

Daikin Altherma low
temperature monobloc
Technical Data
EBLA04-08E3V3 /
EBLA04-08EV3 /
EDLA04-08E3V3 /
EDLA04-08EV3



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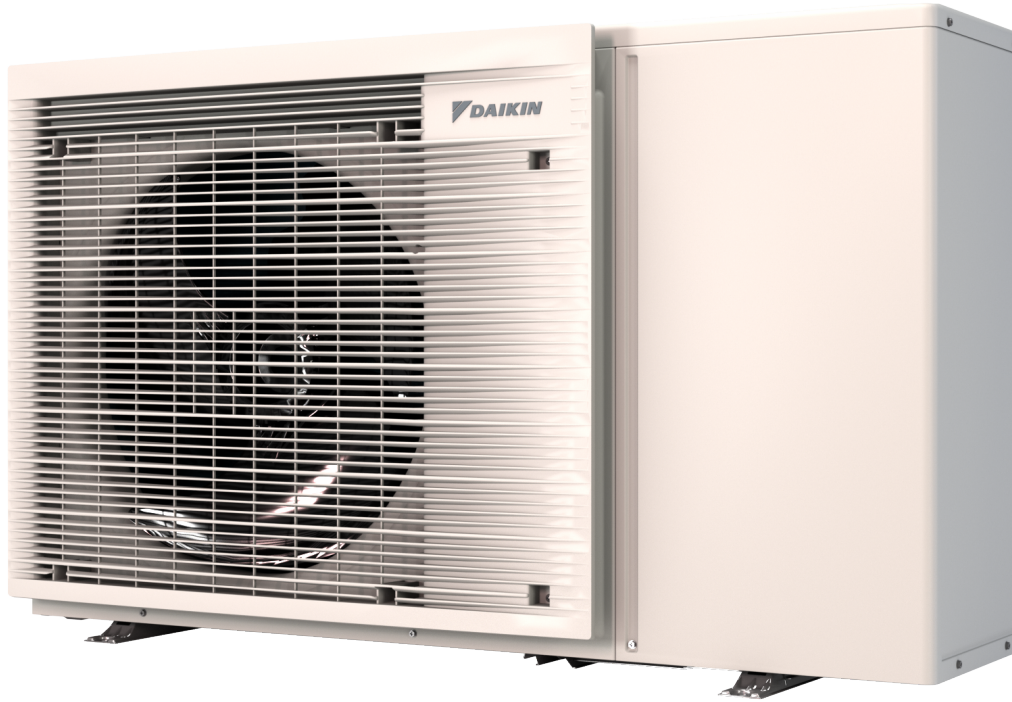
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1 Features

1 - 1 EBLA04-08E(3)V3 / EDLA 04-08E(3)V3

Air to water monobloc system, ideal when indoor space is limited

- › Monobloc all-in-one concept including hydraulic parts
- › W-LAN cartridge included
- › Possible to combine with domestic hot water
- › Energy efficient heating and cooling system based on air to water heat pump technology
- › Separate back-up heater kit (optional)



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2 Specifications

Technical specifications				EBLA04E3V3		EBLA06E3V3		EBLA08E3V3		
Heating capacity	Nom.		kW	4.30 (1) / 4.60 (2)		6.00 (1) / 5.90 (2)		7.50 (1) / 7.80 (2)		
Cooling capacity	Nom.		kW	4.86 (1) / 4.52 (2)		5.83 (1) / 5.09 (2)		6.18 (1) / 5.44 (2)		
Heater capacity	Step 1		kW			3				
Power input	Cooling	Nom.	kW	0.820 (1) / 1.36 (2)		1.08 (1) / 1.55 (2)		1.19 (1) / 1.73 (2)		
	Heating	Nom.	kW	0.840 (1) / 1.26 (2)		1.24 (1) / 1.69 (2)		1.63 (1) / 2.23 (2)		
COP				5.10 (1) / 3.65 (2)		4.85 (1) / 3.50 (2)		4.60 (1) / 3.50 (2)		
EER				5.91 (1) / 3.32 (2)		5.40 (1) / 3.28 (2)		5.19 (1) / 3.14 (2)		
Casing	Colour			Ivory white						
	Material			Zinc coated low carbon steel						
Dimensions	Unit	Height	mm	770						
		Width	mm	1,250						
		Depth	mm	362						
	Packed unit	Height	mm	920						
		Width	mm	1,350						
		Depth	mm	500						
Weight	Unit		kg	91.0						
	Packed unit		kg	98						
Packing	Material			Carton / EPS / Wood (pallet)						
Heat exchanger	Length		mm	920						
	Rows	Quantity		2						
	Fin pitch		mm	1.40						
	Face area		m ²	0.658						
	Stages	Quantity		32						
	Tube type			ø7 Hi-XD						
	Fin	Type		Waffle Hydrophilic Blue						
		Treatment		Hydrophilic						
Fan	Type			Propeller fan						
	Quantity			1						
Fan motor	Discharge direction			Horizontal						
	Quantity			1						
	Model			KFD-325-77-10A						
	Speed	Steps			10					
		Heating	Nom.	rpm	620		680		740	
Output				W						
Compressor	Quantity			1						
Model				2YC7IEXD#C						
Compressor	Type			Hermetically sealed swing compressor						
PED	Category			Category II						
	Most critical part	Name		Compressor						
		P _s *V	Bar*I		110					
Operation range	Heating	Ambient	Min.	°CDB	-25					
			Max.	°CDB	25 (3)					
		Water side	Min.	°C	15 (3)					
			Max.	°C	65 (3)					
	Cooling	Ambient	Min.	°CDB	10 (3)					
			Max.	°CDB	43					
		Water side	Min.	°C	5 (3)					
			Max.	°C	22					
	Domestic hot water	Ambient	Min.	°CDB	-27					
			Max.	°CDB	35					
		Water side	Min.	°C	25					
			Max.	°C	55 (3)					
Sound power level	Heating	Nom.	dB(A)	58.0 (1)		60.0 (1)		62.0 (1)		
	Cooling	Nom.	dB(A)	61.0 (1)		62.0 (1)				
Sound pressure level	Heating	Nom.	dB(A)	44.0 (1)		47.0 (1)		49.0 (1)		
	Cooling	Nom.	dB(A)	48.0 (1)		49.0 (1)		50.0 (1)		
Refrigerant	Type			R-32						
	GWP			675.0						
	Charge			kg		1.35				
	Charge			TCO ₂ Eq		0.910				
	Control			Expansion valve						
	Circuits	Quantity		1						
Type			FW68DA							
Charged volume			l		1.1					
Defrost method				Reversed cycle						
Defrost control				Sensor for outdoor heat exchanger temperature						
Capacity control				Inverter controlled						
Safety devices				High pressure switch						
Pump	Quantity			1						
	Nr of speeds			PWM						
	Power input			W		75				


2 Specifications

Technical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3			
Water side Heat exchanger	Type	Plate heat exchanger							
	Quantity	1							
Water side Heat exchanger	Water volume	1.01							
	Water flow rate	Heating Nom.	l/min	12.3 (1) / 13.2 (2)	17.2 (1) / 16.9 (2)	21.5 (1) / 22.4 (2)			
		Cooling Nom.	l/min	13.9 (1) / 13.0 (2)	16.7 (1) / 14.6 (2)	17.7 (1) / 15.6 (2)			
	Insulation material	Kaiflex							
Expansion vessel	Heater	W							
	Volume	l							
	Max. water pressure	bar							
	Pre pressure	bar							
Water circuit	Heater	W							
	Piping connections diameter	inch							
	Piping length	Max. OU - Tank	m	G 1" (male)					
	Level difference	Max.	m	10					
	Safety valve	bar							
	Drain valve / fill valve	No							
	Air purge valve	Yes							
	General	Supplier/ Manufacturer details	Name and address Name or trademark						
		Daikin Industries Czech Republic s.r.o. U Nove Hospody 1/1155, 301 00 Daikin Europe N.V.							
Product description		Air-to-water heat pump		Yes					
		Brine-to-water heat pump		No					
		Heat pump combination heater		No					
		Low-temperature heat pump		No					
		Supplementary heater integrated		Yes					
Water-to-water heat pump		No							
LW(A) Sound power level (according to EN14825)			dB(A)	58.0	60.0	62.0			
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Space heating general	Air to water unit	Rated airflow (outdoor)		m ³ /h	2,280	2,520	2,770		
		Other		Capacity control					
			Pck (Crankcase heater mode)		kW	0.000			
			Poff (Off mode)		kW	0.010			
			Psb (Standby mode)		kW	0.010			
			Pto (Thermostat off)		kW	0.010			
Space heating	Average climate water outlet 55°C	General	Annual energy consumption		kWh	3,769	4,405	4,939	
			ηs (Seasonal space heating efficiency)		%	129	128	131	
		Prated at -10°C		kW	6.0	7.0	8.0		
		Qhe Annual energy consumption (GCV)		Gj	14	16	18		
		SCOP					3.29	3.28	3.35
		Seasonal space heating eff. class				A++			

2 Specifications

Technical specifications			EBLA04E3V3	EBLA06E3V3	EBLA08E3V3
Space heating Average climate water outlet 55°C Cold climate water outlet 55°C Warm climate water outlet 55°C Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0	
		COPd	1.97	1.98	1.96
		Pdh kW	5.3	5.9	6.9
	B Condition (2°CDB/1°CWB)	PERd %	78.8	79.2	78.4
		Cdh (Degradation heating)		1.0	
		COPd	3.23	3.16	3.20
	C Condition (7°CDB/6°CWB)	Pdh kW	3.3	3.9	4.4
		PERd %	129.2	126.4	128.0
		Cdh (Degradation heating)		1.0	
	D Condition (12°CDB/11°CWB)	COPd		4.49	4.64
		Pdh kW		3.0	3.3
		PERd %	176.0	179.6	185.6
	Tol (temperature operating limit)	Cdh (Degradation heating)		1.0	
		COPd	1.37		1.64
		Pdh kW	4.0	1.53	7.1
	Rated heat output supplementary capacity	PERd %	54.8	61.2	65.6
		TOL °C		-10	
		WTOL °C		55	
	Tbiv (bivalent temperature)	Psup (at Tdesign -10°C)	2.0	1.6	1.0
		COPd	1.97	2.12	1.90
		Pdh kW	5.3	6.1	7.5
	General	PERd %	78.8	84.8	76.0
		Tbiv °C	-7	-6	-8
		Annual energy consumption kWh	4,446	5,278	6,864
	Cold climate water outlet 55°C	ηs (Seasonal space heating efficiency)	108	109	112
		Prated at -22°C kW	5.0	6.0	8.0
		Qhe Annual energy consumption (GCV) GJ	16	19	25
General	Annual energy consumption kWh	1,616	1,813	2,624	
	ηs (Seasonal space heating efficiency)	152	162		
	Prated at 2°C kW	4.7	5.6	8.1	
Warm climate water outlet 55°C	Qhe Annual energy consumption (GCV) GJ	6	7	9	
	Annual energy consumption kWh	2,729	3,196	3,588	
	ηs (Seasonal space heating efficiency)	179	178	181	
Average climate water outlet 35°C	Prated at -10°C kW	6.0	7.0	8.0	

2 Specifications

Technical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3		
Space heating 	Average climate water outlet 35°C	General	Qhe Annual energy consumption (GCV)	Gj	10	12	13	
			SCOP		4.54	4.52	4.61	
			Seasonal space heating eff. class			A+++		
			A Condition (7°CDB/-8°CWB)	COPd		2.90	2.86	2.77
				Pdh	kW	5.5	6.0	7.0
				PERd	%	116.0	114.4	110.8
			B Condition (2°CDB/-1°CWB)	CdH (Degradation heating)			1.0	
				COPd		4.33	4.25	4.35
				Pdh	kW	3.3	3.9	4.2
			C Condition (7°CDB/-6°CWB)	CdH (Degradation heating)			1.0	
				COPd		6.19	6.30	6.49
				Pdh	kW		3.2	3.3
			D Condition (12°CDB/11°CWB)	CdH (Degradation heating)			1.0	
				COPd			7.78	8.52
				Pdh	kW		3.3	3.9
			Tol (temperature operating limit)	PERd			311.2	340.8
				COPd		2.56	2.49	2.41
				Pdh	kW	5.2	6.0	6.9
			Tbiv (bivalent temperature)	PERd			99.6	96.4
				TOL	°C		-10	
				WTOL	°C		35	
			Rated heat output supplementary capacity	COPd			3.07	2.66
				Pdh	kW	5.5	6.1	7.5
PERd	%	116.0		122.8	106.4			
Cold climate water outlet 35°C	General	Psup (at Tdesign -10°C)	kW	0.8	1.0	1.1		
		Annual energy consumption	kWh	3,208	3,727	5,012		
		ηs (Seasonal space heating efficiency)	%	151	156	154		
Warm climate water outlet 35°C	General	Prated at -22°C	kW	5	6	8		
		Qhe Annual energy consumption (GCV)	Gj	11.5	13.4	18.0		
		Prated at 2°C	kW	5.2	6.0	7.0		
		Qhe Annual energy consumption (GCV)	Gj	4		5		

Electrical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3
Compressor component	Main power supply	Phase			3N~	
		Voltage	V		220	
Hydraulic component	Back-up heater current	Type			3V3	
		Power supply	Phase		1~	
		Frequency	Hz		50	
		Voltage	V		230	
		Running current	Back-up heater	A		13.0
Voltage range	Min.	%		0		
	Max.	%		10		
Power supply	Name			V3		
	Phase			1~		
	Frequency	Hz		50		
	Voltage	V		230 +/-10%		

2 Specifications

Electrical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3
Current	Maxi- mum running current	Heating	A	19.9		24.0
			Recommended fuses			

(1)Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(2)Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C) |

