

Daikin Altherma low
temperature split
Technical Data
EHVH-E6V / EHVH-E9W /
EHVX-E3V / EHVX-E6V /
EHVX-E9W / EHVX-E6VG



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1 Features

1 - 1 EHVH-E6V, EHVH-E9W, EHVX-E3V, EHVX-E6V, EHVX-E6VG, EHVX-E9W

Floor standing air to water heat pump for heating and hot water, ideal for low energy houses

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- › A combined stainless steel domestic hot water tank of 180 or 230L and heat pump for easy installation
- › W-LAN Adapter connection
- › PCB board and hydraulic components are located in the front for easy access
- › Small installation footprint, similar to other household appliances
- › Integrated back-up heater choice of 3, 6, 9 kW as well as back-up heater less models are available



Onecta app
(optional)



Online
controller

2 Specifications

2 - 1 Specifications

Technical specifications				EHVH04S18E6V	EHVH04S23E6V	EHVH08S18E6V	EHVH08S23E6V
Heater capacity	Step 1		kW	2			
	Step 2		kW	2 or 4 ..			
Power input	Nom.		kW	0.09			
Efficiency	Domestic hot water	Net calorific value	%	118	135	118	135
Casing	Colour			White + Black			
	Material			Precoated sheet metal			
Dimensions	Unit	Height	mm	1,650	1,850	1,650	1,850
		Width	mm	595			
		Depth	mm	625			
	Packed unit	Height	mm	1,820	2,020	1,820	2,020
		Width	mm	720			
		Depth	mm	740			
Weight	Unit		kg	119	128	119	128
	Packed unit		kg	135	144	135	144
Packing	Material			Wood / Carton / PE wrapping foil / Metal			
	Weight		kg	16			
PED	Category			Art4.3 / See note 7			
	Most critical part	Name		Plate heat exchanger			
Refrigerant side heat exchanger		Ps*V	Bar*l	38			
	Type			Plate heat exchanger			
	Quantity			1			
Pump	Plates	Quantity		42			
	Type			Glandless circulator			
	Nr of speeds			PWM			
Water side Heat exchanger	Power input		W	52			
	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
	Water volume		l	0.95			
Expansion vessel	Water flow rate	Min.	l/min	12			
	Volume		l	10			
	Max. water pressure		bar	3			
Water filter	Pre pressure		bar	1			
	Diameter perforations		mm	0.8			
Tank	Material			Stainless steel / Plastic			
	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Tank	Water volume		l	180	230	180	230
	Material			Stainless steel (EN 1.4521)			
	Maximum water temperature		°C	70			
	Maximum water pressure		bar	10			
	Insulation	Material		Polyurethane foam			
		Heat loss	kWh/24h	1.2 (1)	1.4 (1)	1.2 (1)	1.4 (1)
	Standing heat loss	S	W	50	58	50	58
	Storage volume	V	l	181	220	181	220
	Corrosion protection			Pickling			
	Energy efficiency class			B			
General	Supplier/ Manufacturer details	Name or trademark		Daikin Europe N.V.			
		Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8			
		Domestic hot water tank	m³/h	10			
Water circuit	inch		in	G 1" (female)			
	Piping material			Cu			
	inch		in	1"			
	inch		in	1"			
	Safety valve		bar	3			
	Manometer			Digital			
	Drain valve / fill valve			No			
	Shut off valve			Yes			
	Air purge valve			Yes			
	Total water volume		l	3.5 (2)			
	Minimum water volume in the system for cooling		l	10 (3)			
	Minimum water volume in the system for heating		l	0 (3)			
Water circuit - Domestic hot water side	Piping material			Stainless steel			
	Piping connections	Cold water in / Hot water out	in	G 3/4" FEMALE			
		inch	in	G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter		mm	15.9			
	Liquid side diameter		mm	6.4			

2 Specifications

2 - 1 Specifications

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Technical specifications					EHVH04S18E6V	EHVH04S23E6V	EHVH08S18E6V	EHVH08S23E6V
Sound power level	Nom.			dBA			42 (4)	
Sound pressure level	Nom.			dBA			28 (5)	
Operation range	Heating	Ambient	Min.	°C			0 (6)	
			Max.	°C			0 (6)	
		Water side	Min.	°C			0 (6)	
			Max.	°C			0 (6)	
Operation range	Cooling	Ambient	Min.	°CDB			0 (6)	
			Max.	°CDB			0 (6)	
		Water side	Min.	°C			0 (6)	
			Max.	°C			0 (6)	
	Domestic hot water	Water side	Min.	°C			0 (6)	
			Max.	°C			0 (6)	
Safety devices	Item	01					Thermal cut out	

Electrical specifications					EHVH04S18E6V	EHVH04S23E6V	EHVH08S18E6V	EHVH08S23E6V
Power supply	Name						See note 8	
	Voltage	Min.		%			10	
	range	Max.		%			10	
IP class	IP						IP X0B	
Electric heater	Power supply	Name					6V3	
		Phase					1~ / 3~	
		Frequency		Hz			50	
		Voltage		V			230	
	Current	Maximum running current		A			26	
		Zmax		Ω			0.22	
		Minimum Ssc value					Equipment complying with EN/IEC 61000-3-12	
		Recommended fuses		A			20	
Wiring connections	Communication cable	Quantity					3	
		Remark					2.5 mm ²	
	Electric meter	Quantity					2	
		Remark					Minimum 0.75 mm ² (SVDC pulse detection)	
	Preferential kWh rate	Quantity					Power: 2	
		Remark					Power 6.3A (Select diameter and type according to national and local regulations)	
	Domestic hot water pump	Quantity					2	
		Remark					Minimum 0.75 mm ² (2A inrush, 1A continuous)	
	For power supply back-up heater	Quantity					Prewired	
		Remark						
	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)Based on a dT of 45 K |

(2)Including piping + PHE + back-up heater; excluding expansion vessel |

(3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

(4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |

(5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to operation range of the unit. |

(7)PED unit category: Art3§3: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |

(8)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. |

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). |

4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

2 pole 20 A curve 400V tripping class C (refer to wiring diagram)

Technical specifications				EHVH08S18E9W	EHVH08S23E9W
Heater capacity	Step 1		kW	3	
	Step 2		kW	max. 6	
Power input	Nom.		kW	0.09	

2 Specifications

2 - 1 Specifications

Technical specifications				EHVH08S18E9W	EHVH08S23E9W
Efficiency	Domestic hot water	Net calorific value	%	118	135
Casing	Colour	White + Black			
	Material	Precoated sheet metal			
Dimensions	Unit	Height	mm	1,650	1,850
		Width	mm	595	
		Depth	mm	625	
	Packed unit	Height	mm	1,820	2,020
		Width	mm	720	
		Depth	mm	740	
Weight	Unit		kg	119	128
	Packed unit		kg	135	144
Packing	Material	Wood / Carton / PE wrapping foil / Metal			
	Weight		kg	16	
PED	Category	Art4.3 / See note 7			
	Most critical part	Name		Plate heat exchanger	
		Ps*V	Bar*l	38	
Refrigerant side heat exchanger	Type	Plate heat exchanger			
	Quantity	1			
	Plates	Quantity		42	
Pump	Type	Glandless circulator			
	Nr of speeds	PWM			
	Power input		W	52	
Water side Heat exchanger	Type	Plate heat exchanger			
	Quantity	1			
	Plates	Quantity		42	
	Water volume		l	0.95	
	Water flow rate	Min.	l/min	12	
Expansion vessel	Volume		l	10	
	Max. water pressure		bar	3	
	Pre pressure		bar	1	
Water filter	Diameter perforations		mm	0.8	
	Material	Stainless steel / Plastic			
Tank	Name	Stainless steel domestic hot water tank 180 l			Stainless steel domestic hot water tank 230 L
Tank	Water volume		l	180	230
	Material	Stainless steel (EN 1.4521)			
	Maximum water temperature		°C	70	
	Maximum water pressure		bar	10	
	Insulation	Material		Polyurethane foam	
		Heat loss	kWh/24h	1.2 (1)	1.4 (1)
	Standing heat loss	S	W	50	58
	Storage volume	V	l	181	220
	Corrosion protection	Pickling			
	Energy efficiency class	B			
	Supplier/ Manufacturer details	Name or trademark		Daikin Europe N.V.	
		Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium	
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8	
		Domestic hot water tank	m³/h	10	
Water circuit	inch		in	G 1" (female)	
	Piping material			Cu	
	inch		in	1"	
	inch		in	1"	
	Safety valve		bar	3	
	Manometer			Digital	
	Drain valve / fill valve			No	
	Shut off valve			Yes	
	Air purge valve			Yes	
	Total water volume		l	3.5 (2)	
	Minimum water volume in the system for cooling		l	10 (3)	
	Minimum water volume in the system for heating		l	0 (3)	
Water circuit - Domestic hot water side	Piping material			Stainless steel	
	Piping connections	Cold water in / Hot water out	in	G 3/4" FEMALE	
		inch	in	G 3/4" FEMALE	
Refrigerant circuit	Gas side diameter		mm	15.9	
	Liquid side diameter		mm	6.4	
Sound power level	Nom.		dBA	42 (4)	
Sound pressure level	Nom.		dBA	28 (5)	

2 Specifications

2 - 1 Specifications

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Technical specifications					EHVH08S18E9W	EHVH08S23E9W
Operation range	Heating	Ambient	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
		Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
Operation range	Cooling	Ambient	Min.	°CDB	0 (6)	
			Max.	°CDB	0 (6)	
		Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
	Domestic hot water	Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
Safety devices	Item	01			Thermal cut out	

Electrical specifications				EHVH08S18E9W	EHVH08S23E9W
Power supply	Name			See note 8	
	Voltage range	Min.	%	10	
		Max.	%	10	
IP class	IP			IP X0B	
Electric heater	Power supply	Name		9W	
		Phase		3~	
		Frequency	Hz	50	
		Voltage	V	400	
	Current	Maximum running current		13	
		Recommended fuses		20	
Wiring connections	Communication cable	Quantity		3	
		Remark		2.5 mm ²	
	Electric meter	Quantity		2	
		Remark		Minimum 0.75 mm ² (SVDC pulse detection)	
	Preferential kWh rate	Quantity		Power: 2	
		Remark		Power 6.3A (Select diameter and type according to national and local regulations)	
	Domestic hot water pump	Quantity		2	
		Remark		Minimum 0.75 mm ² (2A inrush, 1A continuous)	
	For power supply back-up heater	Quantity		Prewired	
		Remark			
	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)Based on a dT of 45 K |

(2)Including piping + PHE + back-up heater; excluding expansion vessel |

(3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

(4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |

(5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to operation range of the unit. |

