

Heating

Technical Data

E(B-D)LQ011-016CV3_CW1,
EKCB-CV3,
EK2CB-CV3,
EKMBUHC3V3,
EKMBUHC9W1



> EBLQ011CAV3
> EBLQ011CAW1
> EDLQ011CAV3
> EDLQ011CAW1
> EBLQ014CAV3
> EBLQ014CAW1

> EDLQ014CAV3
> EDLQ014CAW1
> EBLQ016CAV3
> EBLQ016CAW1
> EDLQ016CAV3
> EDLQ016CAW1

> EKCB07CAV
> EK2CB07CA
> EKMBUHCA
> EKMBUHCA

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E(B-D)LQ011-016CV3_CW1

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1 Features

1 - 1 E(B-D)LQ011-016CV3_CW1

- Monobloc all-in-one concept including hydraulic parts
- Separate indoor wiring center (control box)
- Separate back-up heater kit
- LAN Adapter connection
- Possible to combine with domestic hot water
- Energy efficient heating only system based on air-to-water heat pump technology
- A++ heating energy label (from G to A++)

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1 Features

1 - 2 EKCB-CV3

- Connectable to options like domestic hot water tank, heat pump convector, room thermostat, back up heater kit, remote indoor sensor, electric meter, changeover to external heat source, etc.



1 Features

1 - 3 EK2CB-CV3

- Connectable to options like remote indoor sensor, electric meter, changeover to external heat source, etc

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2 Specifications

2-1 Technical Specifications				EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1	
Space heating - Average climate water outlet 55°C	General	Annual energy consumption	kWh	6,260				
		Prated at -10°C	kW	10				
		Qhe Annual energy consumption (GCV)	Gj	23				
		SCOP		3.09				
		Seasonal space heating eff. class		A+				
		ηs,h	%	120				
		A Condition (-7°CDB/-8°CWB)	Cd _h (Degradation heating)			1.0		
	COP _d			1.99				
	Pd _h		kW	8.8				
	PER _d		%	79.6				
	B Condition (2°CDB/1°CWB)	Cd _h (Degradation heating)			1.0			
		COP _d			3.24			
		Pd _h	kW	5.3				
		PER _d	%	130.0				
	C Condition (7°CDB/6°CWB)	Cd _h (Degradation heating)			1.0			
		COP _d			4.31			
		Pd _h	kW	4.5				
		PER _d	%	172.0				
	D Condition (12°CDB/11°CWB)	Cd _h (Degradation heating)			0.9			
		COP _d			6.41			
		Pd _h	kW	5.4				
		PER _d	%	256.0				
	Tol (temperature operating limit)	COP _d			1.79			
		Pd _h	kW	9.1				
		PER _d	%	71.6				
		TOL	°C	-10				
		WTOL	°C	55				
	Rated heat output supplementary capacity	P _{sup} (at T _{design} -10°C)	kW	0.9				
	T _{biv} (bivalent temperature)	COP _d			1.99			
		Pd _h	kW	8.8				
PER _d		%	79.6					
T _{biv}		°C	-7					

2 Specifications

2-1 Technical Specifications				EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1
Space heating - Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,380			
		Prated at -10°C	kW	11			
		Qhe Annual energy consumption (GCV)	Gj	19			
		SCOP		3.98			
		Seasonal space heating eff. class		A++			
		ηs,h	%	156			
		A Condition (-7°CDB/-8°CWB)	COPd		2.63		
	Pdh		kW	8.9			
	PERd		%	105.0			
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0			
		COPd		4.05			
		Pdh	kW	6.0			
		PERd	%	162.0			
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		0.9			
		COPd		6.77			
		Pdh	kW	5.7			
		PERd	%	271.0			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		0.9			
		COPd		8.97			
		Pdh	kW	6.5			
		PERd	%	359.0			
	Tol (temperature operating limit)	COPd		2.34			
		Pdh	kW	8.8			
		PERd	%	93.6			
TOL		°C	-10				
WTOL		°C	35				
Tbiv (bivalent temperature)	COPd		2.82				
	Pdh	kW	9.1				
	PERd	%	113.0				
	Tbiv	°C	-5				
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	2.4				
Space heating - Cold climate water outlet 55°C	General	Annual energy consumption	kWh	6,740			
		Prated at -22°C	kW	7			
		Qhe Annual energy consumption (GCV)	Gj	24			
		ηs,h	%	95			
Space heating - Cold climate water outlet 35°C	General	Annual energy consumption	kWh	6,430			
		Prated at -22°C	kW	10			
		Qhe Annual energy consumption (GCV)	Gj	23			
		ηs,h	%	148			
Space heating - Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,630			
		Prated at 2°C	kW	8			
		Qhe Annual energy consumption (GCV)	Gj	9			
		ηs,h	%	125			

