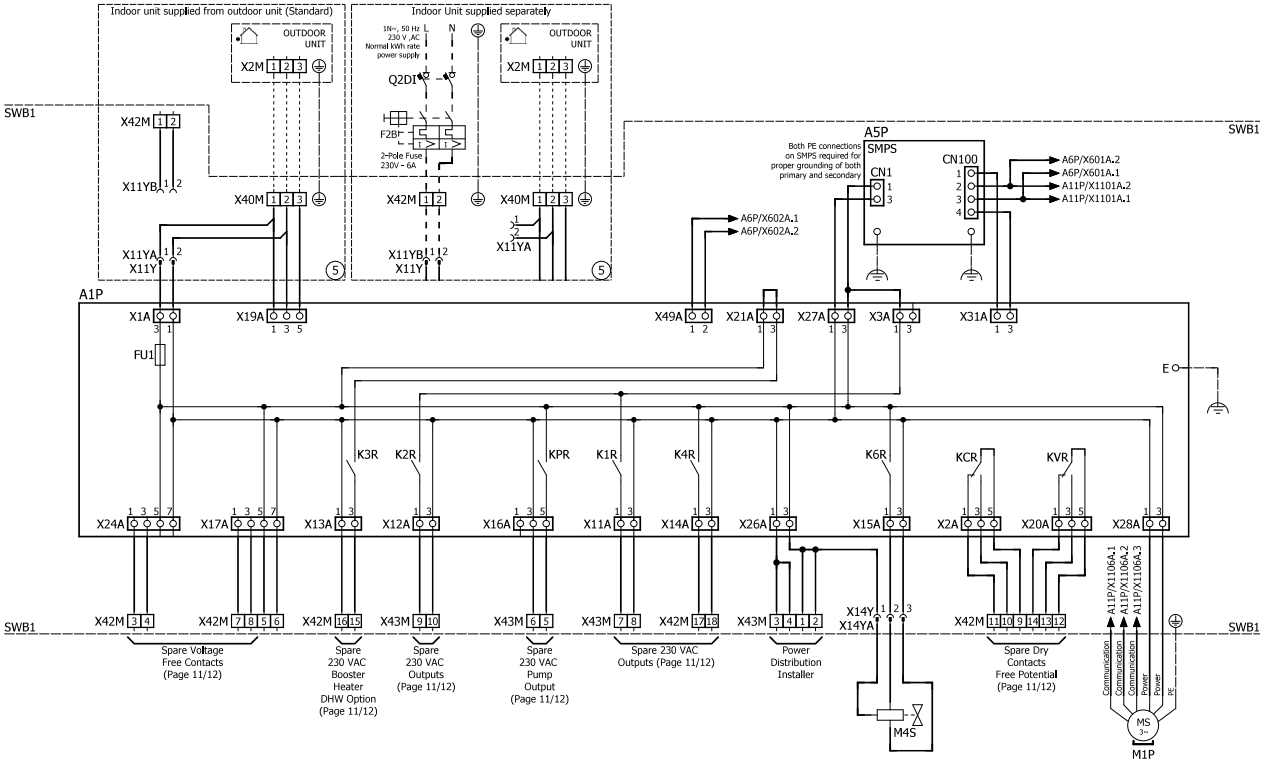
8 Wiring diagrams

8 - 2 Wiring Diagrams - Hydro Module

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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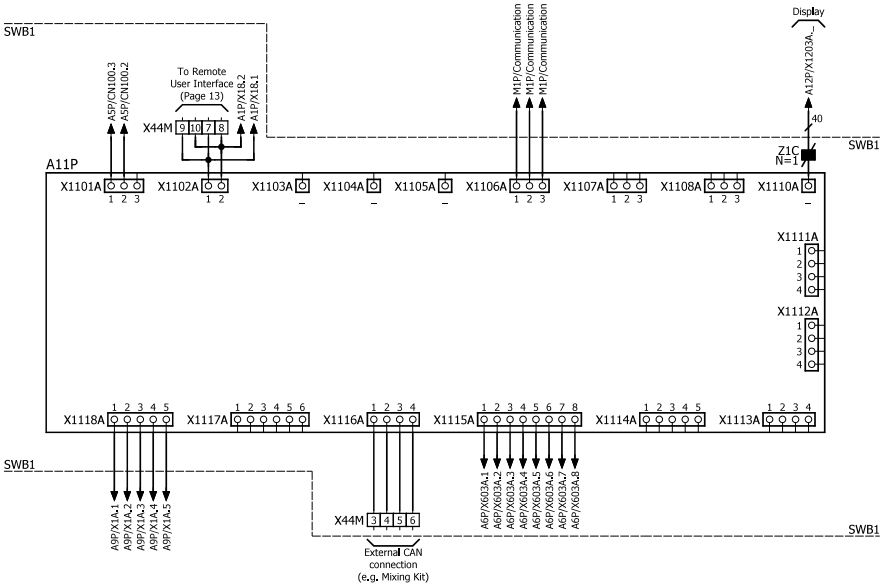
EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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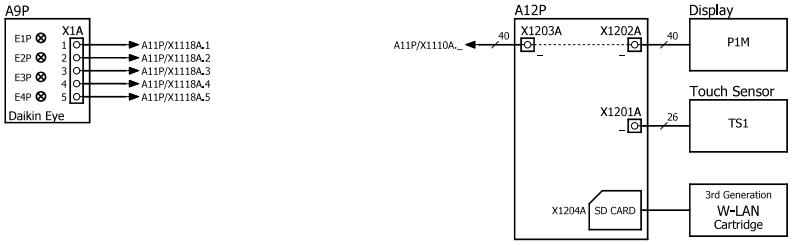
8 Wiring diagrams