(7)PED unit category: Art3S3: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |

(8)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. |

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). |

4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

2 pole 20 A curve 400V tripping class C (refer to wiring diagram)

Technical specifications				EHVX04S18E3V		EHVX04S23E3V	
Heater capacity	Step 1		kW	3			
Power input	Nom.		kW	0.09			
Efficiency	Domestic hot water	Net calorific value	%	118		135	
Casing	Colour			White + Black			
	Material			Precoated sheet metal			

2 Specifications

2 - 1 Specifications

Technical specifications				EHVX04S18E3V		EHVX04S23E3V	
Dimensions	Unit	Height	mm	1,650		1,850	
		Width	mm	595			
		Depth	mm	625			
	Packed unit	Height	mm	1,820		2,020	
		Width	mm	720			
		Depth	mm	740			
Weight	Unit		kg	119		128	
	Packed unit		kg	135		144	
Packing	Material			Wood / Carton / PE wrapping foil / Metal			
	Weight			16			
PED	Category			Art4.3 / See note 7			
	Most critical part	Name		Plate heat exchanger			
		Ps*V	Bar*l	38			
Refrigerant side heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
Pump	Plates	Quantity		42			
	Type			Glandless circulator			
	Nr of speeds			PWM			
	Power input			52			
Water side Heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
	Water volume			0.95			
	Water flow rate	Min.	l/min	12			
Expansion vessel	Volume			10			
	Max. water pressure			3			
	Pre pressure			1			
Water filter	Diameter perforations			0.8			
	Material			Stainless steel / Plastic			
Tank	Name			Stainless steel domestic hot water tank 180 l		Stainless steel domestic hot water tank 230 L	
	Water volume			180		230	
Tank	Material			Stainless steel (EN 1.4521)			
	Maximum water temperature			70			
	Maximum water pressure			10			
	Insulation	Material		Polyurethane foam			
		Heat loss	kWh/24h	1.2 (1)		1.4 (1)	
	Standing heat loss	S	W	50		58	
	Storage volume	V	l	181		220	
	Corrosion protection			Pickling			
	Energy efficiency class			B			
	General	Supplier/	Name or trademark		Daikin Europe N.V.		
Manufacturer details		Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8			
		Domestic hot water tank	m³/h	10			
Water circuit	inch			G 1" (female)			
	Piping material			Cu			
	inch			1"			
	inch			1"			
	Safety valve			3			
	Manometer			Digital			
	Drain valve / fill valve			No			
	Shut off valve			Yes			
	Air purge valve			Yes			
	Total water volume			3.5 (2)			
	Minimum water volume in the system for cooling			10 (3)			
	Minimum water volume in the system for heating			0 (3)			
	Water circuit - Domestic hot water side	Piping material			Stainless steel		
Piping connections		Cold water in / Hot water out	inch	G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter			15.9			
	Liquid side diameter			6.4			
Sound power level	Nom.			42 (4)			
Sound pressure level	Nom.			28 (5)			
Operation range	Heating	Ambient	Min.	°C	0 (6)		
			Max.	°C	0 (6)		
		Water side	Min.	°C	0 (6)		
			Max.	°C	0 (6)		
	Cooling	Ambient	Min.	°CDB	0 (6)		

2 Specifications

2 - 1 Specifications

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Technical specifications					EHVX04S18E3V	EHVX04S23E3V
Operation range	Cooling	Ambient	Max.	°CDB	0 (6)	
			Min.	°C	0 (6)	
			Max.	°C	0 (6)	
	Domestic hot water	Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
Safety devices	Item	01			Thermal cut out	

Electrical specifications				EHVX04S18E3V	EHVX04S23E3V
Power supply	Name			See note 8	
	Voltage range	Min.	%	10	
		Max.	%	10	
IP class	IP			IP X0B	
Electric heater	Power supply	Name		3V3	
		Phase		1~	
		Frequency	Hz	50	
		Voltage	V	230	
	Current	Maximum running current		13	
		Zmax	Ω	0.34	
	Recommended fuses		A	20	
	Wiring connections	Communication cable	Quantity		3
Remark			2.5 mm ²		
Electric meter		Quantity		2	
		Remark		Minimum 0.75 mm ² (SVDC pulse detection)	
Preferential kWh rate		Quantity		Power: 2	
		Remark		Power 6.3A (Select diameter and type according to national and local regulations)	
Domestic hot water pump		Quantity		2	
		Remark		Minimum 0.75 mm ² (2A inrush, 1A continuous)	
For power supply back-up heater		Quantity		Prewired	
		Remark			
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 outout)		Quantity		4	
		Remark		100 mA, minimum 0.75 mm ²	

(1)Based on a dT of 45 K |

(2)Including piping + PHE + back-up heater; excluding expansion vessel |

(3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

(4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |

(5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to operation range of the unit. |

(7)PED unit category: Art353: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |

(8)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. |

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 pole 20 A curve 400V tripping class C (refer to wiring diagram)

Technical specifications				EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Heater capacity	Step 1	kW		2			
	Step 2	kW		2 or 4 ..			
Power input	Nom.	kW		0.09			
Efficiency	Domestic hot water	Net calorific value	%	118	135	118	135
Casing	Colour	White + Black					
	Material	Precoated sheet metal					

2 Specifications

2 - 1 Specifications

Technical specifications				EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Dimensions	Unit	Height	mm	1,650	1,850	1,650	1,850
		Width	mm	595			
		Depth	mm	625			
	Packed unit	Height	mm	1,820	2,020	1,820	2,020
		Width	mm	720			
		Depth	mm	740			
Weight	Unit		kg	119	128	119	128
	Packed unit		kg	135	144	135	144
Packing	Material			Wood / Carton / PE wrapping foil / Metal			
	Weight		kg	16			
PED	Category			Art4.3 / See note 7			
	Most critical part	Name		Plate heat exchanger			
		Ps*V	Bar*l	38			
Refrigerant side heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
Pump	Type			Glandless circulator			
	Nr of speeds			PWM			
	Power input		W	52			
Water side Heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
	Water volume		l	0.95			
	Water flow rate	Min.	l/min	12			
Expansion vessel	Volume		l	10			
	Max. water pressure		bar	3			
	Pre pressure		bar	1			
Water filter	Diameter perforations		mm	0.8			
	Material			Stainless steel / Plastic			
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Tank	Water volume		l	180	230	180	230
	Material			Stainless steel (EN 1.4521)			
	Maximum water temperature		°C	70			
	Maximum water pressure		bar	10			
	Insulation	Material		Polyurethane foam			
		Heat loss	kWh/24h	1.2 (1)	1.4 (1)	1.2 (1)	1.4 (1)
	Standing heat loss	S	W	50	58	50	58
	Storage volume	V	l	181	220	181	220
	Corrosion protection			Pickling			
	Energy efficiency class			B			
General	Supplier/	Name or trademark		Daikin Europe N.V.			
	Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8			
		Domestic hot water tank	m³/h	10			
Water circuit	inch		in	G1" (female)			
	Piping material			Cu			
	inch		in	1"			
	inch		in	1"			
	Safety valve		bar	3			
	Manometer			Digital			
	Drain valve / fill valve			No			
	Shut off valve			Yes			
	Air purge valve			Yes			
	Total water volume		l	3.5 (2)			
	Minimum water volume in the system for cooling		l	10 (3)			
	Minimum water volume in the system for heating		l	0 (3)			
Water circuit - Domestic hot water side	Piping material			Stainless steel			
	Piping connections	Cold water in / Hot water out	in	G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter		mm	15.9			
	Liquid side diameter		mm	6.4			
Sound power level	Nom.		dBA	42 (4)			
Sound pressure level	Nom.		dBA	28 (5)			
Operation range	Heating	Ambient	Min. °C	0 (6)			
		Max. °C		0 (6)			
	Water side	Min. °C		0 (6)			
		Max. °C		0 (6)			

2 Specifications

2 - 1 Specifications

2

Technical specifications					EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Operation range	Cooling	Ambient	Min.	°CDB	0 (6)			
			Max.	°CDB	0 (6)			
		Water side	Min.	°C	0 (6)			
			Max.	°C	0 (6)			
	Domestic hot water	Water side	Min.	°C	0 (6)			
			Max.	°C	0 (6)			
Safety devices	Item	01			Thermal cut out			

Electrical specifications				EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V	
Power supply	Name			See note 8				
	Voltage range	Min.	%	10				
		Max.	%	10				
IP class	IP			IP X08				
Electric heater	Power supply	Name			6V3			
		Phase			1~ / 3~			
		Frequency			50			
		Voltage			230			
	Current	Maximum running current			26			
		Zmax Ω			0.22			
		Minimum Ssc value			Equipment complying with EN/IEC 61000-3-12			
	Recommended fuses			20				
				3				
Wiring connections	Communication cable	Quantity			3			
		Remark			2.5 mm ²			
	Electric meter	Quantity			2			
		Remark			Minimum 0.75 mm ² (5VDC pulse detection)			
	Preferential kWh rate	Quantity			Power: 2			
		Remark			Power 6.3A (Select diameter and type according to national and local regulations)			
	power supply							
	Domestic hot water pump	Quantity			2			
		Remark			Minimum 0.75 mm ² (2A inrush, 1A continuous)			
	For power supply back-up heater	Quantity			Prewired			
	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)Based on a dT of 45 K |

(2)Including piping + PHE + back-up heater; excluding expansion vessel |

(3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

(4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |

(5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to operation range of the unit. |

(7)PED unit category: Art3S3: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |

(8)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. |

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). |

4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

2 pole 20 A curve 400V tripping class C (refer to wiring diagram)

Technical specifications				EHVX08S18E9W	EHVX08S23E9W
Heater capacity	Step 1			3	
	Step 2			max. 6	
Power input	Nom.			0.09	
Efficiency	Domestic hot water	Net calorific value	%	118	135
Casing	Colour	White + Black			
	Material	Precoated sheet metal			

