



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



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1 Features

1 - 1 EBLA04-08EV3

Reversible air to water monobloc system, ideal when indoor space is limited

- › Monobloc all-in-one concept including hydraulic parts
- › WLAN 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

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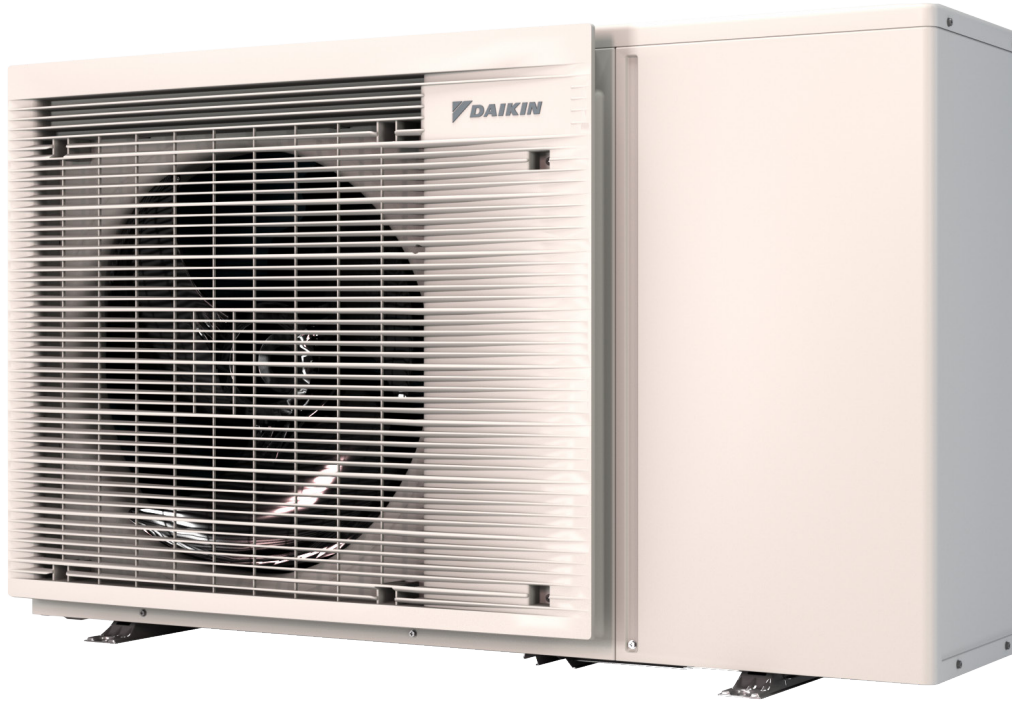
1 Features

1 - 2 EDLA04-08EV3

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- > Energy efficient heating only system based on air to water heat pump technology
- > Separate back-up heater kit



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1 Features

1 - 3 EBLA04-08E3V3

Reversible air to water monobloc system, ideal when indoor space is limited

- › Monobloc all-in-one concept including hydraulic parts
- › WLAN cartridge included
- › Possible to combine with domestic hot water
- › Energy efficient heating and cooling system based on air to water heat pump technology
- › Built-in electric back-up heater as additional heating during extremely cold outdoor temperature

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1 Features

1 - 4 EDLA04-08E3V3

Heating only air to water monobloc system, ideal when indoor space is limited

- 1 > Monobloc all-in-one concept including hydraulic parts
- > WLAN cartridge included
- > Possible to combine with domestic hot water

- > Energy efficient heating only system based on air to water heat pump technology
- > Built-in electric back-up heater as additional heating during extremely cold outdoor temperature




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2 Specifications

Technical specifications					EBLA04EV3		EBLA06EV3		EBLA08EV3		
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	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						
	Packed unit				kg						
Packing	Material				Carton / EPS / Wood (pallet)						
Heat exchanger	Length				mm						
					920						
	Rows	Quantity				2					
						mm					
	Fin pitch				mm						
	Face area				m ²						
					0.658						
	Stages	Quantity				32					
						ø7 Hi-XD					
Tube type	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)						
		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)	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						
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							

2 Specifications

Technical specifications		EBLA04EV3		EBLA06EV3		EBLA08EV3		
Water side Heat exchanger	Type	Plate heat exchanger						
	Quantity	1						
	Water volume	1.01						
Water side Heat exchanger	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)	
	Water 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						
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				
	Level difference	Max.	m					
	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				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					
		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 Cold climate water outlet 55°C Warm 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/B/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/B/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	3.99	5.36	7.05	
	Rated heat output supplementary capacity	PERd			61.2		
		TOL	°C	-10			
	Tbiv (bivalent temperature)	WTOL			55		
		Psup (at Tdesign -10°C)	kW	2.01	1.64	0.95	
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	4,446	5,278	6,864
			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
			Tbiv	°C	-7		
Warm climate water outlet 55°C	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	
		Qhe Annual energy consumption (GCV)	Gj	6	7	9	
		Tbiv	°C	-6			
B Condition (2°CDB/B/1°CWB)	CdH (Degradation heating)			1.0			
	COPd		2.11	2.15	2.09		
	Pdh	kW	4.7	5.6	6.8		
PERd			86.0				
PERd			83.6				

2 Specifications

Technical specifications				EBLA04EV3	EBLA06EV3	EBLA08EV3		
Space heating	Warm climate water outlet 55°C	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0			
			COPd	3.28	3.45	3.42		
			Pdh kW	3.0	3.6	5.3		
		B/6°CWB)	PERd %	131.2	138.0	136.8		
			D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0		
				COPd	5.13	5.48	5.52	
		Pdh kW		3.1	2.3	2.8		
		Tbiv (bivalent temperature)	PERd %	205.2	219.2	220.8		
			COPd	2.11	2.15	2.66		
			Pdh kW	4.7	5.6	6.9		
	Average climate water outlet 35°C	General	Tbiv °C	84.4	86.0	106.4		
			Annual energy consumption kWh	2,729	3,196	3,588		
				ns (Seasonal space heating efficiency) %	179	178	181	
				Prated at -10°C kW	6.0	7.0	8.0	
				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)	PERd %	173.2	170.0	174.0				
	Cdh (Degradation heating)		1.0					
	COPd	6.19	6.30	6.49				
D Condition (12°CDB/11°CWB)	Pdh kW		3.2	3.3				
	PERd %	247.6	252.0	259.6				
	Cdh (Degradation heating)		1.0					
Tol (temperature operating limit)			COPd	7.78		8.52		
			Pdh kW	3.3		3.9		
			PERd %	311.2		340.8		
			COPd	2.56	2.49	2.41		
			Pdh kW	5.22	6.01	6.93		
			PERd %	102.4	99.6	96.4		
			TOL °C		-10			

2 Specifications

Technical specifications				EBLA04EV3	EBLA06EV3	EBLA08EV3		
Space heating 	Average climate water outlet 35°C	Tol (temperature operating limit)	WTOL °C		35			
		tempera- ture)	Tbiv (bivalent)	COPd	2.90	3.07	2.66	
			Pdh	kW	5.5	6.1	7.5	
			PERd	%	116.0	122.8	106.4	
			Tbiv	°C	-7	-6	-8	
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	0.78	0.99	1.07	
		Cold climate water outlet 35°C	General	Annual energy consumption	kWh	3,208	3,727	5,012
				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
Warm climate water outlet 35°C	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		
	B Condition (2°CDB/B/1°CWB)	CdH (Degradation heating)	COPd		1.0			
			Pdh	kW	3.68	3.50	3.28	
	C Condition (7°CDB/B/6°CWB)	CdH (Degradation heating)	COPd		1.0			
			Pdh	kW	5.2	6.0	7.0	
	D Condition (12°CDB/11°CWB)	CdH (Degradation heating)	COPd		1.0			
			Pdh	kW	147.2	140.0	131.2	
PERd			%	5.79	5.92	5.95		
Pdh			kW	3.3	3.9	4.5		
Tbiv (bivalent temperature)	COPd	PERd	%	231.6	236.8	238.0		
		COPd		1.0				
		Pdh	kW	7.78	8.00	8.57		
		PERd	%	3.5	2.7	3.3		
Tbiv (bivalent temperature)	COPd	Pdh	kW	311.2	320.0	342.8		
		PERd	%	3.68	3.50	3.28		
		Pdh	kW	5.2	6.0	7.0		
		PERd	%	147.2	140.0	131.2		
Tbiv (bivalent temperature)	COPd	Tbiv	°C		2			

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

(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)
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
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)

2 Specifications

Technical specifications					EBLA04E3V3		EBLA06E3V3		EBLA08E3V3	
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					
	Packed unit				kg					
Packing	Material				Carton / EPS / Wood (pallet)					
Heat exchanger	Length				mm					
	Rows	Quantity			920					
	Fin pitch				mm					
	Face area				m ²					
	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						
Compressor	Quantity				1					
	Model				2YC71EXD#C					
Compressor	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	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.	dBA	58.0 (1)	60.0 (1)		62.0 (1)			
		Nom.	dBA	61.0 (1)	62.0 (1)					
Sound pressure level	Heating	Nom.	dBA	44.0 (1)	47.0 (1)		49.0 (1)			
		Nom.	dBA	48.0 (1)	49.0 (1)		50.0 (1)			
Refrigerant	Type				R-32					
	GWP				675.0					
	Charge				kg					
	Charge				TCO ₂ Eq					
	Control				0.910					
	Circuits	Quantity			Expansion valve					
			1							
Refrigerant oil	Type				FW68DA					
	Charged volume				l					
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					
Water side Heat exchanger	Type				Plate heat exchanger					
	Quantity				1					
Water side Heat exchanger	Water volume				l					
	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					
Heater				W						
				50.0						

2 Specifications

Technical specifications			EBLA04E3V3	EBLA06E3V3	EBLA08E3V3		
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 Max. length	OU - Tank m	10				
	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			
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 	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	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/-B/1°CWB)	Cdh (Degradation heating)	1.0		
			COPd	3.23	3.16	3.20
			Pdh kW	3.3	3.9	4.4
			PERd %	129.2	126.4	128.0
		C Condition (7°CDB/-B/6°CWB)	Cdh (Degradation heating)	1.0		
			COPd	4.40	4.49	4.64
			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	3.99	5.36	7.05
			PERd %	54.8	61.2	65.6
			TOL °C		-10	
			WTOL °C		55	
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	2.01	1.64	0.95
			Tbiv COPd	1.97	2.12	1.90
			Pdh kW	5.3	6.1	7.5
(bivalent temperature)	PERd %	78.8	84.8	76.0		
	Tbiv °C	-7	-6	-8		
	General Annual energy consumption kWh	4,446	5,278	6,864		
Cold climate water outlet 55°C	General	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	
Warm climate water outlet 55°C	General	ηs (Seasonal space heating efficiency)	152	162		
		Prated at 2°C kW	4.7	5.6	8.1	
		Qhe Annual energy consumption (GCV) GJ	6	7	9	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)	1.0		
	COPd	2.11	2.15	2.09		
	Pdh kW	4.7	5.6	6.8		

2 Specifications

Technical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3	
Space heating	Warm climate water outlet 55°C	B Condition (2°CDB/1°CWB)	PERd %	84.4	86.0	83.6	
			C Condition (7°CDB/1°CWB)	Cdh (Degradation heating) COPd	3.28	3.45	3.42
		D Condition (12°CDB/11°CWB)	Pdh kW	3.0	3.6	5.3	
			PERd %	131.2	138.0	136.8	
			Cdh (Degradation heating) COPd	1.0	1.0	1.0	
		Tbiv (bivalent temperature)	Pdh kW	3.1	2.3	2.8	
			PERd %	205.2	219.2	220.8	
			COPd	2.11	2.15	2.66	
		Average climate water outlet 35°C	General	Pdh kW	4.7	5.6	6.9
				PERd %	84.4	86.0	106.4
	Annual energy consumption		Tbiv °C	2		4	
			kWh	2,729	3,196	3,588	
	Seasonal space heating efficiency		ηs %	179	178	181	
			Prated at -10°C kW	6.0	7.0	8.0	
	Qhe Annual energy consumption (GCV)		Gj	10	12	13	
			SCOP	4.54	4.52	4.61	
	A Condition (7°CDB/8°CWB)		Seasonal space heating eff. class		A+++		
			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				
D Condition (12°CDB/11°CWB)	COPd	6.19	6.30	6.49			
	Pdh kW		3.2	3.3			
	PERd %	247.6	252.0	259.6			
Tol (temperature operating limit)	Cdh (Degradation heating)		1.0				
	COPd		7.78	8.52			
	Pdh kW		3.3	3.9			
	PERd %		311.2	340.8			
	COPd	2.56	2.49	2.41			
	Pdh kW	5.22	6.01	6.93			
	PERd %	102.4	99.6	96.4			

