

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



EHVH04S18E*6V
EHVH04S23E*6V
EHVH08S18E*6V
EHVH08S23E*6V
EHVH08S18E*9W
EHVH08S23E*9W
EHVX04S18E*3V
EHVX04S23E*3V
EHVX04S18E*6V
EHVX04S23E*6V
EHVX08S18E*6V
EHVX08S23E*6V
EHVX04S18EA6VG
EHVX04S23EA6VG
EHVX08S18EA6VG
EHVX08S23EA6VG
EHVX08S18E*9W
EHVX08S23E*9W

Table of contents

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

1	Features	4
	EHVX-E6VG, EHVX-E6V, EHVX-E9W, EHVH-E9W, EHVH-E6V, EHVX-E3V	4
2	Specifications	5
3	Electrical data	17
4	Combination table	19
5	Dimensional drawings	20
6	Centre of gravity	21
7	Piping diagrams	22
8	Wiring diagrams	23
	Notes & Legend	23
	Control Circuit	24
	Power Supply, Back-up Heater	26
9	External connection diagrams	27
10	Installation	28
	Installation Method	28
11	Operation range	29
12	Hydraulic performance	30
	Static Pressure Drop Unit	30

1 Features

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

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

1

- › 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



Daikin
Residential
Controller



Online
controller

2 Specifications

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

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 9			
	Most critical part	Name	Bar* l	Plate heat exchanger			
				37.72			
Refrigerant side heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
Pump	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	12.0 (1)			
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
	Water volume		l	180	230	180	230
Tank	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 (2)	1.4 (2)	1.2 (2)	1.4 (2)
	Corrosion protection			Pickling			
	Energy efficiency class			B			
	Standing heat loss		W	50	58	50	58
	Storage volume		l	181	220	181	220
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	m ³ /h	8			
		Domestic hot water tank	m ³ /h	10			
Water circuit	Piping connections diameter		inch	G 1" (female)			
	Piping material			Cu			
	Internal piping diameter		inch	1"			
	Piping		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 (3)			
	Minimum water volume in the system for cooling		l	10 (4)			
	Minimum water volume in the system for heating		l	0 (4)			
	Piping material			Stainless steel			
Water circuit - Domestic hot water side	Piping connections	Cold water in / Hot water out	inch	G 3/4" FEMALE			
		Recirculation connection	inch	G 3/4" FEMALE			

2 Specifications

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

2

Technical specifications					EHVH04S18E6V	EHVH04S23E6V	EHVH08S18E6V	EHVH08S23E6V
Refrigerant circuit	Gas side diameter	mm					15.9	
	Liquid side diameter	mm					6.40	
Sound power level	Nom.			dBA			42 (5)	
Sound pressure level	Nom.			dBA			28 (6)	
Operation range	Heating	Ambient	Min.	°C			0 (7)	
			Max.	°C			0 (7)	
		Water side	Min.	°C			0 (7)	
			Max.	°C			0 (7)	
	Cooling	Ambient	Min.	°CDB			0 (7)	
			Max.	°CDB			0 (7)	
Operation range	Cooling	Water side	Min.	°C			0 (7)	
			Max.	°C			0 (7)	
		Domestic hot water	Min.	°C			0 (7)	
			Max.	°C			0 (7)	
Safety devices	Item		01				Thermal cut out	

Electrical specifications					EHVH04S18E6V	EHVH04S23E6V	EHVH08S18E6V	EHVH08S23E6V
Power supply	Name						See note 10	
	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			26.0	
		Zmax	List	Ω			0.22	
		Minimum Ssc value					Equipment complying with EN/IEC 61000-3-12	
	Recommended fuses			A			20.000 (8)	
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 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	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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

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 kW	
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

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

Technical specifications				EHVH08S18E9W	EHVH08S23E9W
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 9	
	Most critical part	Name Ps*V	Bar*I	Plate heat exchanger 37.72	
	Refrigerant side heat exchanger	Type		Plate heat exchanger	
Pump	Quantity	Plates	Quantity	1	42
				PWM	
	Power input		W	52	
Water side Heat exchanger	Quantity	Type		Plate heat exchanger	
				1	
	Plates	Quantity		42	
				0.95	
	Water volume		l	12.0 (1)	
	Water Min. flow rate		l/min		
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
	Water volume		l	180	230
Tank	Material			Stainless steel (EN 1.4521)	
		Maximum water temperature	°C	70	
	Maximum water pressure		bar	10	
				Polyurethane foam	
	Insulation	Material			
		Heat loss	kWh/24h	1.2 (2)	1.4 (2)
	Corrosion protection			Pickling	
		Energy efficiency class		B	
	Standing heat loss		W	50	58
		Storage volume	l	181	220
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	Piping connections diameter		inch	G 1" (female)	
		Piping material		Cu	
	Internal piping diameter		inch	1"	
		Piping	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 (3)	
	Minimum water volume in the system for cooling		l	10 (4)	
				0 (4)	
	Minimum water volume in the system for heating		l		
Water circuit - Domestic hot water side	Piping connections	Piping material		Stainless steel	
		Cold water in / Hot water out	inch	G 3/4" FEMALE	
		Recirculation connection	inch	G 3/4" FEMALE	
Refrigerant circuit	Gas side diameter		mm	15.9	
		Liquid side diameter	mm	6.40	
Sound power level	Nom.		dBA	42 (5)	
Sound pressure level	Nom.		dBA	28 (6)	

2 Specifications

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

2

Technical specifications					EHVH08S18E9W	EHVH08S23E9W
Operation range	Heating	Ambient	Min.	°C	0 (7)	
			Max.	°C	0 (7)	
	Water side		Min.	°C	0 (7)	
			Max.	°C	0 (7)	
Operation range	Cooling	Ambient	Min.	°CDB	0 (7)	
			Max.	°CDB	0 (7)	
	Water side		Min.	°C	0 (7)	
			Max.	°C	0 (7)	
	Domestic hot water	Water side	Min.	°C	0 (7)	
			Max.	°C	0 (7)	
Safety devices	Item	01			Thermal cut out	

Electrical specifications					EHVH08S18E9W		EHVH08S23E9W	
Power supply	Name				See note 10			
	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			13.0			
		Zmax	List	Ω		0.22		
	Recommended fuses			A		20.000 (8)		
Wiring connections	Communication cable	Quantity			3			
		Remark			2.5 mm²			
	Electric meter	Quantity			2			
		Remark			Minimum 0.75 mm² (5VDC 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 mm² (2A inrush, 1A continuous)			
	For power supply back-up heater	Quantity			Prewired			
		Remark						
	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	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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

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			
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	