2 Specifications

2 - 1 Specifications

Technical specifications					EHVX08S18E9W		EHVX08S23E9W		
Dimensions	Unit	Height	mm	1,650			1,850		
		Width	mm	595					
		Depth	mm	625					
	Packed unit	Height	mm	1,820			2,020		
		Width	mm	720					
		Depth	mm	740					
Weight	Unit	kg		119			128		
	Packed unit	kg		135			144		
Packing	Material			Wood / Carton / PE wrapping foil / Metal					
	Weight			kg 16					
PED	Category			Art4.3 / See note 7					
	Most critical part	Name		Plate heat exchanger					
		Ps*V		Bar*l 38					
Refrigerant side heat exchanger	Type			Plate heat exchanger					
	Quantity			1					
	Plates	Quantity		42					
Pump	Type			Glandless circulator					
	Nr of speeds			PWM					
	Power input			W 52					
Water side Heat exchanger	Type			Plate heat exchanger					
	Quantity			1					
	Plates	Quantity		42					
	Water volume			l 0.95					
	Water flow rate	Min.	l/min		12				
Expansion vessel	Volume			l 10					
	Max. water pressure			bar 3					
	Pre pressure			bar 1					
Water filter	Diameter perforations			mm 0.8					
	Material			Stainless steel / Plastic					
Tank	Name			Stainless steel domestic hot water tank 180 l			Stainless steel domestic hot water tank 230 L		
Tank	Water volume			l 180			230		
	Material			Stainless steel (EN 1.4521)					
	Maximum water temperature			°C 70					
	Maximum water pressure			bar 10					
	Insulation	Material		Polyurethane foam					
		Heat loss	kWh/24h	1.2 (1)			1.4 (1)		
	Standing heat loss	S	W	50			58		
	Storage volume	V	l		181			220	
	Corrosion protection			Pickling					
	Energy efficiency class			B					
General	Supplier/	Name or trademark		Daikin Europe N.V.					
	Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium					
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8					
		Domestic hot water tank	m³/h	10					
Water circuit	inch			G 1" (female)					
	Piping material			Cu					
	inch			1"					
	inch			1"					
	Safety valve			bar 3					
	Manometer			Digital					
	Drain valve / fill valve			No					
	Shut off valve			Yes					
	Air purge valve			Yes					
	Total water volume			l 3.5 (2)					
	Minimum water volume in the system for cooling			l 10 (3)					
	Minimum water volume in the system for heating			l 0 (3)					
	Water circuit - Domestic hot water side	Piping material			Stainless steel				
Piping connections		Cold water in / Hot water out		in 3/4" FEMALE					
		inch		G 3/4" FEMALE					
Refrigerant circuit	Gas side diameter			mm 15.9					
	Liquid side diameter			mm 6.4					
Sound power level	Nom.			dBA 42 (4)					
Sound pressure level	Nom.			dBA 28 (5)					
Operation range	Heating	Ambient	Min.	°C	0 (6)				
			Max.	°C	0 (6)				
		Water side	Min.	°C	0 (6)				
			Max.	°C	0 (6)				

2 Specifications

2 - 1 Specifications

2

Technical specifications					EHVX08S18E9W	EHVX08S23E9W
Operation range	Cooling	Ambient	Min.	°CDB	0 (6)	
			Max.	°CDB	0 (6)	
		Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
	Domestic hot water	Water side	Min.	°C	0 (6)	
			Max.	°C	0 (6)	
Safety devices	Item	01			Thermal cut out	

Electrical specifications				EHVX08S18E9W	EHVX08S23E9W
Power supply	Name			See note 8	
	Voltage range	Min.	%	10	
		Max.	%	10	
IP class	IP			IP X0B	
Electric heater	Power supply	Name		9W	
		Phase		3~	
		Frequency	Hz	50	
		Voltage	V	400	
	Current	Maximum running current		13	
		Recommended fuses		20	
Wiring connections	Communication cable	Quantity		3	
		Remark		2.5 mm ²	
	Electric meter	Quantity		2	
		Remark		Minimum 0.75 mm ² (SVDC 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		2	
		Remark		Minimum 0.75 mm ² (2A inrush, 1A continuous)	
	For power supply back-up heater	Quantity		Prewired	
		Remark			
	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)Based on a dT of 45 K |

(2)Including piping + PHE + back-up heater; excluding expansion vessel |

(3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |

(4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |

(5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to operation range of the unit. |

(7)PED unit category: Art353: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |

(8)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. |

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). |

4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

2 pole 20 A curve 400V tripping class C (refer to wiring diagram)

Technical specifications				EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
Heater capacity	Step 1		kW	2			
	Step 2		kW	2 or 4 ..			
Power input	Nom.		kW	0.09			
Efficiency	Domestic hot water	Net calorific value	%	118	135	118	135
Casing	Colour			Grey + Black	White + Black		
	Material			Precoated sheet metal			

2 Specifications

2 - 1 Specifications

Technical specifications				EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
Dimensions	Unit	Height	mm	1,650	1,850	1,650	1,850
		Width	mm	595			
		Depth	mm	625			
	Packed unit	Height	mm	1,820	2,020	1,820	2,020
		Width	mm	720			
		Depth	mm	740			
Weight	Unit		kg	119	128	119	128
	Packed unit		kg	135	144	135	144
Packing	Material			Wood / Carton / PE wrapping foil / Metal			
	Weight		kg	16			
PED	Category			Art4.3 / See note 7			
	Most critical part	Name		Plate heat exchanger			
		Ps*V	Bar*l	38			
Refrigerant side heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
Pump	Type			Glandless circulator			
	Nr of speeds			PWM			
	Power input		W	52			
Water side Heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
	Water volume		l	0.95			
	Water flow rate	Min.	l/min	12			
Expansion vessel	Volume		l	10			
	Max. water pressure		bar	3			
	Pre pressure		bar	1			
Water filter	Diameter perforations		mm	0.8			
	Material			Stainless steel / Plastic			
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Tank	Water volume		l	180	230	180	230
	Material			Stainless steel (EN 1.4521)			
	Maximum water temperature		°C	70			
	Maximum water pressure		bar	10			
	Insulation	Material		Polyurethane foam			
		Heat loss	kWh/24h	1.2 (1)	1.4 (1)	1.2 (1)	1.4 (1)
	Standing heat loss	S	W	50	58	50	58
	Storage volume	V	l	181	220	181	220
	Corrosion protection			Pickling			
	Energy efficiency class			B			
General	Supplier/	Name or trademark		Daikin Europe N.V.			
	Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
3-way valve	Coefficient of flow (kV)	Space heating	m³/h	8			
		Domestic hot water tank	m³/h	10			
Water circuit	inch		in	G1" (female)			
	Piping material			Cu			
	inch		in	1"			
	inch		in	1"			
	Safety valve		bar	3			
	Manometer			Digital			
	Drain valve / fill valve			No			
	Shut off valve			Yes			
	Air purge valve			Yes			
	Total water volume		l	3.5 (2)			
	Minimum water volume in the system for cooling		l	10 (3)			
	Minimum water volume in the system for heating		l	0 (3)			
Water circuit - Domestic hot water side	Piping material			Stainless steel			
	Piping connections	Cold water in / Hot water out	in	G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter		mm	15.9			
	Liquid side diameter		mm	6.4			
Sound power level	Nom.		dBA	42 (4)			
Sound pressure level	Nom.		dBA	28 (5)			
Operation range	Heating	Ambient	Min. °C	0 (6)			
		Max.	°C	0 (6)			
	Water side	Min.	°C	0 (6)			
		Max.	°C	0 (6)			

2 Specifications

2 - 1 Specifications

2

Technical specifications					EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
Operation range	Cooling	Ambient	Min.	°CDB	0 (6)			
			Max.	°CDB	0 (6)			
		Water side	Min.	°C	0 (6)			
			Max.	°C	0 (6)			
	Domestic hot water	Water side	Min.	°C	0 (6)			
			Max.	°C	0 (6)			
Safety devices	Item	01			Thermal cut out			

Electrical specifications				EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG	
Power supply	Name			See note 8				
	Voltage range	Min.	%	10				
		Max.	%	10				
IP class	IP			IP X0B				
Electric heater	Power supply	Name			6V3			
		Phase			1~ / 3~			
		Frequency Hz			50			
		Voltage V			230			
	Current	Maximum running current A			26			
		Zmax Ω			0.22			
		Minimum Ssc value			Equipment complying with EN/IEC 61000-3-12			
	Recommended fuses A			20				
Wiring connections	Communication cable	Quantity			3			
		Remark			2.5 mm ²			
	Electric meter	Quantity			2			
		Remark			Minimum 0.75 mm ² (5VDC pulse detection)			
	Preferential kWh rate	Quantity			Power: 2			
		Remark			Power 6.3A (Select diameter and type according to national and local regulations)			
	power supply							
	Domestic hot water pump	Quantity			2			
		Remark			Minimum 0.75 mm ² (2A inrush, 1A continuous)			
	For power supply back-up heater	Quantity			Prewired			
	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)Based on a dT of 45 K |
- (2)Including piping + PHE + back-up heater; excluding expansion vessel |
- (3)Excluding the water in the unit. This minimum water volume is sufficient for most applications. During critical processes extra water may be required. |
- (4)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
- (5)Sound values are measured in a semi-anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
- (6)Refer to operation range of the unit. |
- (7)PED unit category: Art3S3: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC |
- (8)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. |
- 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). |
- 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |
- 2 pole 20 A curve 400V tripping class C (refer to wiring diagram)

3 Electrical data

3 - 1 Electrical Data

EHBH-E6V / EHBH-E9W / EHBX-E6V / EHBX-E9W / EHVH-E6V / EHVH-E9W / EHVX-E3V / EHVX-E6V / EHVX-E6VG / EHVX-E9W / EHVZ-E6V / EHVZ-E9W

* 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
- 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 metering is not allowed).
- Required number of electrical meters

Required number of electrical meters		ERGA(04/06/08)(D/E)AV3(H)(7)								ERLA03DAV3
Outdoor unit type		*HB(H/X)(04/08)(D/E)A*				*HV(H/X)(04/08)(D/E)(A/J)*				EHF*03S18DJ3V
Indoor unit type		6V		9W	3V	6V		9W	3V	
	Backup heater type	1~230V	3~230V	3~400V	1~230V	1~230V	3~230V	3~400V	1~230V	
	Backup heater power supply	2/4/6kW	6kW	3/6/9kW	3kW	2/4/6kW	6kW	3/6/9kW	3kW	
	Backup heater configuration									
Normal kWh rate power supply										
Electrical meter type	1~	1	-	-	1	1	-	-	1	
	3~ balanced	-	-	-	-	-	-	-	-	
	3~ unbalanced	-	1	1	-	-	1	1	-	
Preferential kWh rate power supply										
Electrical meter type	1~	2	1	1	2	2	1	1	2	
	3~ balanced	-	-	-	-	-	-	-	-	
	3~ unbalanced	-	1	1	-	-	1	1	-	

		Immersion heater (no backup heater)	
Outdoor unit type		ERGA(04/06/08)(D/E)AV3(H)(7)	
Indoor unit type		*HV(H/X)(04/08)(D/A/J)V	
	Backup heater type	Booster heater (·2.4· kW)	
	Immersion heater	1~	
	power supply	230V	
		Normal kWh rate power supply	
Electrical meter type	1~	1	
	3~ balanced	-	
	3~ unbalanced	-	
		Unit preferential kWh rate power supply	
Electrical meter type	1~	2	
	3~ balanced	-	
	3~ unbalanced	-	