2 Specifications

2

Technical specifications				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3	
Space heating 	Average climate water outlet 35°C	Tol (temperature operating limit)	TOL °C		-10		
			WTOL °C		35		
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	3,208	3,727	5,012
			ηs (Seasonal space heating efficiency)	%	151	156	154
		Bivalent temperature)	Prated at -22°C	kW	5	6	8
			Qhe Annual energy consumption (GCV)	Gj	11.5	13.4	18.0
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,095	1,232	1,393
			ηs (Seasonal space heating efficiency)	%	251	257	266
		Bivalent temperature)	Prated at 2°C	kW	5.2	6.0	7.0
			Qhe Annual energy consumption (GCV)	Gj		4	5
B Condition (2°CDB-B/1°CWB)	Cdch (Degradation heating)	COPd		1.0			
		Pdh kW	3.68	3.50	3.28		
C Condition (7°CDB-B/6°CWB)	Cdch (Degradation heating)	COPd		1.0			
		Pdh kW	5.79	5.92	5.95		
D Condition (12°CDB/11°CWB)	Cdch (Degradation heating)	COPd		1.0			
		Pdh kW	3.3	3.9	4.5		
	Tbiv (bivalent temperature)	COPd		231.6	236.8	238.0	
			Pdh kW	3.68	3.50	3.28	
Tbiv (bivalent temperature)	PERd %		147.2	140.0	131.2		
		Tbiv °C		2			

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~	
	Running current	Frequency	Hz		50	
		Voltage	V		230	
		Back-up heater	A		13.0	
Voltage range	Min.	%		-10		
	Max.	%		10		
Power supply	Name			V3		
	Phase			1~		
	Frequency	Hz		50		
	Voltage	V		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

2 Specifications

Technical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3	
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			
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			
Fan motor	Discharge direction			Horizontal			
	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	Ambient	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.	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		TCO2Eq	0.910			
	Control			Expansion valve			
Refrigerant oil	Circuits	Quantity		1			
		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 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			EDLA04EV3	EDLA06EV3	EDLA08EV3		
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 Max. length	OU - Tank m	10				
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				
	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		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						
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	2,280	2,520	2,770	
Space heating	Average 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)	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/B/1°CWB)	CdH (Degradation heating)	COPd		3.23	3.16	3.20
			Pdh	kW	3.3	3.9	4.4
			PERd	%	129.2	126.4	128.0
	C Condition (7°CDB/6°CWB)	CdH (Degradation heating)	COPd		4.40	4.49	4.64
			Pdh	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		3.99	5.36	7.05	
			PERd %		54.8	61.2	65.6	
			TOL °C			-10		
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C) kW			2.01	1.64	0.95
			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		
B Condition (2°CDB/1°CWB)	C Condition (7°CDB/6°CWB)	CdH (Degradation heating)			1.0			
		COPd		2.11	2.15	2.09		
		Pdh kW		4.7	5.6	6.8		
		PERd %		84.4	86.0	83.6		
		CdH (Degradation heating)			1.0			
		COPd		3.28	3.45	3.42		
		Pdh kW		3.0	3.6	5.3		
		PERd %		131.2	138.0	136.8		
		D Condition (12°CDB/11°CWB)	CdH (Degradation heating)			1.0		
			COPd		5.13	5.48	5.52	
Pdh kW			3.1	2.3	2.8			
PERd %			205.2	219.2	220.8			
Tbiv (bivalent temperature)	COPd			2.11	2.15	2.66		
	Pdh kW			4.7	5.6	6.9		

2 Specifications

Technical specifications					EDLA04EV3	EDLA06EV3	EDLA08EV3
Space heating	Warm climate water outlet 55°C	Tbiv	PERd	%	84.4	86.0	106.4
		(bivalent temperature)	Tbiv	°C	2		4
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	
		PERd	%	116.0	114.4	110.8	
B Condition (2°CDB/-1°CWB)	COPd	Cdh (Degradation heating)		1.0			
				4.33	4.25	4.35	
		Pdh	kW	3.3	3.9	4.2	
C Condition (7°CDB/6°CWB)	COPd	Cdh (Degradation heating)		1.0			
				6.19	6.30	6.49	
		Pdh	kW	3.2		3.3	
D Condition (12°CDB/11°CWB)	COPd	Cdh (Degradation heating)		247.6	252.0	259.6	
				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	5.22	6.01	6.93	
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	General	Rated heat output supplementary capacity	°C	-7	-6	-8	
		Psup (at Tdesign -10°C)	kW	0.78	0.99	1.07	
		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	

2 Specifications

Technical specifications				EDLA04EV3	EDLA06EV3	EDLA08EV3	
Space heating 	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,139	1,276	1,437
			η_s (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	
	B Condition (2°C CD-B/1°C CWB)	Cdh (Degradation heating)	COPd		3.68	3.50	3.28
			Pdh	kW	5.2	6.0	7.0
			PERd	%	147.2	140.0	131.2
			Cdh (Degradation heating)			1.0	
	C Condition (7°C CD-B/6°C CWB)	Cdh (Degradation heating)	COPd		5.79	5.92	5.95
			Pdh	kW	3.3	3.9	4.5
			PERd	%	231.6	236.8	238.0
			Cdh (Degradation heating)			1.0	
	D Condition (12°C CD-B/11°C CWB)	Cdh (Degradation heating)	COPd		7.78	8.00	8.57
			Pdh	kW	3.5	2.7	3.3
			PERd	%	311.2	320.0	342.8
			Cdh (Degradation heating)			1.0	
	Tbiv (bivalent temperature)	COPd			3.68	3.50	3.28
			Pdh	kW	5.2	6.0	7.0
			PERd	%	147.2	140.0	131.2
			Tbiv	°C		2	

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

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)	
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		
					Propeller fan		
Fan	Type			1			
	Quantity			Horizontal			
	Discharge direction						

2 Specifications

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3	
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	Ps*V	Bar*l	110			
Operation range	Heating	Ambient	Min.	°CDB	-25		
			Max.	°CDB	25 (3)		
	Water side	Ambient	Min.	°C	15 (3)		
			Max.	°C	65 (3)		
	Domestic hot water	Ambient	Min.	°CDB	-27		
			Max.	°CDB	35		
Water side	Ambient	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			
	Charge			TCO2Eq			
	Control			Expansion valve			
	Circuits	Quantity		1			
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			
	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				
Expansion vessel	Volume			l			
	Max. water pressure			bar			
	Pre pressure			bar			
	Heater			W			
			50				
Water circuit	Piping connections diameter			inch			
			G 1" (male)				
Water circuit	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		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				

2 Specifications

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3		
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	
			ηs (Seasonal space heating efficiency)	%	127		130	
			Prated at -10°C	kW	6.0	7.0	8.0	
			Qhe Annual energy consumption (GCV)	Gj	14	16	18	
			SCOP		3.26		3.32	
			Seasonal space heating eff. class		A++			
		A Condition (7°CDB/-8°CWB)	Cd	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)	Cd	Cdh (Degradation heating)		1.0		
				COPd		3.23	3.16	3.20
				Pdh	kW	3.3	3.9	4.4
				PERd	%	129.2	126.4	128.0
		C Condition (7°CDB/6°CWB)	Cd	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	3.99	5.36	7.05	
			PERd %	54.8	61.2	65.6	
			TOL °C		-10		
			WTOL °C		55		
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	2.01	1.64	0.95
		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	
B Condition (2°CDB/1°CWB)	C Condition (7°CDB/6°CWB)	D Condition (12°CDB/11°CWB)	Tbiv (bivalent temperature)	Cdh (Degradation heating)		1.0	
				COPd	2.11	2.15	2.09
				Pdh kW	4.7	5.6	6.8
				PERd %	84.4	86.0	83.6
				Cdh (Degradation heating)		1.0	
				COPd	3.28	3.45	3.42
				Pdh kW	3.0	3.6	5.3
				PERd %	131.2	138.0	136.8
				Cdh (Degradation heating)		1.0	
				COPd	5.13	5.48	5.52
Pdh kW	3.1	2.3	2.8				
PERd %	205.2	219.2	220.8				
	COPd	2.11	2.15	2.66			

2 Specifications

Technical specifications					EDLA04E3V3	EDLA06E3V3	EDLA08E3V3
Space heating Warm climate water outlet 55°C Average climate water outlet 35°C Cold climate water outlet 35°C	Tbiv (bivalent temperature)	Pdh	kW	4.7	5.6	6.9	
		PERd	%	84.4	86.0	106.4	
		Tbiv	°C	2		4	
	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	
	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)		247.6	252.0	259.6	
		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	5.22	6.01	6.93	
		PERd	%	102.4	99.6	96.4	
	Tbiv (bivalent temperature)	TOL	°C			-10	
		WTOL	°C			35	
COPd			2.90	3.07	2.66		
Pdh		kW	5.5	6.1	7.5		
PERd		%	116.0	122.8	106.4		
Rated heat output supplementary capacity	Tbiv	°C	-7	-6	-8		
	Psup (at Tdesign -10°C)	kW	0.78	0.99	1.07		
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	

2 Specifications

2

Technical specifications				EDLA04E3V3	EDLA06E3V3	EDLA08E3V3		
Space heating	Cold climate water outlet 35°C	General	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	
			General	Prated at 2°C	kW	5.2	6.0	7.0
				Qhe Annual energy consumption (GCV)	Gj	4	5	
	B Condition (2°CDB/1°CWB)		General	Cd _h (Degradation heating)		1.0		
				COP _d		3.68	3.50	3.28
			General	Pd _h	kW	5.2	6.0	7.0
				PER _d	%	147.2	140.0	131.2
	C Condition (7°CDB/6°CWB)		General	Cd _h (Degradation heating)		1.0		
				COP _d		5.79	5.92	5.95
			General	Pd _h	kW	3.3	3.9	4.5
				PER _d	%	231.6	236.8	238.0
	D Condition (12°CDB/11°CWB)		General	Cd _h (Degradation heating)		1.0		
				COP _d		7.78	8.00	8.57
			General	Pd _h	kW	3.5	2.7	3.3
PER _d				%	311.2	320.0	342.8	
Tbiv (bivalent temperature)		General	COP _d		3.68			
			Pd _h	kW	5.2	6.0	7.0	
		General	PER _d	%	147.2	140.0	131.2	
			Tbiv	°C		2		

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~	
	Running current	Frequency	Hz		50	
		Voltage	V		230	
	Voltage range	Min.	%		-10	
		Max.	%		10	
Power supply	Name			V3		
	Phase			1~		
	Frequency	Hz		50		
	Voltage	V		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