2 Specifications

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

Technical specifications					EHVX04S18E3V		EHVX04S23E3V		
Packing	Material				Wood / Carton / PE wrapping foil / Metal				
	Weight kg				16				
PED	Category				Art4.3 / See note 9				
	Most critical part	Name Ps*V			Plate heat exchanger				
					37.72				
Refrigerant side heat exchanger	Type				Plate heat exchanger				
	Quantity				1				
	Plates	Quantity			42				
Pump	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		12.0 (1)				
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		
	Water volume l				180		230		
	Material				Stainless steel (EN 1.4521)				
Tank	Maximum water temperature °C				70				
	Maximum water pressure bar				10				
	Insulation Material				Polyurethane foam				
	Heat loss		kWh/24h	1.2 (2)		1.4 (2)			
	Corrosion protection				Pickling				
	Energy efficiency class				B				
	Standing heat loss W				50		58		
	Storage volume l				181		220		
	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	Piping connections diameter			inch	G 1" (female)				
	Piping material				Cu				
	Internal piping diameter			inch	1"				
	Piping			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 (3)				
	Minimum water volume in the system for cooling			l	10 (4)				
	Minimum water volume in the system for heating			l	0 (4)				
	Water circuit - Domestic hot water side	Piping material				Stainless steel			
Piping connections		Cold water in / Hot water out	inch	G 3/4" FEMALE					
Recirculation connection			inch	G 3/4" FEMALE					
Refrigerant circuit	Gas side diameter			mm	15.9				
	Liquid side diameter			mm	6.40				
Sound power level	Nom.				dB(A) 42 (5)				
Sound pressure level	Nom.				dB(A) 28 (6)				
Operation range	Heating	Ambient	Min.	°C	0 (7)				
			Max.	°C	0 (7)				
		Water side	Min.	°C	0 (7)				
			Max.	°C	0 (7)				
	Cooling	Ambient	Min.	°CDB	0 (7)				
			Max.	°CDB	0 (7)				
Operation range	Cooling	Water side	Min.	°C	0 (7)				
			Max.	°C	0 (7)				
	Domestic hot water	Water side	Min.	°C	0 (7)				
			Max.	°C	0 (7)				
Safety devices	Item	01			Thermal cut out				

2 Specifications

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

Electrical specifications				EHVX04S18E3V	EHVX04S23E3V
Power supply	Name			See note 10	
	Voltage	Min.	%	10	
	range	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	A	13.0	
		Zmax	List	0.22	
		Recommended fuses	A	20.000 (8)	
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 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		2	
	For connection with R6T	Quantity		Minimum 0.75 mm ²	
		Remark		Depends on thermostat type, cf. installation manual	
	For connection with A3P	Quantity		Voltage: 230V / Max. current: 100mA / Min. 0.75mm ²	
		Remark		2	
	For connection with M2S	Quantity		Voltage: 230V / Max. current: 100mA / Min. 0.75mm ²	
		Remark		4	
	For connection with optional FWXV* (demand	Quantity		100 mA, minimum 0.75 mm ²	
		Remark			

(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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 2 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

4 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			
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 9			
	Most critical part	Name		Plate heat exchanger			
		Ps*V	Bar*I	37.72			
Refrigerant side heat exchanger	Type			Plate heat exchanger			
	Quantity			1			
	Plates	Quantity		42			
Pump	Nr of speeds			PWM			
	Power input		W	52			

2 Specifications

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

Technical specifications					EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Water side Heat exchanger	Type				Plate heat exchanger			
	Quantity				1			
	Plates		Quantity		42			
	Water volume		l		0.95			
	Water flow rate		Min. l/min		12.0 (1)			
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
	Water volume		l		180	230	180	230
Tank	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 (2)	1.4 (2)	1.2 (2)	1.4 (2)
	Corrosion protection				Pickling			
	Energy efficiency class				B			
	Standing heat loss		W		50	58	50	58
	Storage volume		l		181	220	181	220
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	Piping connections diameter			inch	G 1" (female)			
	Piping material				Cu			
	Internal piping diameter			inch	1"			
	Piping			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 (3)			
	Minimum water volume in the system for cooling		l		10 (4)			
	Minimum water volume in the system for heating		l		0 (4)			
	Water circuit - Domestic hot water side	Piping material			Stainless steel			
		Piping connections	Cold water in / Hot water out		inch	G 3/4" FEMALE		
Recirculation connection			inch	G 3/4" FEMALE				
Refrigerant circuit	Gas side diameter			mm	15.9			
	Liquid side diameter			mm	6.40			
Sound power level	Nom.			dBA	42 (5)			
Sound pressure level	Nom.			dBA	28 (6)			
Operation range	Heating	Ambient	Min.	°C	0 (7)			
			Max.	°C	0 (7)			
		Water side	Min.	°C	0 (7)			
			Max.	°C	0 (7)			
Operation range	Cooling	Ambient	Min.	°CDB	0 (7)			
		Ambient	Max.	°CDB	0 (7)			
	Water side	Min.	°C	0 (7)				
		Max.	°C	0 (7)				
	Domestic hot water	Water side	Min.	°C	0 (7)			
			Max.	°C	0 (7)			
Safety devices	Item	01			Thermal cut out			
Electrical specifications					EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Power supply	Name				See note 10			
	Voltage range	Min.	%		10			
		Max.	%		10			
IP class	IP				IP X0B			

2 Specifications

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

2

Electrical specifications			EHVX04S18E6V	EHVX04S23E6V	EHVX08S18E6V	EHVX08S23E6V
Electric heater	Power supply	Name	6V3			
		Phase	1~ / 3~			
		Frequency	Hz			
		Voltage	V			
	Current	Maximum running current	A			
		Zmax List	Ω			
		Minimum Ssc value	Equipment complying with EN/IEC 61000-3-12			
	Recommended fuses		A			
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 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	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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

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				
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 9				
	Most critical part	Name		Plate heat exchanger				
		Ps*V	Bar*I	37.72				
Refrigerant side heat exchanger	Type			Plate heat exchanger				
	Quantity			1				
	Plates	Quantity			42			
Pump	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	12.0 (1)				

2 Specifications

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

Technical specifications					EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
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
	Water volume		l		180	230	180	230
Tank	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 (2)	1.4 (2)	1.2 (2)	1.4 (2)
	Corrosion protection				Pickling			
	Energy efficiency class				B			
	Standing heat loss		W		50	58	50	58
	Storage volume		l		181	220	181	220
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	Piping connections diameter		inch		G 1" (female)			
	Piping material				Cu			
	Internal piping diameter		inch		1"			
	Piping		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 (3)			
	Minimum water volume in the system for cooling		l		10 (4)			
	Minimum water volume in the system for heating		l		0 (4)			
Water circuit - Domestic hot water side	Piping material				Stainless steel			
	Piping connections	Cold water in / Hot water out	inch		G 3/4" FEMALE			
		Recirculation connection	inch		G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter		mm		15.9			
	Liquid side diameter		mm		6.40			
Sound power level	Nom.		dB(A)		42 (5)			
Sound pressure level	Nom.		dB(A)		28 (6)			
Operation range	Heating	Ambient	Min.	°C	0 (7)			
			Max.	°C	0 (7)			
	Water side	Min.	°C		0 (7)			
		Max.	°C		0 (7)			
Operation range	Cooling	Ambient	Min.	°CDB	0 (7)			
			Max.	°CDB	0 (7)			
	Water side	Min.	°C		0 (7)			
		Max.	°C		0 (7)			
	Domestic hot water	Min.	°C		0 (7)			
		Max.	°C		0 (7)			
	Safety devices	Item	01		Thermal cut out			

Electrical specifications					EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
Power supply	Name				See note 10			
	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		26.0			
		Zmax List	Ω		0.22			
		Minimum Ssc value			Equipment complying with EN/IEC 61000-3-12			
	Recommended fuses		A		20.000 (8)			

2 Specifications

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

2

Electrical specifications			EHVX04S18E6VG	EHVX04S23E6VG	EHVX08S18E6VG	EHVX08S23E6VG
Wiring connections	Communication cable	Quantity				
		Remark				
	Electric meter	Quantity				
		Remark				
	Preferential kWh rate power supply	Quantity				
		Remark				
	Domestic hot water pump	Quantity				
		Remark				
	For power supply back-up heater	Quantity				
		Remark				
	For connection with R6T	Quantity				
		Remark				
	For connection with A3P	Quantity				
		Remark				
	For connection with M2S	Quantity				
		Remark				
	For connection with optional FWXV* (demand	Quantity				
		Remark				