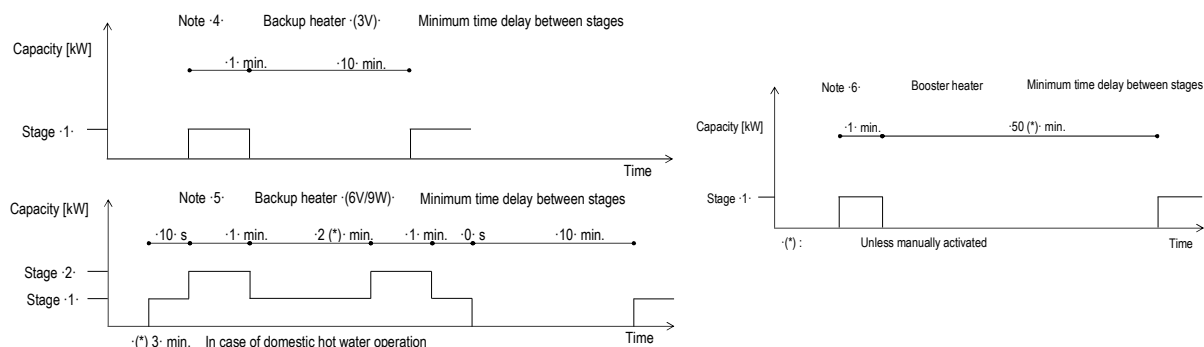
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EHV(H-X-Z)-E(3V_6V_9W)(G)

Electrical specifications		Not applicable for ·EHVH(04/08)(D/A/J)V· models.									
		3V					6V				
Capacity setting		kW	3	2.4	2.6	4.6	2.4 (in case of emergency: ·2.6·)	6	3.6	3.9	·3.6· (in case of emergency: ·3.9·)
Capacity stage ··			1	2	2	2	2	1	2	2	2
Capacity stage ·1·		kW	3	2	2	2	2	6	3	3	3
Capacity stage ·2·		kW	-	4	6	4	4	6	-	6	9
Minimum time delay between stages		Note ·4·					Note ·5·				
Power supply		1~					3~				
(1)		50					50				
Frequency		230 ±10%					400 ±10%				
Voltage		A					15				
Nominal running current		A	13	17.4	26.1	26.1	17.4	26.1	15	8.7	13
Zmax (backup heater)		Q	0.34	0.22	0.22	0.22	0.22	0.22	-	8.7	13
(2)		Complex	-	-	-	-	-	-	-	-	-
Minimum Ssc value		kVA	-	(3)	-	-	(3)	-	-	-	-

Notes

- (1) The above-mentioned power supply of the hydrobox is for the backup heater only.
- (2) Booster heater power supply
In accordance with EN/IEC 61000-3-11, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with $Z_{sys} \leq Z_{max}$.
- (3) The equipment complies with EN/IEC 61000-3-12.
- EN/IEC 61000-3-11 European/International Technical Standard setting the limits for voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with rated current ≤ 75 A.
- 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.
- Z_{sys} System impedance



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4 Combination table

4 - 1 Combination Table

EHVH-E6V / EHVH-E9W / EHVX-E3V / EHVX-E6V / EHVX-E6VG / EHVX-E9W / EHVZ-E6V / EHVZ-E9W

Factory-mounted equipment for -EHV(H/X/Z)04S*E(A/J)*-

Description	EHV(H/X/Z)04S*E(A/J)*			
	18 - 3V	18 - 6V (9)	23 - 3V	23 - 6V (9)
Heating only model -EHVH*-				
Reversible model -EHVX*- (Integrated Bizzone)				
Heating only indoor unit for the UK				
Backup heater -3kW 1N~230 V-	0	-	0	-
Backup heater -2-4-6kW 1N~230 V-	-	0	-	0
Backup heater -2-4-6kW 3~230 V-	-	0	-	0
Backup heater -3-6-9kW 3N~400 V-	-	-	-	-
Domestic hot water tank -180L-	0	0	-	-
Domestic hot water tank -230L-	-	-	0	0

Factory-mounted equipment for -EHV(H/X/Z)08S*E(A/J)*-

Description	EHV(H/X/Z)08S*E(A/J)*			
	18 - 6V (9)	18 - 9W (9)	23 - 6V (9)	23 - 9W (9)
Heating only model -EHVH*-				
Reversible model -EHVX*- (Integrated Bizzone)				
Heating only indoor unit for the UK				
Backup heater -3kW 1N~230 V-	-	-	-	-
Backup heater -2-4-6kW 1N~230 V-	0	-	0	-
Backup heater -2-4-6kW 3~230 V-	0	-	0	-
Backup heater -3-6-9kW 3N~400 V-	-	0	-	0
Domestic hot water tank -180L-	0	0	-	-
Domestic hot water tank -230L-	-	-	0	0

Outdoor combination table for -EHV(H/X/Z)(04/08)S(U)(18/23)E(A/J)*-

		ERGA04EAV3	ERGA06EAV3	ERGA08EAV3	ERGA04EAV3A	ERGA06EAV3A	ERGA08EAV3A
EHVH04S(18/23)E(A/J)*	Heating only indoor unit	0	---	---	0	---	---
EHVX04S(18/23)E(A/J)*	Reversible indoor unit	0	---	---	0	---	---
EHVZ04S(18/23)E(A/J)*	(Integrated Bizzone)	0	---	---	---	---	---
EHVH04SU(18/23)E(A/J)*	Heating only indoor unit for the UK	0	---	---	0	---	---
EHVH08S(18/23)E(A/J)*	Heating only indoor unit	---	0	0	---	0	0
EHVX08S(18/23)E(A/J)*	Reversible indoor unit	---	0	0	---	0	0
EHVZ08S(18/23)E(A/J)*	(Integrated Bizzone)	---	0	0	---	---	---
EHVH08SU(18/23)E(A/J)*	Heating only indoor unit for the UK	---	0	0	---	0	0

		ERGA04EAV37	ERGA04EAV3H	ERGA06EAV3H	ERGA08EAV3H	ERGA08EAV3H7
EHVH04S(18/23)E(A/J)*	Heating only indoor unit	0	0	---	---	---
EHVX04S(18/23)E(A/J)*	Reversible indoor unit	0	0	---	---	---
EHVZ04S(18/23)E(A/J)*	(Integrated Bizzone)	---	0	---	---	---
EHVH04SU(18/23)E(A/J)*	Heating only indoor unit for the UK	---	0	---	---	---
EHVH08S(18/23)E(A/J)*	Heating only indoor unit	---	---	0	0	0
EHVX08S(18/23)E(A/J)*	Reversible indoor unit	---	---	0	0	0
EHVZ08S(18/23)E(A/J)*	(Integrated Bizzone)	---	---	0	0	0
EHVH08SU(18/23)E(A/J)*	Heating only indoor unit for the UK	---	---	0	0	0

Kit availability

Reference	Description	EHV*(04/08)S*E(A/J)*							EHVH(04/08)SU*E(A/J)*	
EHVH*	Heating only indoor unit	---	18 - 6V	18 - 9W	---	23 - 6V	23 - 9W			
EHVX*	Reversible indoor unit	18 - 3V	18 - 6V	18 - 9W	23 - 3V	23 - 6V	23 - 9W			
EHVZ*	(Integrated Bizzone)	---	18 - 6V	18 - 9W	---	23 - 6V	23 - 9W			
EHVH*U*	Heating only indoor unit for the UK							18 - 6V	23 - 6V	
EKRP1HBAA	Digital I/O PCB	*(1) (2)	0	0	0	0	0	0	0	
EKRP1AHTA	Demand PCB	*(3)	0	0	0	0	0	0	0	
EKPCAB4	PC cable	*(4)	0	0	0	0	0	0	0	
KRCS01-1	Remote indoor sensor	*(5)	0	0	0	0	0	0	0	
EKRSCA1	Remote sensor for outdoor	*(5)	0	0	0	0	0	0	0	
EKHVTC	Corner pipe bend kit									
EKHVCONV4	Conversion kit: heating only to reversible.		0	0	0	0	0	0	0	
EKUHWG3D	-G3- kit							0 (6)	0 (6)	
BRP069A71	WLAN module	*(7)	0	0	0	0	0	0	0	
BRC1HH*	HCI (Human Comfort Interface)		0	0	0	0	0	0	0	
EKRELSG	Relay for Smart Grid									
FWXV10ATV3	Heat pump convector		0	0	0	0	0	0	0	
FWXV15ATV3	Heat pump convector		0	0	0	0	0	0	0	
FWXV20ATV3	Heat pump convector		0	0	0	0	0	0	0	
EKRTWA	Wired room thermostat		0	0	0	0	0	0	0	
EKRTR1	Wireless room thermostat		0	0	0	0	0	0	0	
EKRSETS	External sensor room thermostat	*(8)	0	0	0	0	0	0	0	

Reference	Description		
	Only applicable for -EHVH* & EHVX*- models	EHVH*	EHVX*
BZKA7V3	Bizone kit	0	0

Notes

- PCB that provides additional output connections: -
 - Control external heat source (bivalent operation).
 - Output remote ON/OFF signal space heating/cooling OR bottom plate heater - *KBPHTH16* - control.
 - Remote alarm output
- Additional relays to allow bivalent control in combination with an external room thermostat are field-supplied.
- PCB to receive up to 4 digital inputs for power limitation, only for -EHV(H/X/Z)(04/08)E(A/J)*-.
- Data cable for connection with PC.
- Only 1 remote sensor can be connected: indoor OR outdoor sensor.
- This kit is mandatory for the UK models.
- The WLAN cartridge is supplied in the accessory bag of the unit and is meant to be plugged into the SD card slot on the MMI-2. In case of bad signal reception, the WLAN cartridge can be removed and replaced by the WLAN module.
- Can only be used in combination with wireless room thermostat -EKTR1-.
- The backup heater capacity depends on a user interface setting.

Remark

Other combinations than mentioned in this combination table are prohibited.