(3)For more details, see operation range drawing

Technical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3	
Heating capacity	Nom.		kW	4.30 (1) / 4.60 (2)	6.00 (1) / 5.90 (2)	7.50 (1) / 7.80 (2)	
Cooling capacity	Nom.		kW	4.86 (1) / 4.52 (2)	5.83 (1) / 5.09 (2)	6.18 (1) / 5.44 (2)	
Power input	Cooling Heating	Nom.	kW	0.820 (1) / 1.36 (2)	1.08 (1) / 1.55 (2)	1.19 (1) / 1.73 (2)	
				0.840 (1) / 1.26 (2)	1.24 (1) / 1.69 (2)	1.63 (1) / 2.23 (2)	
COP				5.10 (1) / 3.65 (2)	4.85 (1) / 3.50 (2)	4.60 (1) / 3.50 (2)	
EER				5.91 (1) / 3.32 (2)	5.40 (1) / 3.28 (2)	5.19 (1) / 3.14 (2)	
Casing	Colour			Ivory white			
	Material			Zinc coated low carbon steel			
Dimensions	Unit	Height	mm	770			
		Width	mm	1,250			
		Depth	mm	362			
	Packed unit	Height	mm	920			
		Width	mm	1,350			
		Depth	mm	500			
Weight	Unit		kg	88.0			
	Packed unit		kg	95			
Packing	Material			Carton / EPS / Wood (pallet)			
Heat exchanger	Length		mm	920			
	Rows	Quantity		2			
		Fin pitch		mm	1.40		
	Face area		m ²	0.658			
	Stages	Quantity		32			
	Tube type			ø7 Hi-XD			
	Fin	Type			Waffle Hydrophilic Blue		
		Treatment			Hydrophilic		
Fan	Type			Propeller fan			
	Quantity			1			
	Discharge direction			Horizontal			
Fan motor	Quantity			1			
	Model			KFD-325-77-10A			
	Speed	Steps			10		
		Heating Nom.		rpm	620	680	740
	Output		W	77			
Compressor	Quantity			1			
	Model			2YC71EXD#C			
	Type			Hermetically sealed swing compressor			
PED	Category			Category II			
	Most critical part	Name		Compressor			
		Ps*V	Bar*I		110		
Operation range	Heating	Ambient	Min.	°CDB	-25		
			Max.	°CDB	25 (3)		
		Water side	Min.	°C	9 (3)		
			Max.	°C	65 (3)		
		Cooling	Ambient	Min.	°CDB	10 (3)	
				Max.	°CDB	43	
	Water side		Min.	°C	5 (3)		
	Domestic hot water	Ambient	Min.	°CDB	-27		
			Max.	°CDB	35		
		Water side	Min.	°C	25		
			Max.	°C	55 (3)		
		Sound power level	Heating	Nom.	dBA	58.0 (1)	60.0 (1)
Cooling			Nom.	dBA	61.0 (1)	62.0 (1)	
Sound pressure level	Heating	Nom.	dBA	44.0 (1)	47.0 (1)	49.0 (1)	
	Cooling	Nom.	dBA	48.0 (1)	49.0 (1)	50.0 (1)	
Refrigerant	Type			R-32			
	GWP			675.0			
	Charge		kg	1.35			
	Charge		TCO2Eq	0.910			
	Control			Expansion valve			
	Circuits	Quantity			1		

2 Specifications

Technical specifications				EBLA04EV3		EBLA06EV3		EBLA08EV3		
Refrigerant oil	Type	FW68DA								
	Charged volume	l		1.1						
Defrost method	Reversed cycle									
Defrost control	Sensor for outdoor heat exchanger temperature									
Capacity control	Method	Inverter controlled								
Safety devices	Item	01		High pressure switch						
Pump	Quantity	1								
	Nr of speeds	PWM								
	Power input	W		75						
Water side Heat exchanger	Type	Plate heat exchanger								
	Quantity	1								
	Water volume	l		1.01						
Water side Heat exchanger	Water	Heating	Nom.	l/min	12.3 (1) / 13.2 (2)	17.2 (1) / 16.9 (2)	21.5 (1) / 22.4 (2)			
	flow rate	Cooling	Nom.	l/min	13.9 (1) / 13.0 (2)	16.7 (1) / 14.6 (2)	17.7 (1) / 15.6 (2)			
	Insulation material	Kaiflex								
	Heater			W	50.0					
Expansion vessel	Volume	l		7						
	Max. water pressure			bar	3					
	Pre pressure			bar	1					
	Heater			W	50					
Water circuit	Piping connections diameter			inch	G 1" (male)					
	Piping length	Max.	OU - Tank	m	10					
	Level difference	Max.		m	5					
	Safety valve			bar	3					
	Drain valve / fill valve				No					
	Air purge valve				Yes					
	General	Supplier/Manufacturer details	Name and address	Daikin Industries Czech Republic s.r.o. U Nove Hospody 1/1155, 301 00						
		Name or trademark	Daikin Europe N.V.							
Product description		Air-to-water heat pump	Yes							
		Brine-to-water heat pump	No							
		Heat pump combination heater	No							
		Low-temperature heat pump	No							
		Supplementary heater integrated	No							
Water-to-water heat pump	No									
LW(A) Sound power level (according to EN14825)			dB(A)	58.0	60.0	62.0				
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825						
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h		2,280	2,520	2,770			
		Other	Capacity control Inverter							
		Pck (Crankcase heater mode)	kW		0.000					
		Poff (Off mode)	kW		0.010					
		Psb (Standby mode)	kW		0.010					
		Pto (Thermostat off)	kW		0.010					
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	3,769	4,405	4,939			
			ηs (Seasonal space heating efficiency)	%	129	128	131			
			Prated at -10°C	kW		6.0	7.0	8.0		
			Qhe Annual energy consumption (GCV)	Gj		14	16	18		
			SCOP			3.29	3.28	3.35		
			Seasonal space heating eff. class			A++				
			A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0				

2 Specifications

Technical specifications				EBLA04EV3	EBLA06EV3	EBLA08EV3		
Space heating	Average climate water outlet 55°C	A Condition (7°CDB/-8°CWB)	COPd	1.97	1.98	1.96		
			Pdh kW	5.3	5.9	6.9		
			PERd %	78.8	79.2	78.4		
		B Condition (2°CDB/-1°CWB)	CdH (Degradation heating)			1.0		
			COPd	3.23	3.16	3.20		
			Pdh kW	3.3	3.9	4.4		
		C Condition (7°CDB/6°CWB)	CdH (Degradation heating)			1.0		
			COPd	4.40	4.49	4.64		
			Pdh kW		3.0	3.3		
		D Condition (12°CDB/11°CWB)	CdH (Degradation heating)			1.0		
			COPd		6.10	6.22		
			Pdh kW		3.3	4.1		
		Tol (temperature operating limit)	PERd %			244.0		
			COPd	1.37	1.53	1.64		
			Pdh kW	4.0	5.4	7.1		
		Rated heat output supplementary capacity	PERd %			61.2		
			TOL °C		-10	65.6		
			WTOL °C		55			
		Tsup (at Tdesign -10°C)	kW			2.0		
					1.6	1.0		
		Tdiv (bivalent temperature)	COPd			1.97		
			Pdh kW	5.3	6.1	7.5		
			PERd %	78.8	84.8	76.0		
		General	Tdiv °C			-7		
			Annual energy consumption kWh			4,446		
			ηs (Seasonal space heating efficiency) %			108		
Cold climate water outlet 55°C	Prated at -22°C kW			5.0				
	Qhe Annual energy consumption (GCV) GJ			16				
	Annual energy consumption kWh			1,616				
General	ηs (Seasonal space heating efficiency) %			152				
	Prated at 2°C kW			4.7				
	Qhe Annual energy consumption (GCV) GJ			6				
Warm climate water outlet 55°C	Annual energy consumption kWh			1,813				
	ηs (Seasonal space heating efficiency) %			162				
	Prated at 2°C kW			5.6				
General	Qhe Annual energy consumption (GCV) GJ			7				
	Annual energy consumption kWh			2,729				
	ηs (Seasonal space heating efficiency) %			179				
Average climate water outlet 35°C	Prated at -10°C kW			6.0				
	Qhe Annual energy consumption (GCV) GJ			10				
	Annual energy consumption kWh			3,196				
ηs (Seasonal space heating efficiency) %			178					
Prated at -10°C kW			7.0					
Qhe Annual energy consumption (GCV) GJ			12					
Annual energy consumption kWh			3,588					
ηs (Seasonal space heating efficiency) %			181					
Prated at -10°C kW			8.0					
Qhe Annual energy consumption (GCV) GJ			13					

2 Specifications

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Technical specifications				EBLA04EV3	EBLA06EV3	EBLA08EV3
Space heating Average climate water outlet 35°C	General	SCOP		4.54	4.52	4.61
		Seasonal space heating eff. class		A+++		
	A Condition (7°CDB/8°CWB)	COPd		2.90	2.86	2.77
		Pdh	kW	5.5	6.0	7.0
		PERd	%	116.0	114.4	110.8
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
		COPd		4.33	4.25	4.35
		Pdh	kW	3.3	3.9	4.2
	B/1°CWB)	PERd	%	173.2	170.0	174.0
		Cdh (Degradation heating)			1.0	
	C Condition (7°CDB/6°CWB)	COPd		6.19	6.30	6.49
		Pdh	kW		3.2	3.3
		PERd	%	247.6	252.0	259.6
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
		COPd			7.78	8.52
		Pdh	kW		3.3	3.9
	Tol (temperature operating limit)	PERd	%		311.2	340.8
		COPd		2.56	2.49	2.41
		Pdh	kW	5.2	6.0	6.9
	Tbiv (bivalent temperature)	PERd	%	102.4	99.6	96.4
		TOL	°C		-10	
		WTOL	°C		35	
	Rated heat output supplementary capacity	COPd		2.90	3.07	2.66
		Pdh	kW	5.5	6.1	7.5
		PERd	%	116.0	122.8	106.4
	Cold climate water outlet 35°C	Tbiv	°C	-7	-6	-8
		Psup (at Tdesign -10°C)	kW	0.8	1.0	1.1
General		Annual energy consumption kWh	3,208	3,727	5,012	
Warm climate water outlet 35°C	ηs (Seasonal space heating efficiency)	%	151	156	154	
	Prated at -22°C	kW	5	6	8	
	Qhe Annual energy consumption (GCV)	Gj	11.5	13.4	18.0	
	General	Annual energy consumption kWh	1,095	1,232	1,393	
	ηs (Seasonal space heating efficiency)	%	251	257	266	
	Prated at 2°C	kW	5.2	6.0	7.0	
	Qhe Annual energy consumption (GCV)	Gj		4	5	

Electrical specifications				EBLA04EV3	EBLA06EV3	EBLA08EV3
Compressor component	Main power supply	Phase		3N~		
		Voltage	V	220		
Power supply	Name	Phase		V3		
		Frequency	Hz	1~		
		Voltage	V	50		
				230 +/-10%		
Current	Maximum running current	Heating	A	19.9		24.0
		Recommended fuses	A	20		25

(1)Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
 (2)Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C) |
 (3)For more details, see operation range drawing

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3
Heating capacity	Nom.		kW	4.30 (1) / 4.60 (2)	6.00 (1) / 5.90 (2)	7.50 (1) / 7.80 (2)
Heater capacity	Step 1		kW	3		
Power input	Heating	Nom.	kW	0.840 (1) / 1.26 (2)	1.24 (1) / 1.69 (2)	1.63 (1) / 2.23 (2)
COP				5.10 (1) / 3.65 (2)	4.85 (1) / 3.50 (2)	4.60 (1) / 3.50 (2)

2 Specifications

Technical specifications				EDLA04E3V3		EDLA06E3V3		EDLA08E3V3		
Casing	Colour			Ivory white						
	Material			Zinc coated low carbon steel						
Dimensions	Unit	Height	mm	770						
		Width	mm	1,250						
		Depth	mm	362						
	Packed unit	Height	mm	920						
		Width	mm	1,350						
		Depth	mm	500						
Weight	Unit		kg	91.0						
	Packed unit		kg	98						
Packing	Material			Carton / EPS / Wood (pallet)						
Heat exchanger	Length			mm	920					
	Rows	Quantity			2					
	Fin pitch			mm	1.40					
	Face area			m ²	0.658					
	Stages			Quantity	32					
	Tube type				ø7 Hi-XD					
	Fin	Type			Waffle Hydrophilic Blue					
		Treatment			Hydrophilic					
	Fan	Type			Propeller fan					
		Quantity			1					
Discharge direction			Horizontal							
Fan motor	Quantity			1						
	Model			KFD-325-77-10A						
	Speed	Steps			10					
		Heating	Nom.	rpm	620	680		740		
	Output			W	77					
Compressor	Quantity			1						
	Model			2YC71EXD#C						
	Type			Hermetically sealed swing compressor						
PED	Category			Category II						
	Most critical part	Name		Compressor						
PED	Most critical part	P _s *V	Bar*l	110						
Operation range	Heating	Ambient	Min.	°CDB	-25					
			Max.	°CDB	25 (3)					
		Water side	Min.	°C	15 (3)					
			Max.	°C	65 (3)					
	Domestic hot water	Ambient	Min.	°CDB	-27					
			Max.	°CDB	35					
		Water side	Min.	°C	25					
			Max.	°C	55 (3)					
Sound power level	Heating	Nom.	dBa	58.0 (1)	60.0 (1)		62.0 (1)			
Sound pressure level	Heating	Nom.	dBa	44.0 (1)	47.0 (1)		49.0 (1)			
Refrigerant	Type			R-32						
	GWP			675.0						
	Charge			kg	1.35					
	Charge			TCO ₂ Eq	0.910					
	Control			Expansion valve						
	Circuits	Quantity			1					
Type			FW68DA							
Charged volume			l	1.1						
Defrost method				Reversed cycle						
Defrost control				Sensor for outdoor heat exchanger temperature						
Capacity control				Inverter controlled						
Safety devices				High pressure switch						
Pump	Quantity			1						
	Nr of speeds			PWM						
	Power input			W	75					
Water side Heat exchanger	Type			Plate heat exchanger						
	Quantity			1						
	Water volume			l	1.01					
	Water flow rate	Heating	Nom.	l/min	12.3 (1) / 13.2 (2)	17.2 (1) / 16.9 (2)		21.5 (1) / 22.4 (2)		
	Insulation material			Kaiflex						
	Heater			W	50.0					

2 Specifications


Technical specifications			EDLA04E3V3	EDLA06E3V3	EDLA08E3V3		
Expansion vessel	Volume	l	7				
	Max. water pressure	bar	3				
	Pre pressure	bar	1				
	Heater	W	50				
Water circuit	Piping connections diameter	inch	G 1" (male)				
Water circuit	Piping Max. length	OU - Tank m	10				
	Level difference	Max. m	5				
	Safety valve	bar	3				
	Drain valve / fill valve		No				
General	Air purge valve		Yes				
	Supplier/ Name and address		Daikin Industries Czech Republic s.r.o. U Nove Hospody 1/1155, 301 00				
	Manufacturer details	Name or trademark	Daikin Europe N.V.				
	Product description	Air-to-water heat pump		Yes			
		Brine-to-water heat pump		No			
		Heat pump combination heater		No			
		Low-temperature heat pump		No			
		Supplementary heater integrated		Yes			
	Water-to-water heat pump		No				
	LW(A) Sound power level (according to EN14825)	dB(A)	58.0	60.0	62.0		
Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825				
Space heating general	Air to water unit	Rated airflow (outdoor) m ³ /h	2,280	2,520	2,770		
	Other	Capacity control		Inverter			
		Pck (Crankcase heater mode) kW		0.000			
		Poff (Off mode) kW		0.010			
		Psb (Standby mode) kW		0.010			
Pto (Thermostat off) kW		0.010					
Space heating climate water outlet 55°C	General	Annual energy consumption kWh	3,806	4,441	4,975		
		ηs (Seasonal space heating efficiency) %	127				
		Prated at -10°C kW	6.0	7.0	8.0		
		Qhe Annual energy consumption (GCV) GJ	14	16	18		
		SCOP	3.26				
		Seasonal space heating eff. class	A++				
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0		
			COPd	1.97	1.98	1.96	
			Pdh kW	5.3	5.9	6.9	
			PERd %	78.8	79.2	78.4	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0		
			COPd	3.23	3.16	3.20	
			Pdh kW	3.3	3.9	4.4	
		C Condition (7°CDB/6°CWB)	PERd %	129.2	126.4	128.0	
Cdh (Degradation heating)			1.0				
COPd	4.40		4.49	4.64			