(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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

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

Technical specifications				EHVX08S18E9W		EHVX08S23E9W	
Heater capacity	Step 1						
	Step 2						
Power input	Nom.						
Efficiency	Domestic hot water	Net calorific value	%				
Casing	Colour						
	Material						
Dimensions	Unit	Height	mm				
		Width	mm				
		Depth	mm				
	Packed unit	Height	mm				
		Width	mm				
		Depth	mm				
Weight	Unit						
	Packed unit						
Packing	Material						
	Weight						
PED	Category						
	Most critical part	Name	Ps*V				
Refrigerant side heat exchanger	Type						
	Quantity						
Pump	Plates	Quantity					
	Nr of speeds						
	Power input						
Water side Heat exchanger	Type						
	Quantity						
	Plates	Quantity					
	Water volume						
	Water flow rate	Min.	l/min				
Expansion vessel	Volume						
	Max. water pressure						
	Pre pressure						
Water filter	Diameter perforations						
	Material						
Tank	Name						
	Water volume						

2 Specifications

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

Technical specifications					EHVX08S18E9W		EHVX08S23E9W		
Tank	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 (2)		1.4 (2)		
	Corrosion protection				Pickling				
	Energy efficiency class				B				
	Standing heat loss		W		50		58		
Storage volume		l		181		220			
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 (kW)	Space heating		m³/h		8			
		Domestic hot water tank		m³/h		10			
Water circuit	Piping connections diameter			inch		G 1" (female)			
	Piping material					Cu			
	Internal piping diameter			inch		1"			
	Piping			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 (3)			
	Minimum water volume in the system for cooling			l		10 (4)			
	Minimum water volume in the system for heating			l		0 (4)			
Water circuit - Domestic hot water side	Piping material				Stainless steel				
	Piping connections	Cold water in / Hot water out		inch		G 3/4" FEMALE			
		Recirculation connection		inch		G 3/4" FEMALE			
Refrigerant circuit	Gas side diameter			mm		15.9			
	Liquid side diameter			mm		6.40			
Sound power level	Nom.			dBA		42 (5)			
Sound pressure level	Nom.			dBA		28 (6)			
Operation range	Heating	Ambient	Min.	°C		0 (7)			
			Max.	°C		0 (7)			
		Water side	Min.	°C		0 (7)			
			Max.	°C		0 (7)			
		Cooling	Ambient	Min.	°CDB		0 (7)		
Operation range	Cooling	Ambient	Max.	°CDB		0 (7)			
			Water side	Min.	°C		0 (7)		
		Water side	Max.	°C		0 (7)			
			Domestic hot water	Water side	Min.	°C		0 (7)	
				Max.	°C		0 (7)		
Safety devices	Item	01			Thermal cut out				
Electrical specifications					EHVX08S18E9W		EHVX08S23E9W		
Power supply	Name				See note 10				
	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		A		13.0			
		Zmax	List	Ω		0.22			
	Recommended fuses		A		20.000 (8)				

2 Specifications

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

Electrical specifications			EHVX08S18E9W	EHVX08S23E9W
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 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	
	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	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) Based on a dT of 45 K |

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

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

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

(6) 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. |

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

(8) 4 pole 20 A curve 400V tripping class C (refer to wiring diagram) |

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

(10) 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. |

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

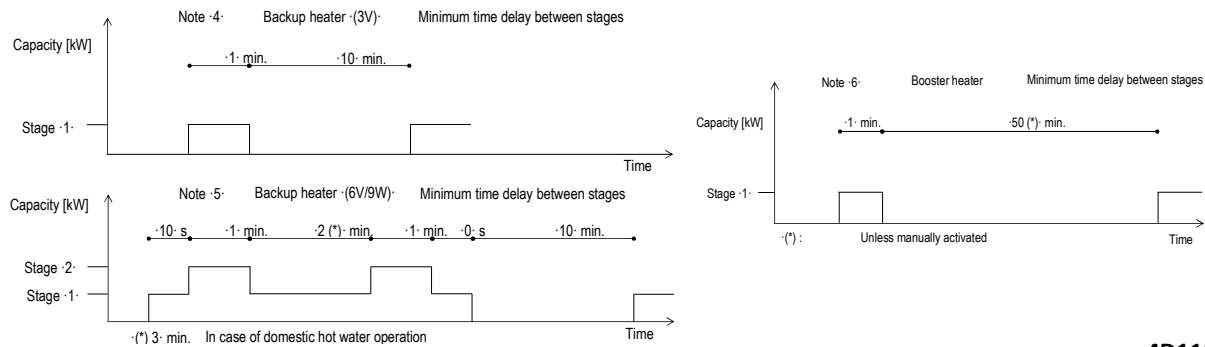
3 Electrical data

3 - 1 Electrical Data

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

Electrical specifications												
Not applicable for -EHVH(04/08)D(A/J)- models.												
Backup heater	Type		3V			6V			9W			
	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-)	3-9
	Capacity stage -		1	2	2	2	2	2	1	2	2	2
	Capacity stage -1-	kW	3	2	2	2	2	2	6	3	3	3
	Capacity stage -2-	kW	-	4	6	4	4	6	-	6	9	9
	Minimum time delay between stages		Note -4-			Note -5-			Note -5-			
	Power supply (1)	Phase	1~			3~			3~			
		Frequency	50			50			50			
		Voltage	230 ±10%			230 ±10%			400 ±10%			
	Current	Nominal running current	A	13	17,4	26,1	26,1	17,4	26,1	15	8,7	13

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 Zsys ≤ Zmax.
	(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.



4D111982B

3 Electrical data

3 - 1 Electrical Data

3

EHVX-E3V

EHV(H-X-Z)-E6V

EHV(H-X-Z)-E9W

EHVX-E6VG

* Electrical meter specification

- Pulse meter type/voltage-free contact for 5 V DC detection by PCB.

- Possible number of pulses

·0.1· pulse/kWh ·100· pulse/kWh ·10· pulse/kWh

·1· 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

- Required number of electrical meters

Outdoor unit type		ERGA(04/06/08)(D/E)AV3							ERLA03DAV3
Indoor unit type		*HB(H/X)(04/08)(D/E)A*			*HV(H/X)(04/08)(D/E)(A/J)*				EHF*03S18DJ3V
	Backup heater type	6V		9W	3V	6V		9W	3V
	Backup heater power supply	1~230V	3~230V	3~400V	1~230V	1~230V	3~230V	3~400V	1~230V
	Backup heater configuration	2/4/6kW	6kW	3/6/9kW	3kW	2/4/6kW	6kW	3/6/9kW	3kW
		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)DAV3
Indoor unit type		*HV(H/X)(04/08)D(A/J)V
	Backup heater type	Booster heater (·2.4· kW)
	Immersion heater power supply	1~
		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	-

4D113240C

4 Combination table

4 - 1 Combination Table

EHVX-E3V

EHV(H-X-Z)-E6V

EHV(H-X-Z)-E9W

EHVX-E6VG

Factory-mounted equipment for ·EHV(H/X/Z)045*E(A/J)*.