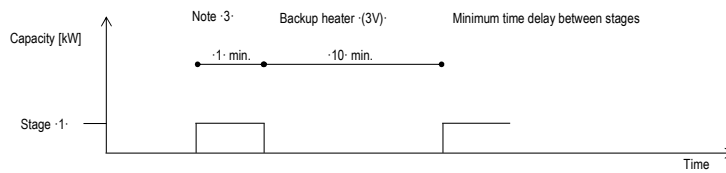
EBLA04-08E3V3

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



4D128962

4 Combination table

4 - 1 Combination Table

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

Kit availability for: E(B/D)LA*E*

Reference	Description	Notes	E(B/D)LA(04/06/08)E*			
			No backup heater		Backup heater	
			Heating only	Reversible	Heating only	Reversible
			EDLA(04/06/08)EZV3	EBLA(04/06/08)EZV3	EDLA(04/06/08)E23V3	EBLA(04/06/08)E23V3
EKRP1HBAA	Digital I/O PCB	(1)	o	o	o	o
EKRP1AHFA	Demand PCB		o	o	o	o
BRCL1HDA*	Remote user interface		o	o	o	o
BRP069A61	LAN adapter with solar connectivity		o	o	o	o
BRP069A62	LAN adapter		o	o	o	o
BRP069A71	WLAN module	(2)	o	o	o	o
EKRELSG	Relay for Smart Grid		o	o	o	o
KRCS01-1	Remote indoor sensor	(3)	o	o	o	o
EKRS0A1	Remote sensor for outdoor	(3)	o	o	o	o
EKPC0A4	PC cable kit	(7)	o	o	-	-
EKCCS-W	Universal centralised user interface		o	o	o	o
EKHYPART	Third-party tank connection kit for thermostat pocket	(4) (6)	o	o	o	o
EKHYPART2	Third-party tank connection kit for thermostat contact	(5) (6)	o	o	o	o
EKLBHCHG6W	Backup heater kit	(7)	o	o	-	-
EKMBHBP1	Valve kit	(7)	-	-	-	-
EKFLSW2	Flow switch	(8)	o	o	o	o
AKVALVE1	Freeze protection valve		o	o	o	o
FWXV10-15-20ABTV3*	Heat pump connector	Floor standing unit	o	o	o	o
FWXT10-15-20ABTV3*	Heat pump connector	Wall mounted type	o	o	o	o
FWXM10-15-20ATV3*	Heat pump connector	Ceiling ceiling	o	o	o	o
EKHWS15003V3	Domestic hot water tank - LT 150 1°-230V-		o	o	o	o
EKHWS18003V3	Domestic hot water tank - LT 180 1°-230V-		o	o	o	o
EKHWS20003V3	Domestic hot water tank - LT 200 1°-230V-		o	o	o	o
EKHWS25003V3	Domestic hot water tank - LT 250 1°-230V-		o	o	o	o
EKHWS30003V3	Domestic hot water tank - LT 300 1°-230V-		o	o	o	o
EKHWS15003V3	Domestic hot water tank - LT 150 1°-230V-	(only for UK) (9)	o	o	o	o
EKHWS18003V3	Domestic hot water tank - LT 180 1°-230V-	(only for UK) (9)	o	o	o	o
EKHWS20003V3	Domestic hot water tank - LT 200 1°-230V-	(only for UK) (9)	o	o	o	o
EKHWS25003V3	Domestic hot water tank - LT 250 1°-230V-	(only for UK) (9)	o	o	o	o
EKHWS30003V3	Domestic hot water tank - LT 300 1°-230V-	(only for UK) (9)	o	o	o	o
EKHWP300B	Domestic hot water tank - HT 300-	(10) (11) (12)	o	o	o	o
EKHWP500B	Domestic hot water tank - HT 500-	(10) (11) (12)	o	o	o	o
EKHWP300PB	Domestic hot water tank - HT 300	(10) (11) (12)	o	o	o	o
EKHWP500PB	Domestic hot water tank - HT 500	(10) (11) (12)	o	o	o	o
EKMKPDAF	Mixing kit - PCB only		o	o	o	o
EKMKPHAF	Mixing kit - PCB with hydraulics		o	o	o	o
EKMKHMAF	Hydraulics - mixed pump ground	(13)	o	o	o	o
EKMKHMAF	Hydraulics - unmixed pump ground	(13)	o	o	o	o
EKMKBVAF	Balancing vessel		o	o	o	o
EKMKDIAF	Distributor for balancing vessel	(14)	o	o	o	o
EKRTRIA	Wired room thermostat		o	o	o	o
EKRTR1L EKRTR8	Wireless room thermostat		o	o	o	o
EKRTRTS	External temperature sensor option kit	(15)	o	o	o	o
EKTESE1	Temperature sensor DHW	(16)	o	o	o	o
EKTESE2	Temperature sensor DHW	(17)	o	o	o	o
EKWUFHTA1V3	Multi-zoning kit		o	o	o	o

Notes

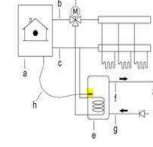
- (1) Additional relays to allow bi-valent control in combination with an external room thermostat are field-supplied.
- (2) The WLAN cartridge is supplied in the accessory bag of the unit and is meant to be plugged into the SD card slot on the MMI-2. In case of bad signal reception, the WLAN cartridge can be removed and replaced by the WLAN module.
- (3) Only 1 remote sensor can be connected: indoor OR outdoor sensor.
- (7) Necessity to install a bypass kit - EKMBHBP1 - to avoid sweat on the BUH, when the BUH is installed in combination with a reversible model.
- (8) -EKFLSW2- is obligatory for Monobloc & Mini-chiller in case Glycol is used.
- (9) Only possible in combination with -EKEXPVES-.
- (10) Domestic hot water tank with solar connection. Dedicated connection kit available. Other options EKRS44A* Solar pump station
- (11) For the combination with -EKHWP*, refer to the combination table of -EKHWP*.
- (12) The installation of -EKHWP* is mandatory. As backup or for tank preheating. For details, see the installer reference guide.
- (13) The installation of -EKMKHMAF- is mandatory.
- (14) Only possible in combination with -EKMKPDAF-.
- (15) Only possible in combination with -EKMKBVAF- and -EKMKHMAF- or -EKMKHMAF-.
- (16) Can only be used in combination with the wireless room thermostat.
- (17) Only in combination with -EKHWS*.

Remark

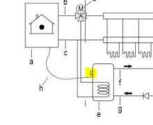
Other combinations than mentioned in this combination table are prohibited.

Notes

(4) -EKHY3PART- can be used if you have a tank in which you can insert a thermostat.



(5) -EKHY3PART2- can be used if you have a tank in which you cannot insert a thermostat.



(6) Conditions for third-party tank

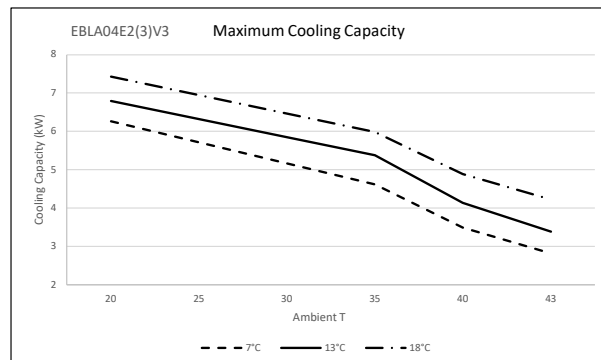
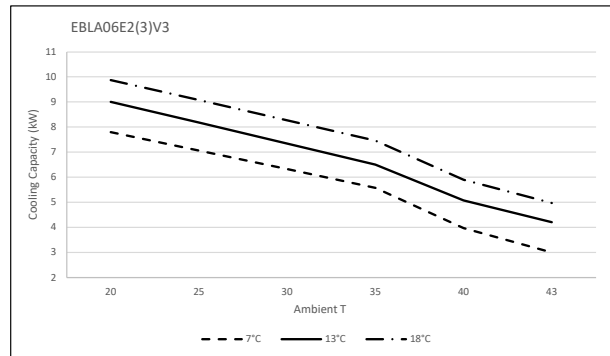
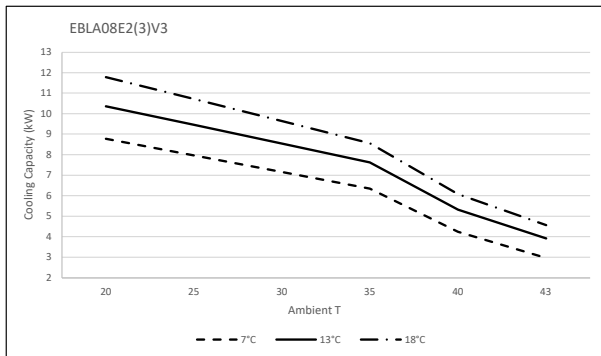
Third-party with identical specifications as EKHWS*.
Coil surface > 1.05-m² and < 3.7-m²
Tank thermostat and booster heater above heat pump coil.

4D139367A

5 Capacity graphs

5 - 1 Cooling Capacity Graphs

EBLA04-08EV3 EBLA04-08E3V3



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.

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5 Capacity graphs

5 - 2 Heating Capacity Graphs

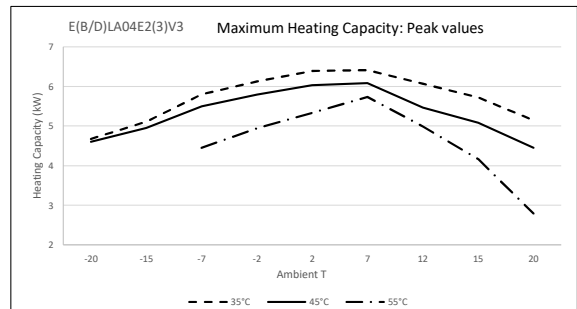
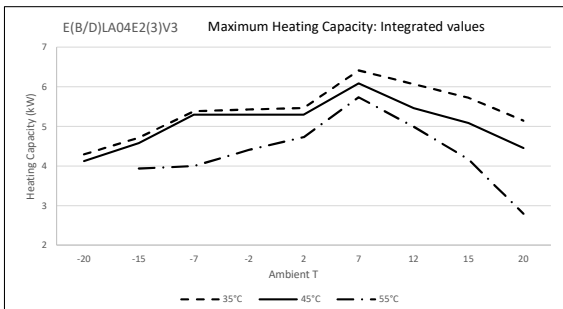
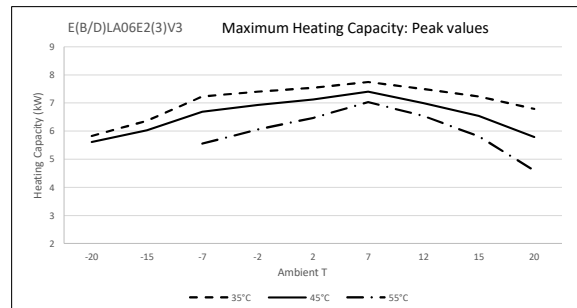
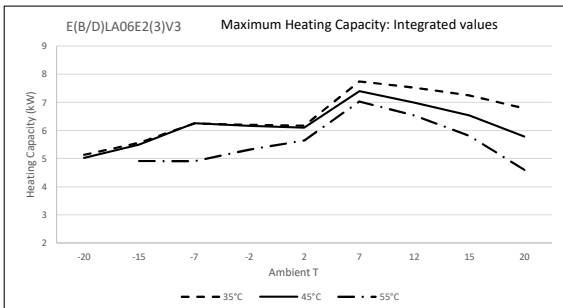
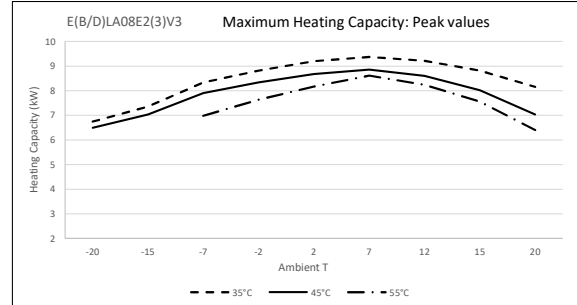
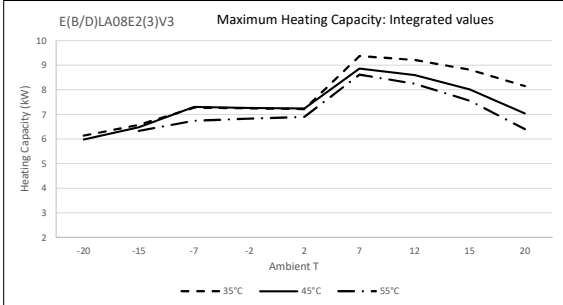
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EBLA04-08EV3