2 Specifications

2-1 Technical Specifications				EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1
Space heating - Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,950			
		Prated at 2°C	kW	9			
		Qhe Annual energy consumption (GCV)	Gj	7			
		ηs,h	%	192			
Space heating general	Air to water unit	Rated airflow (outdoor)	m³/h	5,400			
		Other	Capacity control		Inverter		
	Cdh (Degradation heating)			1.0			
	Pck (Crankcase heater mode)		kW	0.055			
	Poff (Off mode)		kW	0.055			
	Psb (Standby mode)		kW	0.055			
Pto (Thermostat off)	kW	0.057					
Heating capacity	Nom.		kW	11.2 (1) / 11.0 (2)			
	Max.		kW	8.60 (3) / 8.60 (4)			
Cooling capacity	Nom.		kW	12.4 (1) / 11.6 (2)			
Capacity control	Method			Inverter controlled			
Power input	Heating	Nom.	kW	2.43 (1) / 3.10 (2)			
Power input	Cooling	Nom.	kW	3.18 (1) / 5.09 (2)			
COP				4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4)			
EER				2.63 (1) / 4.20 (2)		-	
SEER				3.85		-	
Casing	Colour			Ivory white			
	Material			Painted galvanized steel plate			
Dimensions	Unit	Height	mm	1,348			
		Width	mm	1,160			
		Depth	mm	380			
	Packed unit	Height	mm	1,490			
		Width	mm	1,277			
		Depth	mm	450			
Weight	Unit		kg	151	154	151	154
	Packed unit		kg	165	168	165	168
Packing	Material			Carton / PE wrapping foil / Wood (pallet)			
	Weight			kg	15		
Heat exchanger	Length		mm	857			
	Rows	Quantity		2			
	Fin pitch		mm	1.40			
	Passes	Quantity		7			
	Face area		m²	1.13			
	Stages	Quantity		60			
	Empty tubeplate hole	Quantity		0			
	Tube type			ø8 Hi-XSS			
	Fin	Type		WF fin			
		Treatment		Anti-corrosion treatment (PE)			
Pump	Type			DC motor			
	Quantity			1			
	Nominal ESP unit	Heating	kPa	62.3			
	Power input			W	140		
Expansion vessel	Volume		l	10			
	Max. water pressure		bar	3			
	Pre pressure		bar	1			