Description	EHV(H/X/Z)045*E(A/J)*			
Heating only model ·EHVH*.		18 - 6V (9)		23 - 6V (9)
Reversible model ·EHVX*.	18 - 3V	18 - 6V (9)	23 - 3V	23 - 6V (9)
(Integrated Bizone)		18 - 6V (9)		
Heating only indoor unit for the UK		18 - 6V (9)		23 - 6V (9)
Backup heater ·3kW 1N~230 V.	o	-	o	-
Backup heater ·2-4-6kW 1N~230 V.	-	o	-	o
Backup heater ·2-4-6kW 3~230 V.	-	o	-	o
Backup heater ·3-6-9kW 3N~400 V.	-	-	-	-
Domestic hot water tank ·180L.	o	o	-	-
Domestic hot water tank ·230L.	-	-	o	o

Factory-mounted equipment for ·EHV(H/X/Z)085*E(A/J)*.

Description	EHV(H/X/Z)085*E(A/J)*			
Heating only model ·EHVH*.	18 - 6V (9)	18 - 9W (9)	23 - 6V (9)	23 - 9W (9)
Reversible model ·EHVX*.	18 - 6V (9)	18 - 9W (9)	23 - 6V (9)	23 - 9W (9)
(Integrated Bizone)	18 - 6V (9)	18 - 9W (9)	23 - 6V (9)	23 - 9W (9)
Heating only indoor unit for the UK	18 - 6V (9)		23 - 6V (9)	
Backup heater ·3kW 1N~230 V.	-	-	-	-
Backup heater ·2-4-6kW 1N~230 V.	o	-	o	-
Backup heater ·2-4-6kW 3~230 V.	o	-	o	-
Backup heater ·3-6-9kW 3N~400 V.	-	o	-	o
Domestic hot water tank ·180L.	o	o	-	-
Domestic hot water tank ·230L.	-	-	o	o

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

		ERGA04EAV3	ERGA06EAV3	ERGA08EAV3	ERGA04EAV3A	ERGA06EAV3A	ERGA08EAV3A	ERGA04EAV37
EHVH04S(18/23)E(A/J)*	Heating only indoor unit	o	---	---	o	---	---	o
EHVX04S(18/23)E(A/J)*	Reversible indoor unit	o	---	---	o	---	---	o
EHVZ04S(18/23)E(A/J)*	(Integrated Bizone)	o	---	---	o	---	---	---
EHVH04SU(18/23)E(A/J)*	Heating only indoor unit for the UK	o	---	---	o	---	---	---
EHVH08S(18/23)E(A/J)*	Heating only indoor unit	---	o	o	---	o	o	---
EHVX08S(18/23)E(A/J)*	Reversible indoor unit	---	o	o	---	o	o	---
EHVZ08S(18/23)E(A/J)*	(Integrated Bizone)	---	o	o	---	o	o	---
EHVH08SU(18/23)E(A/J)*	Heating only indoor unit for the UK	---	o	o	---	o	o	---

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 Bizone)	---	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)	o	o	o	o	o	o	o
EKRP1AHTA	Demand PCB	*(3)	o	o	o	o	o	o	o
EKPCCAB4	PC cable	*(4)	o	o	o	o	o	o	o
KRCS01-1	Remote indoor sensor	*(5)	o	o	o	o	o	o	o
EKRSCA1	Remote sensor for outdoor	*(5)	o	o	o	o	o	o	o
EKHVTC	Corner pipe bend kit								
EKHVCONV4	Conversion kit: heating only to reversible.		o	o	o	o	o	o	o
EKUHWG3D	-G3- kit							o (6)	o (6)
BRP069A71	WLAN module	*(7)	o	o	o	o	o	o	o
BRC1HH*	HCI (Human Comfort Interface)		o	o	o	o	o	o	o
EKRELSG	Relay for Smart Grid								
FWXV10ATV3	Heat pump convector		o	o	o	o	o	o	o
FWXV15ATV3	Heat pump convector		o	o	o	o	o	o	o
FWXV20ATV3	Heat pump convector		o	o	o	o	o	o	o
EKRTWA	Wired room thermostat		o	o	o	o	o	o	o
EKRTR1	Wireless room thermostat		o	o	o	o	o	o	o
EKRTEIS	External sensor room thermostat	*(8)	o	o	o	o	o	o	o

Reference	Description		
BZKA7V3	Only applicable for ·EHVH* & EHVX* models Bizone kit	EHVH*	EHVX*
		o	o

Notes

- (1) PCB that provides additional output connections:
 - Control external heat source (bivalent operation).
 - Output remote ON/OFF signal space heating/cooling OR bottom plate heater ·*KBPTH16* · control.
 - Remote alarm output
- (2) Additional relays to allow bivalent control in combination with an external room thermostat are field-supplied.
- (3) PCB to receive up to 4 digital inputs for power limitation, only for ·EHV(H/X/Z)(04/08)E(A/J)*.
- (4) Data cable for connection with PC.
- (5) Only 1 remote sensor can be connected: indoor OR outdoor sensor.
- (6) This kit is mandatory for the UK models.
- (7) 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.
- (8) Can only be used in combination with wireless room thermostat ·EKRTR1.
- (9) The backup heater capacity depends on a user interface setting.

Remark

Other combinations than mentioned in this combination table are prohibited.

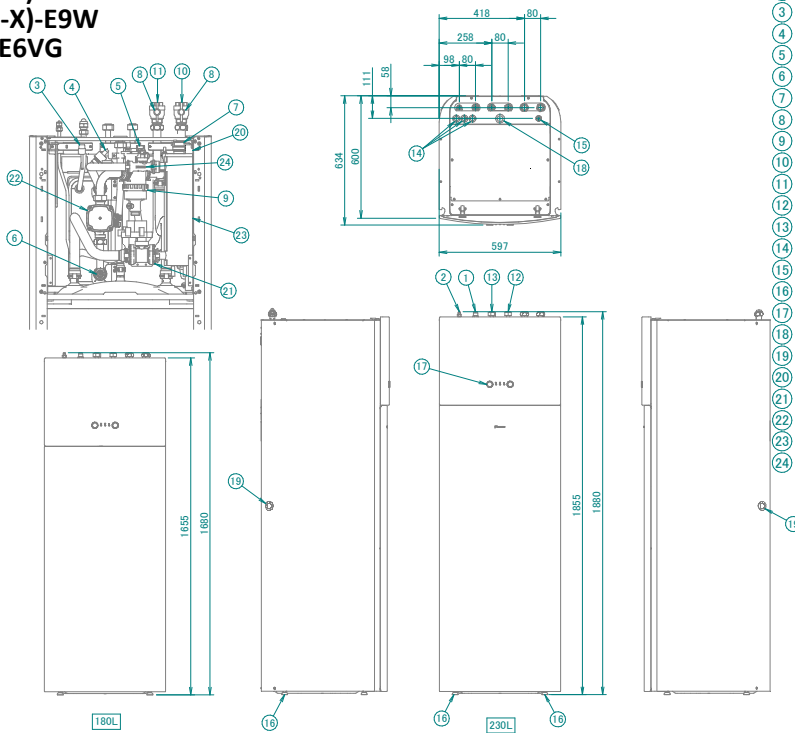
3D130019

5 Dimensional drawings

5 - 1 Dimensional Drawings

5

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.