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

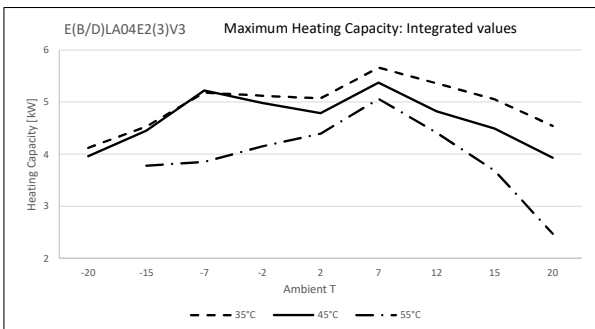
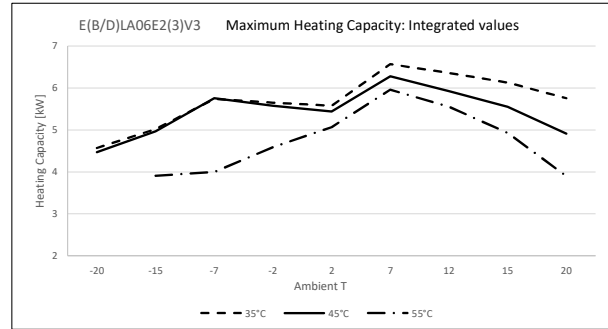
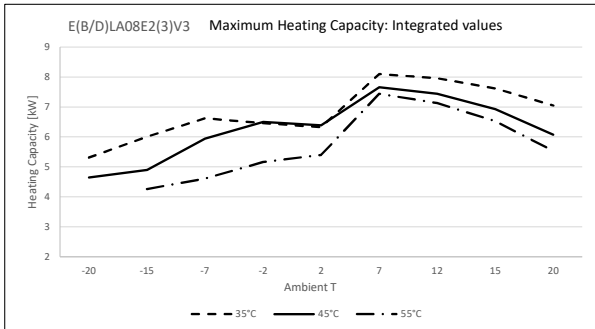
The capacity and the power input are valid for V3 models at 230 V. The capacity and the power input are at maximum operation.

3D139362

5 Capacity graphs

5 - 3 Heating Capacity Graphs - more quiet mode

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



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.

3D139433

6 Capacity tables

6 - 1 Certification Programs

6

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

Rated data for certification programmes - heating mode

Tamb	EWC	LWC	E(B/D)LA04E2(3)V3		E(B/D)LA06E2(3)V3		E(B/D)LA08E2(3)V3	
			HC	COP	HC	COP	HC	COP
[°C]	[°C]	[°C]	[kW]		[kW]		[kW]	
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	EWE	LWE	EBLA04E2(3)V3		EBLA06E2(3)V3		EBLA08E2(3)V3	
			CC	EER	CC	EER	CC	EER
[°C]	[°C]	[°C]	[kW]		[kW]		[kW]	
35	23	18	4.86	5.91	5.83	5.4	6.18	5.19
35	12	7	4.52	3.32	5.09	3.28	5.44	3.14

Seasonal data - cooling

Low temperature Application		LWE 7°C		
		EBLA04E2(3)V3	EBLA06E2(3)V3	EBLA08E2(3)V3
SEER	[-]	5.25	5.31	5.36
Pdes	[kW]	4.5	5.1	5.4
η _{sc}	[-]	210%	212%	215%
Q _{ce}	[kWh/annum]	518	576	609

Rated data for sound GET database

Standard sound model		E(B/D)LA04E2(3)V3	E(B/D)LA06E2(3)V3	E(B/D)LA08E2(3)V3
Maximum sound day	Sound power [dBA]	60	62	65
Maximum sound night	Sound power [dBA]	54	54	54

Low sound model		E(B/D)LA04E2(3)V3	E(B/D)LA06E2(3)V3	E(B/D)LA08E2(3)V3
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
- EWC Entering water condenser temperature [°C]
- LWC Leaving water condensor temperature [°C]
- EWE Entering water evaporator temperature [°C]
- LWE Leaving water evaporator temperature [°C]
- Tamb Ambient temperature [°C]
- Pdes Nominal capacity value at design temperature [°C DB/WB]
- η_{sc} Seasonal space cooling energy efficiency according to EN14825 [kW]
- SEER Seasonal energy efficiency ratio according to EN14825
- Q_{ce} Annual energy consumption for cooling according to EN14825

Rated data for certification programmes - domestic hot water performance

Outdoor unit	E(B/D)LA(04/06/08)E2(3)V3													
Domestic hot water tank	EKHS-150D3V3	EKHS-180D3V3	EKHS-200D3V3	EKHS-250D3V3	EKHS-300D3V3	EKH-SU150D3V3	EKH-SU180D3V3	EKH-SU200D3V3	EKH-SU250D3V3	EKH-SU300D3V3	EKH-WP300B	EKH-WP500B	EKHWP-300PB	EKHWP-500PB
Tapping pattern	L	L	L	XL	XL	L	L	L	XL	XL	L	XL	L	XL
Application	Average climate (design temperature: -7°C)													
COP _{DHW}	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	2,63
η _{wh}	84,1%	110,3%	121,1%	117,1%	114,3%	84,1%	110,3%	121,1%	117,1%	114,3%	94,7%	107,4%	94,7%	108,7%
AEC	1217	928	845	1430	1466	1217	928	845	1430	1466	1081	1560	1081	1541
Application	Colder climate (design temperature: -2°C)													
COP _{DHW}	1,66	2,16	2,36	2,34	2,33	1,66	2,16	2,36	2,34	2,33	2,02	2,12	2,02	2,15
η _{wh}	68,8%	89,6%	98,3%	98,9%	96,2%	68,8%	89,6%	98,3%	98,9%	96,2%	83,7%	87,3%	83,7%	88,3%
AEC	1487	1142	1042	1694	1742	1487	1142	1042	1694	1742	1223	1918	1223	1896
Application	Warmer climate (design temperature: -14°C)													
COP _{DHW}	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
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%
AEC	1025	811	738	1225	1256	1025	811	738	1225	1256	985	1269	985	1256

SYMBOLS

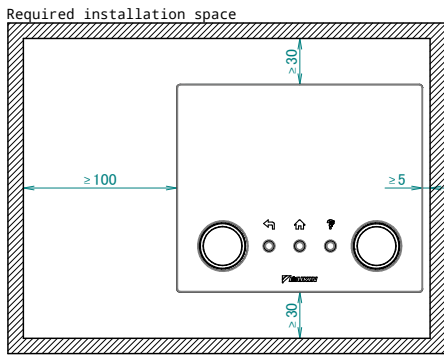
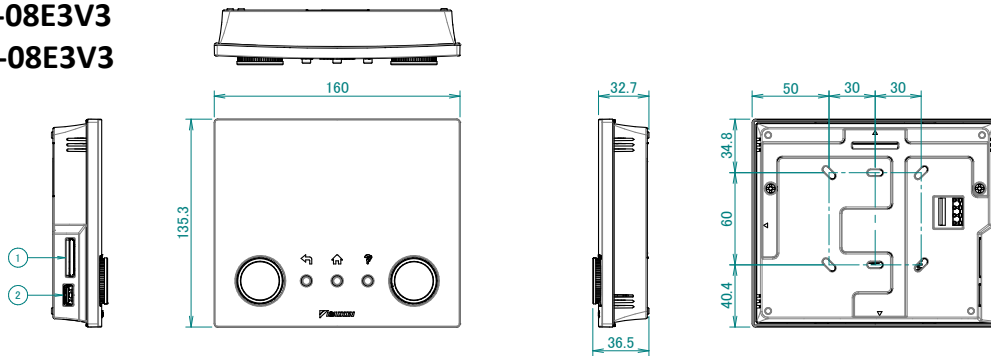
- COP_{DHW} Domestic hot water COP According to EN16147
- η_{wh} η_{wh} (Water heating energy efficiency)
- AEC Annual energy consumption [kWh]

3D139368

7 Dimensional drawings

7 - 1 Dimensional Drawings

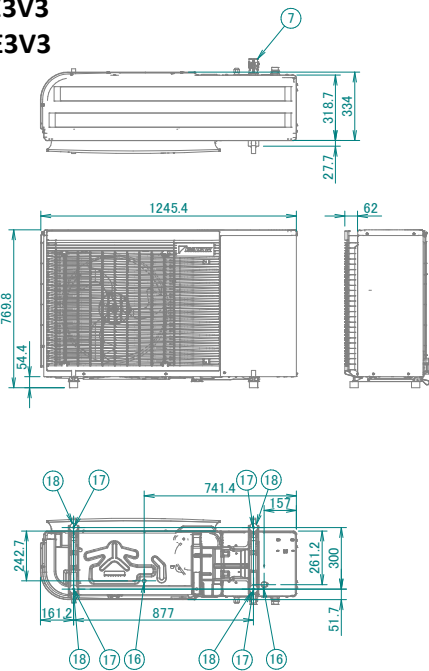
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3



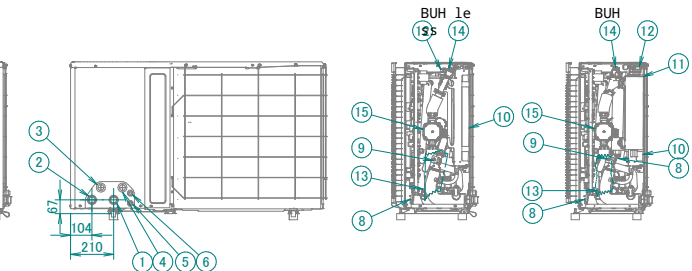
- ① USB Connector
- ② WLAN cartridge

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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

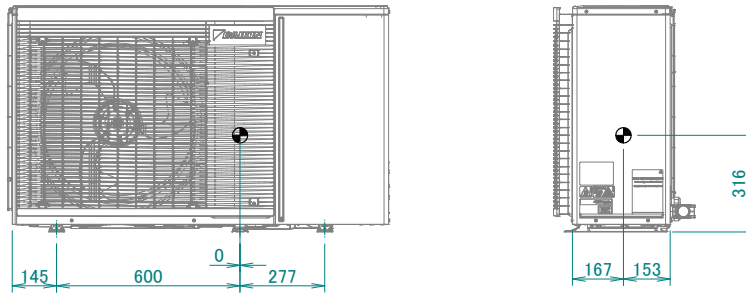
3D139356

8 Centre of gravity

8 - 1 Centre of Gravity

8

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







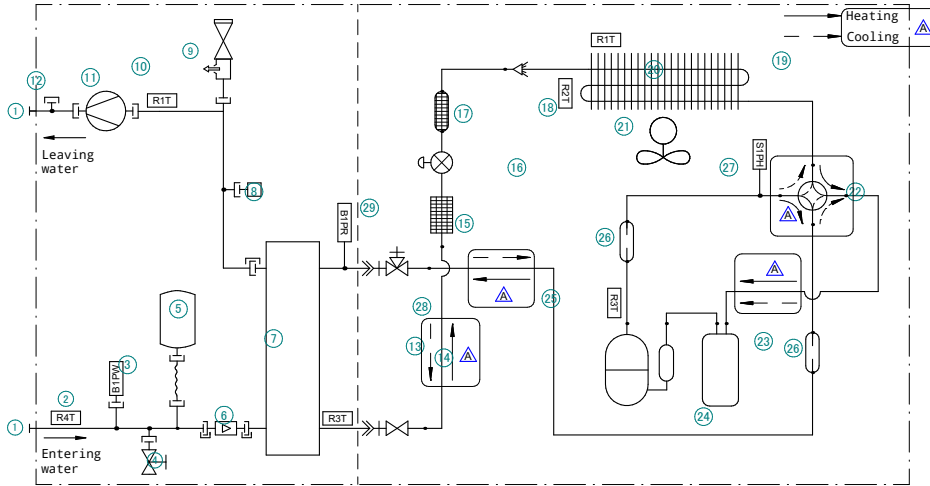
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9 Piping diagrams