2 Specifications

2-1 Technical Specifications					EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1	
Fan	Type				Propeller fan				
	Quantity				2				
	Discharge direction				Horizontal				
	Air flow rate	Heating	High	m ³ /min	90.0				
Cooling		High	m ³ /min	96.0				-	
Fan motor	Quantity				2				
	Model				Brushless DC motor				
	Speed	Steps			8				
		Heating	Nom.	rpm	740				
		Cooling	Nom.	rpm	780				-
	Output			W	70				
Drive				Direct drive					
Fan motor 2	Speed	Heating	Nom.	rpm				740	
		Cooling	Nom.	rpm	780				-
	Drive				Direct drive				
Compressor	Quantity				1				
	Model				JT100G-VD@B2	JT1G-VDYR@B2	JT100G-VD@B2	JT1G-VDYR@B2	
	Type				Hermetically sealed scroll compressor				
	Output			W	2,200.0				
	Starting method				Inverter driven				
Operation range	Heating	Ambient	Min.	°CWB				-25 (9)	
			Max.	°CWB				35 (9)	
		Water side	Min.	°C				25 (9)	
			Max.	°C				55 (9)	
	Cooling	Ambient	Min.	°CDB	10				-
			Max.	°CDB	46				-
		Water side	Min.	°C	5				-
			Max.	°C	22				-
	Domestic hot water	Ambient	Min.	°CDB				-25	
			Max.	°CDB				35	
		Water side	Min.	°C				25	
			Max.	°C				80	
Water side Heat exchanger	Type				Brazed plate				
	Quantity				1				
	Water volume			l	1.00				
	Water flow rate	Max.		l/min	46.0				
	Insulation material				Elastomeric foam				
Refrigerant	Type				R-410A				
	GWP				2,087.5				
	Charge	kg			3.40				
		TCO _{2eq}			7.10				
	Control				Expansion valve (electronic type)				
	Circuits	Quantity			1				
Refrigerant oil	Type				Daphne FVC68D				
	Charged volume			l	1.5				
Sound power level	Heating	Nom.		dBA	64 (5)				
	Cooling	Nom.		dBA	64 (6)				
Sound pressure level	Heating	Nom.		dBA	51 (7)				
	Cooling	Nom.		dBA	50 (7)				
	Night quiet mode	Heating			dBA	42 (7)			
		Cooling			dBA	45 (7)			
Defrost method				Reversed cycle					
Defrost control				Sensor for outdoor heat exchanger temperature					
Water filter	Diameter perforations			mm	1.0				
	Material				Copper - brass - stainless steel				

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2 Specifications

2-1 Technical Specifications			EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1
Water circuit	Piping connections diameter	inch	G 1" (male)			
	Safety valve	bar	3			
	Manometer		No			
	Drain valve / fill valve		Yes			
	Shut off valve		Yes			
	Air purge valve		Yes			
	Total water volume	l	1.8 (8)			
Safety devices	Item	01	High pressure switch			
		02	Fan thermal protector			
		03	Fuse			
PED	Category		Category I			
	Most critical part	Name	Compressor			
		Ps*V	Bar*l	164		
Heater capacity	Step 1	kW	3			
General	Supplier/ Manufacturer details	Name and address	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
		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	Yes			
		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)	64			
Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825			

2 Specifications

2-2 Technical Specifications				EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1
Space heating - Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,900			
		Prated at -10°C	kW	13			
		Qhe Annual energy consumption (GCV)	Gj	28			
		SCOP		3.16			
		Seasonal space heating eff. class		A+			
		ηs,h	%	123			
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0		
		COPd		1.76			
		Pdh	kW	10.0			
		PERd	%	70.4			
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0			
		COPd		3.55			
		Pdh	kW	6.8			
		PERd	%	142.0			
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0			
		COPd		4.22			
		Pdh	kW	4.7			
		PERd	%	169.0			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		0.9			
		COPd		5.44			
		Pdh	kW	5.3			
		PERd	%	218.0			
	Tol (temperature operating limit)	COPd		1.75			
		Pdh	kW	12.2			
		PERd	%	70.0			
		TOL	°C	-10			
		WTOL	°C	55			
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	0.6			
	Tbiv (bivalent temperature)	COPd		1.92			
		Pdh	kW	11.0			
PERd		%	76.8				
Tbiv		°C	-6				