3D112072B

6 Centre of gravity

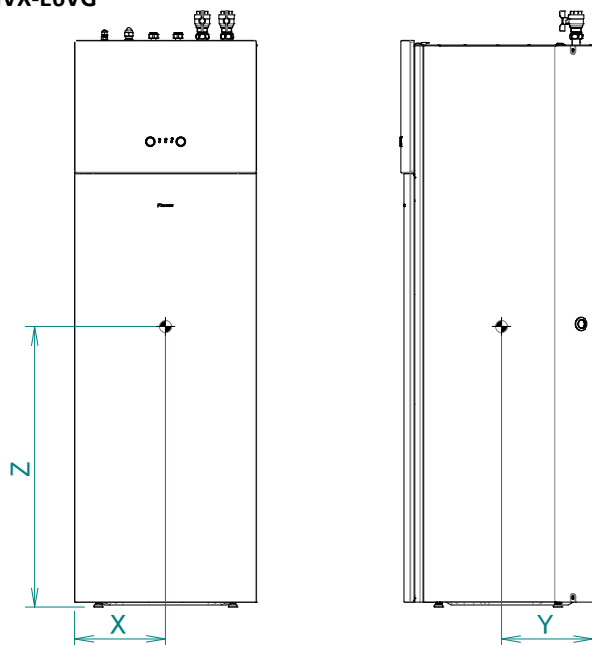
6 - 1 Centre of Gravity

EHVX-E3V

EHV(H-X-Z)-E6V

EHV(H-X-Z)-E9W

EHVX-E6VG

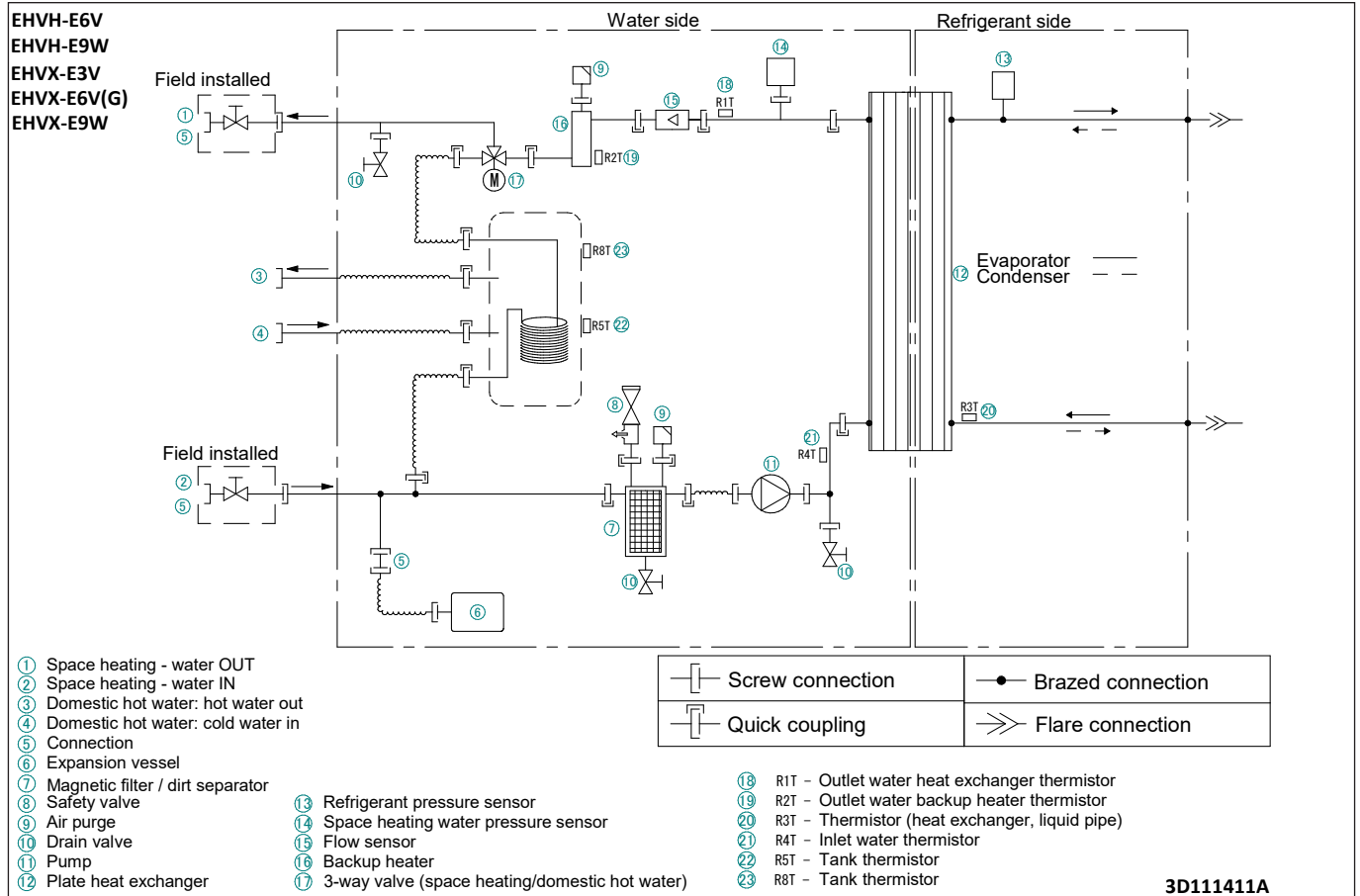


MODEL	X	Y	Z
180L	297.5	299	718
230L	297.5	299	858

3D113623A

7 Piping diagrams

7 - 1 Piping Diagrams



8 Wiring diagrams

8 - 1 Notes & Legend

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

Option

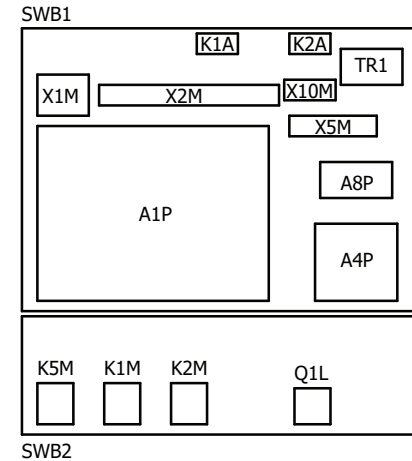
Wiring depending on model

Not mounted in switch box

PCB

- 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:
- ☐ Remote user interface
 - ☐ Ext. indoor thermistor
 - ☐ Ext. outdoor thermistor
 - ☐ Digital I/O PCB
 - ☐ Demand PCB
 - ☐ Safety thermostat
 - ☐ Smartgrid
 - ☐ WLAN adapter module
 - ☐ WLAN cartridge
- Main LWT:
- ☐ ON/OFF thermostat (wired)
 - ☐ ON/OFF thermostat (wireless)
 - ☐ Ext. thermistor
- Add LWT:
- ☐ Heat pump convactor
 - ☐ ON/OFF thermostat (wired)
 - ☐ ON/OFF thermostat (wireless)
 - ☐ Ext. thermistor
 - ☐ Heat pump convactor