8 - 2 Wiring Diagrams - Hydro Module

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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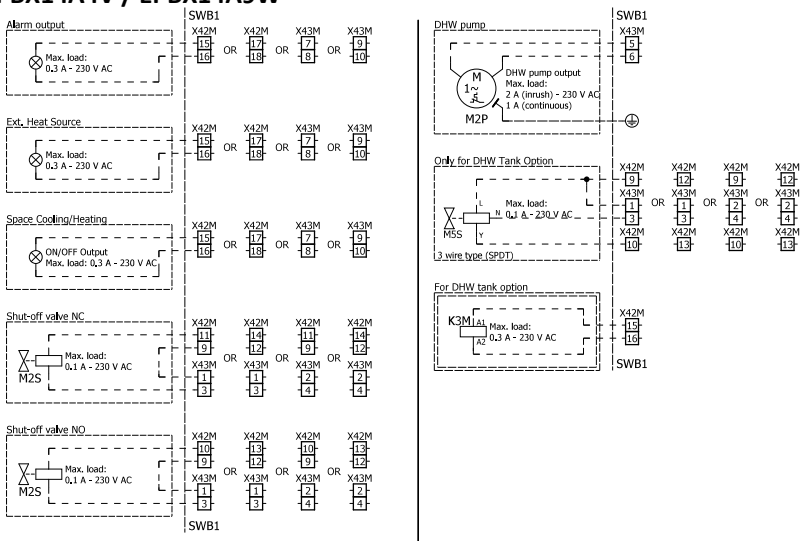
EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W

Connection Possibilities for X42M / X43M (Page 1/2)



X42M Ports	Description	Max No. of wires per position
1	Alternative Power Supply - L (230 VAC)	1
2	Alternative Power Supply - N (230 VAC)	1
3	Input 1 Room Thermostat 1 (Voltage Free)	1
4	Input 2 Room Thermostat 1 (Voltage Free)	1
5	L Room Thermostat (1 & 2)	2 (See note 3)
6	N Room Thermostat (1 & 2)	2 (See note 3)
7	Input 1 Room Thermostat 2 (Voltage Free)	1
8	Input 2 Room Thermostat 2 (Voltage Free)	1
9	Spare Dry Contact Free Potential 1 - COM	1
10	Spare Dry Contact Free Potential 1 - NO	1
11	Spare Dry Contact Free Potential 1 - NC	1
12	Spare Dry Contact Free Potential 2 - COM	1
13	Spare Dry Contact Free Potential 2 - NO	1
14	Spare Dry Contact Free Potential 2 - NC	1
15	Spare 230 VAC Output 1 (NO)	1
16	Spare 230 VAC Output 1 (N)	1
17	Spare 230 VAC Output 2 (NO)	1
18	Spare 230 VAC Output 2 (N)	1

X43M Ports	Description	Max No. of wires per position
1	Power Distribution Installer - L (230 VAC)	1
2	Power Distribution Installer - L (230 VAC)	1
3	Power Distribution Installer - N (230 VAC)	1
4	Power Distribution Installer - N (230 VAC)	1
5	Spare 230 VAC Output Pump (NO)	1
6	Spare 230 VAC Output Pump (N)	1
7	Spare 230 VAC Output 3 (NO)	1
8	Spare 230 VAC Output 3 (N)	1
9	Spare 230 VAC Output 4 (NO)	1
10	Spare 230 VAC Output 4 (N)	1
11	HV Smart Grid 1 - L (230 VAC)	1
12	HV Smart Grid 1 - N (230 VAC)	1
13	HV Smart Grid 2 - L (230 VAC)	1
14	HV Smart Grid 2 - N (230 VAC)	1

Notes:
1. For X42M Ports 3-4 and 7-8: Only ON/OFF voltage free contacts
2. Terminal combinations can only be used for one option.
3. For terminals X42M/5-6 a twin Ferrule is needed if 2 wires are needed.