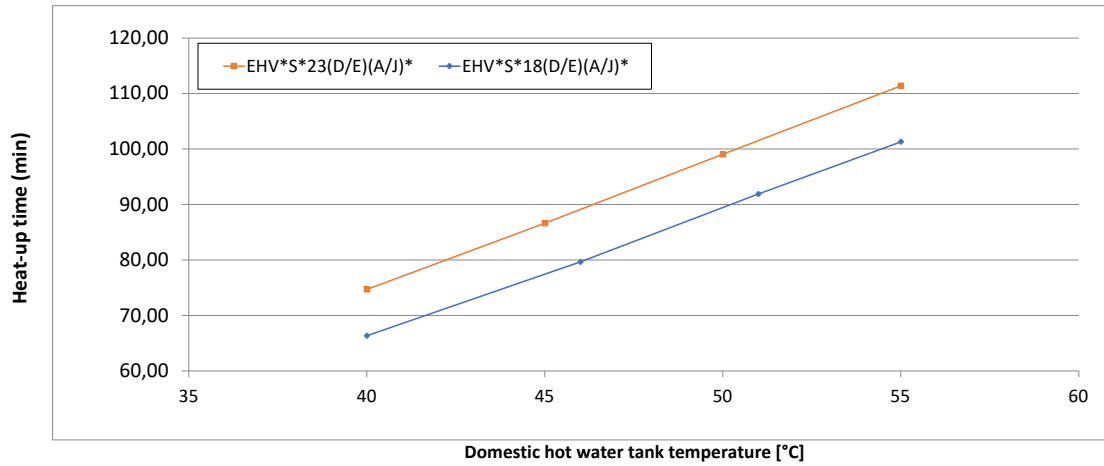
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5 Capacity tables

5 - 1 Domestic Hot Water performance

EHVX-E3V
EHV(H-X-Z)-E6V
EHV(H-X-Z)-E9W
EHVX-E6VG

Heat-up times



	Heat-up time domestic hot water tank until 45°C
EHV*04S*18(D/E)(A/J)*	·79· min.
EHV*08S*23(D/E)(A/J)*	·87· min.

Notes

- Time the indoor unit (**heat pump only operation**) requires to heat up the domestic hot water tank from 10°C to the indicated temperature.
See the operation range for maximum domestic hot water tank temperature during heat pump only operation.

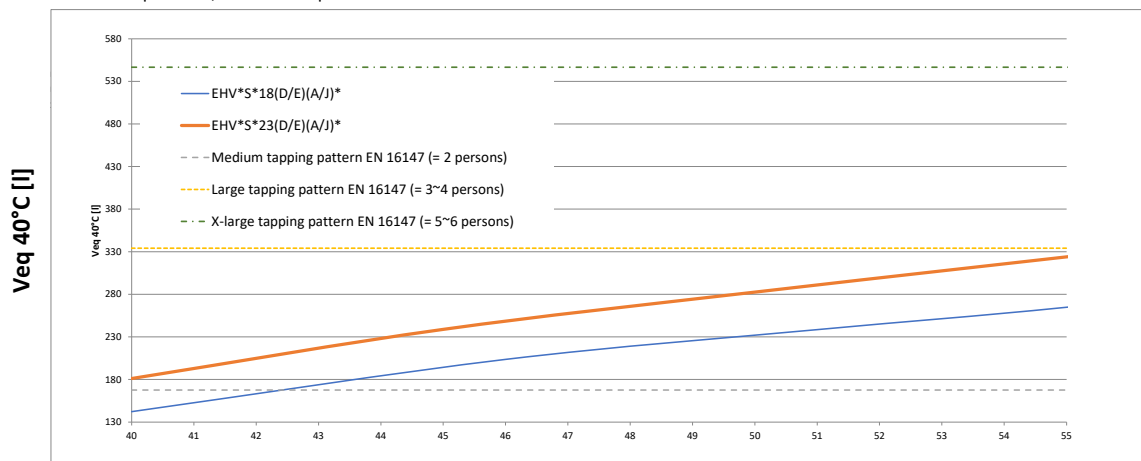
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EHVX-E3V
EHV(H-X-Z)-E6V
EHV(H-X-Z)-E9W
EHVX-E6VG

Selection guide for the domestic hot water tank volume

(1)

Veq 40°C = the amount of water with a temperature of 40°C that can be tapped when the domestic hot water tank is heated to a certain temperature, and the temperature of the cold inlet water is 10°C.



If a higher daily Veq 40°C is required, then additional heat-up cycles are required within 24 hours.

See the operation manual for more information.

Notes

- According to EN16147.

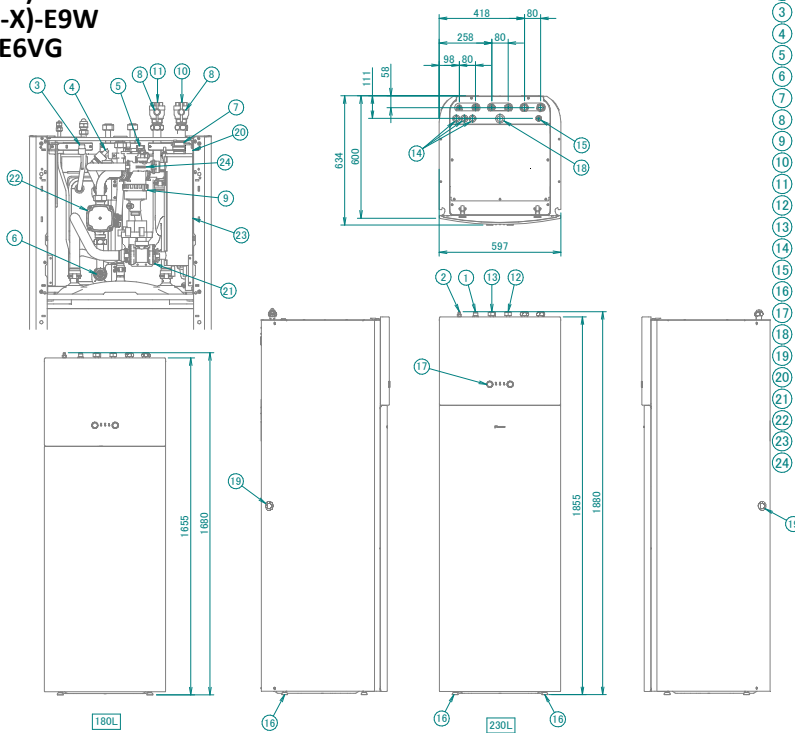
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6 Dimensional drawings

6 - 1 Dimensional Drawings

6

EHVX-E3V
EHV(H-X)-E6V
EHV(H-X)-E9W
EHVX-E6VG



- ① Gas pipe connection ·Ø 15.90mm· flare
- ② Liquid pipe connection ·Ø 6.35mm· flare
- ③ Refrigerant pressure sensor
- ④ Space heating water pressure sensor
- ⑤ Safety valve
- ⑥ Drain valve water circuit
- ⑦ Air purge
- ⑧ Shut-off valve
- ⑨ Magnetic filter / dirt separator
- ⑩ Water in connection ·1" F BSP·
- ⑪ Water out connection ·1" F BSP·
- ⑫ Domestic hot water: cold water in ·3/4" F BSP·
- ⑬ Domestic hot water: hot water out ·3/4" F BSP·
- ⑭ High voltage wiring intake ·Ø 24mm·
- ⑮ Low voltage wiring intake ·Ø 15mm·
- ⑯ Levelling feet
- ⑰ User interface
- ⑱ Recirculation connection ·G 3/4"· (female)
- ⑲ Drain outlet (unit + safety valve)
- ⑳ Expansion vessel
- ㉑ 3-way valve
- ㉒ Pump
- ㉓ Backup heater
- ㉔ Flow sensor

Screws used in this unit:



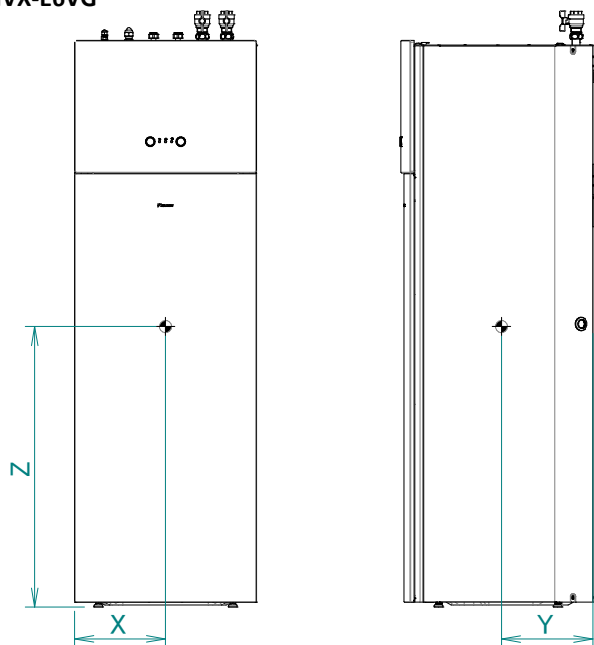
The typical field installation has to be done according to the applicable legislation.
For examples, refer to the installer reference guide.