POSITION IN SWITCH BOX



NOTES

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

LEGEND

Part n°	Description	Part n°	Description
A1P	main PCB	PHC1 (A4P)	* optocoupler input circuit
A2P	* ON/OFF thermostat (PC = power circuit)	Q1L	thermal protector backup heater
A3P	* heat pump convactor	Q4L	# safety thermostat
A4P	* digital I/O PCB	Q*DI	# earth leakage circuit breaker
A8P	* demand PCB	R1H (A2P)	* humidity sensor
A9P	status indicator	R1T (A1P)	outlet water heat exchanger thermistor
A11P	MMI main PCB	R1T (A2P)	* ambient sensor ON/OFF thermostat
A14P	* user interface PCB	R1T (A14P)	* ambient sensor user interface
A15P	receiver PCB (wireless ON/OFF thermostat)	R2T (A1P)	outlet backup heater thermistor
A20P	* WLAN module	R2T (A2P)	* external sensor (floor or ambient)
B2L	flow sensor	R3T	refrigerant liquid side thermistor
B1PR	refrigerant pressure sensor	R4T	inlet water thermistor
B1PW	water pressure sensor	R5T, R8T	domestic hot water thermistor
CN* (A4P)	* connector	R6T	* external indoor or outdoor ambient thermistor
DS1 (A8P)	* dipswitch	S1S	# preferential kWh rate PS contact
E1H	backup heater element (1 kW)	S2S	# electrical meter pulse input 1
E2H	backup heater element (2 kW)	S3S	# electrical meter pulse input 2
E*P (A9P)	indication LED	S4S	# smartgrid feed-in
F1B	# overcurrent fuse backup heater	S6S-S9S	* digital power limitation inputs
F1T	thermal fuse backup heater	S10S-S11S	# low voltage smartgrid contact
F1U, F2U (A4P)	* fuse 5 A 250 V for digital I/O PCB	SS1 (A4P)	* selector switch
FU1 (A1P)	fuse T 5 A 250 V for PCB	SW1~2 (A11P)	turn buttons
K1A, K2A	* high voltage smartgrid relay	SW3~5 (A11P)	push button
K1M, K2M	contactor backup heater	TR1	power supply transformer
K5M	safety contactor BUH	X6M	# BUH power supply terminal strip
K*R (A1P-A4P)	relay on PCB	X10M	* smartgrid power supply terminal strip
M1P	main supply pump	X*, X*A, X*H*, X*Y	connector
M2P	# domestic hot water pump	X*M	terminal strip
M2S	# 2 way valve for cooling mode		
M3S	3 way valve for spaceheating / domestic hot water		
P1M	MMI display		
PC (A15P)	* power circuit		