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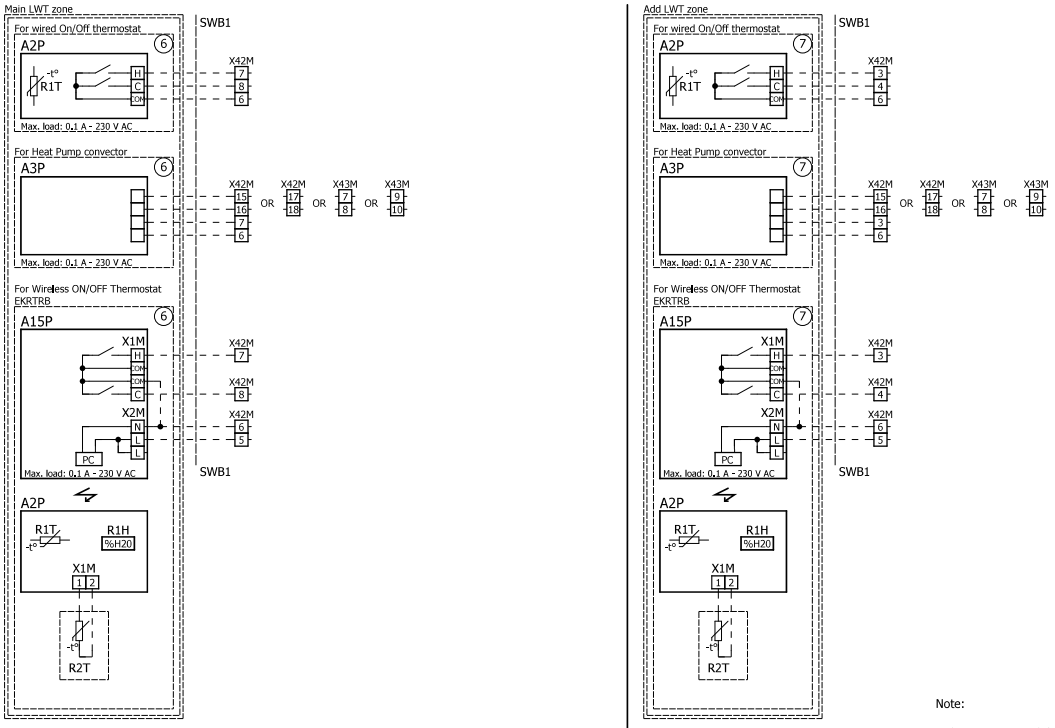
8 Wiring diagrams

8 - 2 Wiring Diagrams - Hydro Module

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W

Connection Possibilities for X42M / X43M (Page 2/2)



Note:

Refer to page 10 of the Wiring Diagram for Terminal Block designation legend.

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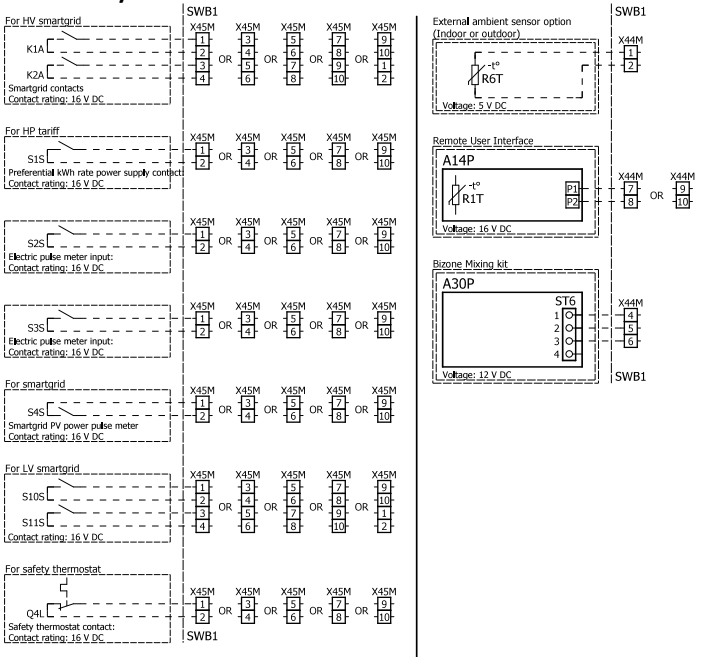
EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W

Possible connections for X44M / X45M



X44M Ports	Description	Max No. of wires per position
1	External Thermistor	1
2	External Thermistor GND	1
3	CAN Bus VCC	1
4	CAN Bus High	1
5	CAN Bus Low	1
6	CAN Bus GND	1
7	P1 - 1	1
8	P2 - 1	1
9	P1 - 2	1
10	P2 - 2	1