2 Specifications

2-2 Technical Specifications				EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1	
Space heating - Average climate water outlet 35°C	General	Annual energy consumption	kWh	7,250				
		Prated at -10°C	kW	15				
		Qhe Annual energy consumption (GCV)	Gj	26				
		SCOP		3.90				
		Seasonal space heating eff. class		A++				
		ηs,h	%	153				
	A Condition (-7°CDB/-8°CWB)	COPd			2.63			
		Pdh	kW	10.7				
		PERd	%	105.0				
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0			
		COPd			4.07			
		Pdh	kW	7.7				
		PERd	%	163.0				
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0			
		COPd			5.71			
		Pdh	kW	5.1				
		PERd	%	228.0				
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			0.9			
		COPd			6.71			
		Pdh	kW	5.2				
		PERd	%	268.0				
	Tol (temperature operating limit)	COPd			2.60			
		Pdh	kW	12.6				
		PERd	%	104.0				
TOL		°C	-10					
WTOL		°C	35					
Tbiv (bivalent temperature)	COPd			2.83				
	Pdh	kW	11.6					
	PERd	%	113.0					
	Tbiv	°C	-5					
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	1.9					
Space heating - Cold climate water outlet 55°C	General	Annual energy consumption	kWh	7,870				
		Prated at -22°C	kW	8				
		Qhe Annual energy consumption (GCV)	Gj	28				
		ηs,h	%	96				
Space heating - Cold climate water outlet 35°C	General	Annual energy consumption	kWh	8,170				
		Prated at -22°C	kW	12				
		Qhe Annual energy consumption (GCV)	Gj	29				
		ηs,h	%	141				
Space heating - Warm climate water outlet 55°C	General	Annual energy consumption	kWh	3,270				
		Prated at 2°C	kW	10				
		Qhe Annual energy consumption (GCV)	Gj	12				
		ηs,h	%	135				

2 Specifications

2-2 Technical Specifications				EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1
Space heating - Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,350			
		Prated at 2°C	kW	11			
		Qhe Annual energy consumption (GCV)	Gj	8			
		ηs,h	%	199			
Space heating general	Air to water unit	Rated airflow (outdoor)	m³/h	5,400			
	Other	Capacity control		Inverter			
		Cdh (Degradation heating)		1.0			
		Pck (Crankcase heater mode)	kW	0.055			
		Poff (Off mode)	kW	0.055			
		Psb (Standby mode)	kW	0.055			
Pto (Thermostat off)	kW	0.057					
Heating capacity	Nom.		kW	14.5 (1) / 13.6 (2)			
	Max.		kW	10.60 (3) / 10.80 (4)			
Cooling capacity	Nom.		kW	12.8 (1) / 12.6 (2)			
Capacity control	Method			Inverter controlled			
Power input	Heating	Nom.	kW	3.37 (1) / 4.10 (2)			
Power input	Cooling	Nom.	kW	3.16 (1) / 5.14 (2)			
COP				4.30 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4)			
EER				4.05 (1) / 2.45 (2)		-	
SEER				3.89		-	
Casing	Colour		Ivory white				
	Material		Painted galvanized steel plate				
Dimensions	Unit	Height	mm	1,348			
		Width	mm	1,160			
		Depth	mm	380			
	Packed unit	Height	mm	1,490			
		Width	mm	1,277			
		Depth	mm	450			
Weight	Unit		kg	151	154	151	154
	Packed unit		kg	165	168	165	168
Packing	Material			Carton / PE wrapping foil / Wood (pallet)			
	Weight			kg	15		
Heat exchanger	Length		mm	857			
	Rows	Quantity		2			
	Fin pitch		mm	1.40			
	Passes	Quantity		7			
	Face area		m²	1.13			
	Stages	Quantity		60			
	Empty tubeplate hole	Quantity		0			
	Tube type			ø8 Hi-XSS			
	Fin	Type		WF fin			
		Treatment		Anti-corrosion treatment (PE)			
Pump	Type			DC motor			
	Quantity			1			
	Nominal ESP unit	Heating	kPa	44.1			
	Power input			W	140		
Expansion vessel	Volume		l	10			
	Max. water pressure		bar	3			
	Pre pressure		bar	1			