* : optional
: field supply

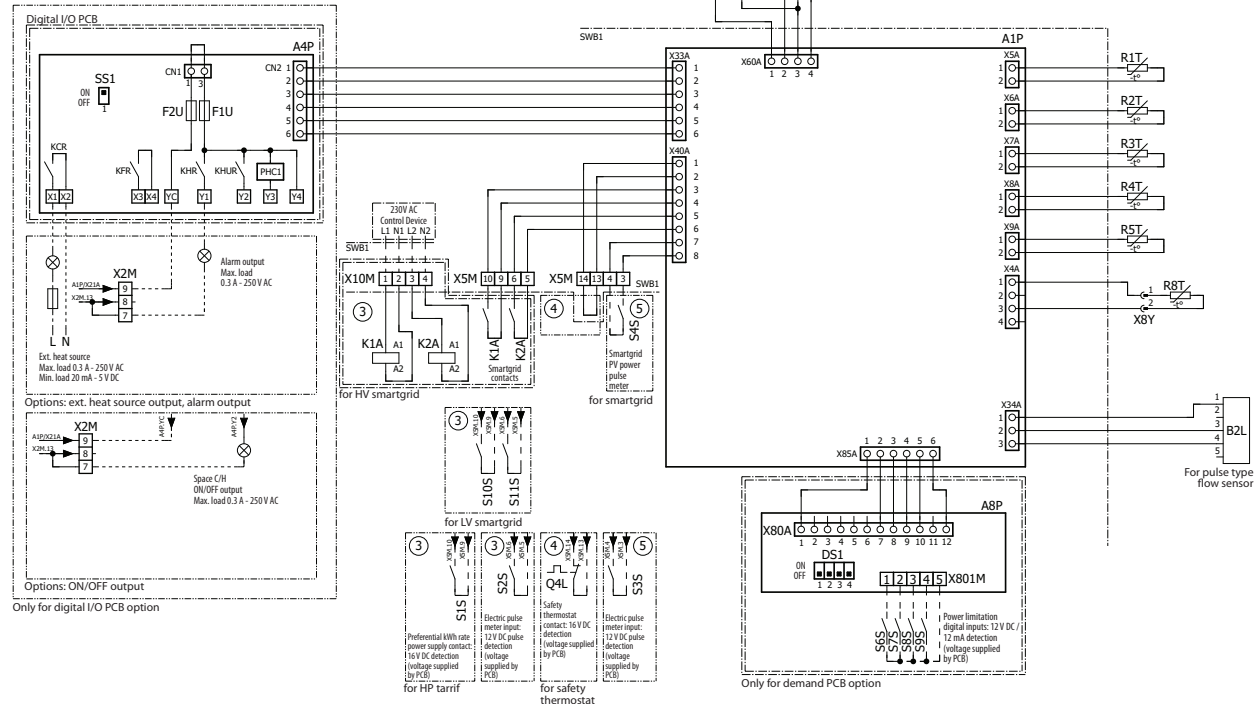
4D130329A

8 Wiring diagrams

8 - 2 Control Circuit

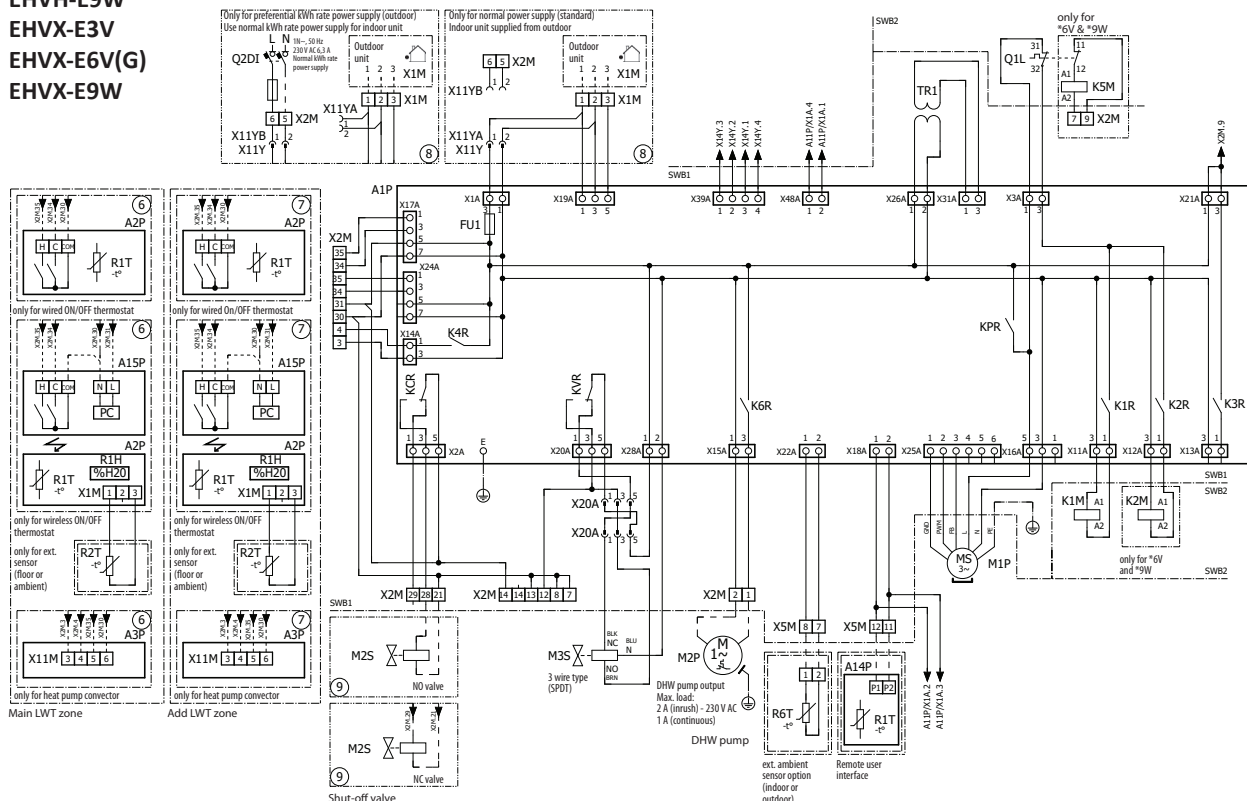
8

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



4D130329A

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



4D130329A

8 - 2 Control Circuit

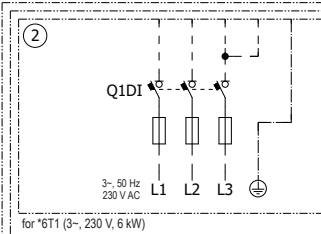
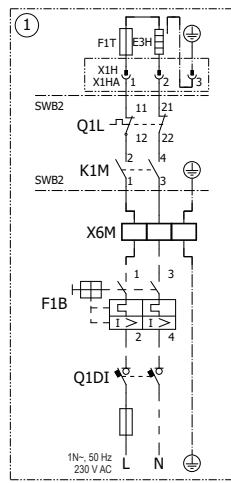
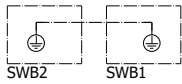


8 Wiring diagrams

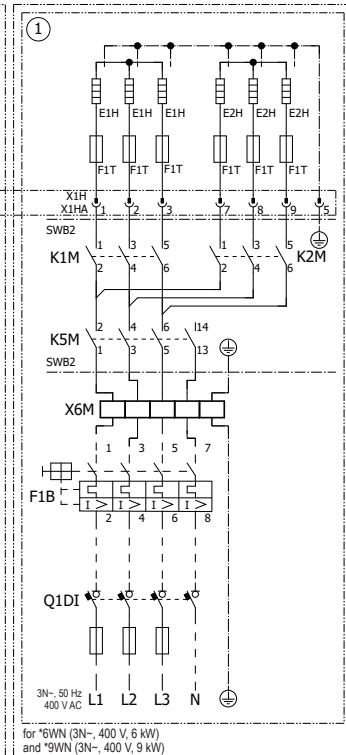
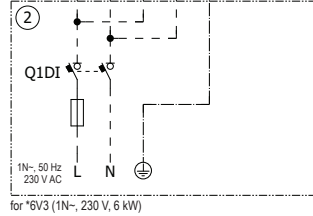
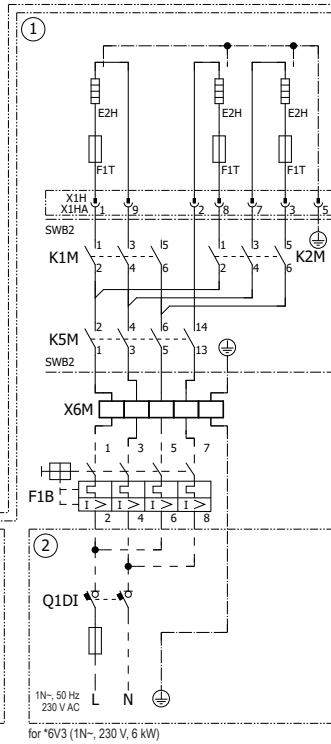
8 - 3 Power Supply, Back-up Heater

8

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



only for *6V



only for *9W

4D130329

9 External connection diagrams

9 - 1 External Connection Diagrams

EHVH-E6V

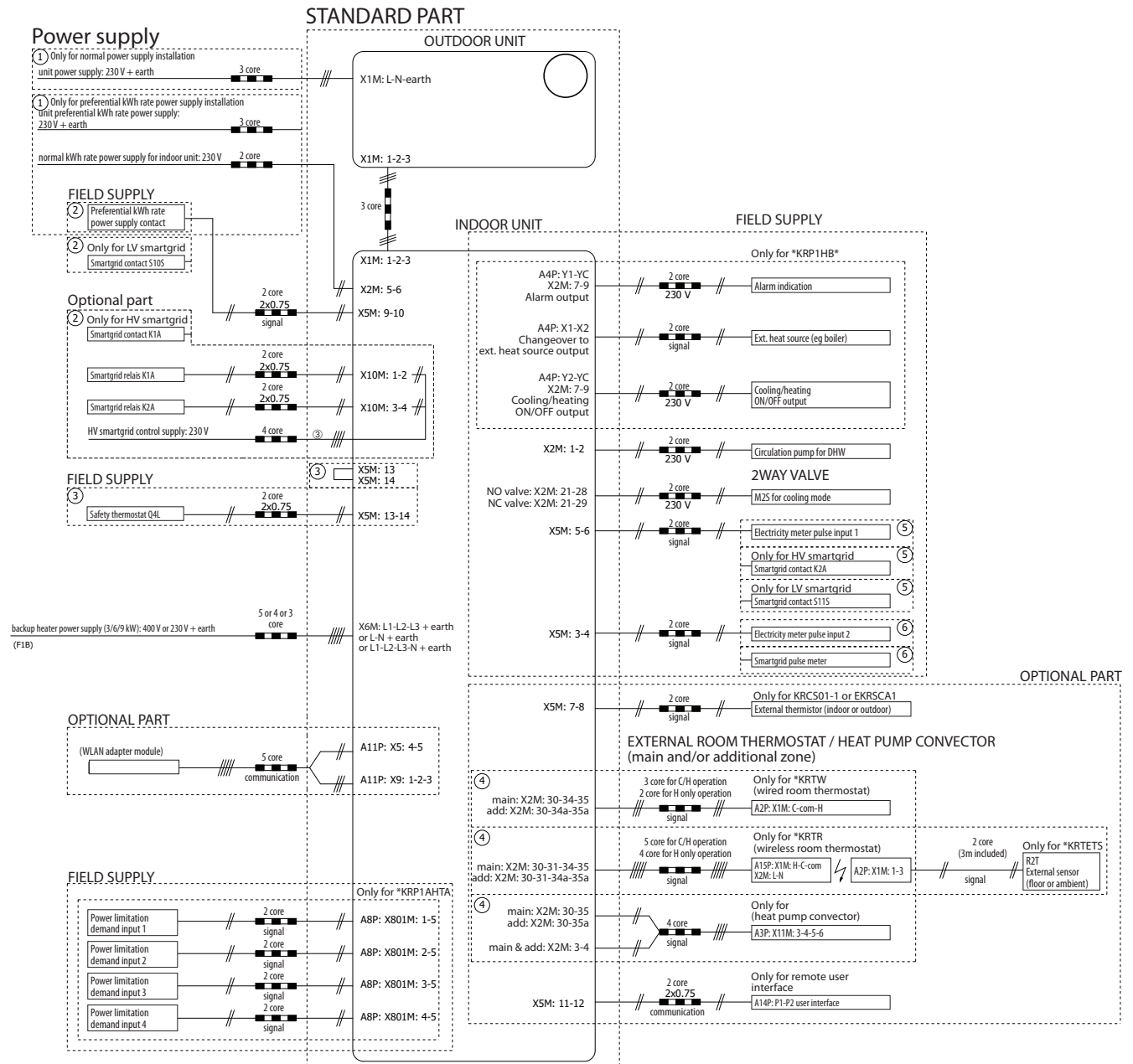
EHVH-E9W

EHVX-E3V

EHVX-E6V(G)