9 - 1 Piping Diagrams

EBLA04-08EV3
EDLA04-08EV3





 Screw connection	 Brazed connection
 Quick coupling	 Flare connection

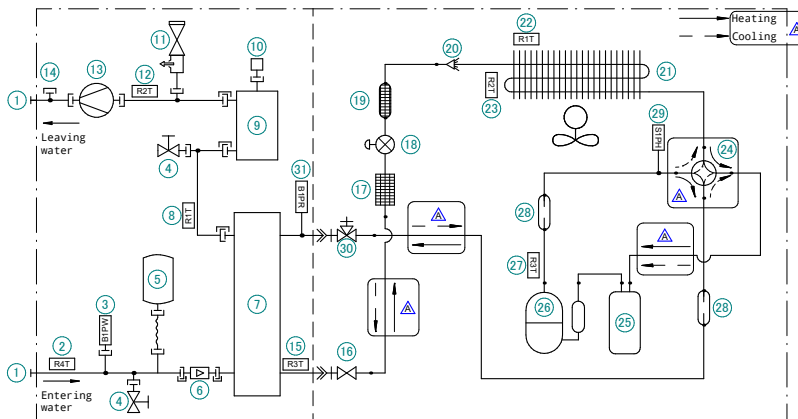


- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Screw connection -1" M 2 R4T- Inlet water thermistor 3 Space heating water pressure sensor 4 Drain valve water circuit 5 Expansion vessel 6 Flow sensor 7 Plate heat exchanger 8 Automatic air purge valve 9 Safety valve 10 R1T- Outlet water heat exchanger thermistor 11 Pump 12 Connection for optional flow switch 13 R3T- Refrigerant liquid side thermistor 14 Liquid stop valve 15 Filter | <ul style="list-style-type: none"> 16 Electronic expansion valve 17 Muffer with filter 18 Distributor 19 Heat exchanger 20 R1T- Thermistor (outdoor air) 21 R2T- Thermistor (heat exchanger) 22 4-way valve 23 Accumulator 24 Compressor 25 R3T- Thermistor (discharge) 26 Muffer 27 High pressure switch 28 Gas stop valve with service port 29 Refrigerant pressure sensor |
|---|--|

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EBLA04-08E3V3
EDLA04-08E3V3

 Screw connection	 Brazed connection
 Quick coupling	 Flare connection



- | | |
|---|---|
| <ul style="list-style-type: none"> 1 Screw connection -1" M 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 9 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"> 16 Liquid stop valve 17 Filter 18 Electronic expansion valve 19 Muffer 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 Muffer 29 High pressure switch 30 Gas stop valve with service port 31 Refrigerant pressure sensor |
|---|---|

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10 Wiring diagrams

10 - 1 Notes & Legend

10

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

(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

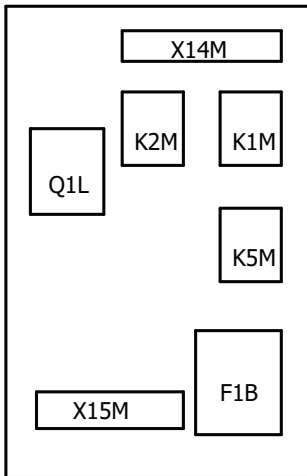


: PCB

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

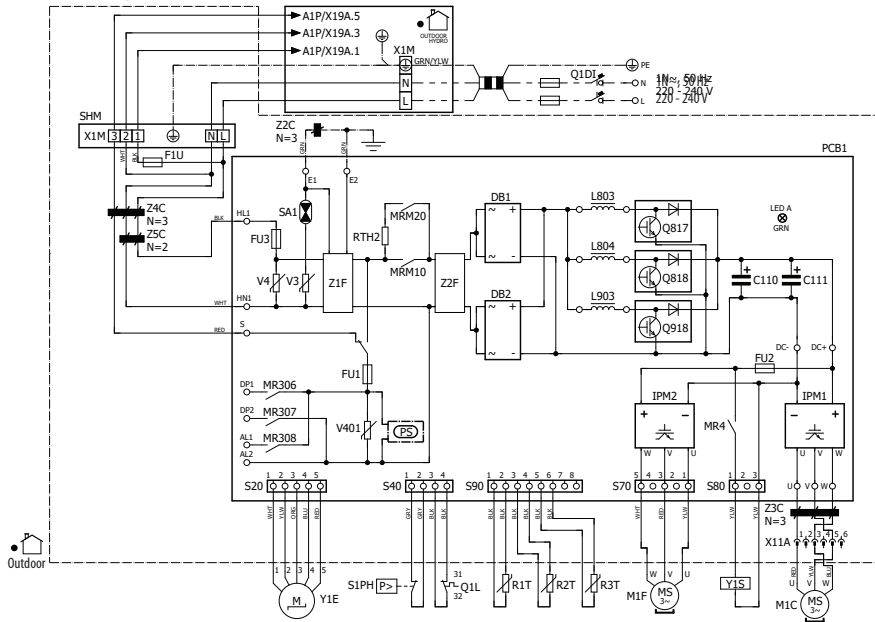
4D134955D

10 Wiring diagrams

10 - 2 Compressor - Single phase

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

(1) Connection diagram



(2) Notes

- ⊙ : Connection
- X1M : Main terminal
- : Earth wiring
- - - : Field supply
- [] : Option
- [] : switch box
- [] : PCB
- [] : Wiring depending on model
- ⊕ : Protective earth
- [] : Field wire

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

4D139355D

10 Wiring diagrams

10 - 3 Hydro Module - Notes & Legend

10

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

NOTES to go through before starting the unit

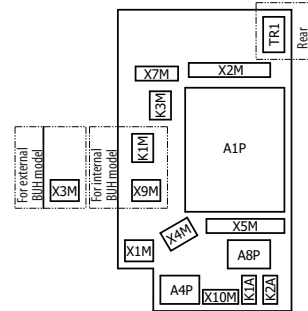
- X1M : Main terminal
 - X2M : Field wiring terminal for AC
 - X3M : External backup heater terminal
 - X4M : Booster heater power supply terminal
 - X5M : Field wiring terminal for DC
 - X9M : Internal backup heater power supply terminal
 - X10M : Smartgrid terminal
 - : Earth wiring
 - - - - - : Field 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
 - BZ mixing kit
- 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)
A30P	* BZ mixing kit PCB
B1L	flow sensor
B1PR	refrigerant pressure sensor
B1PW	water pressure sensor
CN* (A4P)	* connector
DS1 (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 5 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

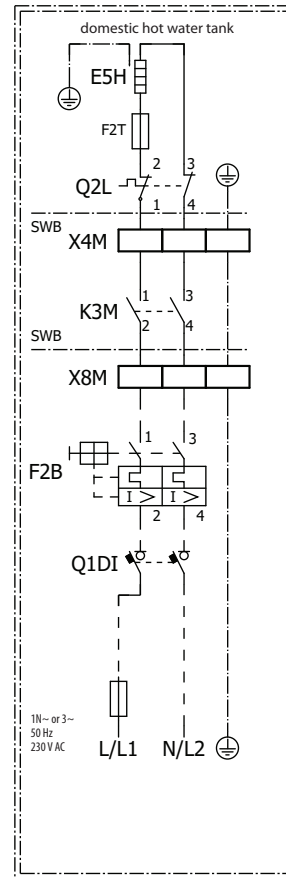
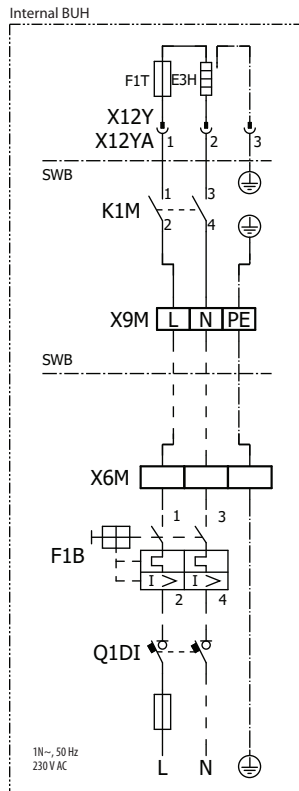
Part n°	Description
P1M	MMI display
PC (A15P)	* power circuit
PHC1 (A4P)	* optocoupler input circuit
Q1L	thermal protector backup heater
Q2L	thermal protector booster heater
Q4L	# safety thermostat
Q*DI	# earth leakage circuit breaker
R1H (A2P)	* humidity sensor
R1T (A1P)	outlet water heat exchanger 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
SS1 (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
4D139355D

10 Wiring diagrams

10 - 4 Hydro Module - Power Supply, Back-up Heater

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



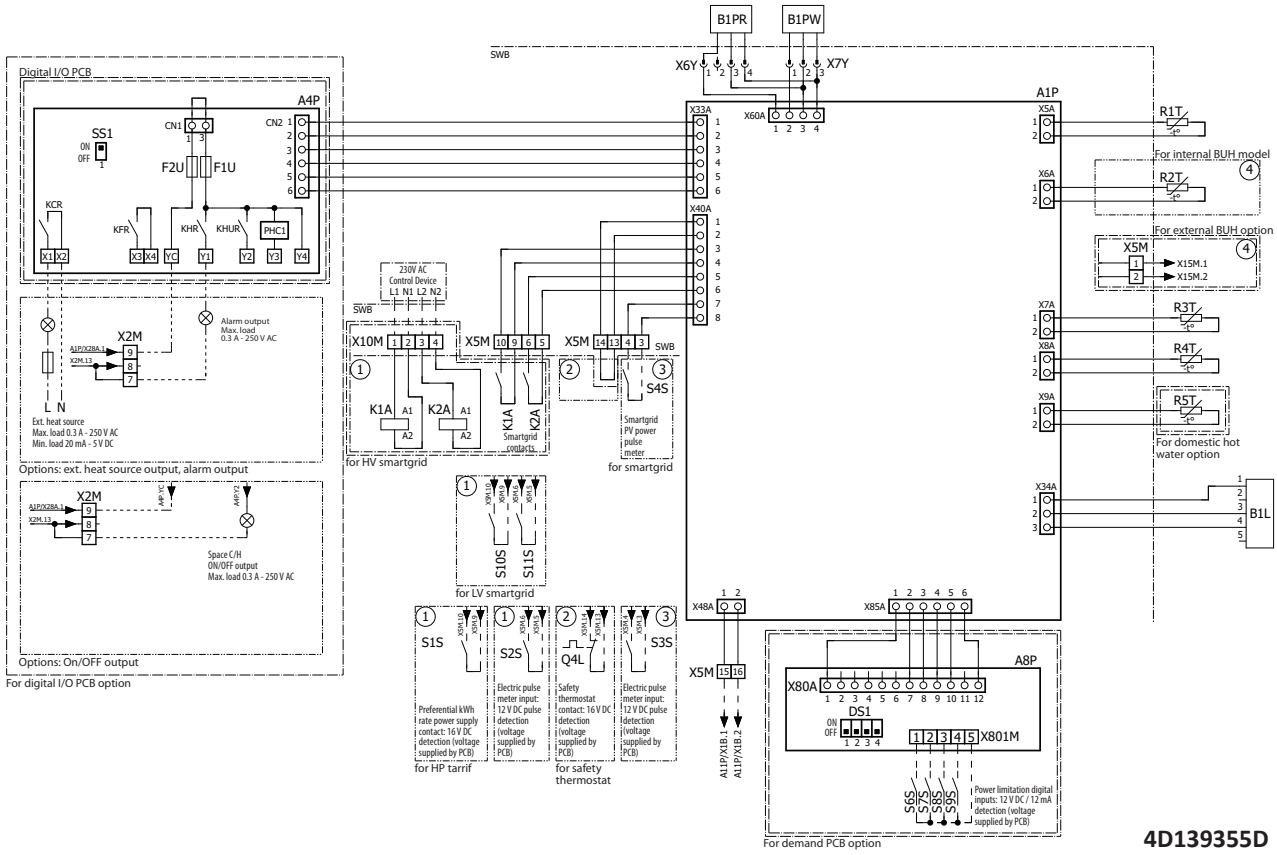
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10 Wiring diagrams