2 Specifications

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3		
Space heating 	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	Pdh	kW	3.0		3.3	
			PERd	%	176.0	179.6	185.6	
		D Condition (12°CDB/11°CWB)	CdH (Degradation heating)		1.0			
			COPd		6.10		6.22	
			Pdh	kW	3.3		4.1	
			PERd	%	244.0		248.8	
		Tol (temperature operating limit)	COPd		1.37	1.53	1.64	
			Pdh	kW	4.0	5.4	7.1	
			PERd	%	54.8	61.2	65.6	
			TOL	°C		-10		
	Rated heat output supplementary capacity	WCOL		55				
		Psup (at Tdesign -10°C)		2.0	1.6	1.0		
	Cold climate water outlet 55°C	General	COPd		1.97	2.12	1.90	
			Pdh	kW	5.3	6.1	7.5	
			PERd	%	78.8	84.8	76.0	
			Tbiv	°C	-7	-6	-8	
			Annual energy consumption	kWh	4,468	5,300	6,886	
	Warm climate water outlet 55°C	General	ηs (Seasonal space heating efficiency)	%	107	109	112	
			Prated at -22°C	kW	5.0	6.0	8.0	
			Qhe Annual energy consumption (GCV)	Gj	16	19	25	
Annual energy consumption			kWh	1,660	1,858	2,669		
ηs (Seasonal space heating efficiency)			%	148	158	159		
Average climate water outlet 35°C	General	Prated at 2°C	kW	4.7	5.6	8.1		
		Qhe Annual energy consumption (GCV)	Gj	6	7	10		
		Annual energy consumption	kWh	2,766	3,233	3,625		
		ηs (Seasonal space heating efficiency)	%	176		179		
		Prated at -10°C	kW	6.0	7.0	8.0		
	A Condition (7°CDB/8°CWB)	Qhe Annual energy consumption (GCV)	Gj	10	12	13		
			SCOP	4.48	4.47	4.56		
		Seasonal space heating eff. class		A+++				
		COPd		2.90	2.86	2.77		
		B Condition (2°CDB/1°CWB)	PdH	kW	5.5	6.0	7.0	
PERd	%			116.0	114.4	110.8		
CdH (Degradation heating)			1.0					
COPd			4.33	4.25	4.35			
B Condition (2°CDB/1°CWB)	PdH	kW	3.3	3.9	4.2			
		PERd	%	173.2	170.0	174.0		

2 Specifications

2

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3
Space heating 	Average climate water outlet 35°C	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating) COPd	1.0		
			Pdh kW	6.19	6.30	6.49
			PERd %	247.6	252.0	259.6
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating) COPd	1.0			
			Pdh kW	7.78	8.52	
			PERd %	311.2	340.8	
	Tol (temperature operating limit)	COPd	2.56			
			Pdh kW	2.49	2.41	
			PERd %	5.2	6.0	
	Tbiv (bivalent temperature)	COPd	102.4			
			Pdh kW	99.6	96.4	
			PERd %	2.90	3.07	
	Rated heat output supplementary capacity	COPd	-10			
			Pdh kW	35	2.66	
			PERd %	2.90	3.07	
Cold climate water outlet 35°C	General	Annual energy consumption kWh	3,230	3,749	5,034	
		ηs (Seasonal space heating efficiency) %	150	155	154	
		Prated at -22°C kW	5	6	8	
		Qhe Annual energy consumption (GCV) GJ	11.6	13.5	18.1	
Warm climate water outlet 35°C	General	Annual energy consumption kWh	1,139	1,276	1,437	
		ηs (Seasonal space heating efficiency) %	241	249	257	
		Prated at 2°C kW	5.2	6.0	7.0	
		Qhe Annual energy consumption (GCV) GJ	4	5		

Electrical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3
Compressor component	Main power supply	Phase		3N~		
		Voltage V		220		
Hydraulic component	Back-up heater current	Type		3V3		
		Power supply	Phase	1~		
		Frequency Hz		50		
		Voltage V		230		
Power supply	Running current	Back-up heater	A	13.0		
		Min. %		0		
		Max. %		10		
		Name		V3		
Current	Maxi-mum running current	Phase		1~		
		Frequency Hz		50		
		Voltage V		230 +/-10%		
Current	Heating	Maximum running current A	19.9	24.0		
		Recommended fuses A	20	25		


(1)Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
 (2)Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C) |
 (3)For more details, see operation range drawing

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3
Heating capacity	Nom.		kW	4.30 (1) / 4.60 (2)	6.00 (1) / 5.90 (2)	7.50 (1) / 7.80 (2)
Power input	Heating	Nom.	kW	0.840 (1) / 1.26 (2)	1.24 (1) / 1.69 (2)	1.63 (1) / 2.23 (2)
COP				5.10 (1) / 3.65 (2)	4.85 (1) / 3.50 (2)	4.60 (1) / 3.50 (2)
Casing	Colour	Ivory white				
	Material	Zinc coated low carbon steel				

2 Specifications

Technical specifications					EDLA04EV3		EDLA06EV3		EDLA08EV3	
Dimensions	Unit	Height	mm		770					
		Width	mm		1,250					
		Depth	mm		362					
	Packed unit	Height	mm		920					
		Width	mm		1,350					
		Depth	mm		500					
Weight	Unit			kg						
	Packed unit			kg						
Packing	Material				Carton / EPS / Wood (pallet)					
Heat exchanger	Length		mm		920					
	Rows	Quantity		2						
	Fin pitch		mm		1.40					
	Face area		m ²		0.658					
	Stages	Quantity		32						
	Tube type				ø7 Hi-XD					
	Fin	Type			Waffle Hydrophilic Blue					
		Treatment			Hydrophilic					
Fan	Type				Propeller fan					
	Quantity				1					
	Discharge direction				Horizontal					
Fan motor	Quantity				1					
	Model				KFD-325-77-10A					
	Speed	Steps			10					
		Heating	Nom.	rpm	620	680	740			
Output					W					
					77					
Compressor	Quantity				1					
	Model				2YC71EXD#C					
	Type				Hermetically sealed swing compressor					
PED	Category				Category II					
	Most critical part	Name			Compressor					
		P _s *V	Bar*l		110					
Operation range	Heating	Ambient	Min.	°CDB	-25					
			Max.	°CDB	25 (3)					
		Water side	Min.	°C	9 (3)					
			Max.	°C	65 (3)					
	Domestic hot water	Ambient	Min.	°CDB	-27					
			Max.	°CDB	35					
		Water side	Min.	°C	25					
			Max.	°C	55 (3)					
Sound power level	Heating	Nom.	dB(A)	58.0 (1)	60.0 (1)	62.0 (1)				
Sound pressure level	Heating	Nom.	dB(A)	44.0 (1)	47.0 (1)	49.0 (1)				
Refrigerant	Type				R-32					
	GWP				675.0					
	Charge		kg		1.35					
	Charge		TCO ₂ Eq		0.910					
	Control				Expansion valve					
	Circuits	Quantity				1				
Type				FW68DA						
Refrigerant oil	Charged volume		l		1.1					
Defrost method					Reversed cycle					
Defrost control					Sensor for outdoor heat exchanger temperature					
Capacity control	Method				Inverter controlled					
Safety devices	Item 01				High pressure switch					
Pump	Quantity				1					
	Nr of speeds				PWM					
	Power input		W		75					
Water side Heat exchanger	Type				Plate heat exchanger					
	Quantity				1					
	Water volume		l		1.01					
	Water flow rate	Heating	Nom.	l/min	12.3 (1) / 13.2 (2)	17.2 (1) / 16.9 (2)	21.5 (1) / 22.4 (2)			
					Insulation material					
	Heater		W		Kaiflex					
				50.0						
Expansion vessel	Volume		l		7					
	Max. water pressure		bar		3					
	Pre pressure		bar		1					
	Heater		W		50					
Water circuit	Piping connections diameter		inch		G 1" (male)					
	Piping length	Max.	OU - Tank	m	10					

2 Specifications

Technical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3		
Water circuit	Level difference	Max.	m	5				
		Safety valve	bar	3				
	Drain valve / fill valve			No				
	Air purge valve			Yes				
General	Supplier/	Name and address		Daikin Industries Czech Republic s.r.o. U Nove Hospody 1/1155, 301 00				
	Manu- facturer details	Name or trademark		Daikin Europe N.V.				
	Product descrip- tion	Air-to-water heat pump		Yes				
		Brine-to-water heat pump		No				
		Heat pump combination heater		No				
		Low-temperature heat pump		No				
		Supplementary heater integrated		No				
Water-to-water heat pump		No						
LW(A) Sound power level (according to EN14825)		dB(A)	58.0	60.0	62.0			
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825				
Space heating general	Air to water unit	Rated airflow (outdoor)		m ³ /h	2,280	2,520	2,770	
		Other	Capacity control		Inverter			
	Pck (Crankcase heater mode)		kW	0.000				
	Poff (Off mode)		kW	0.010				
	Psb (Standby mode)		kW	0.010				
	Pto (Thermostat off)		kW	0.010				
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption	kWh	3,806	4,441	4,975	
			η_s (Seasonal space heating efficiency)	%	127		130	
		Prated at -10°C		kW	6.0	7.0	8.0	
		Qhe Annual ener- gy consumption (GCV)		Gj	14	16	18	
		SCOP			3.26		3.32	
		Seasonal space heating eff. class			A++			
		A Condition (7°CDB/18°CWB)	Cd _h (Degradation heating)			1.0		
			COP _d			1.97	1.98	1.96
			Pd _h		kW	5.3	5.9	6.9
			PER _d		%	78.8	79.2	78.4
		B Con- dition (2°CDB- B/1°CWB)	Cd _h (Degradation heating)			1.0		
			COP _d			3.23	3.16	3.20
			Pd _h		kW	3.3	3.9	4.4
		C Condition (7°CDB/16°CWB)	PER _d		%	129.2	126.4	128.0
			Cd _h (Degradation heating)			1.0		
			COP _d			4.40	4.49	4.64
		Pd _h		kW	3.0		3.3	

2 Specifications

Technical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3				
Space heating 	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	PERd	%	176.0	179.6	185.6			
			D Condition (12°CDB/11°CWB)		CdH (Degradation heating)			1.0		
				COPd		6.10		6.22		
				Pdh	kW	3.3		4.1		
				PERd	%	244.0		248.8		
				Tol (temperature operating limit)	COPd	1.37	1.53	1.64		
					Pdh	kW	4.0	5.4	7.1	
					PERd	%	54.8	61.2	65.6	
					TOL	°C		-10		
					WTOL	°C		55		
			Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	2.0	1.6	1.0		
			Tbiv (bivalent temperature)	COPd		1.97	2.12	1.90		
				Pdh	kW	5.3	6.1	7.5		
				PERd	%	78.8	84.8	76.0		
				Tbiv	°C	-7	-6	-8		
			Cold climate water outlet 55°C	General		Annual energy consumption	kWh	4,468	5,300	6,886
					ηs (Seasonal space heating efficiency)	%	107	109	112	
					Prated at -22°C	kW	5.0	6.0	8.0	
					Qhe Annual energy consumption (GCV)	Gj	16	19	25	
			Warm climate water outlet 55°C	General		Annual energy consumption	kWh	1,660	1,858	2,669
				ηs (Seasonal space heating efficiency)	%	148	158	159		
				Prated at 2°C	kW	4.7	5.6	8.1		
				Qhe Annual energy consumption (GCV)	Gj	6	7	10		
		Average climate water outlet 35°C	General		Annual energy consumption	kWh	2,766	3,233	3,625	
				ηs (Seasonal space heating efficiency)	%	176		179		
				Prated at -10°C	kW	6.0	7.0	8.0		
				Qhe Annual energy consumption (GCV)	Gj	10	12	13		
				SCOP		4.48	4.47	4.56		
				Seasonal space heating eff. class		A+++				
			A Condition (7°CDB/8°CWB)	COPd		2.90	2.86	2.77		
				Pdh	kW	5.5	6.0	7.0		
		B Condition (2°CDB/1°CWB)	PERd	%	116.0	114.4	110.8			
			CdH (Degradation heating)		1.0					
			COPd		4.33	4.25	4.35			
		C Condition (7°CDB/6°CWB)	Pdh	kW	3.3	3.9	4.2			
			PERd	%	173.2	170.0	174.0			
		CdH (Degradation heating)		1.0						

2 Specifications

Technical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3	
Space heating	Average climate water outlet 35°C	C Condition (7°CDB/6°CWB)	COPd	6.19	6.30	6.49	
			Pdh kW		3.2	3.3	
			PERd %	247.6	252.0	259.6	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0		
			COPd		7.78		8.52
			Pdh kW		3.3		3.9
		Tol (temperature operating limit)	PERd %	COPd	2.56	2.49	2.41
				Pdh kW	5.2	6.0	6.9
				PERd %	102.4	99.6	96.4
		Tbiv (bivalent temperature)	Tbiv °C	TOL °C		-10	
				WTOL °C		35	
				COPd	2.90	3.07	2.66
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C) kW	Pdh kW	5.5	6.1	7.5
				PERd %	116.0	122.8	106.4
				Tbiv °C	-7	-6	-8
		Cold climate water outlet 35°C	General	Annual energy consumption kWh	3,230	3,749	5,034
ηs (Seasonal space heating efficiency) %	150			155	154		
Prated at -22°C kW	5			6	8		
Qhe Annual energy consumption (GCV) GJ	11.6			13.5	18.1		
Warm climate water outlet 35°C	General	Annual energy consumption kWh	1,139	1,276	1,437		
		ηs (Seasonal space heating efficiency) %	241	249	257		
		Prated at 2°C kW	5.2	6.0	7.0		
		Qhe Annual energy consumption (GCV) GJ	4		5		

Electrical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3
Compressor component	Main power supply	Phase		3N~		
		Voltage V		220		
Power supply	Name	Phase		V3		
		Frequency Hz		1~		
		Voltage V		50		
				230 +/-10%		
Current	Maximum running current	Heating A		19.9		24.0
		Recommended fuses A		20		25

(1)Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(2)Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C) |

(3)For more details, see operation range drawing

3 Electrical data

3 - 1 Electrical Data

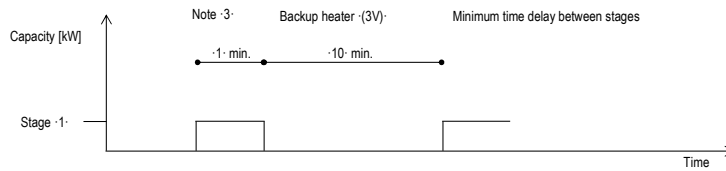
EBLA04-08E3V3

EDLA04-08E3V3

Electrical specifications

Backup heater	Type			3V	
	Capacity setting		kW	3	
	Capacity stage - 1			1	
	Capacity stage - 1		kW	3	
	Capacity stage - 2		kW	-	
	Minimum time delay between stages				Note -3-
	Power supply (1)	Phase			1~
		Frequency		Hz	50
		Voltage		V	230 +-10%
	Current	Nominal running current		A	13
Zmax (backup heater) (2)			Ω	-	
			Complex	-	
Minimum Ssc value			kVA	-	