X45M Ports	Description	Max No. of wires per position
1	Spare Voltage Free Contact NO 1	1
2	Spare Voltage Free Contact GND 1	1
3	Spare Voltage Free Contact NO 2	1
4	Spare Voltage Free Contact GND 2	1
5	Spare Voltage Free Contact NO 3	1
6	Spare Voltage Free Contact GND 3	1
7	Spare Voltage Free Contact NO 4	1
8	Spare Voltage Free Contact GND 4	1
9	Spare Voltage Free Contact NO 5	1
10	Spare Voltage Free Contact GND 5	1

Notes:
1. Recommended to use High Grade Contact material
2. For Ports 1 to 10 of X45M: Only ON/OFF voltage free contacts
3. Terminal combinations can only be used for one option.

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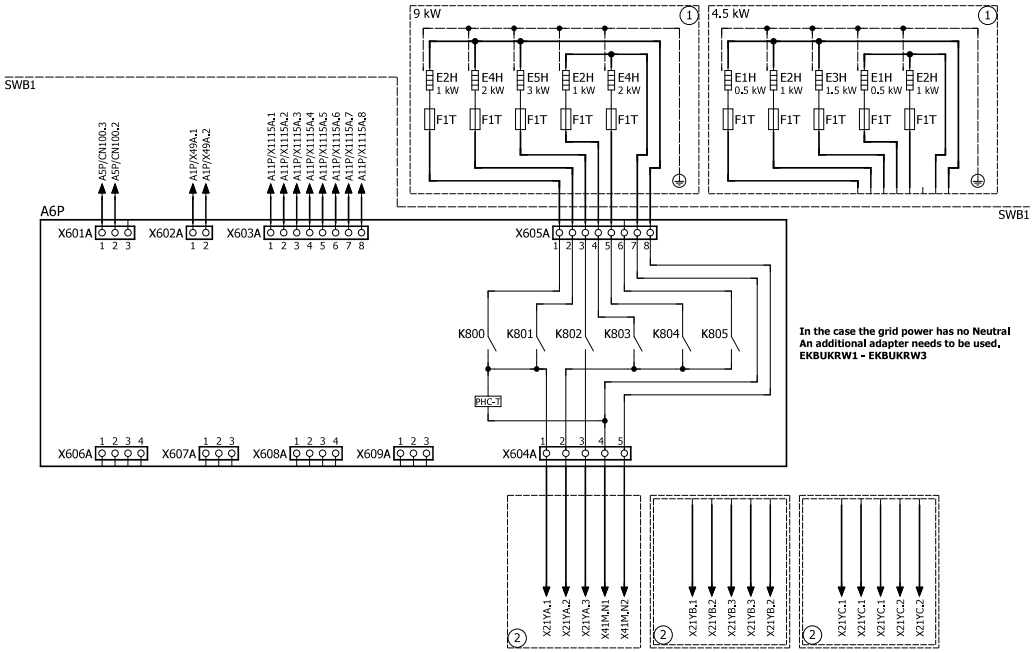
8 Wiring diagrams

8 - 3 Power Supply, Back-up Heater

EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



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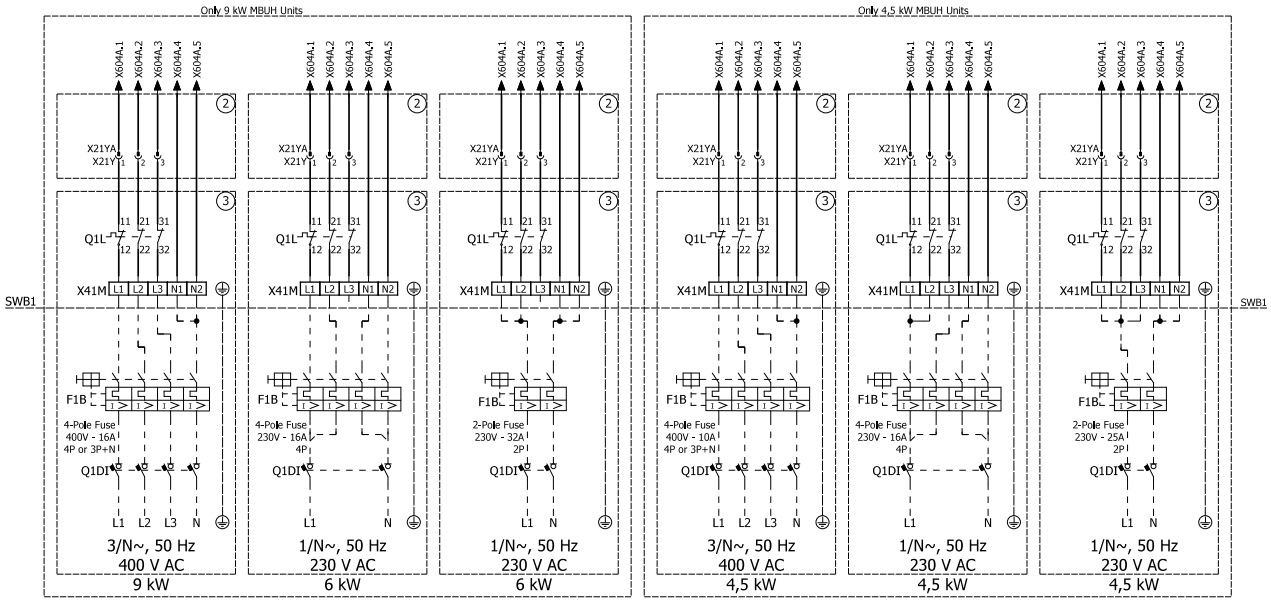
EPBX10A4V / EPBX10A9W
EPBX14A4V / EPBX14A9W