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7 Centre of gravity

7 - 1 Centre of Gravity

EHVX-E3V
EHV(H-X-Z)-E6V
EHV(H-X-Z)-E9W
EHVX-E6VG

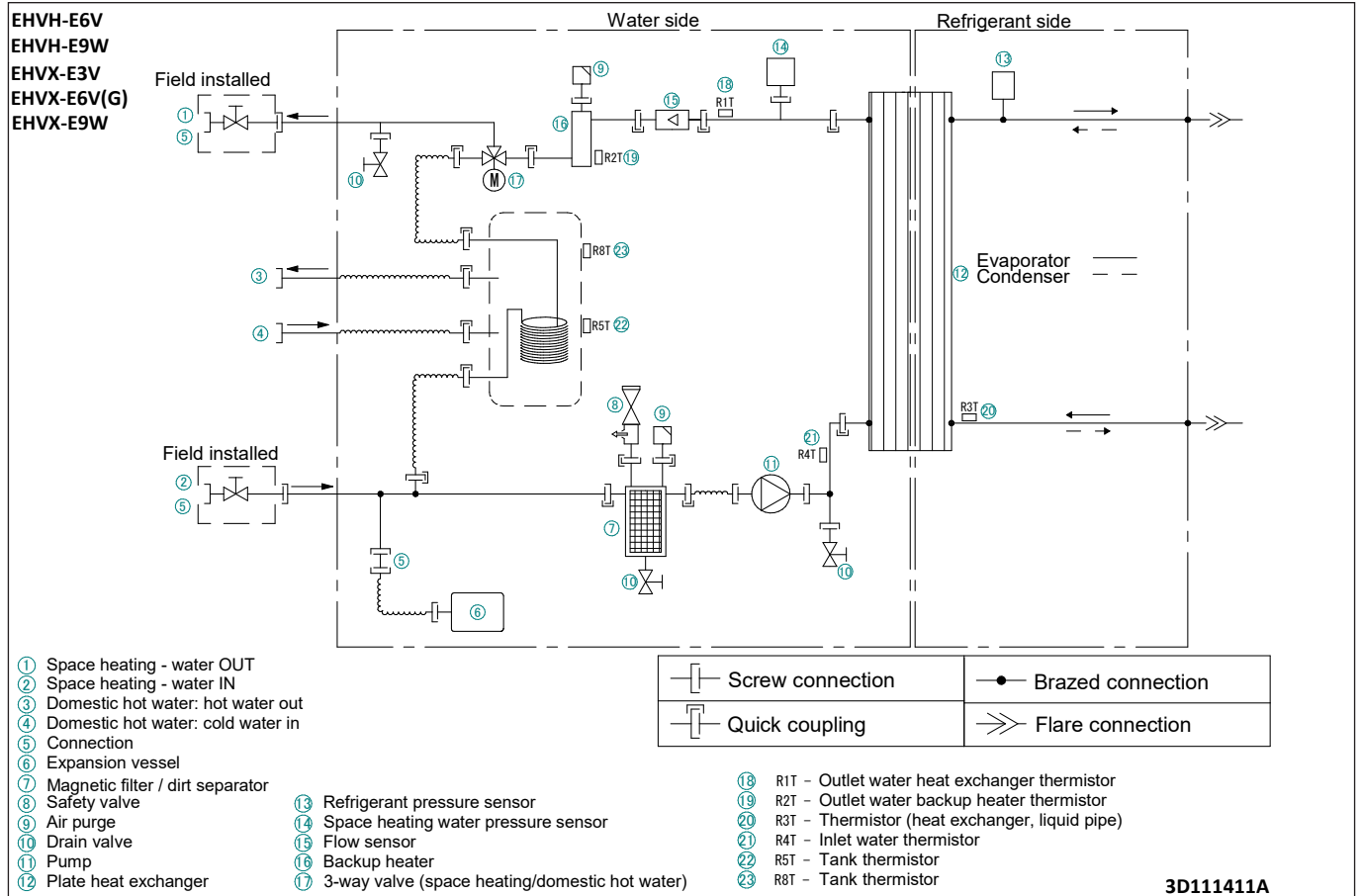


MODEL	X	Y	Z
180L	297.5	299	718
230L	297.5	299	858

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8 Piping diagrams

8 - 1 Piping Diagrams



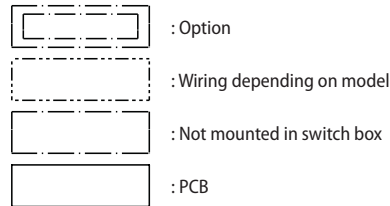
9 Wiring diagrams

9 - 1 Notes & Legend

EHVH-E6V / EHVH-E9W / EHVX-E3V / EHVX-E6V / EHVX-E6VG / EHVX-E9W

NOTES to go through before starting the unit

- X1M : Main terminal
X2M : Field wiring terminal for AC
X5M : Field wiring terminal for DC
X6M : BUH Power supply terminal
X10M : Smartgrid terminal
--- : Earth wiring
- - - : Field supply
① : Several wiring possibilities

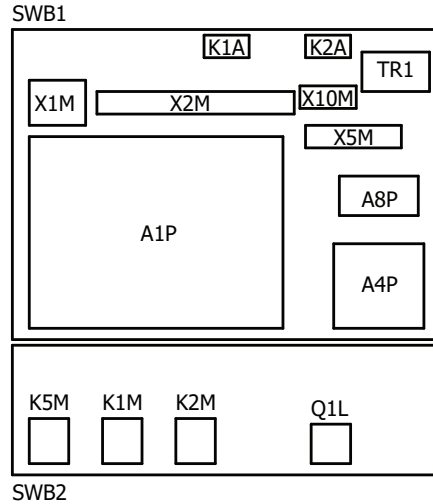


NOTES

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

- Backup heater power supply
☐ 3V (1N~, 230V, 3kW)
☐ 6T1 (3~, 230V, 6kW)
☐ 6V3 (1N~, 230V, 6kW)
☐ 6WN/9WN (3N~, 400V, 6/9kW)
- User installed options:
☐ LAN adapter
☐ Remote user interface
☐ Ext. indoor thermistor
☐ Ext. outdoor thermistor
☐ Digital I/O PCB
☐ Demand PCB
☐ Safety thermostat
☐ Smartgrid kit
☐ WLAN adapter module
☐ WLAN cartridge
- 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

Part n°	Description	Part n°	Description
A1P	main PCB	P1M	MMI display
A2P	* ON/OFF thermostat (PC=power circuit)	PC (A15P)	* power circuit
A3P	* heat pump convector	PHC1 (A4P)	* optocoupler input circuit
A4P	* digital I/O PCB	Q1L	thermal protector backup heater
A8P	* demand PCB	Q4L	# safety thermostat
A9P	status indicator	Q*DI	# earth leakage circuit breaker
A11P	MMI main PCB	R1H (A2P)	* humidity sensor
A13P	* LAN adapter	R1T (A1P)	outlet water heat exchanger thermistor
A14P	* user interface PCB	R1T (A2P)	* ambient sensor ON/OFF thermostat
A15P	* receiver PCB (wireless ON/OFF thermostat)	R1T (A14P)	* ambient sensor user interface
A20P	* WLAN module	R2T (A1P)	outlet backup heater thermistor
B2L	flow sensor	R2T (A2P)	* external sensor (floor or ambient)
B1PR	refrigerant pressure sensor	R3T	refrigerant liquid side thermistor
B1PW	water pressure sensor	R4T	inlet water thermistor
CN* (A4P)	* connector	R5T, R8T	domestic hot water thermistor
DS1 (A8P)	* dipswitch	R6T	* external indoor or outdoor ambient thermistor
E1H	backup heater element (1 kW)	S15	# preferential kWh rate PS contact
E2H	backup heater element (2 kW)	S25	# electrical meter pulse input 1
E*P (A9P)	indication LED	S35	# electrical meter pulse input 2
F1B	# overcurrent fuse backup heater	S45	# smart grid feed-in
F1T	thermal fuse backup heater	S6S-S9S	* digital power limitation inputs
F1U, F2U (A4P)	* fuse 5 A 250 V for digital I/O PCB	S10S-S11S	# low voltage smartgrid contact
FU1 (A1P)	fuse T 6.3 A 250 V for PCB	SS1 (A4P)	* selector switch
K1A, K2A	* high voltage smartgrid relay	SW1~2 (A11P)	turn buttons
K1M, K2M	contactor backup heater	SW3~5 (A11P)	push button
K5M	safety contactor BUH	TR1	power supply transformer
K*R (A1P-A4P)	relay on PCB	X6M	# BUH power supply terminal strip
M1P	main supply pump	X10M	* smartgrid power supply terminal strip
M2P	# domestic hot water pump	X*, X*A, X*H*, X*Y	connector
M2S	# 2 way valve for cooling mode	X*M	terminal strip
M3S	3 way valve for spaceheating/ domestic hot water		