Notes	(1)	The above-mentioned power supply of the hydrobox is for the backup heater only.
	(2)	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 $Z_{sys} \leq Z_{max}$.
	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.
	Zsys	System impedance

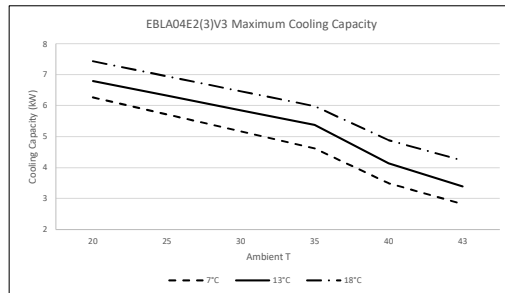
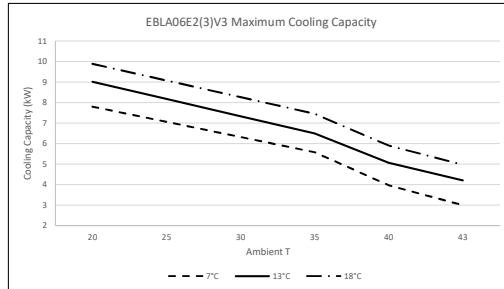
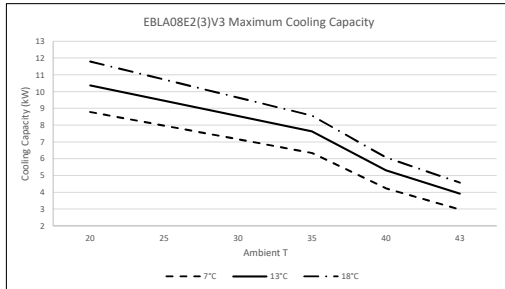


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5 Capacity graphs

5 - 1 Cooling Capacity Graphs

EBLA04-08EV3
EBLA04-08E3V3



3D139432

5 Capacity graphs

5 - 2 Heating Capacity Graphs

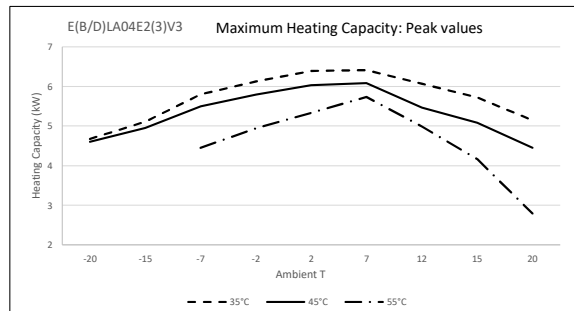
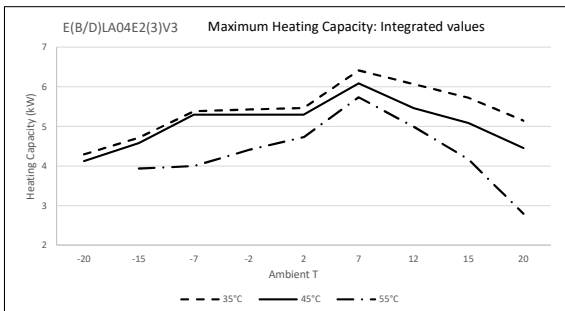
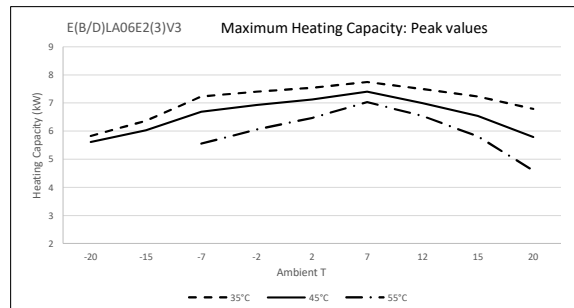
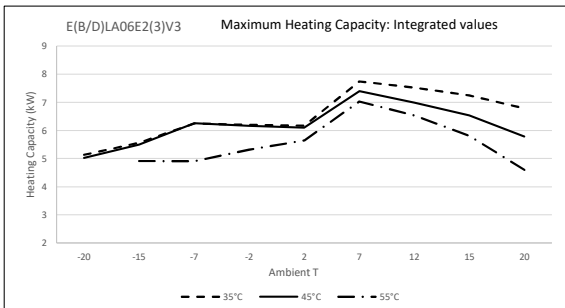
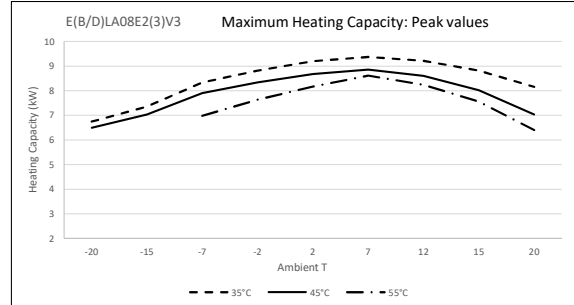
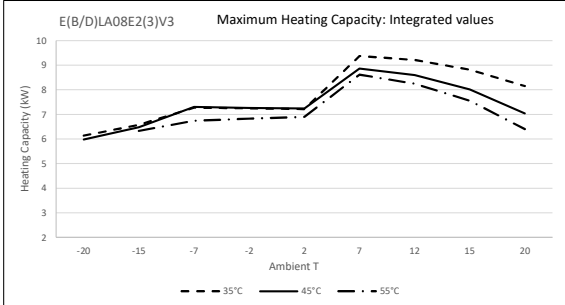
5

EBLA04-08EV3

EDLA04-08EV3

EBLA04-08E3V3

EDLA04-08E3V3



Symbols

- CC Cooling capacity at maximum operating frequency, measured according to EN 14511.
- HC Heating capacity at maximum operating frequency, measured according to EN 14511
- PI Power input is the total input of indoor and outdoor units, including the circulation pump; according to EN 14511.
- LWE Leaving water evaporator temperature [°C]
- LWC Leaving water condensor temperature [°C]
- Tamb Ambient temperature; RH (heating) = 85%

Conditions

Cooling capacity

Capacity according to standard EN 14511 and valid for chilled water range $\Delta T = 3\sim 8^{\circ}\text{C}$. Capacity values may not be extrapolated below 7°C leaving water temperature.

Heating capacity

Capacity according to standard EN 14511 and valid for heated water range $\Delta T = 3\sim 8^{\circ}\text{C}$.

Power input

Power input is the total input of indoor and outdoor units, including the circulation pump; according to EN 14511.

Notes

The capacity and the power input are valid for V3 models at 230 V. The capacity and the power input are at maximum operation.

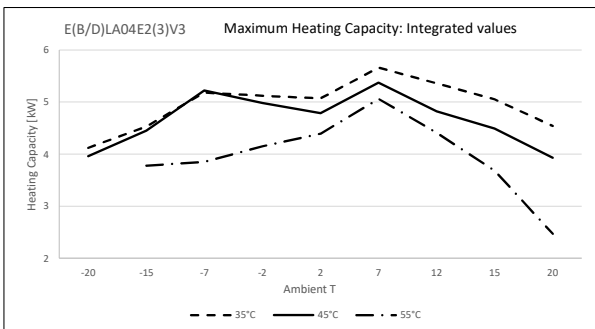
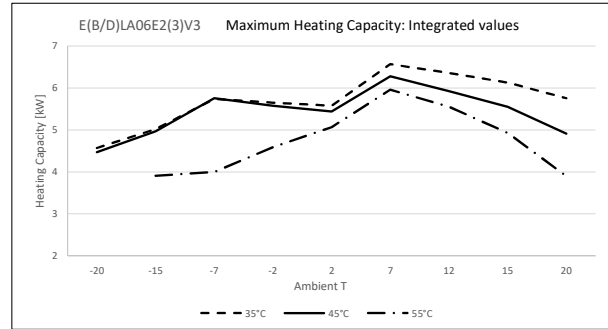
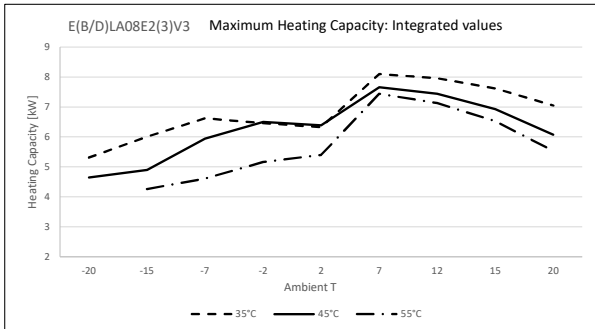
3D139362

5 Capacity graphs

5 - 3 Heating Capacity Graphs - more quiet mode

EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

5



Symbols

- CC Cooling capacity at maximum operating frequency, measured according to EN 14511.
- HC Heating capacity at maximum operating frequency, measured according to EN 14511
- PI Power input is the total input of indoor and outdoor units, including the circulation pump; according to EN 14511.
- LWE Leaving water evaporator temperature [°C]
- LWC Leaving water condensor temperature [°C]
- Tamb Ambient temperature; RH (heating) = 85%

Conditions

Cooling capacity

Capacity according to standard EN 14511 and valid for chilled water range $\Delta T = 3\sim 8^{\circ}\text{C}$.
 Capacity values may not be extrapolated below 7°C leaving water temperature.

Heating capacity

Capacity according to standard EN 14511 and valid for heated water range $\Delta T = 3\sim 8^{\circ}\text{C}$.

Power input

Power input is the total input of indoor and outdoor units, including the circulation pump; according to EN 14511.

Notes

The capacity and the power input are valid for V3 models at 230 V.
 The capacity and the power input are at maximum operation.

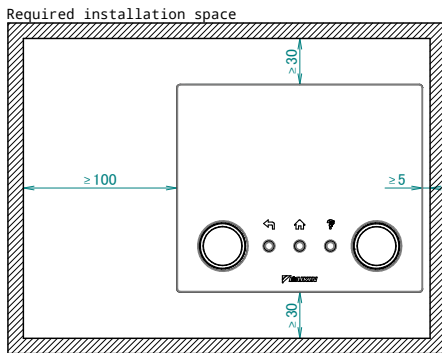
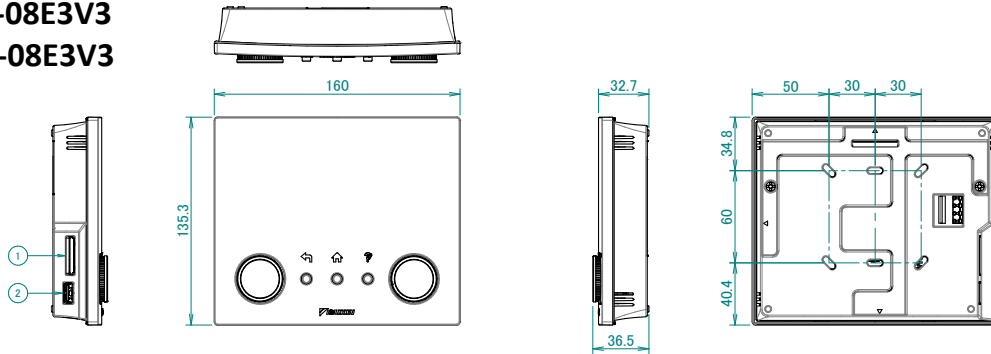
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6 Dimensional drawings

6 - 1 Dimensional Drawings

6

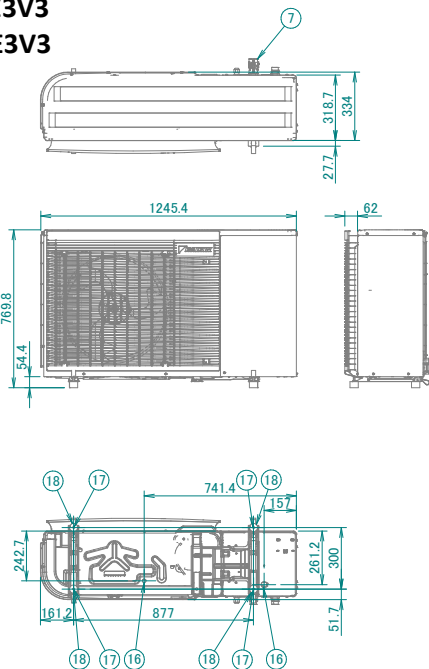
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3



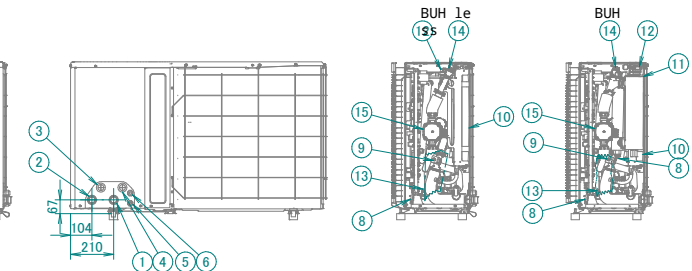
- ① USB Connector
- ② WLAN cartridge

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EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3



- ① Water in connection -1" M-
- ② Water out connection -1" M-
- ③ Wiring intake (low voltage wiring)
- ④ Wiring intake (high voltage wiring)
- ⑤ Wiring intake (power supply)
- ⑥ Backup heater power supply
- ⑦ Shut-off valve / filter (included accessory)
- ⑧ Drain valve water circuit
- ⑨ Flow sensor
- ⑩ Expansion vessel



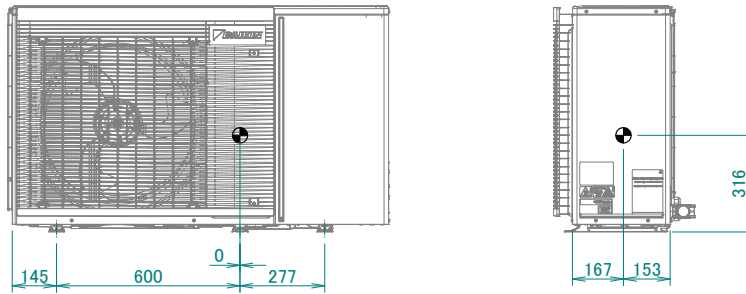
- ⑪ Backup Heater (just BUH Version)
- ⑫ Automatic air purge valve
- ⑬ Space heating water pressure sensor
- ⑭ Safety valve
- ⑮ Pump
- ⑯ Drain outlet
- ⑰ 4- holes for anchor bolts
- ⑱ 4- rubber pads