2 Specifications

2-2 Technical Specifications					EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1	
Fan	Type				Propeller fan				
	Quantity				2				
	Discharge direction				Horizontal				
	Air flow rate	Heating	High	m ³ /min	90.0				
Cooling		High	m ³ /min	100.0				-	
Fan motor	Quantity				2				
	Model				Brushless DC motor				
	Speed	Steps			8				
		Heating	Nom.	rpm	750				
		Cooling	Nom.	rpm	780				-
	Output			W	70				
Drive				Direct drive					
Fan motor 2	Speed	Heating	Nom.	rpm	750				
		Cooling	Nom.	rpm	780				-
	Drive				Direct drive				
Compressor	Quantity				1				
	Model				JT100G-VD@B2	JT1G-VDYR@B2	JT100G-VD@B2	JT1G-VDYR@B2	
	Type				Hermetically sealed scroll compressor				
	Output			W	2,200.0				
	Starting method				Inverter driven				
Operation range	Heating	Ambient	Min.	°CWB	-25 (9)				
			Max.	°CWB	35 (9)				
		Water side	Min.	°C	25 (9)				
			Max.	°C	55 (9)				
	Cooling	Ambient	Min.	°CDB	10				-
			Max.	°CDB	46				-
		Water side	Min.	°C	5				-
			Max.	°C	22				-
	Domestic hot water	Ambient	Min.	°CDB	-25				
			Max.	°CDB	35				
		Water side	Min.	°C	25				
			Max.	°C	80				
Water side Heat exchanger	Type				Brazen plate				
	Quantity				1				
	Water volume			l	1.00				
	Water flow rate	Max.		l/min	46.0				
	Insulation material				Elastomeric foam				
Refrigerant	Type				R-410A				
	GWP				2,087.5				
	Charge	kg			3.40				
		TCO ₂ eq			7.10				
	Control				Expansion valve (electronic type)				
	Circuits	Quantity			1				
Refrigerant oil	Type				Daphne FVC68D				
	Charged volume			l	1.5				
Sound power level	Heating	Nom.		dBA	64 (5)				
	Cooling	Nom.		dBA	66 (6)				
Sound pressure level	Heating	Nom.		dBA	51 (7)				
	Cooling	Nom.		dBA	52 (7)				
	Night quiet mode	Heating			dBA	42 (7)			
		Cooling			dBA	45 (7)			
Defrost method				Reversed cycle					
Defrost control				Sensor for outdoor heat exchanger temperature					
Water filter	Diameter perforations			mm	1.0				
	Material				Copper - brass - stainless steel				

2 Specifications

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2-2 Technical Specifications			EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1
Water circuit	Piping connections diameter	inch	G 1" (male)			
	Safety valve	bar	3			
	Manometer		No			
	Drain valve / fill valve		Yes			
	Shut off valve		Yes			
	Air purge valve		Yes			
	Total water volume	l	1.8 (8)			
Safety devices	Item	01	High pressure switch			
		02	Fan thermal protector			
		03	Fuse			
PED	Category		Category I			
	Most critical part	Name	Compressor			
		Ps*V	Bar*l	164		
Heater capacity	Step 1	kW	3			
General	Supplier/ Manufacturer details	Name and address	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
		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	Yes			
		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)	64			
Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825			

2 Specifications

2-3 Technical Specifications			EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1	
Space heating - Average climate water outlet 55°C	General	Annual energy consumption	kWh	8,970			
		Prated at -10°C	kW	14			
		Qhe Annual energy consumption (GCV)	Gj	32			
		SCOP		3.06			
		Seasonal space heating eff. class		A+			
		ηs,h	%	119			
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
	COPd			1.78			
	Pdh		kW	12.2			
	PERd		%	71.2			
	B Condition (2°CDB/1°CWB)		Cdh (Degradation heating)			1.0	
		COPd			3.12		
		Pdh	kW	7.6			
		PERd	%	125.0			
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0		
		COPd			4.40		
		Pdh	kW	4.8			
		PERd	%	176.0			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			0.9		
		COPd			6.36		
		Pdh	kW	5.4			
		PERd	%	254.0			
	Tol (temperature operating limit)	COPd			1.71		
		Pdh	kW	13.3			
		PERd	%	68.4			
		TOL	°C	-10			
		WTOL	°C	55			
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	0.6			
	Tbiv (bivalent temperature)	COPd			1.78		
		Pdh	kW	12.2			
		PERd	%	71.2			
Tbiv		°C	-7				