EHVX-E9W

Electrical connection diagram Altherma BML FS - E-series



NOTE

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

For more details please check unit wiring

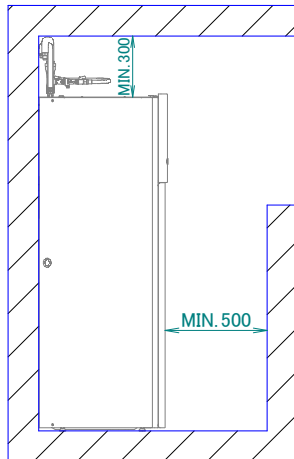
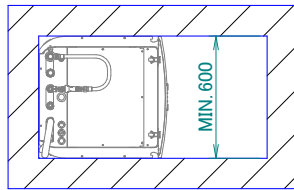
4D130331B

10 Installation

10 - 1 Installation Method

10

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



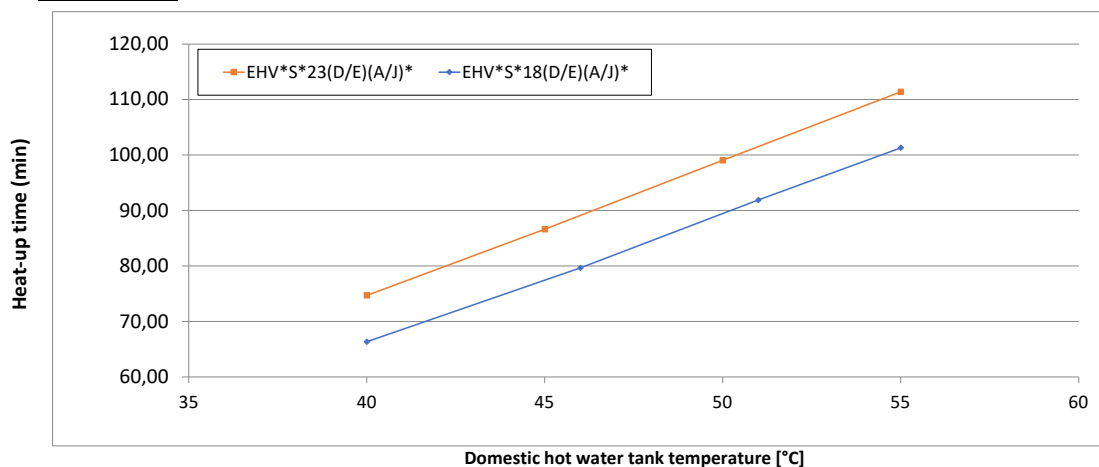
3D112073A

11 Operation range

11 - 1 Operation Range

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

1. 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.

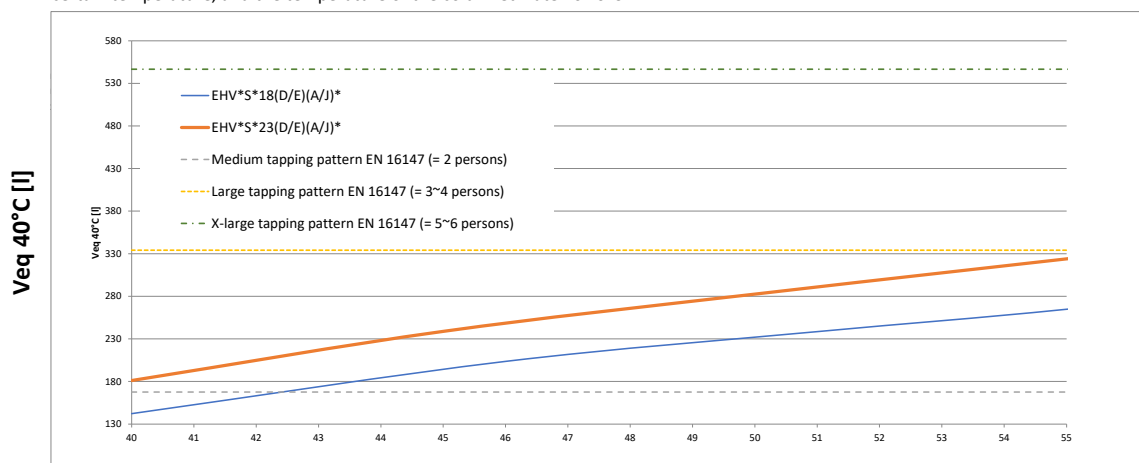
4D113329C

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

- (1) According to EN16147.

4D113329C

12 Hydraulic performance

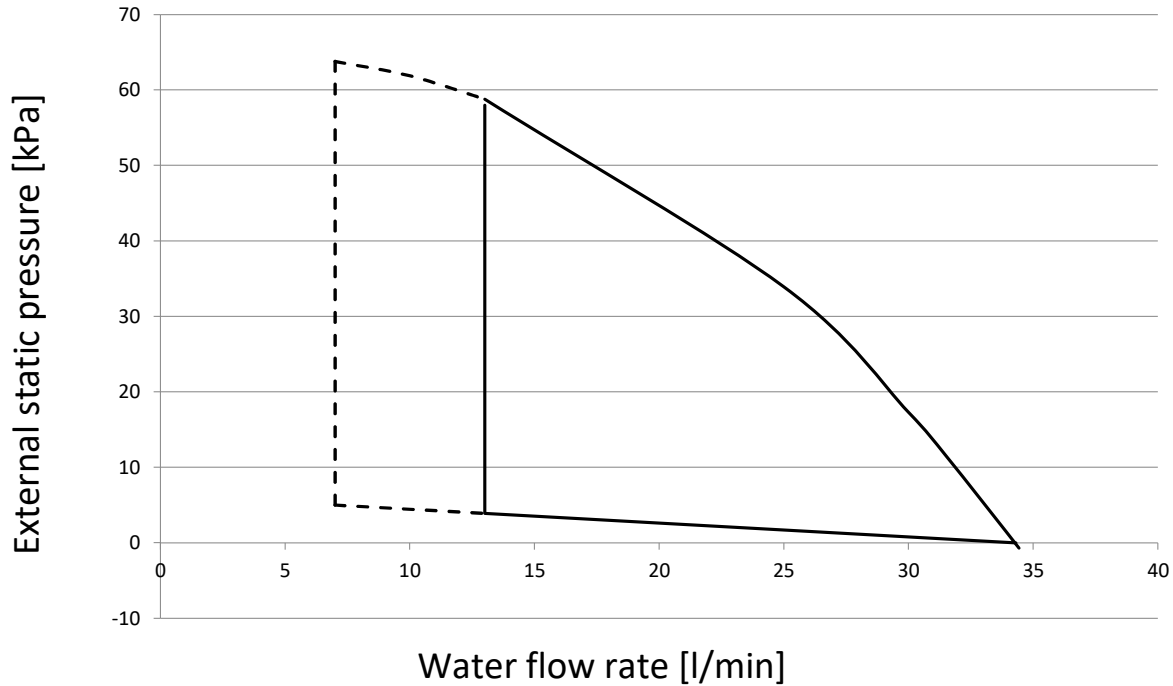
12 - 1 Static Pressure Drop Unit

12

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

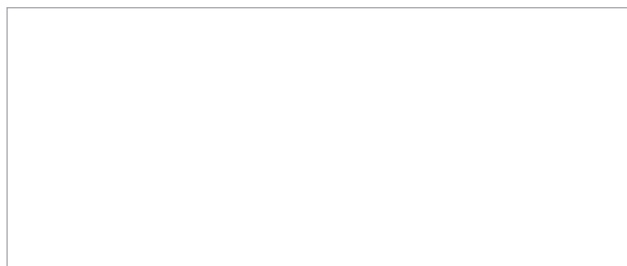
Notes

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.

4D112012B



EEDEN20

11/2020



The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.