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7 Centre of gravity

7 - 1 Centre of Gravity

- EBLA04-08EV3**
- EDLA04-08EV3**
- EBLA04-08E3V3**
- EDLA04-08E3V3**



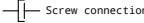
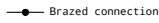
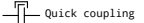
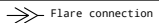
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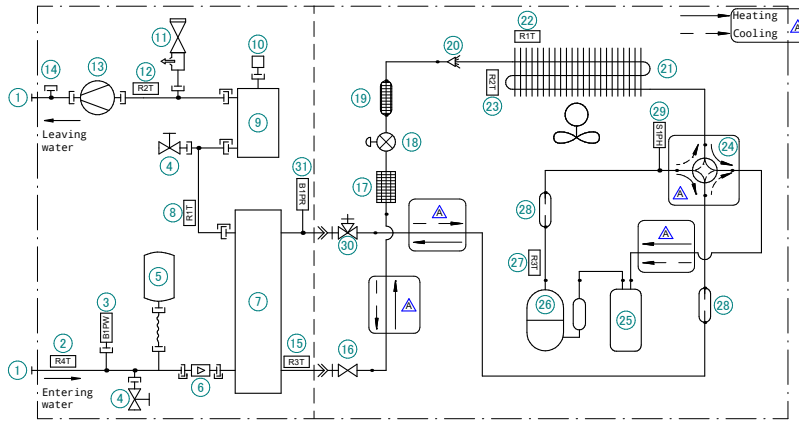
8 Piping diagrams

8 - 1 Piping Diagrams

8

EBLA04-08E3V3
EDLA04-08E3V3



- | | |
|---|---|
| <ul style="list-style-type: none"> ① Screw connection -1"Μ- ② R4T- Inlet water thermistor ③ Space heating water pressure sensor ④ Drain valve water circuit ⑤ Expansion vessel ⑥ Flow sensor ⑦ Plate heat exchanger ⑧ R1T- Outlet water heat exchanger thermistor ⑧ Backup heater ⑩ Automatic air purge valve ⑪ Safety valve ⑫ R2T- Outlet water backup heater thermistor ⑬ Pump ⑭ Connection for optional flow switch ⑮ R3T- Refrigerant liquid side thermistor | <ul style="list-style-type: none"> ⑮ Liquid stop valve ⑰ Filter ⑰ Electronic expansion valve ⑱ Muffler with filter ⑳ Distributor ㉑ Heat exchanger ㉒ R1T- Thermistor (outdoor air) ㉓ R2T- Thermistor (heat exchanger) ㉔ 4-way valve ㉕ Accumulator ㉖ Compressor ㉗ R3T- Thermistor (discharge) ㉘ Muffler ㉙ High pressure switch ㉚ Gas stop valve with service port ㉛ Refrigerant pressure sensor |
|---|---|

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9 Wiring diagrams

9 - 1 Notes & Legend

EKHVET-BV3

(2) NOTES

X14M, X15M : Main terminal


----- : Earth wiring


15 : Wire number 15

----- : Field supply

① : Several wiring possibilities

 : Option

 : Wiring depending on model

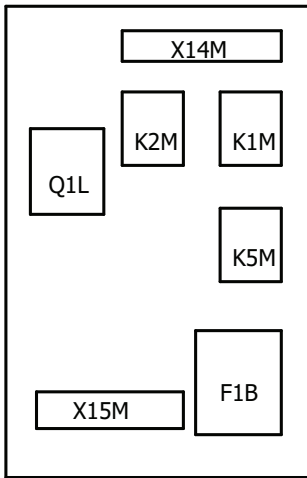
 : Not mounted in switch box

 : PCB

Optional backup heater configuration :
(only for EKLBUHCB6W1)

- 1N~, 230V, 3kW or 6kW
- 3N~, 400V, 6kW or 9kW

(3) BUH kit switch box



EKLBUHCB6W1

(4) Legend

Part n°	Description
E1H	BUH element (1 kW)
E2H	BUH element (2 kW)
F1B	Overcurrent fuse BUH
F1T	Thermal fuse BUH
F1U	Fuse
K1M	Contacteur BUH (Step 1)
K2M	Contacteur BUH (Step 2)
K5M	Safety contacteur BUH
Q3DI	# Earth leakage circuit breaker
Q1L	Thermal protector BUH
R2T	Outlet BUH thermistor
X*M	Terminal strip

#: field supply

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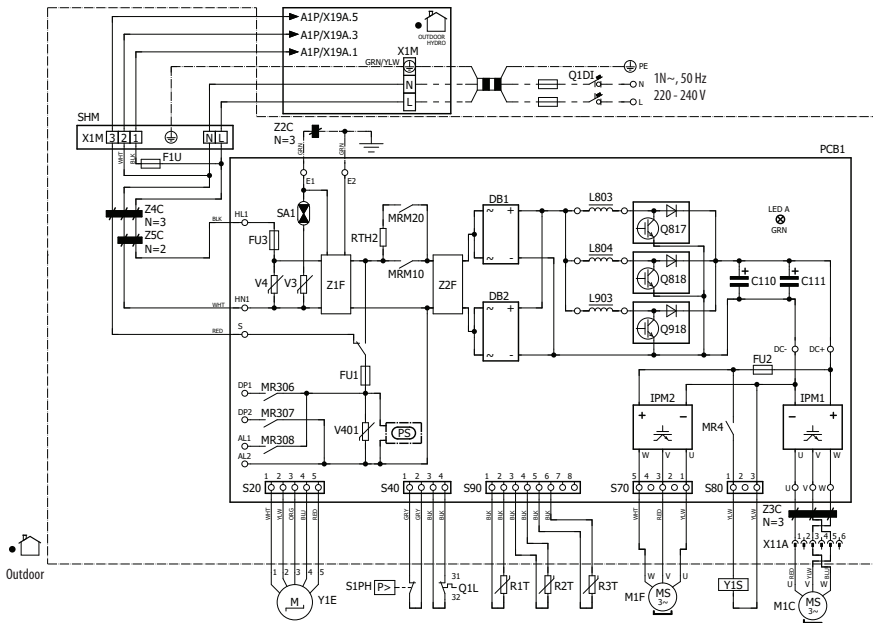
9 Wiring diagrams

9 - 2 Compressor - Single phase

9

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3

(1) Connection diagram



(2) Notes

- : Connection
- : Earth wiring
- : Field supply
- : Option
- : switch box
- : PCB
- : Protective earth
- : Field wire
- : Wiring depending on model

NOTES

- When operating, do not short-circuit protection device(s) S1PH and Q1L.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green; YLW:yellow

(3) Legend

* : optional # : field supply

Part n°	Description
A1P	Hydro kit main PCB
AL*	Connector
C*	Capacitor
DB*	Rectifier bridge
DC*	Connector
DP*	Connector
E*	Connector
F1U	Fuse T 6,3 A 250 V
FU1, FU2	Fuse T 3,15 A 250 V
FU3	Fuse T 30 A 250 V
H*	Connector
IPM*	Intelligent power module
L	Connector
LED A	Pilot lamp
L*	Reactor
M1C	Compressor motor
M1F	Fan motor
MR*	Magnetic relay
N	Connector
PCB1	Printed circuit board (main)
PS	Switching power supply
Q1L	Thermal protector
Q1DI #	Earth leakage circuit breaker
Q*	Insulated gate bipolar transistor (IGBT)
R1T	Thermistor (air)
R2T	Thermistor (heat exchanger)
R3T	Thermistor (discharge)
RTH2	Resistor
S	Connector
S1PH	High pressure switch
S2~80	Connector
SA1	Surge arrester
SHM	Terminal strip fixed plate
U, V, W	Connector
V3, V4, V401	Varistor
X*A	Connector
X*M	Terminal strip
Y1E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Z*C	Noise filter (ferrite core)
Z*F	Noise filter

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9 Wiring diagrams

9 - 3 Hydro Module - Notes & Legend

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3

NOTES to go through before starting the unit

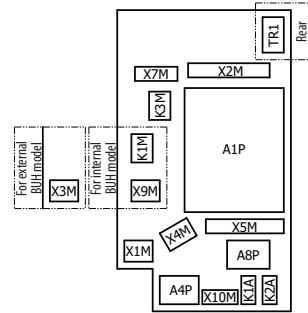
- X1M : Main terminal
 - X2M : Field wiring terminal for AC
 - X3M : External backup heater terminal
 - X4M : Booster heater power supply terminal
 - X5M : Field wiring terminal for DC
 - X9M : Internal backup heater power supply terminal
 - X10M : Smartgrid terminal
 - : Earth wiring
 - - - - - : Field supply
- ① : Several wiring possibilities
- [] : Option
- [] : Wiring depending on model
- [] : Not mounted in switch box
- [] : PCB

NOTES

- Connection point of the power supply for the backup heater & booster heater should be foreseen outside the unit.

- Backup heater power supply 3V (1N~, 230V, 3kW)
- User installed options:
 - Domestic hot water tank
 - External backup heater
 - Booster heater
 - Remote user interface
 - Ext. indoor thermistor
 - Ext. outdoor thermistor
 - Digital I/O PCB
 - Demand PCB
 - Smart grid
 - WLAN cartridge
 - Bypass kit
 - LAN adapter
- 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



LEGEND

Part n°	Description
A1P	main PCB
A2P	* ON/OFF thermostat (PC=power circuit)
A3P	* heat pump convactor
A4P	* digital I/O PCB
A8P	* demand PCB
A11P	MMI main PCB
A13P	* LAN adapter
A14P	* user interface PCB
A15P	* receiver PCB (wireless ON/OFF thermostat)
B1L	flow sensor
B1PR	refrigerant pressure sensor
B1PW	water pressure sensor
CN* (A4P)	* connector
D51 (A8P)	* dipswitch
E3H	backup heater element (3 kW)
E5H	* booster heater element (2,4 kW)
E6H	PHE heater (50 W)
E9H	expansion vessel heater (50 W)
E10H	expansion vessel flex heater (15,6 W)
E11H, E12H	PHE heater IN/OUT (33 W)
E*P (A9P)	indication LED
F1B	# overcurrent fuse backup heater
F1T	thermal fuse backup heater
F2B	# overcurrent fuse booster heater
F2T	thermal fuse booster heater
F1U, F2U (A4P)	* fuse S A 250 V for digital I/O PCB
FU1 (A1P)	* fuse T 5 A 250 V for PCB
K1A, K2A	* high voltage smartgrid relay
K1M	contactor backup heater
K3M	* contactor booster heater
K*R (A1P-A4P)	relay on PCB
M1P	main supply pump
M2P	# domestic hot water pump
M2S	# 2 way valve for cooling mode
M3S	* 3 way valve for floorheating/ domestic hot water
M4S	* valve kit
P1M	MMI display

Part n°	Description
PC (A15P)	* power circuit
PHC1 (A4P)	* optocoupler input circuit
Q1L	thermal protector backup heater
Q2L	* thermal protector booster heater
Q4L	# safety thermostat
Q*DI	# earth leakage circuit breaker
R1H (A2P)	* humidity sensor
R1T (A1P)	outlet water heat exchanger thermistor
R1T (A2P)	* ambient sensor ON/OFF thermostat
R1T (A14P)	* ambient sensor user interface
R2T (A1P)	internal BUH sensor
R2T (A2P)	* external sensor (floor or ambient)
R3T	refrigerant liquid side thermistor
R4T	inlet water thermistor
R5T	* domestic hot water thermistor
R6T	* external indoor or outdoor ambient thermistor
S1L	* flow switch
S1S	# preferential kWh rate PS contact
S*T	thermostat
S2S	# electrical meter pulse input 1
S3S	# electrical meter pulse input 2
S4S	# smart grid feed-in
S6S-S9S	* digital power limitation inputs
S10S-S11S	# low voltage smartgrid contact
S51 (A4P)	* selector switch
SW1-2 (A11P)	turn buttons
SW3-5 (A11P)	push button
TR1	power supply transformer
X4M	* booster heater power supply terminal strip
X6M, X8M	# power supply terminal strip client
X9M	backup heater power supply terminal strip
X10M	* smartgrid power supply terminal strip
X*, X*A, X*Y	connector
X*M	terminal strip

* : optional # : field supply

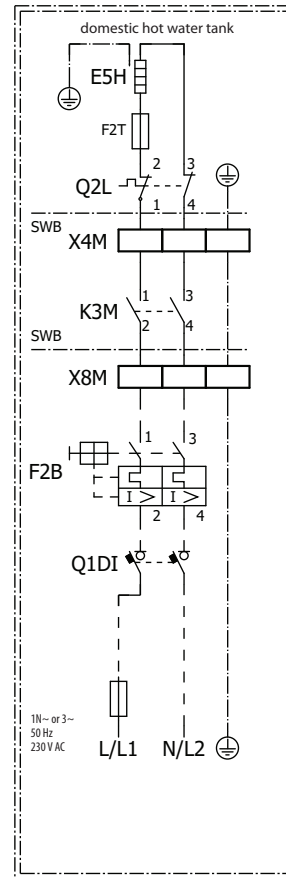
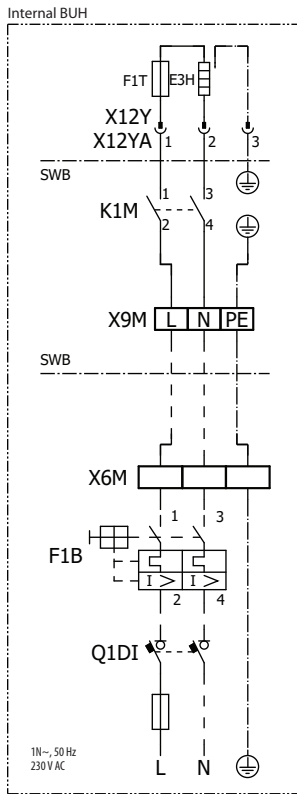
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9 Wiring diagrams

9 - 4 Hydro Module - Power Supply, Back-up Heater

9

EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3



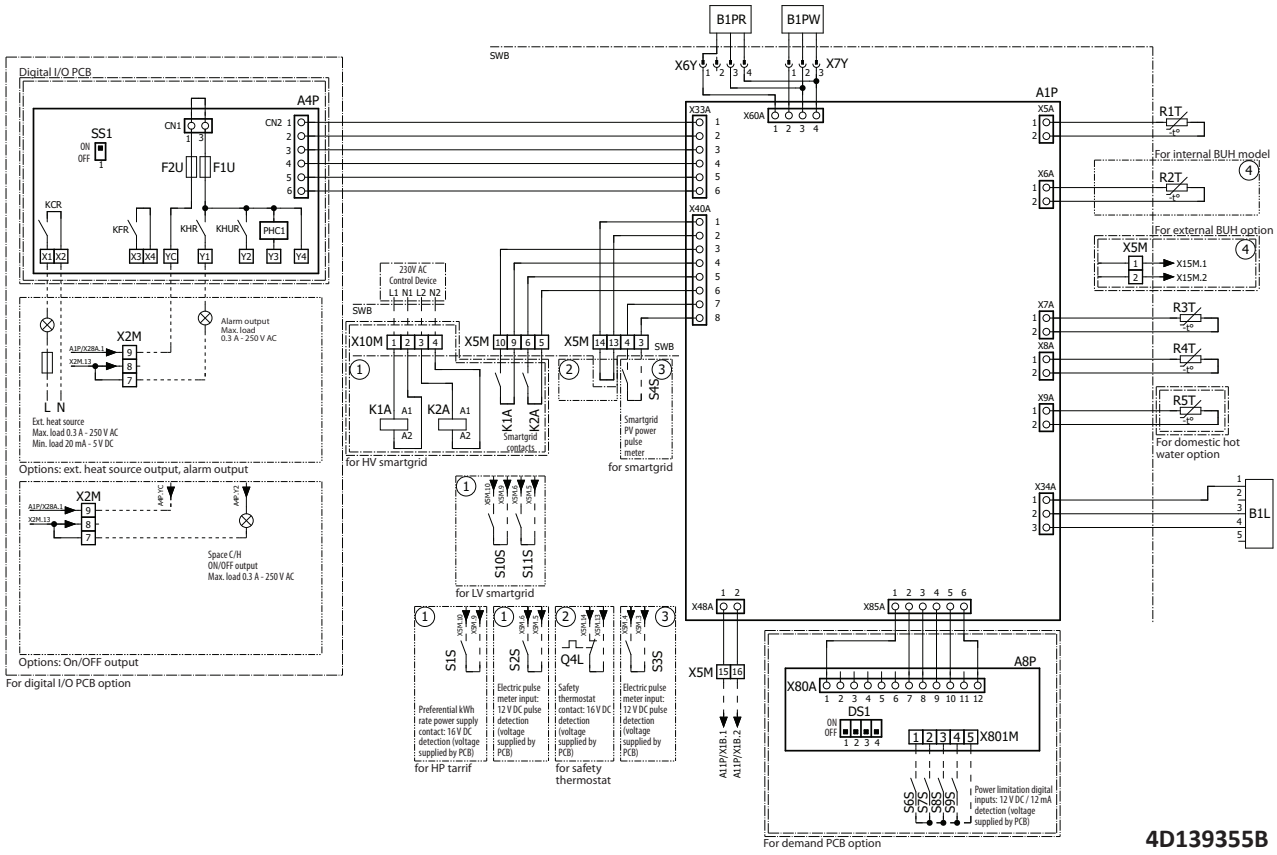
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9 Wiring diagrams