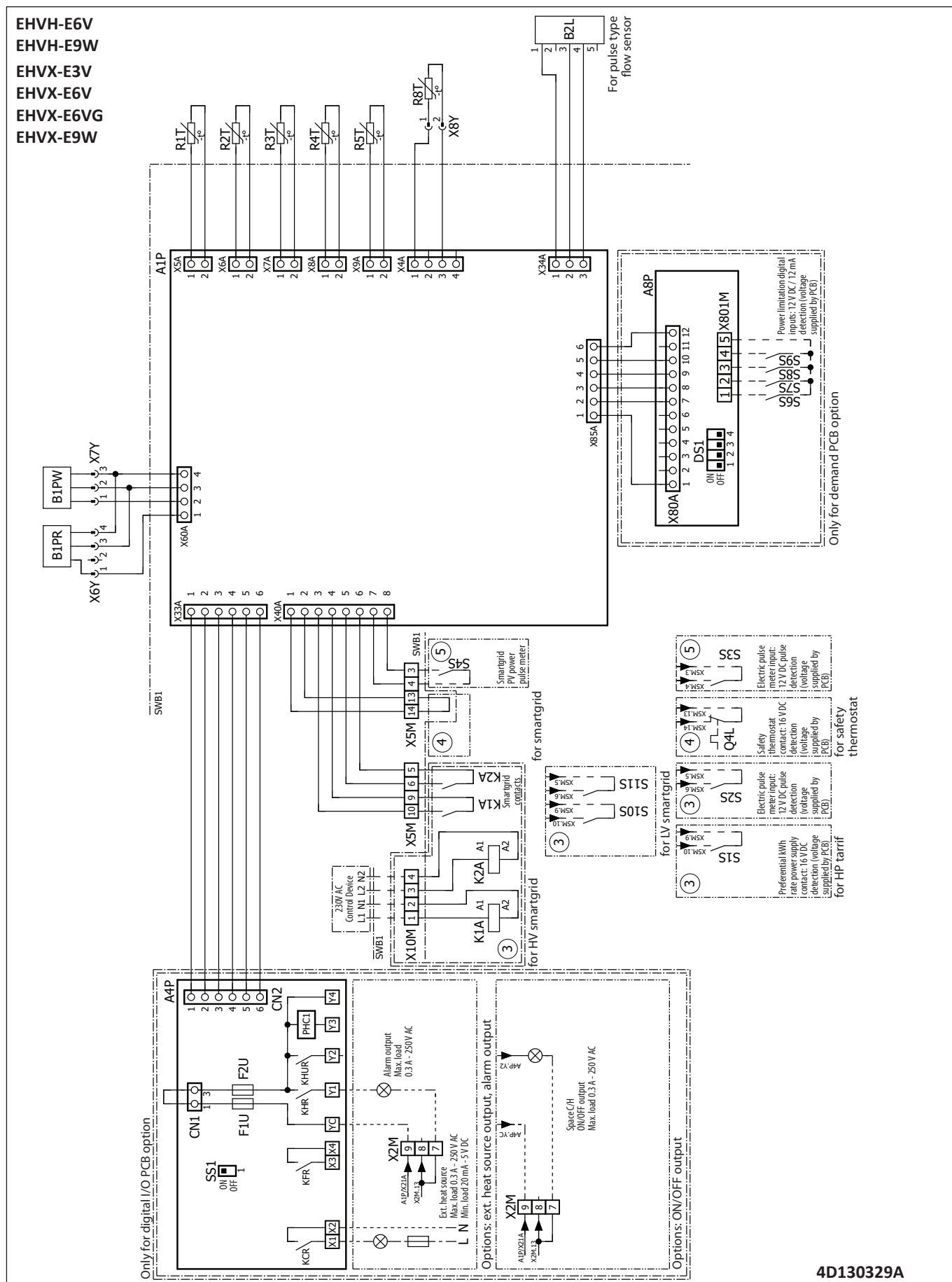
*: optional

#: field supply

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9 - 2 Control Circuit

9



9 Wiring diagram

9 - 2 Control Circuit

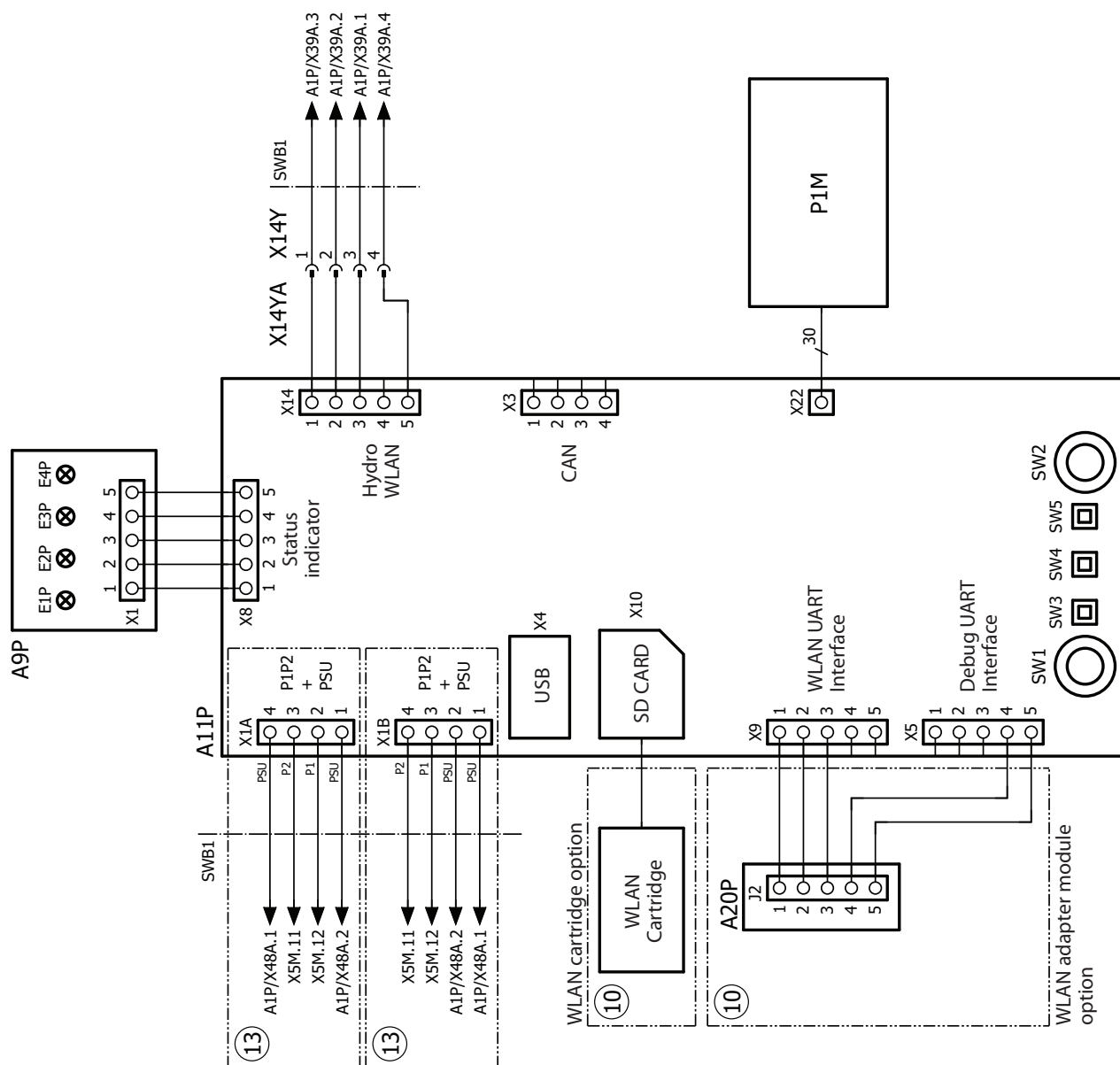


9 Wiring diagrams

9 - 2 Control Circuit

9

EHVH-E6V
EHVH-E9W
EHVX-E3V
EHVX-E6V
EHVX-E6VG
EHVX-E9W

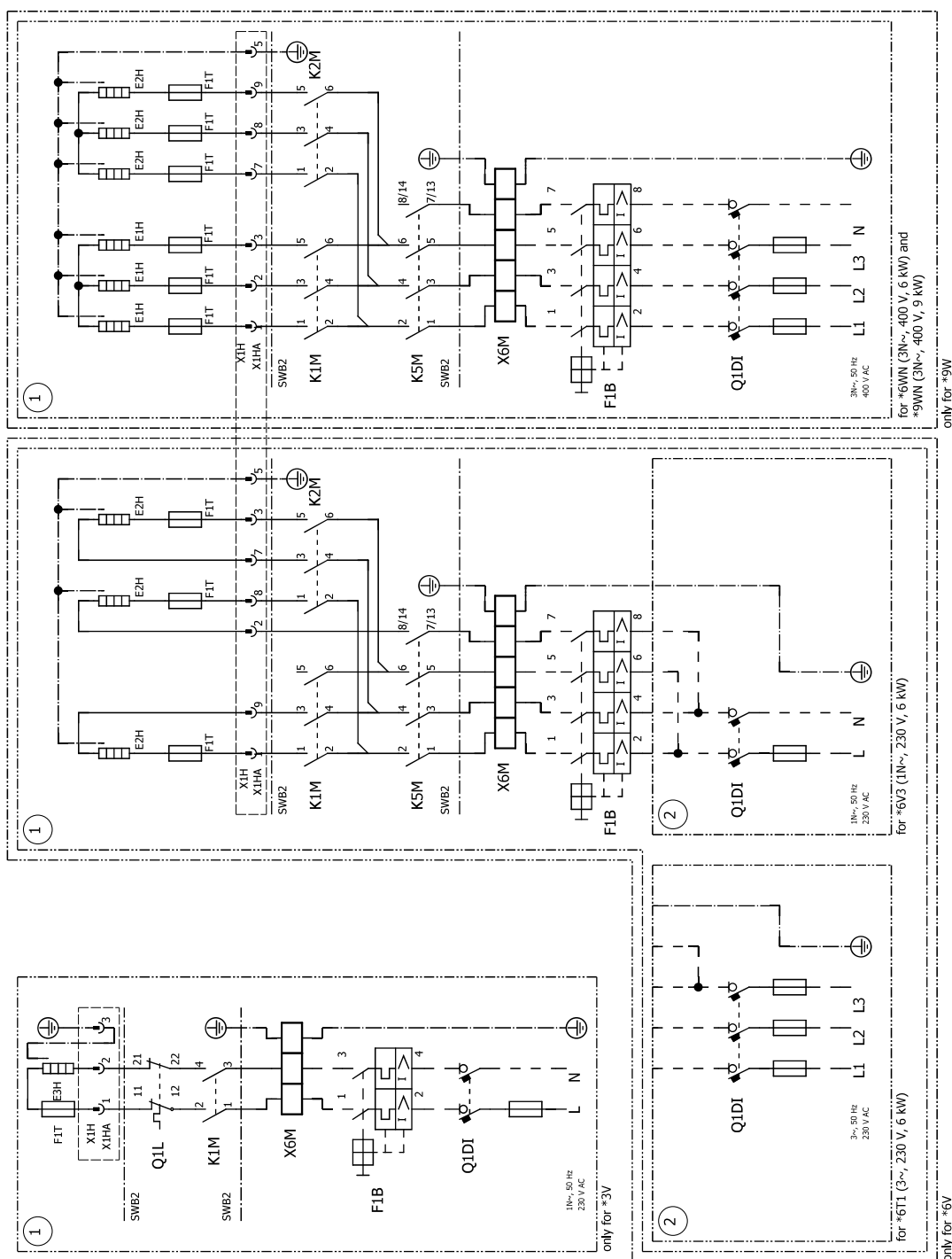
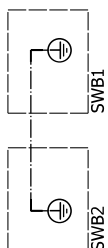


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9 Wiring diagrams

9 - 3 Power Supply, Back-up Heater

EHVH-E6V
EHVH-E9W
EHVX-E3V
EHVX-E6V
EHVX-E6VG
EHVX-E9W



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10 External connection diagrams