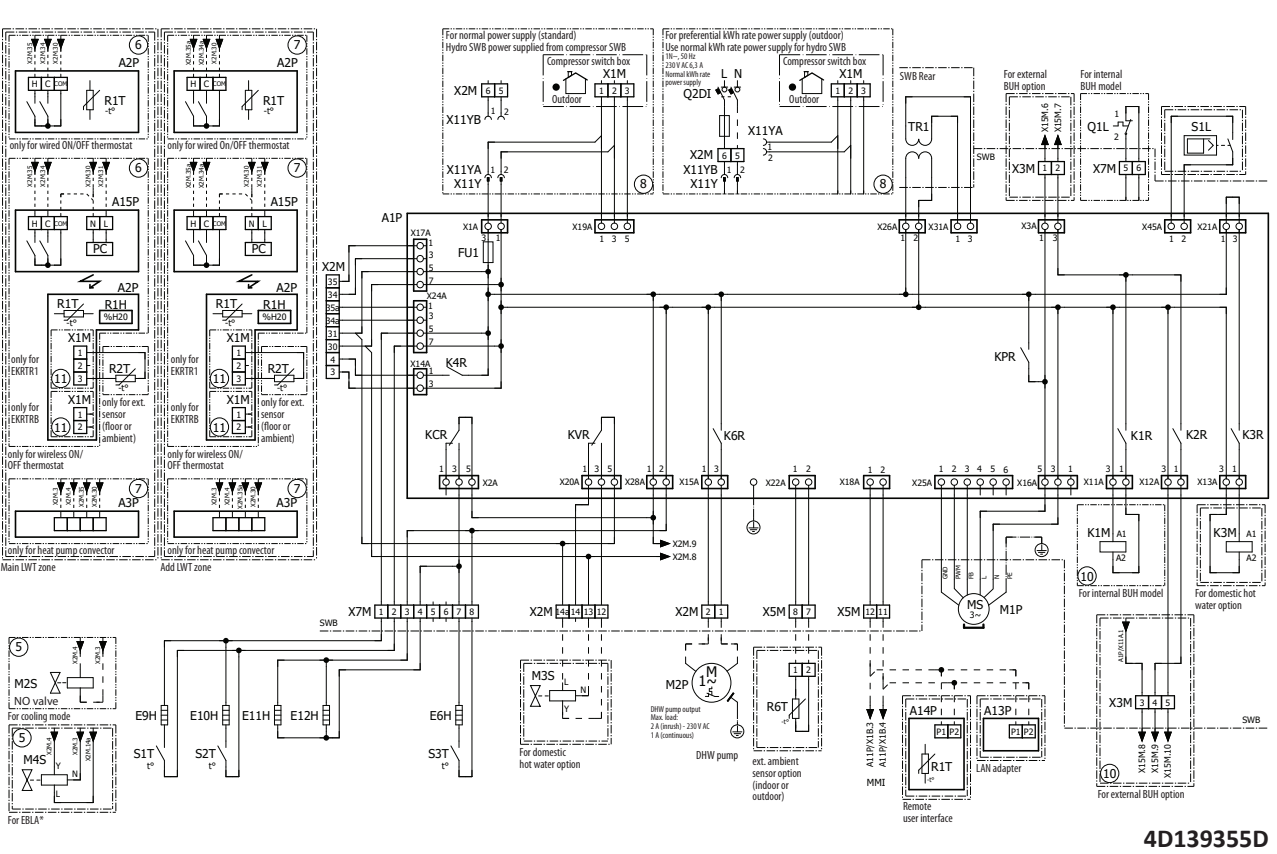
10 - 5 Hydro Module - Control Circuit

10

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

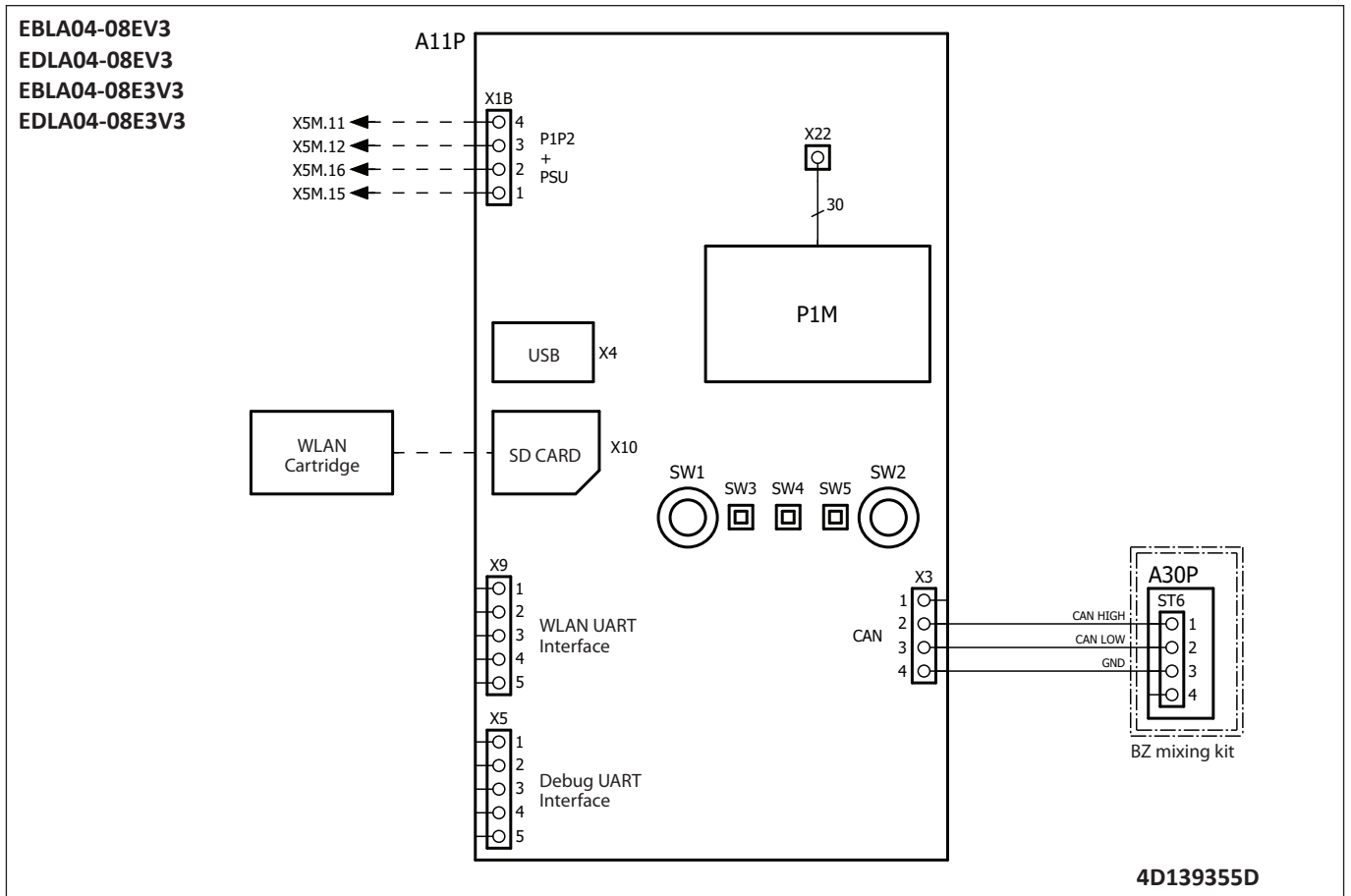


EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



10 Wiring diagrams

10 - 5 Hydro Module - Control Circuit



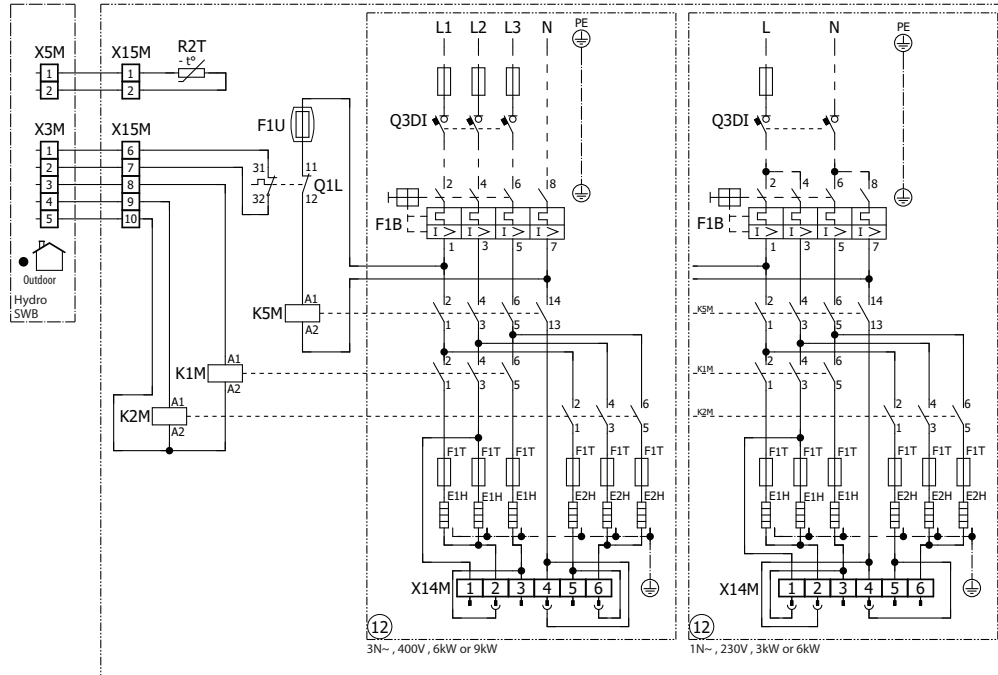
10 Wiring diagrams

10 - 6 External back-up heater - Option Circuit

10

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

(1) Connection diagram



BUH Option (EKLBHCB6W1)