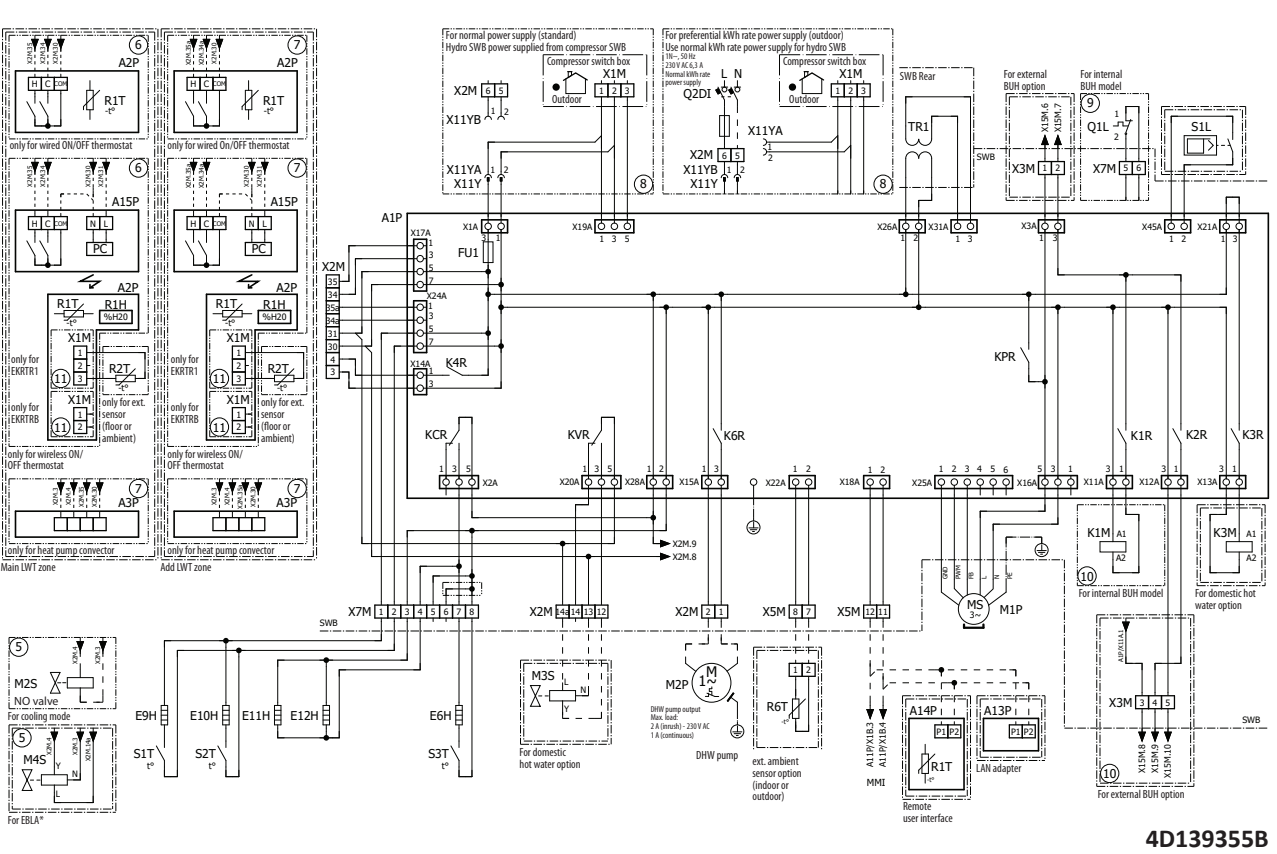
9 - 5 Hydro Module - Control Circuit

9

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



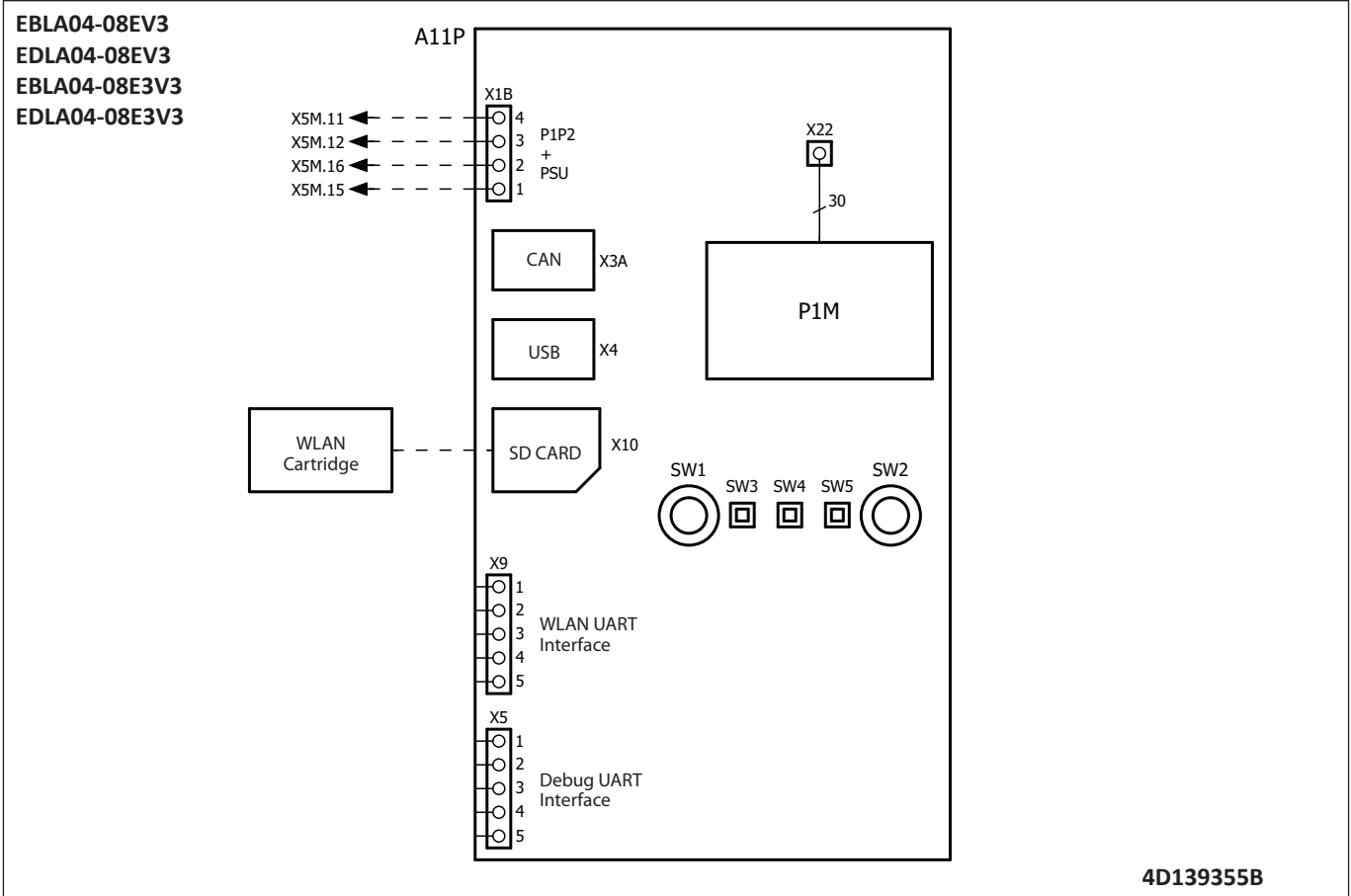
EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



9 Wiring diagrams

9 - 5 Hydro Module - Control Circuit

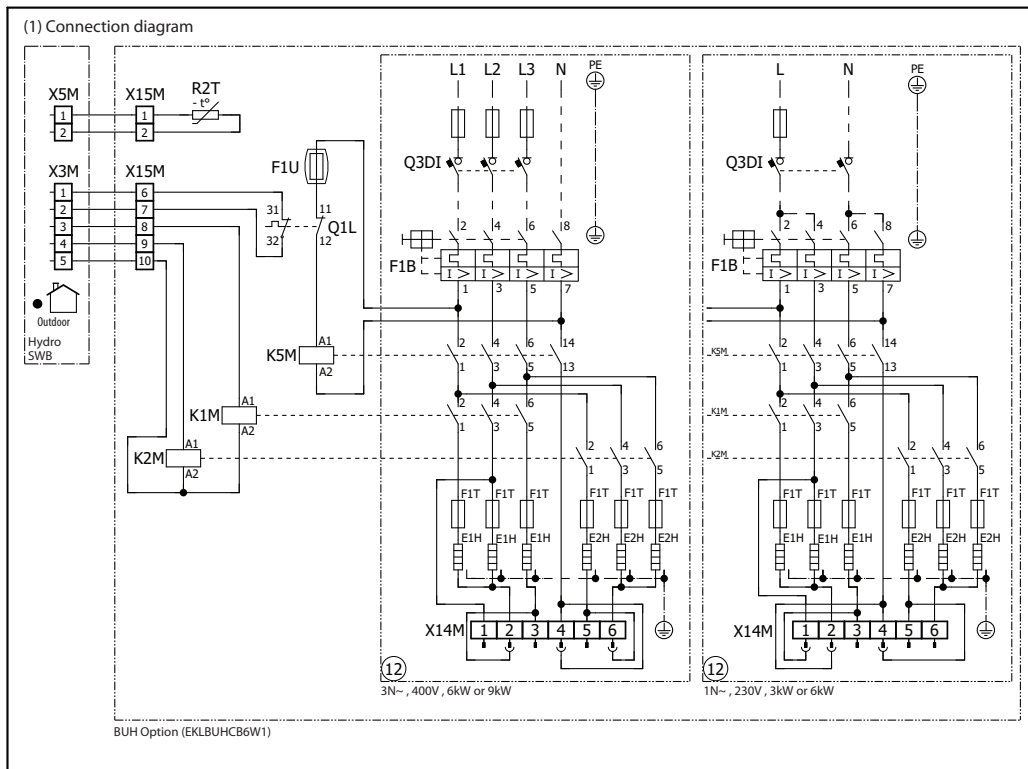
9



9 Wiring diagrams

9 - 6 External back-up heater - Option Circuit

EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3



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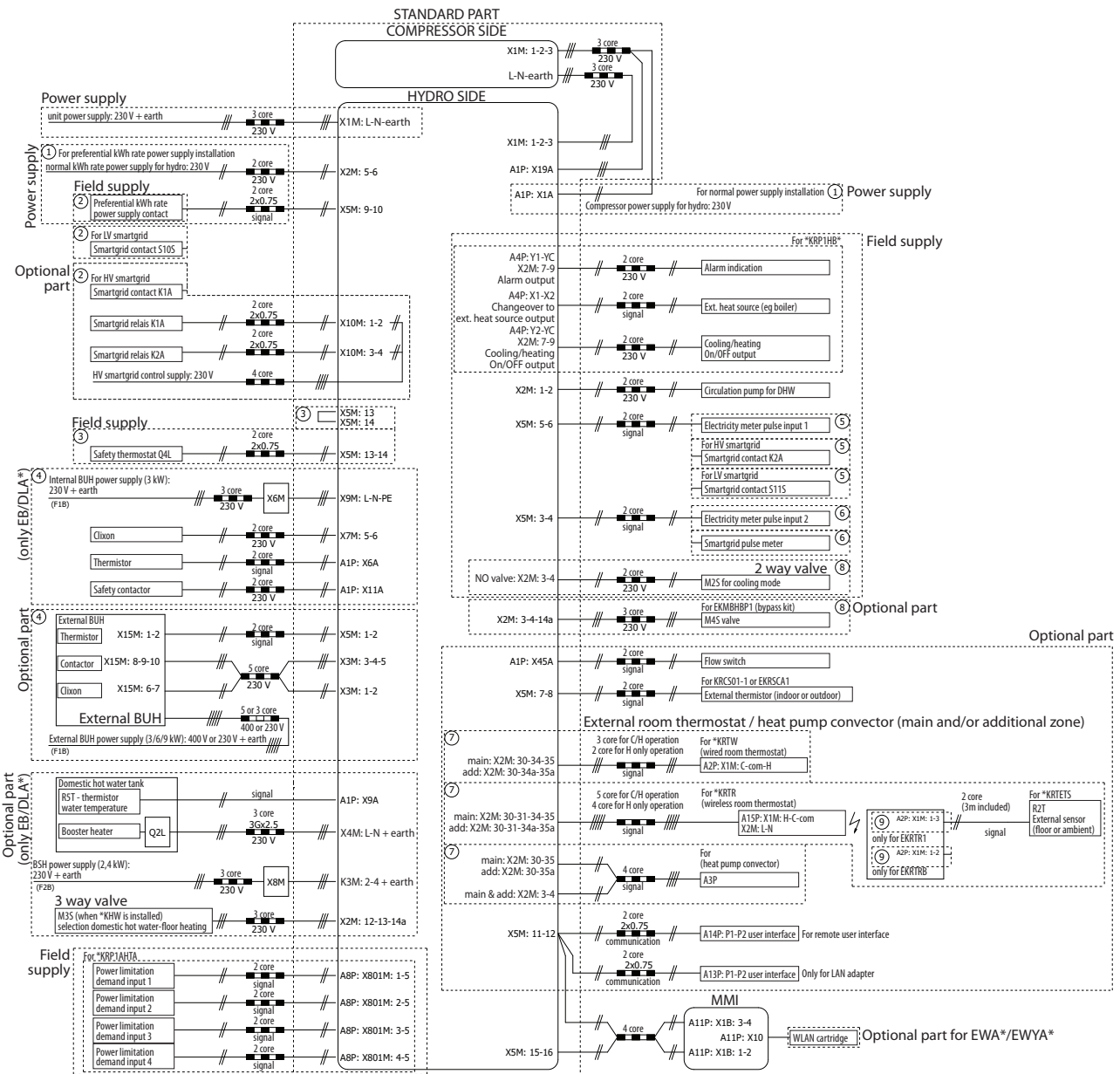
10 External connection diagrams