4D148696B

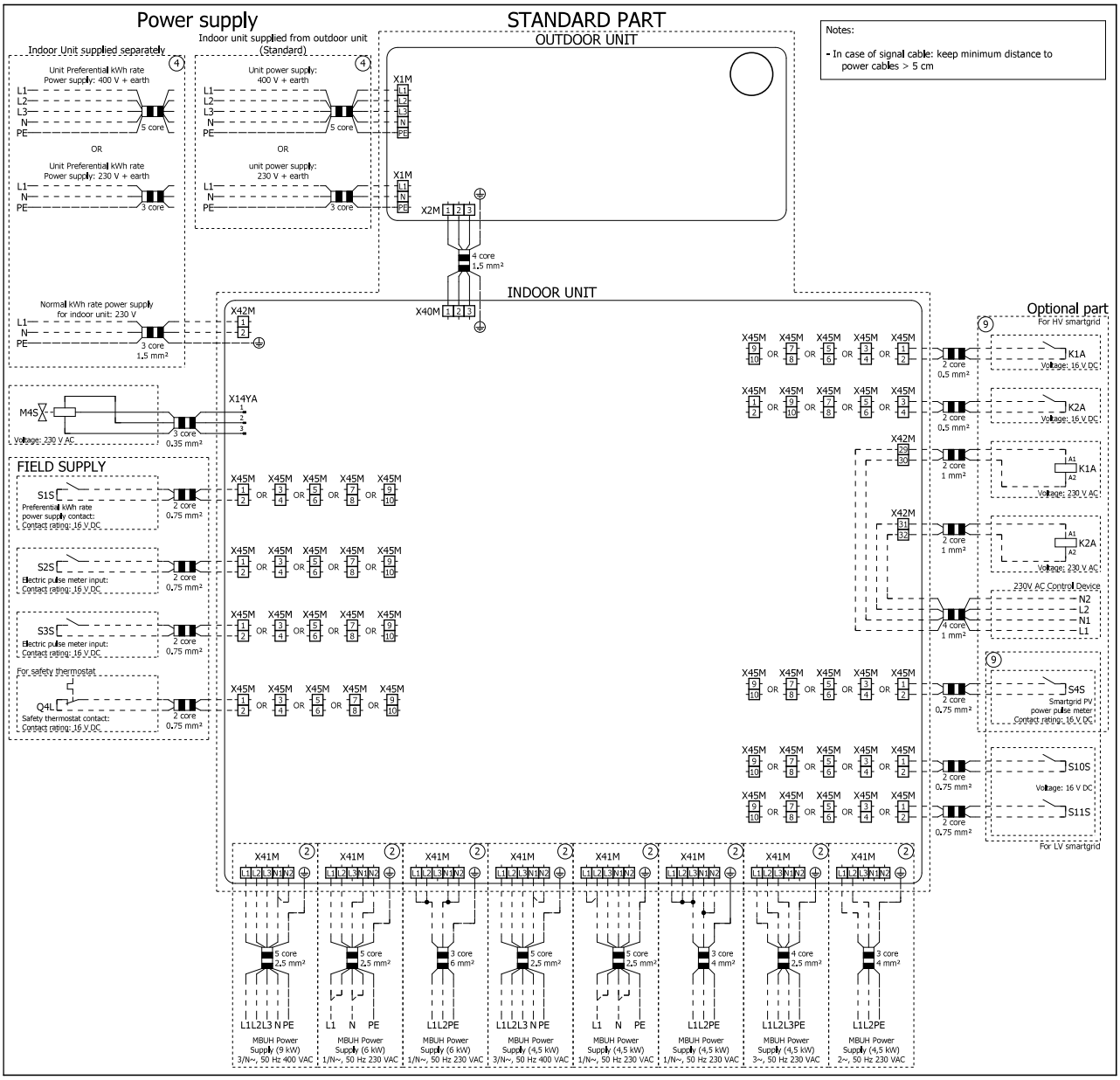
9 External connection diagrams

9 - 1 External Connection Diagrams

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