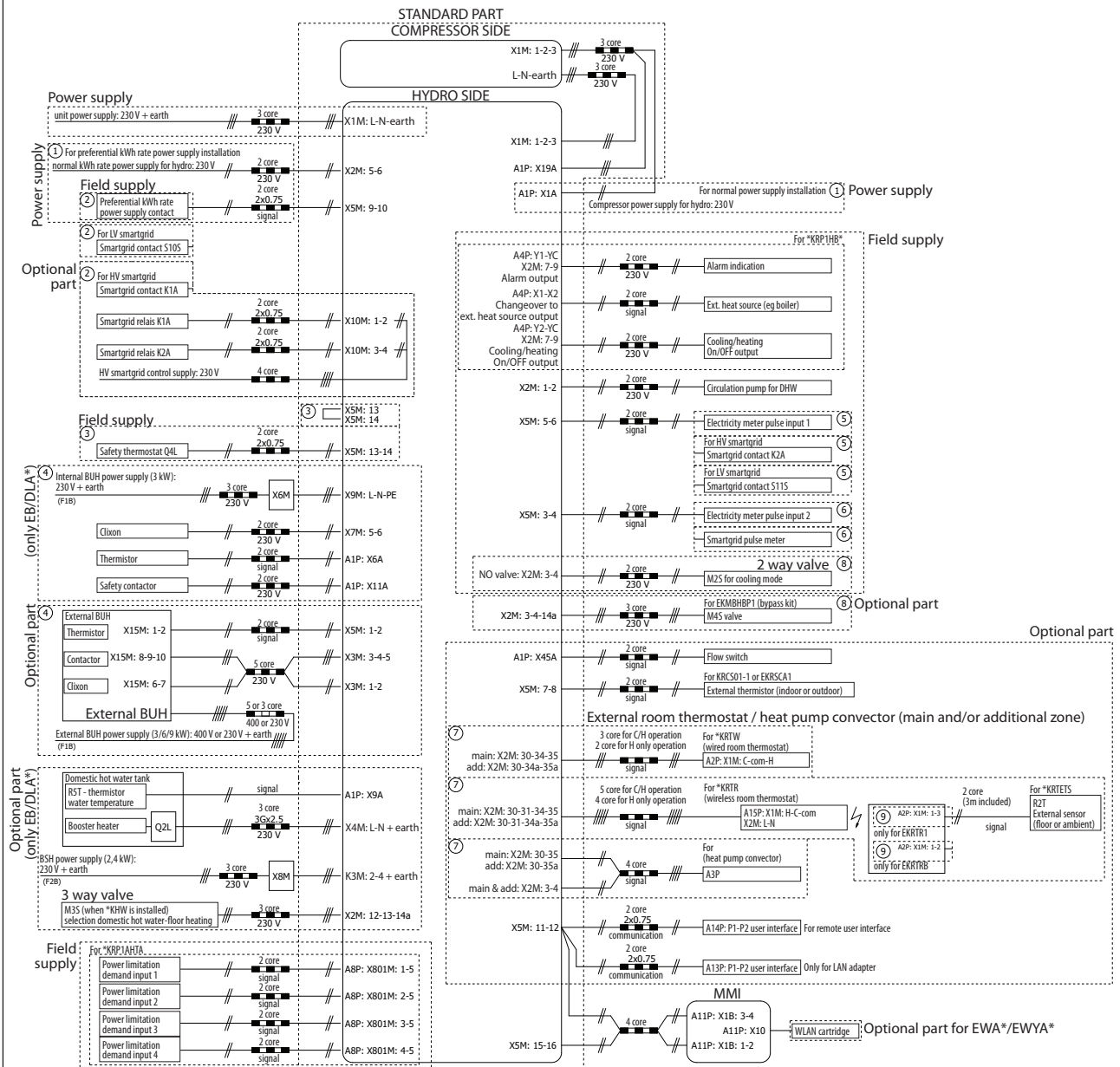
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11 External connection diagrams

11 - 1 External Connection Diagrams

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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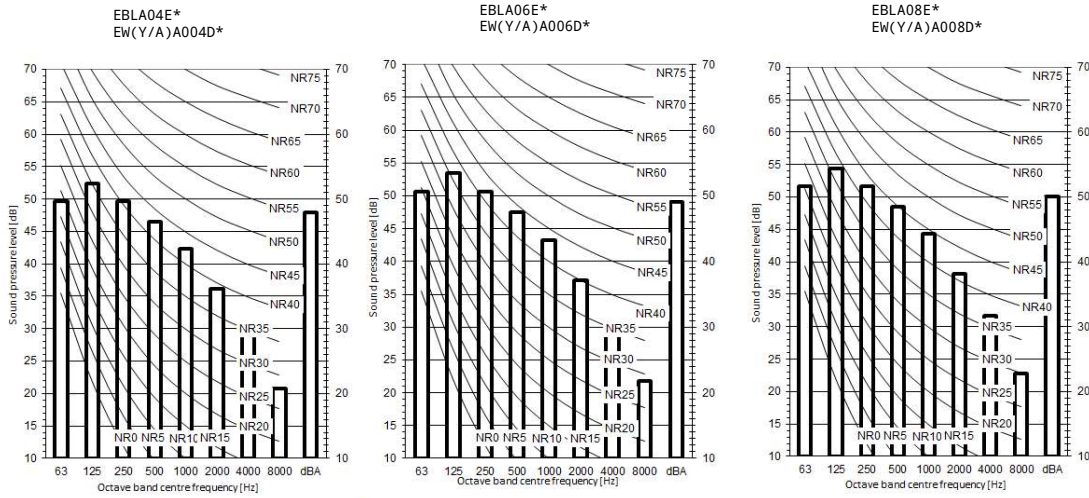
12 Sound data

12 - 1 Sound Pressure Spectrum - Cooling

12

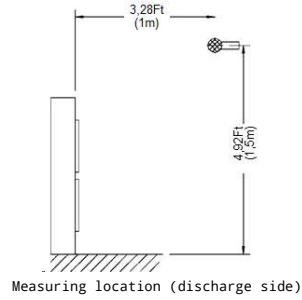
EBLA04-08EV3
EBLA04-08E3V3

Cooling



Notes

- 1.Data is valid at free field condition.
- 2.Data is valid in a semi-anechoic chamber
- 3.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.



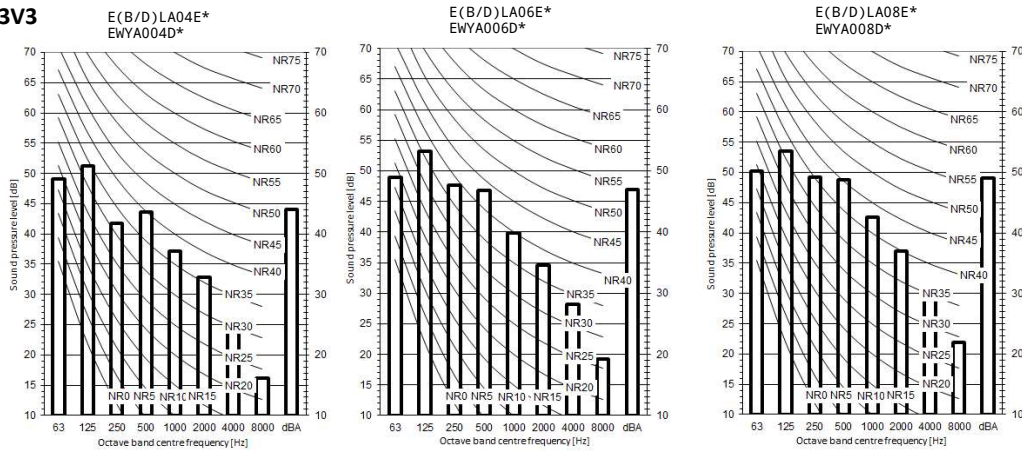
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12 Sound data

12 - 2 Sound Pressure Spectrum - Heating

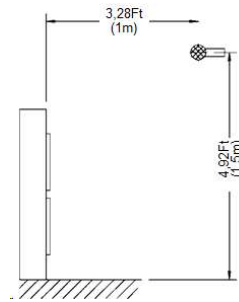
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

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

12 Sound data

12 - 3 Sound Pressure Spectrum Quiet Mode

12

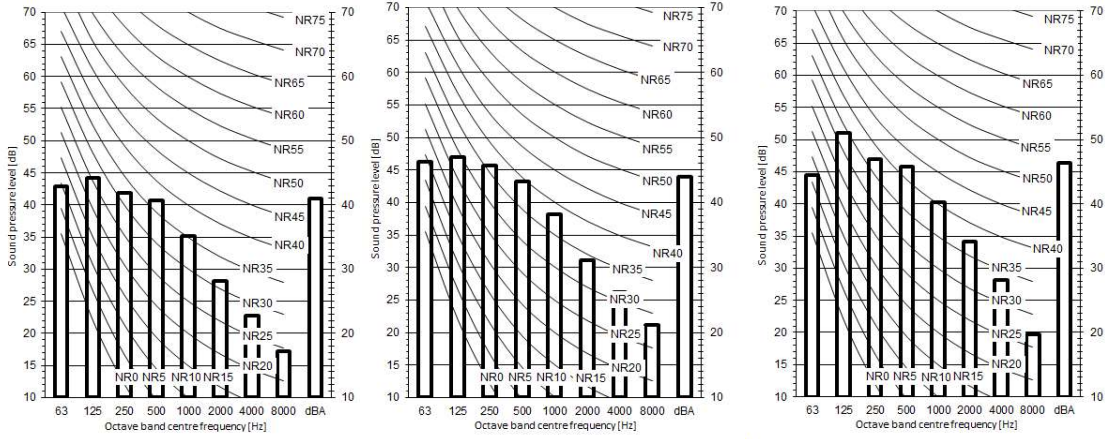
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

Heating more quiet mode

E(B/D)LA04E*
EWYA004D*

E(B/D)LA06E*
EWYA006D*

E(B/D)LA08E*
EWYA008D*



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)

3D140606

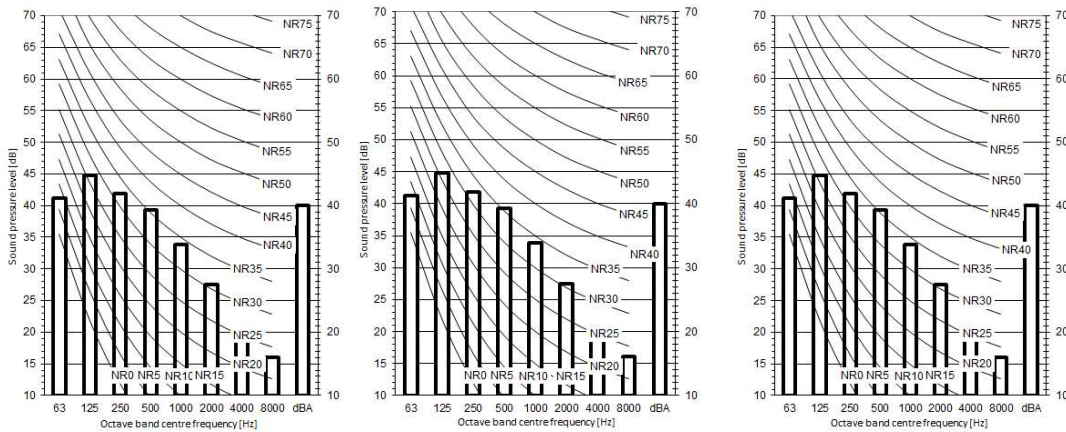
EBLA04-08EV3
EDLA04-08EV3
EBLA04-08E3V3
EDLA04-08E3V3

Heating most quiet mode

E(B/D)LA04E*
EWYA004D*

E(B/D)LA06E*
EWYA006D*

E(B/D)LA08E*
EWYA008D*



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.