10 - 1 External Connection Diagrams

10

EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

Electrical connection diagram Daikin Monobloc/Minichiller BML



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

For more details please check unit wiring

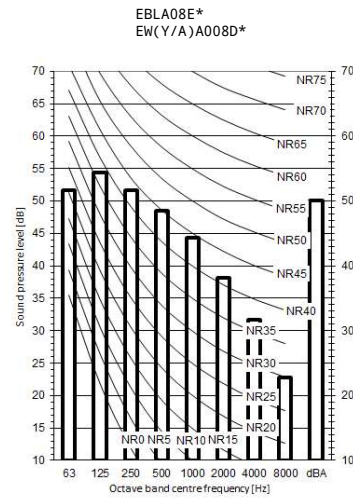
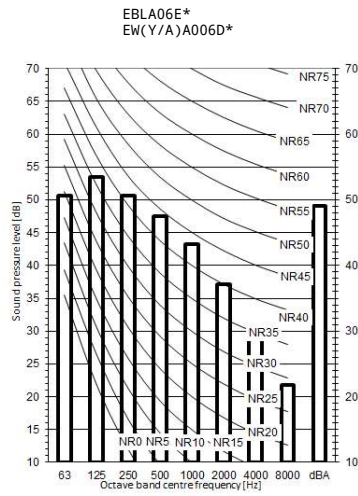
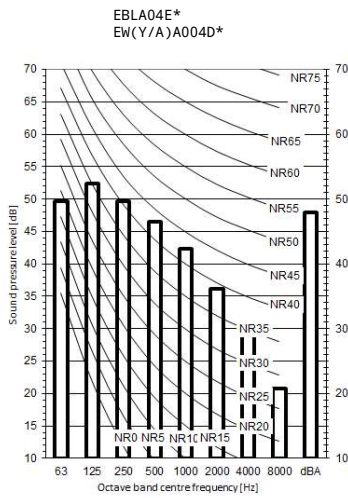
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11 Sound data

11 - 1 Sound Pressure Spectrum - Cooling

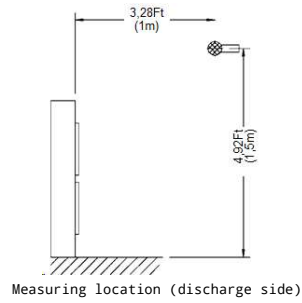
EBLA04-08EV3
EBLA04-08E3V3

Cooling



Notes

- 1.Data is valid at free field condition.
- 2.Data is valid in a semi-anechoic chamber
- 3.dBA is valid at nominal operation condition.
- 4.dBA = A-weighted sound pressure level (A scale according to IEC).
- 4.Reference acoustic pressure 0 dB = 20 µPa
- 5.If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



3D140608

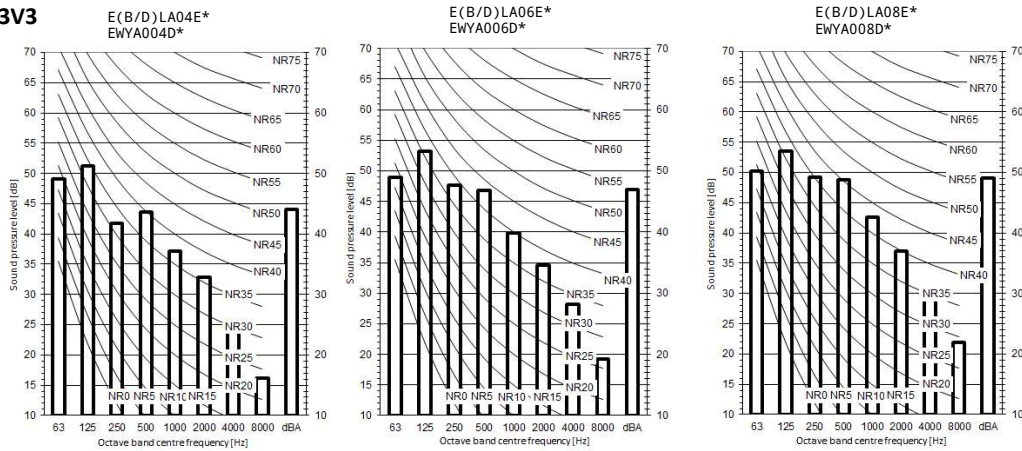
11 Sound data

11 - 2 Sound Pressure Spectrum - Heating

11

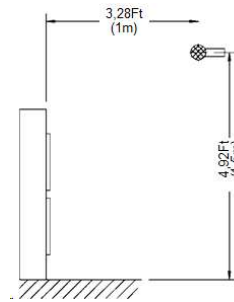
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

Heating



Notes

- 1.Data is valid at free field condition.
Measured in a semi-anechoic chamber
- 2.Data is valid at nominal operation condition.
- 3.dBA = A-weighted sound pressure level (A scale according to IEC).
- 4.Reference acoustic pressure 0 dB = 20 μPa
- 5.If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

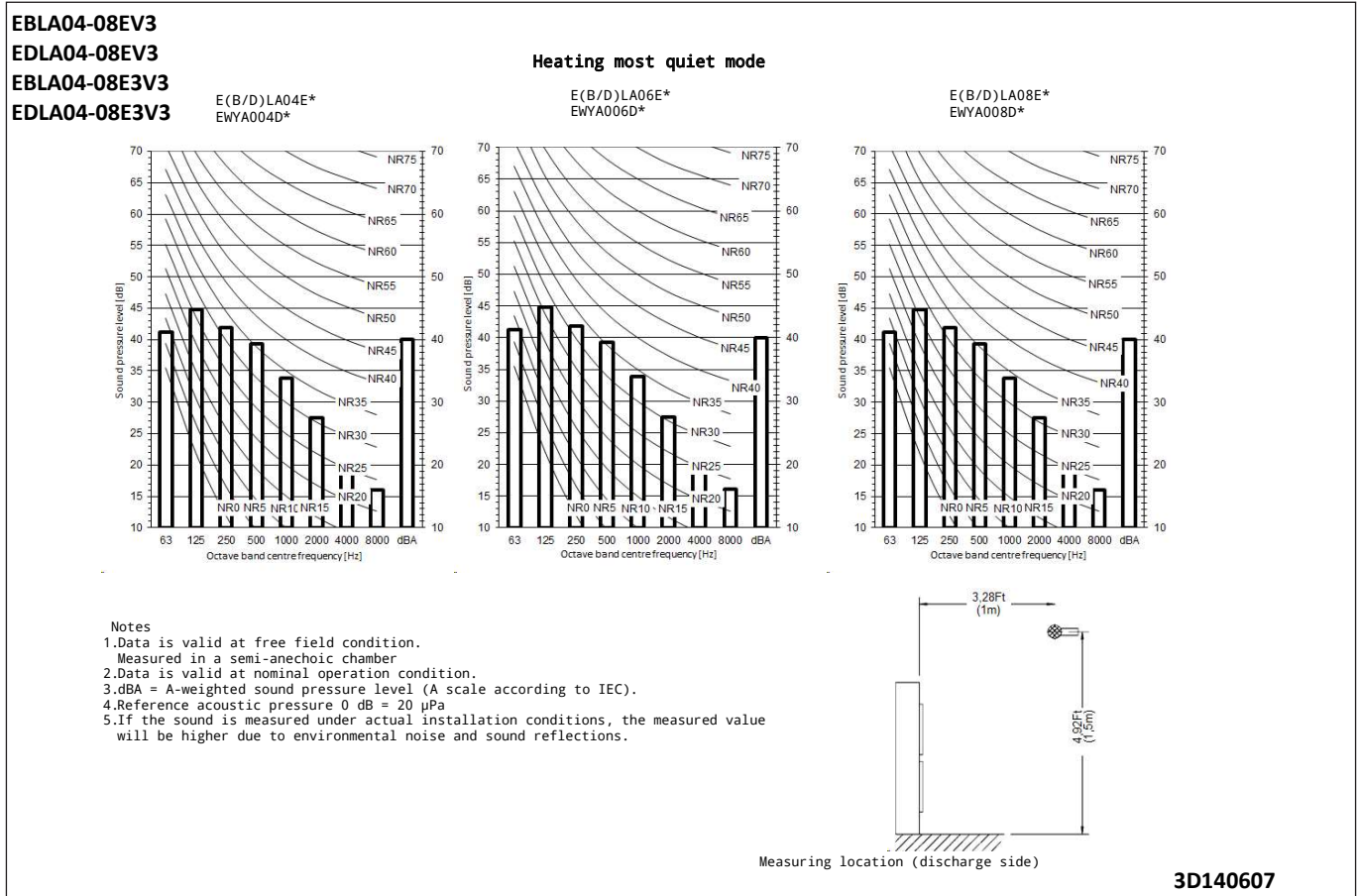
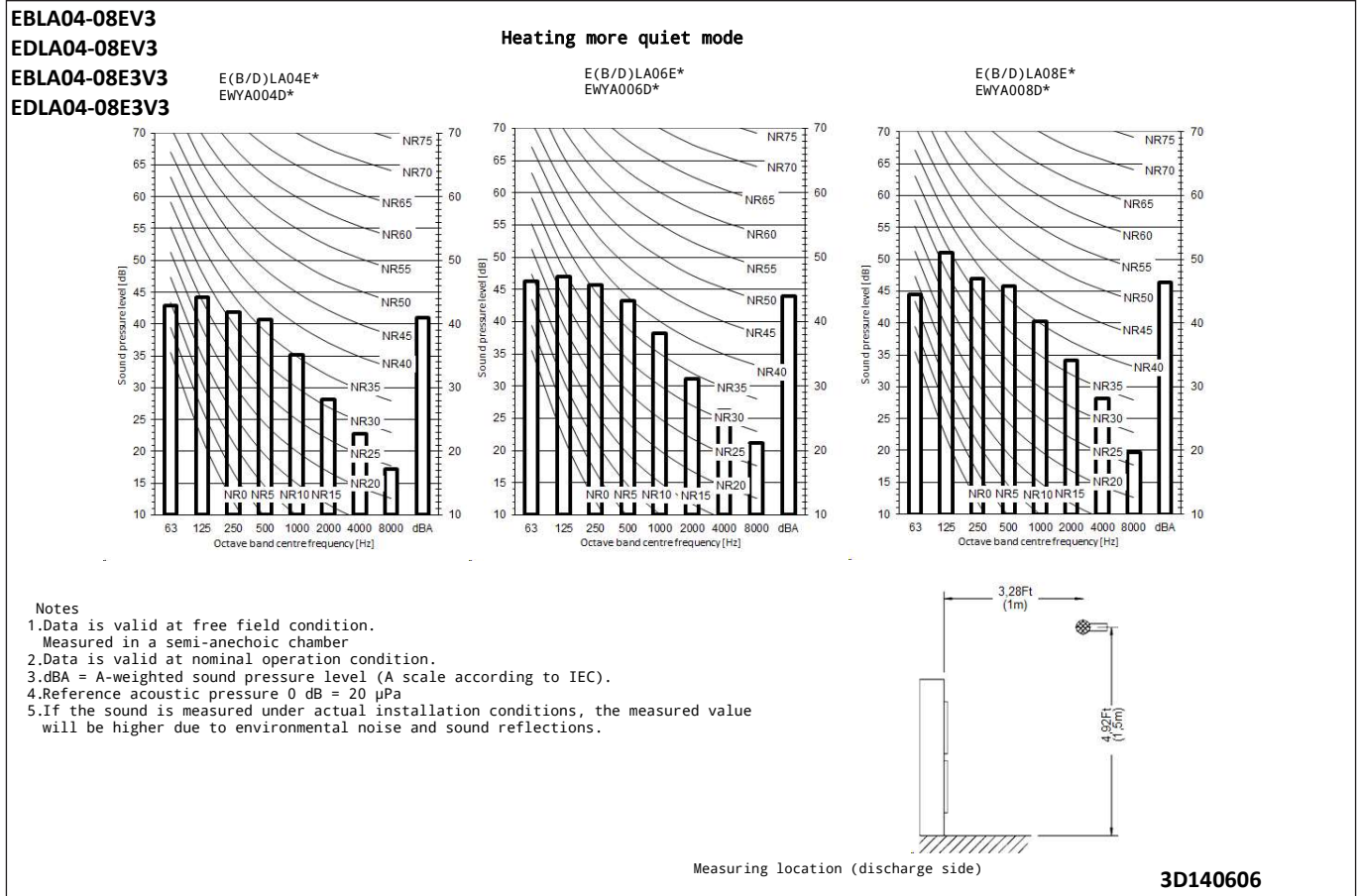


Measuring location (discharge side)

3D140605

11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode

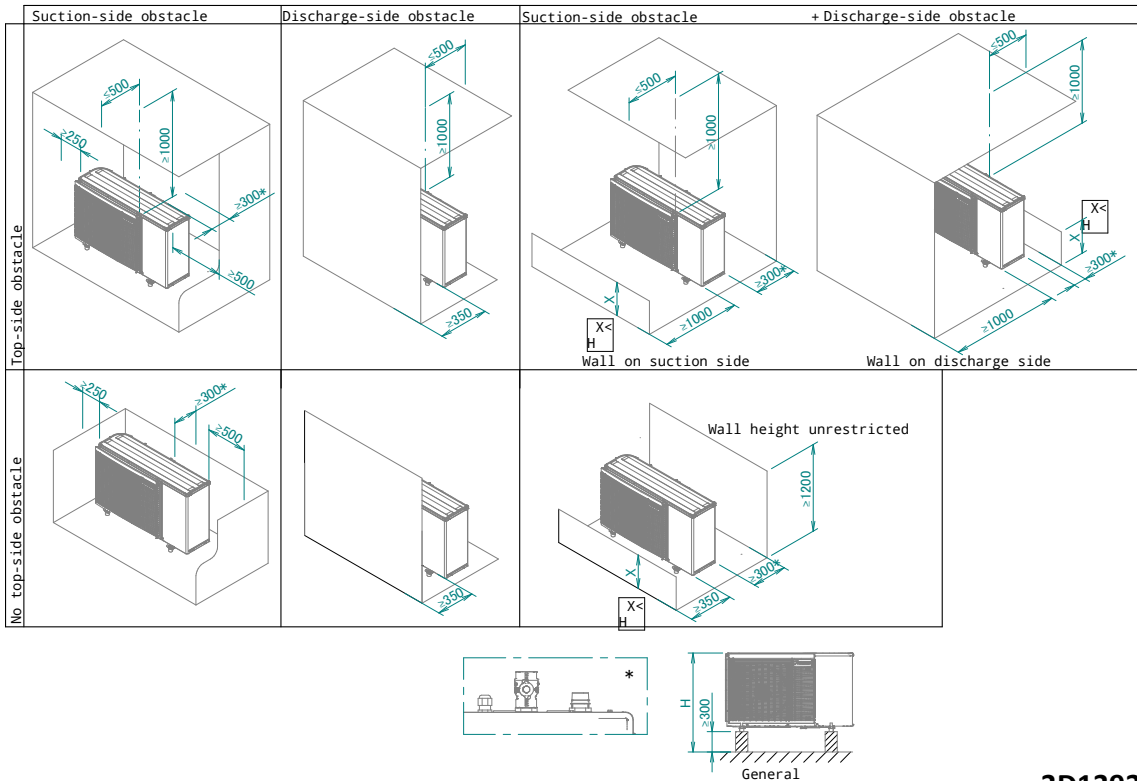


12 Installation

12 - 1 Installation Method

12

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



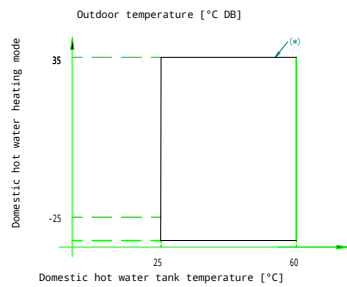
3D139357

13 Operation range

13 - 1 Operation Range

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3

EKHSW*150* + EKHSW*180* + [Third-party with identical specifications as EKHSW*150*]



Legend

(*) 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
If the outdoor temperature < -20°C, then outdoor unit operation is possible, but with a possible capacity reduction.
If the outdoor temperature < -25°C, the outdoor unit will stop.