Electrical connection diagram Altherma 4 Wall Mounted

For more details please check unit wiring



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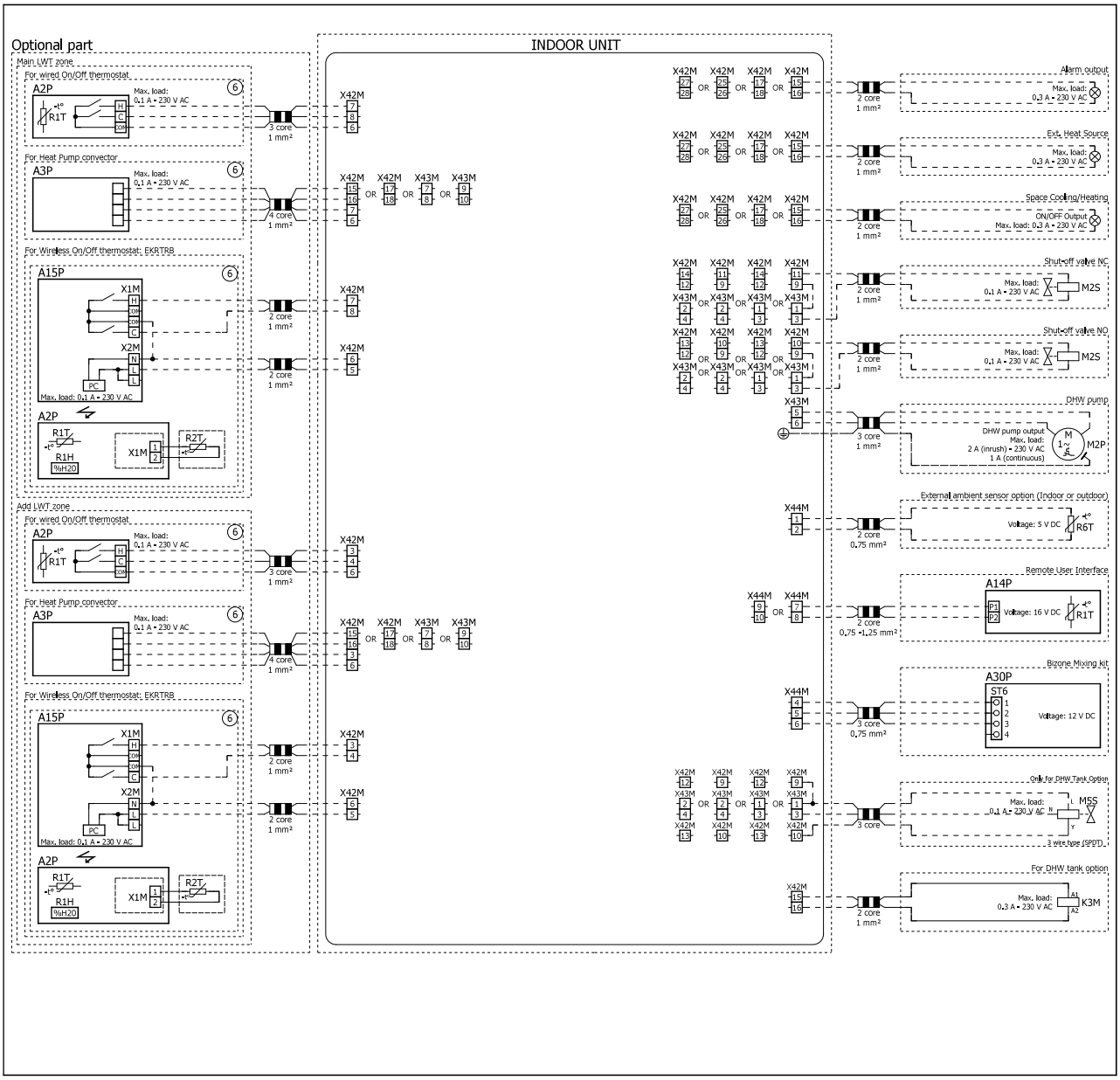
9 External connection diagrams