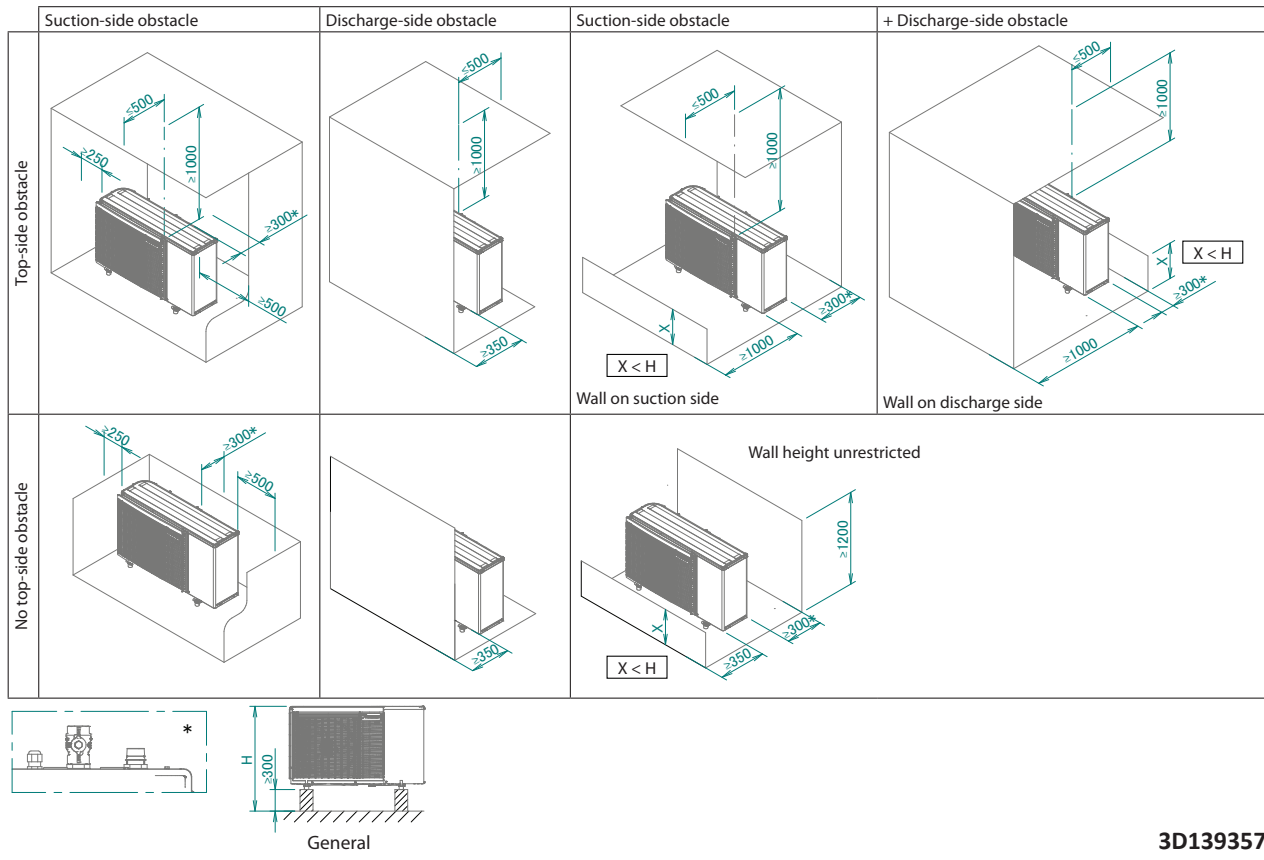
Measuring location (discharge side)

3D140607

13 Installation

13 - 1 Installation Method

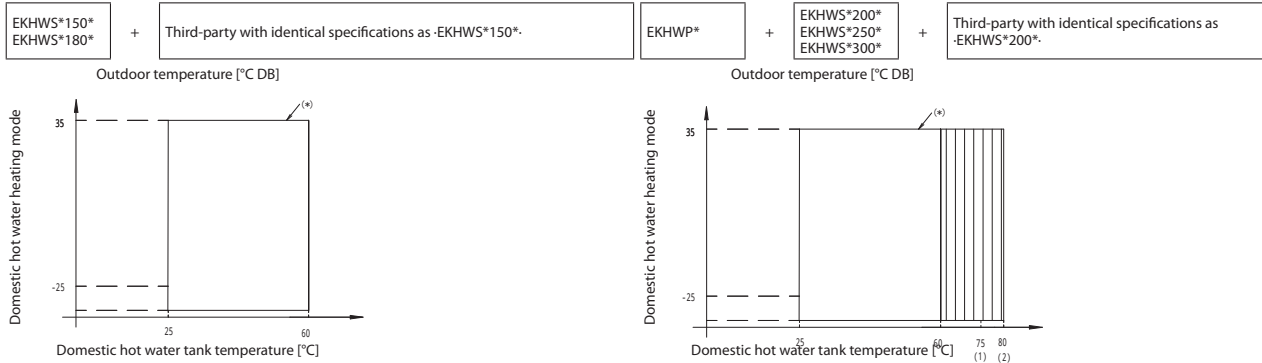
EBLA04-08EV3 / EDLA04-08EV3 / EBLA04-08E3V3 / EDLA04-08E3V3



14 Operation range

14 - 1 Operation Range

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



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 -EKHWS*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 -EKHWS*200*. Coil surface >1.8-m² and <3.7-m². Tank thermistor and booster heater above heat pump coil.

LEGEND
 ▨ Booster heater only operation (if a booster heater is part of the system)
 (1) Combination of EKHWS*
 (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.

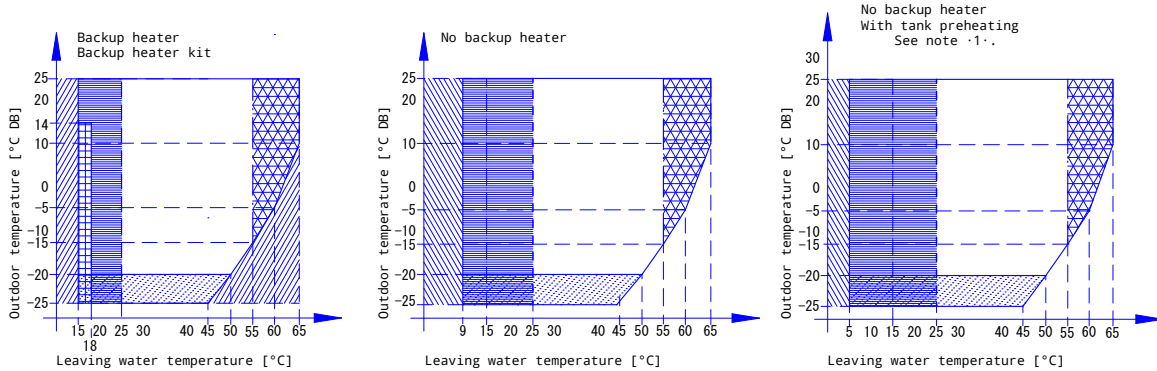
REMARK
 If the outdoor temperature < -20°C, then outdoor unit operation is possible, but with a possible capacity reduction.
 If the outdoor temperature < -25°C, the outdoor unit will stop.
 Indoor unit and backup heater operation will continue.

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 -EKHWS*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 -EKHWS*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

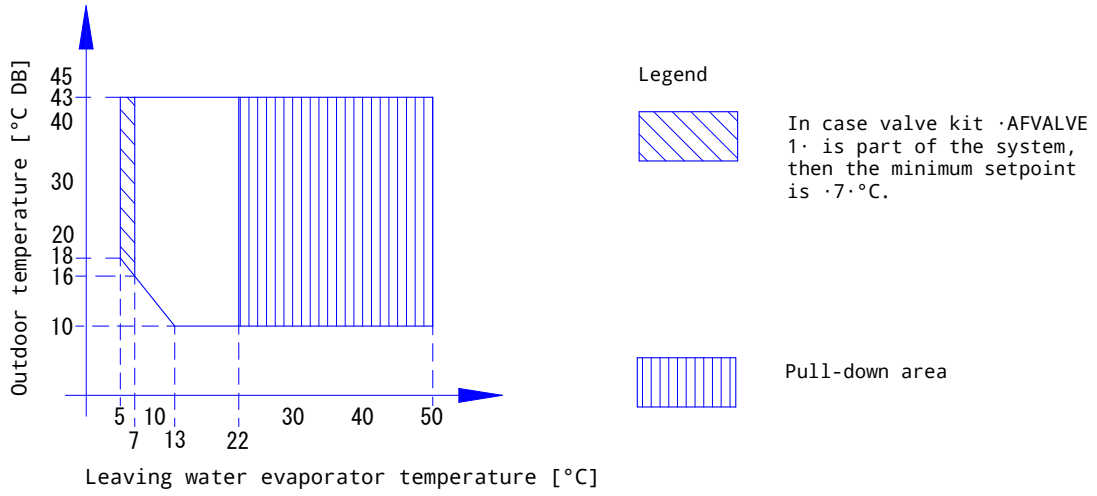
- Tank preheating
For details, see the installer reference guide.
- If negative ambient temperatures are expected, both in operation or at standstill, take adequate countermeasures against freezing.
For more information, refer to the installation manual.
- In restricted power supply mode, the outdoor unit and backup heater can only operate separately.

3D139428A

14 Operation range

14 - 1 Operation Range

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.

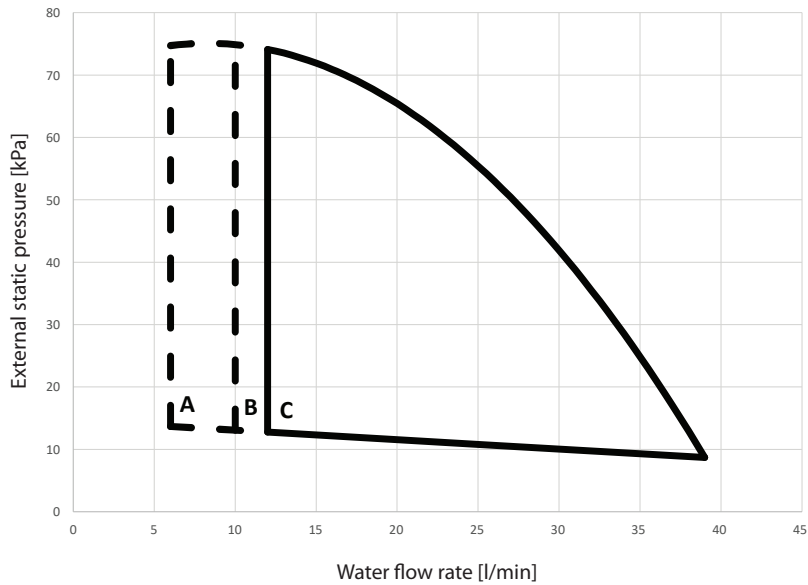
3D139430

15 Hydraulic performance

15 - 1 Static Pressure Drop Unit

15

EBLA04-08EV3
EDLA04-08EV3



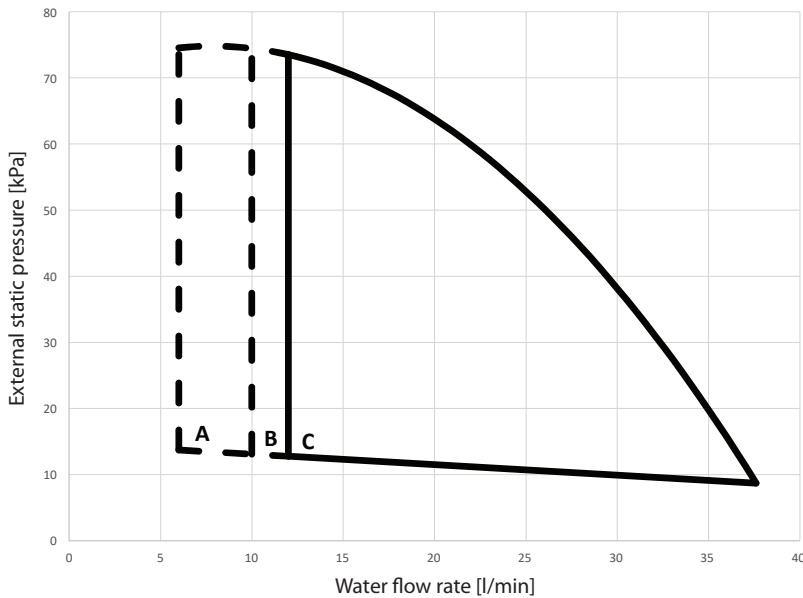
A = Minimum water flow rate during normal operation
 B = Minimum water flow rate during Cooling operation
 C = Minimum water flow rate during Defrost and Backup heater operation

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

4D139364

EBLA04-08E3V3
EDLA04-08E3V3

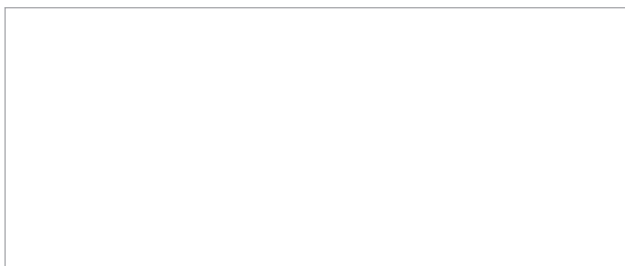


A = Minimum water flow rate during normal operation
 B = Minimum water flow rate during Cooling operation
 C = Minimum water flow rate during Defrost and Backup heater operation

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



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06/2022



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