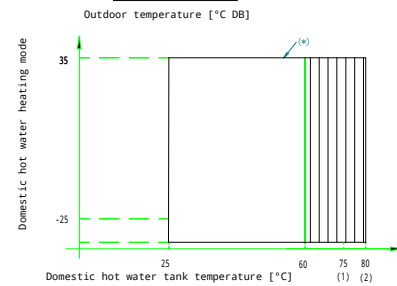
Indoor unit and backup heater operation will continue.

Notes

- In restricted power supply mode (EKHW* only), the outdoor unit, booster heater and backup heater can only operate separately.
- Third-party with identical specifications as EKHSW*150*
Coil surface > 1.05-m² and < 3.7-m²
Tank thermistor and booster heater above heat pump coil.
- If negative ambient temperatures are expected, both in operation or at standstill, take adequate countermeasures against freezing.

For more information, refer to the installation manual.
- Third-party with identical specifications as EKHSW*200*
Coil surface > 1.8-m² and < 3.7-m²
Tank thermistor and booster heater above heat pump coil.

EKHPW* + EKHSW*200* + EKHSW*250* + EKHSW*300* + [Third-party with identical specifications as EKHSW*200*]



Legend

Boosted heater only operation (if a booster heater is part of the system)
(1) Combination of EKHSW*
(2) Combination of EKHPW*

(*) 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
If the outdoor temperature < -20°C, then outdoor unit operation is possible, but with a possible capacity reduction.
If the outdoor temperature < -25°C, the outdoor unit will stop.

Indoor unit and backup heater operation will continue.

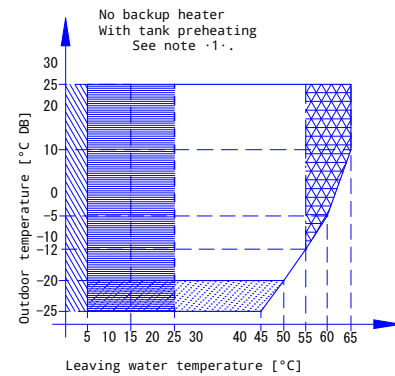
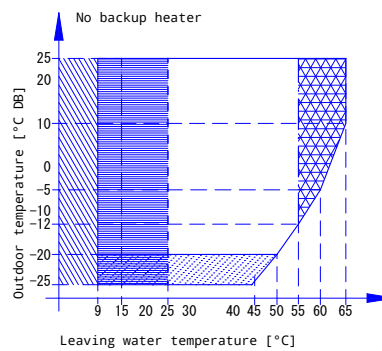
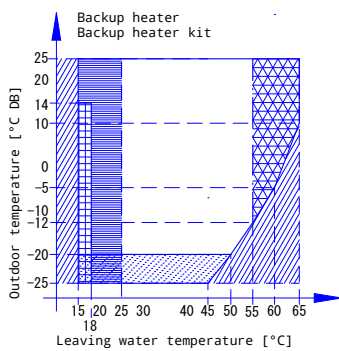
Notes

- In restricted power supply mode (EKHW* only), the outdoor unit, booster heater and backup heater can only operate separately.
- Third-party with identical specifications as EKHSW*150*
Coil surface > 1.05-m² and < 3.7-m²
Tank thermistor and booster heater above heat pump coil.
- If negative ambient temperatures are expected, both in operation or at standstill, take adequate countermeasures against freezing.

For more information, refer to the installation manual.
- Third-party with identical specifications as EKHSW*200*
Coil surface > 1.8-m² and < 3.7-m²
Tank thermistor and booster heater above heat pump coil.

3D139360

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



Legend

- Backup heater only operation
No outdoor unit operation
- Heat pump + backup heater operation
Pull-up area
- Outdoor unit operation if controller setpoint is regulated to minimal leaving water temperature request.
See dashed lines
- Operation of outdoor unit possible, but with possible capacity reduction.
- Circulation pump operation only
- Outdoor unit operation if setpoint > 55°C and ΔT = 10°C (ΔT = outlet temperature - inlet temperature)

Notes

- Tank preheating
For details, see the installer reference guide.
- If negative ambient temperatures are expected, both in operation or at standstill, take adequate countermeasures against freezing.

For more information, refer to the installation manual.
- In restricted power supply mode, the outdoor unit and backup heater can only operate separately.

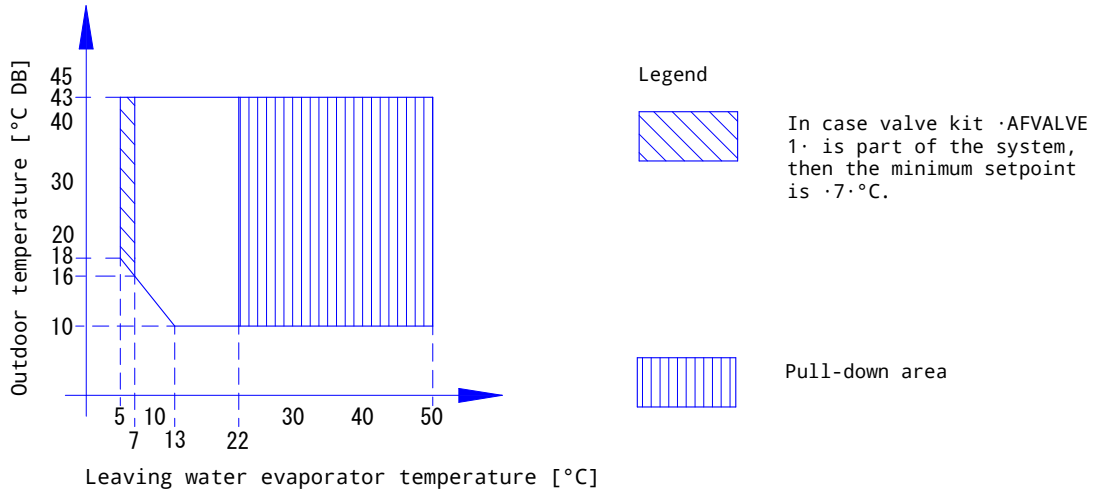
3D139428

13 Operation range

13 - 1 Operation Range

13

EBLA04-08EV3
EBLA04-08E3V3



Notes

1.If negative ambient temperatures are expected, both in operation or at standstill, take adequate countermeasures against freezing.

For more information, refer to the installation manual.

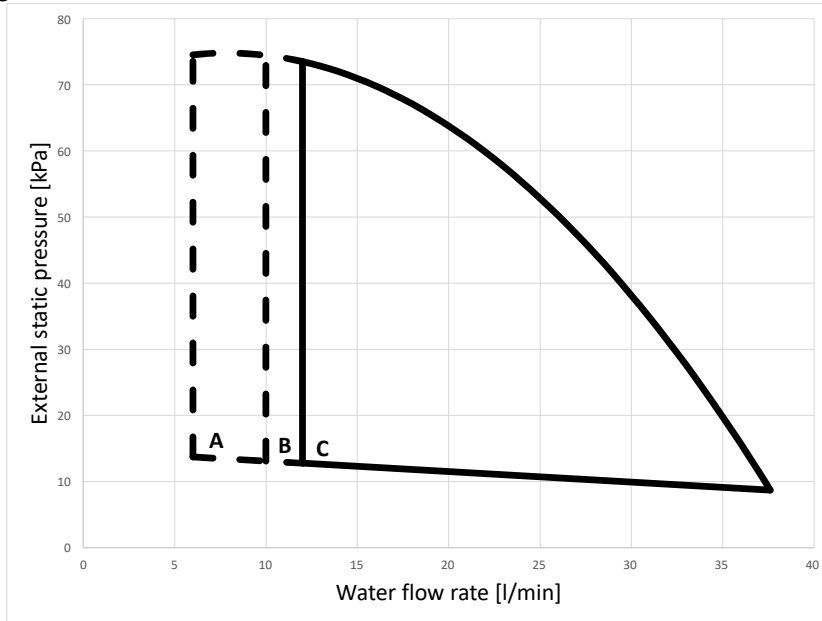
3D139430

14 Hydraulic performance

14 - 1 Static Pressure Drop Unit

EBLA04-08E3V3

EDLA04-08E3V3



- A = Minimum water flow rate during normal operation
- B = Minimum water flow rate during Cooling operation
- C = Minimum water flow rate during Defrost and Backup heater operation

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 2020/2184

4D139365

15 Certification drawing

EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3

Rated data for certification programmes - heating mode

Tamb [°C]	EWIC [°C]	LWIC [°C]	EIB/DILA04E23V3		EIB/DILA06E23V3		EIB/DILA08E23V3	
			HC [kW]	COP	HC [kW]	COP	HC [kW]	COP
10/8	30	35	5,17	5,42	6,17	5,12	7,72	4,72
7/6	30	35	4,30	5,10	6,00	4,85	7,50	4,60
2/1	30	35	3,50	4,10	4,80	3,75	5,60	3,65
-7/-8	30	35	4,50	3,10	5,50	2,90	6,00	2,70
7/6	40	45	4,60	3,65	5,90	3,50	7,80	3,50
2/1	40	45	4,20	2,80	5,00	2,80	6,00	2,75
-7/-8	40	45	4,35	2,40	5,00	2,35	6,10	2,21
7/6	47	55	4,90	2,65	5,80	2,70	7,50	2,70
-7/-8	47	55	4,20	1,60	5,00	1,65	5,50	1,70

Rated data for certification programmes - cooling mode

Tamb [°C]	EWE [°C]	LWE [°C]	ECLA04E23V3		ECLA06E23V3		ECLA08E23V3	
			CC [kW]	EER	CC [kW]	EER	CC [kW]	EER
35	23	18	4,86	5,91	5,83	5,4	6,18	5,19
35	12	7	4,52	3,82	5,09	3,28	5,44	3,14

Seasonal data - cooling

Low temperature Application		LWE 7°C		ECLA04E23V3		ECLA06E23V3		ECLA08E23V3	
SER	[]		5,25		5,31		5,36		5,36
Pdes	[kW]		4,5		5,1		5,4		5,4
η _{sc}	[]		210%		212%		215%		215%
Q _{sc}	[kWh/annum]		518		576		609		609

Rated data for sound GET database

Standard sound model		EIB/DILA04E23V3		EIB/DILA06E23V3		EIB/DILA08E23V3	
Maximum sound day	Sound power [dBA]		60		65		65
Maximum sound night	Sound power [dBA]		54		54		54
Low sound model		EIB/DILA04E23V3		EIB/DILA06E23V3		EIB/DILA08E23V3	
Maximum sound day	Sound power [dBA]		59		61		63
Maximum sound night	Sound power [dBA]		52		52		52

Symbols

- HC Heating capacity measured according to EN 14511
- CC Cooling capacity, measured according to EN 14511
- COP/EER Coefficient of Performance/Energy efficiency ratio according to EN 14511
- EWIC Entering water condenser temperature [°C]
- LWIC Leaving water condenser temperature [°C]
- EWE Entering water evaporator temperature [°C]
- LWE Leaving water evaporator temperature [°C]
- Tamb Ambient temperature [°C] (DB/WE)
- Pdes Nominal capacity value at design temperature [kW]
- η_{sc} Seasonal space cooling energy efficiency according to EN14825
- SER Seasonal energy efficiency ratio according to EN14825
- Q_{sc} Annual energy consumption for cooling according to EN14825

Rated data for certification programmes - domestic hot water performance

Outdoor unit Domestic hot water tank Tapping pattern	EIB/DILA04/06/08E23V3														
	EKHS150D3V3 L	EKHS180D3V3 L	EKHS200D3V3 L	EKHS250D3V3 XL	EKHS300D3V3 XL	EKHS150D3V3 L	EKHS180D3V3 L	EKHS200D3V3 L	EKHS250D3V3 XL	EKHS300D3V3 XL	EKHS150D3V3 L	EKHS180D3V3 L	EKHS200D3V3 L	EKHS250D3V3 XL	EKHS300D3V3 XL
Application	Average climate (design temperature: 7°C)														
COP _{max}	2,02	2,65	2,91	2,77	2,77	2,02	2,65	2,91	2,77	2,77	2,28	2,60	2,28	2,28	2,63
η _{wh}	84,1%	110,3%	121,1%	117,1%	114,3%	84,1%	110,3%	121,1%	114,3%	114,3%	94,7%	107,4%	94,7%	108,7%	108,7%
AEC	1217	928	845	1430	1466	1217	928	845	1466	1081	1560	1081	1560	1081	1541
Application	Colder climate (design temperature: 2°C)														
COP _{max}	1,66	2,16	2,36	2,24	2,23	1,66	2,16	2,36	2,24	2,23	2,02	2,12	2,02	2,12	2,15
η _{wh}	68,8%	89,6%	98,3%	98,9%	96,2%	68,8%	89,6%	98,3%	96,2%	96,2%	83,7%	87,3%	83,7%	88,3%	88,3%
AEC	1487	1142	1042	1684	1742	1487	1142	1042	1684	1742	1918	1223	1918	1223	1896
Application	Warmer climate (design temperature: 14°C)														
COP _{max}	2,38	3,01	3,31	3,22	3,23	2,38	3,01	3,31	3,22	3,23	2,50	3,18	2,50	3,21	3,21
η _{wh}	99,8%	126,2%	138,6%	136,7%	133,3%	99,8%	126,2%	138,6%	136,7%	133,3%	103,9%	132,0%	103,9%	133,4%	133,4%
AEC	1025	811	738	1225	1256	1025	811	738	1225	1256	985	1269	985	1256	

Symbols

- COP_{max} Domestic hot water COP
- η_{wh} According to EN16147
- AEC TWh (Water heating energy efficiency)
- AEC Annual energy consumption [kWh]

3D139368