10 - 1 External Connection Diagrams

10

EHVH-E6V

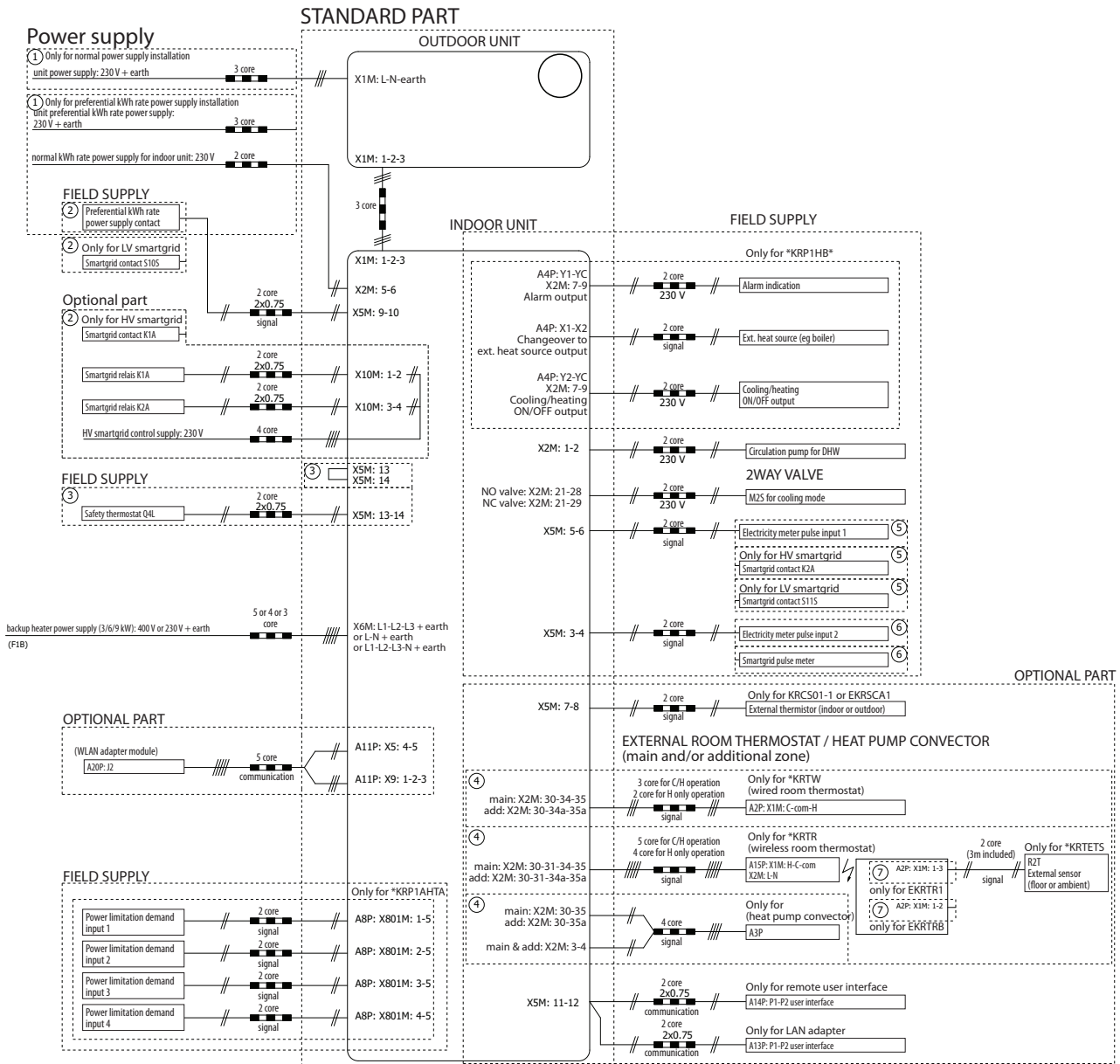
EHVH-E9W

EHVX-E3V

EHVX-E6V

EHVX-E6VG

EHVX-E9W



NOTE

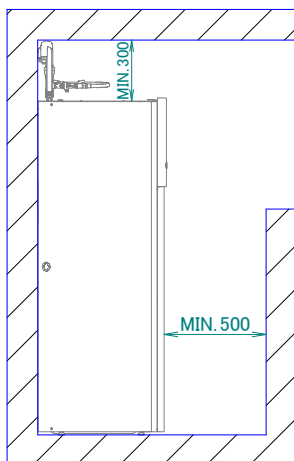
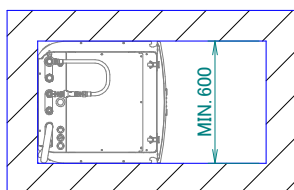
- In case of signal cable: keep minimum distance to power cables > 5 cm

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11 Installation

11 - 1 Installation Method

EHVH-E6V
EHVH-E9W
EHVX-E3V
EHVX-E6V(G)
EHVX-E9W



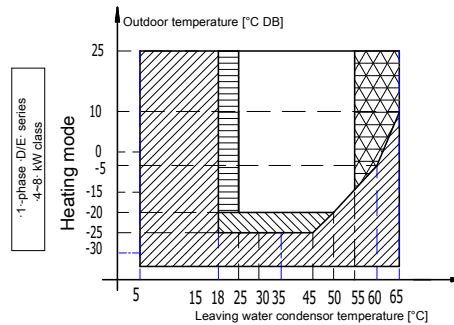
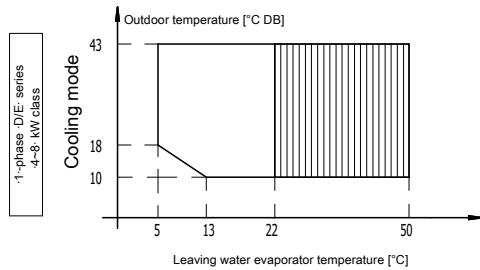
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12 Operation range

12 - 1 Operation Range

12

EHBH-E6V / EHBH-E9W / EHBX-E6V / EHBX-E9W
EHSH-E / ESHB-E / EHSX-E / EHSXB-E
EHVH-E6V / EHVH-E9W / EHVX-E3V
EHVX-E6V / EHVX-E6VG / EHVX-E9W / EHVZ-E6V / EHVZ-E9W



Legend

- Backup heater only operation
No outdoor unit operation
- Outdoor unit operation if setpoint $\geq -25^{\circ}\text{C}$.
- Operation of outdoor unit possible, but with possible capacity reduction.
If the outdoor temperature $< -25^{\circ}\text{C}$, the outdoor unit will stop.
Indoor unit and backup heater operation will continue.
- Pull-down area
- Outdoor unit operation if setpoint $> 55^{\circ}\text{C}$ and $\Delta T = 10^{\circ}\text{C}$ ($\Delta T = \text{outlet temperature} - \text{inlet temperature}$)

Remark

In restricted power supply mode, the outdoor unit, booster heater and backup heater can only operate separately.

Warning

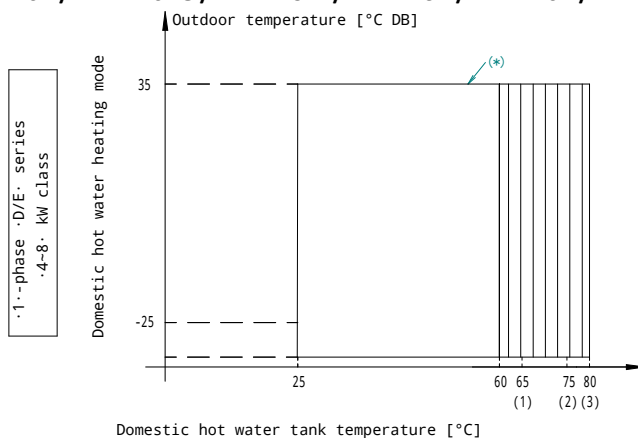
In areas with low ambient temperatures and high humidity, or in areas with heavy snowfall, remove the suction grille to ensure proper operation.

Non-exhaustive list of areas: Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Norway, Poland, Romania, Serbia, Slovakia, Sweden, ...

Indoor
D/E(A/F/G/U) series Standard

3D111563E

EHBH-E6V / EHBH-E9W / EHBX-E6V / EHBX-E9W
EHSH-E / ESHB-E / EHSX-E / EHSXB-E
EHVH-E6V / EHVH-E6VG / EHVH-E9W / EHVX-E3V / EHVX-E6V / EHVX-E9W / EHVZ-E6V / EHVZ-E9W



Legend

- Booster heater only operation (if a booster heater is part of the system)
- (1) EHVH*S*CBV indoor units only
- (2) Combination of EKHS(P)1*DA* and EHB*D/E(A/F)V* indoor units
- (3) Combination of EKHS(P)(2/3)*DA* and EHB*D/E(A/F)V* indoor units

(*) System operation: the system consists of an outdoor unit and indoor unit, and depending on the system, a booster heater and/or a backup heater.

Remark

In restricted power supply mode (EKHW* only), the outdoor unit, booster heater and backup heater can only operate separately.

If the outdoor temperature $< -20^{\circ}\text{C}$, then outdoor unit operation is possible, but with a possible capacity reduction.

If the outdoor temperature $< -25^{\circ}\text{C}$, the outdoor unit will stop.

Indoor unit and backup heater operation will continue.

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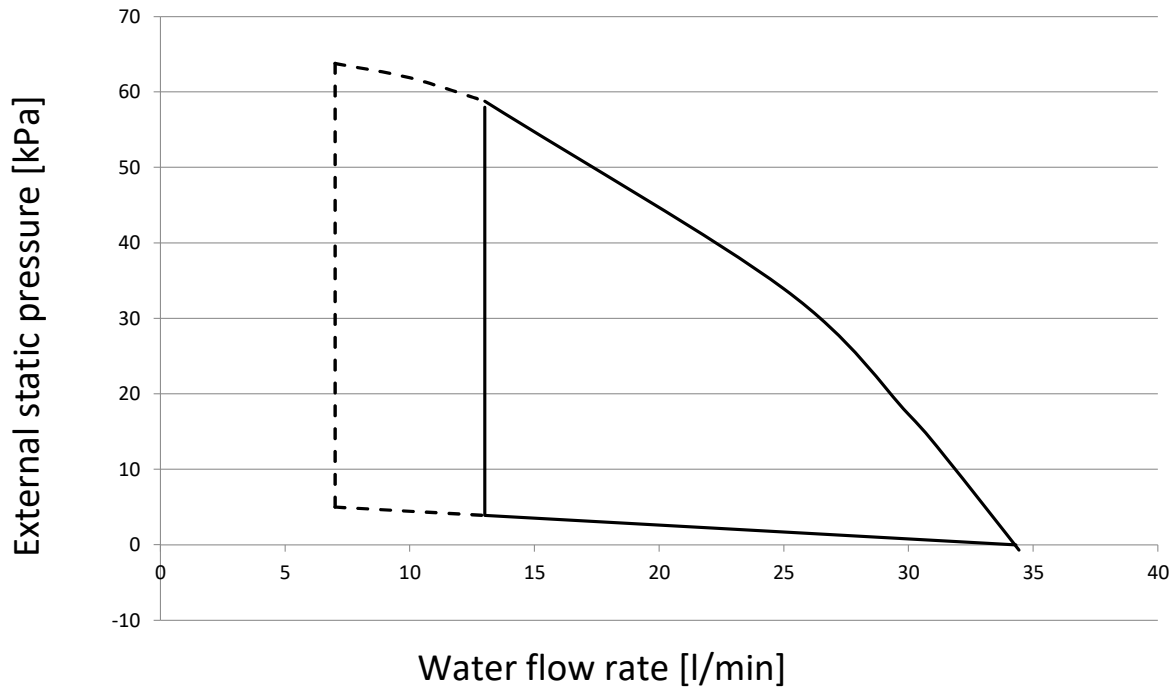
13 Hydraulic performance

13 - 1 Static Pressure Drop Unit

EHVH-E6V
EHVH-E9W
EHVX-E3V
EHVX-E6V(G)
EHVX-E9W

EHV(H/X)(04/08)*(D/E)(A/J)*

Operation area



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.)

See dashed lines

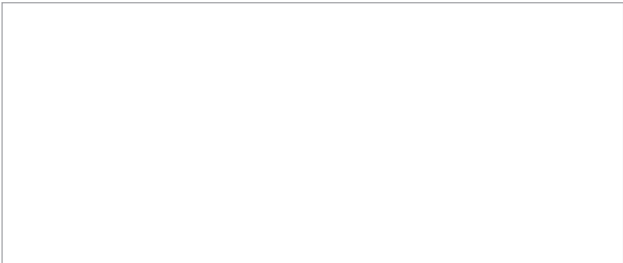
Notes

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 Water quality must be according to EU directive 98/83 EC.

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02/2025



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