9 - 1 External Connection Diagrams

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W

Electrical connection diagram Altherma 4 Wall Mounted

For more details please check unit wiring



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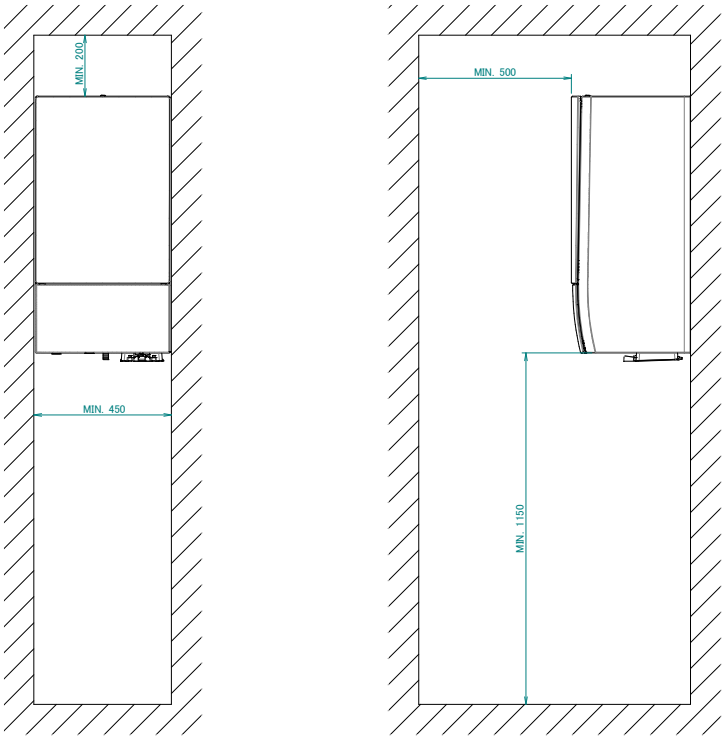
10 Installation

10 - 1 Installation Method

EPBX10A4V
EPBX10A9W
EPBX14A4V
EPBX14A9W



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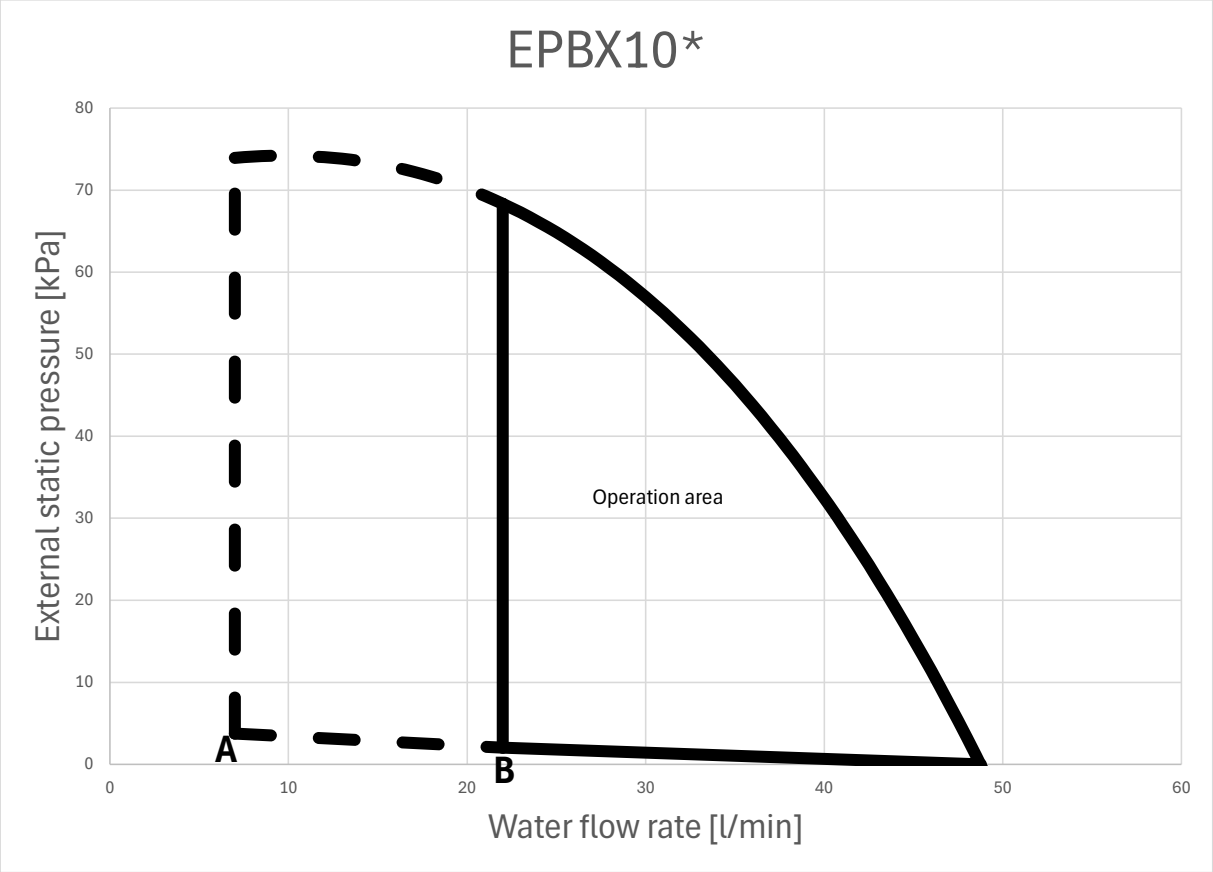
11 Hydraulic performance

11 - 1 Static Pressure Drop Unit

EPBX10A4V
EPBX10A9W



A Minimum water flow rate during normal operation

B Minimum water flow rate during defrost/backup heater operation

Operation area is extended to lower flow rates only in case the unit operates with heat pump only.
See dashed lines

Notes

1. Selecting a flow outside the operating area can damage the unit or cause the unit to malfunction. See also the minimum and maximum allowed water flow range in the technical specifications.
2. Make sure water quality complies with EU Directive ·2020/2184·
3. Unit "External static pressure" includes the shut-off valve

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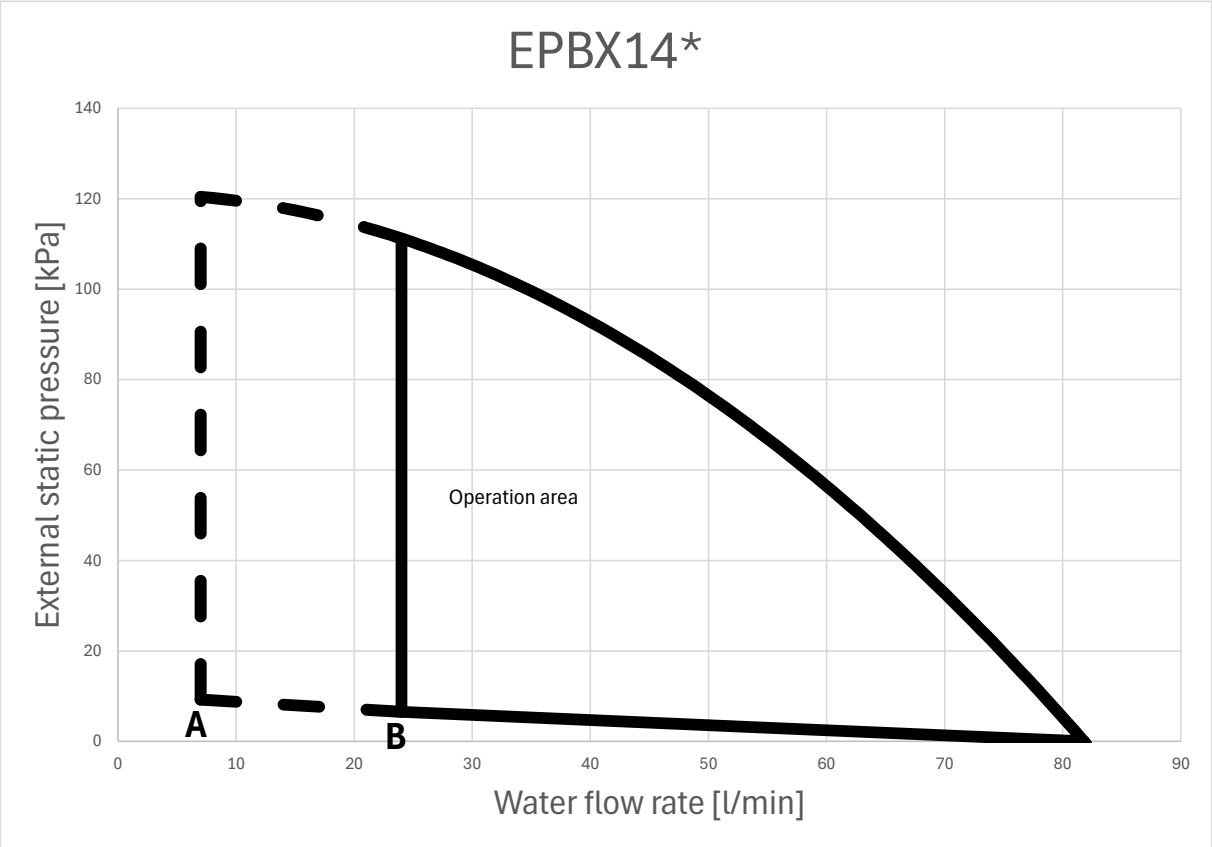
11 Hydraulic performance

11 - 1 Static Pressure Drop Unit

EPBX14A4V
EPBX14A9W



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