2 Specifications

2

2-3 Technical Specifications				EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1	
Space heating - Average climate water outlet 35°C	General	Annual energy consumption	kWh	8,270				
		Prated at -10°C	kW	16				
		Qhe Annual energy consumption (GCV)	Gj	30				
		SCOP		3.80				
		Seasonal space heating eff. class		A+				
		ηs,h	%	149				
	A Condition (-7°CDB/-8°CWB)	COPd			2.33			
		Pdh	kW	12.4				
		PERd	%	93.2				
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0			
		COPd			3.74			
		Pdh	kW	8.6				
		PERd	%	150.0				
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0			
		COPd			6.77			
		Pdh	kW	5.7				
		PERd	%	271.0				
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			0.9			
		COPd			8.97			
		Pdh	kW	6.5				
		PERd	%	359.0				
	Tol (temperature operating limit)	COPd			2.05			
		Pdh	kW	11.7				
		PERd	%	82.0				
		TOL	°C	-10				
		WTOL	°C	35				
	Tbiv (bivalent temperature)	COPd			2.56			
Pdh		kW	12.1					
PERd		%	102.0					
Tbiv		°C	-4					
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	4.4					
Space heating - Cold climate water outlet 55°C	General	Annual energy consumption	kWh	8,580				
		Prated at -22°C	kW	9				
		Qhe Annual energy consumption (GCV)	Gj	31				
		ηs,h	%	98				
		Annual energy consumption	kWh	9,050				
Space heating - Cold climate water outlet 35°C	General	Prated at -22°C	kW	13				
		Qhe Annual energy consumption (GCV)	Gj	33				
		ηs,h	%	137				
		Annual energy consumption	kWh	3,420				
Space heating - Warm climate water outlet 55°C	General	Prated at 2°C	kW	10				
		Qhe Annual energy consumption (GCV)	Gj	12				
		ηs,h	%	136				
		Annual energy consumption	kWh	3,420				

2 Specifications

2-3 Technical Specifications				EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1
Space heating - Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,480			
		Prated at 2°C	kW	11			
		Qhe Annual energy consumption (GCV)	Gj	9			
		ηs,h	%	199			
Space heating general	Air to water unit	Rated airflow (outdoor)	m³/h	5,400			
	Other	Capacity control		Inverter			
		Cdh (Degradation heating)		1.0			
		Pck (Crankcase heater mode)	kW	0.055			
		Poff (Off mode)	kW	0.055			
		Psb (Standby mode)	kW	0.055			
Pto (Thermostat off)	kW	0.057					
Heating capacity	Nom.		kW	16.0 (1) / 15.2 (2)			
	Max.		kW	11.40 (3) / 10.90 (4)			
Cooling capacity	Nom.		kW	13.9 (1) / 13.6 (2)			
Capacity control	Method			Inverter controlled			
Power input	Heating	Nom.	kW	3.76 (1) / 4.66 (2)			
Power input	Cooling	Nom.	kW	3.56 (1) / 5.96 (2)			
COP				4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4)			
EER				3.90 (1) / 2.28 (2)		-	
SEER				3.90		-	
Casing	Colour			Ivory white			
	Material			Painted galvanized steel plate			
Dimensions	Unit	Height	mm	1,348			
		Width	mm	1,160			
		Depth	mm	380			
	Packed unit	Height	mm	1,490			
		Width	mm	1,277			
		Depth	mm	450			
Weight	Unit		kg	151	154	151	154
	Packed unit		kg	165	168	165	168
Packing	Material			Carton / PE wrapping foil / Wood (pallet)			
	Weight		kg	15			
Heat exchanger	Length		mm	857			
	Rows	Quantity		2			
	Fin pitch		mm	1.40			
	Passes	Quantity		7			
	Face area		m²	1.13			
	Stages	Quantity		60			
	Empty tubeplate hole	Quantity		0			
	Tube type			ø8 Hi-XSS			
	Fin	Type		WF fin			
		Treatment		Anti-corrosion treatment (PE)			
Pump	Type			DC motor			
	Quantity			1			
	Nominal ESP unit	Heating	kPa	29.3			
	Power input			W	140		
Expansion vessel	Volume		l	10			
	Max. water pressure		bar	3			
	Pre pressure		bar	1			

2 Specifications

2-3 Technical Specifications					EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1	
Fan	Type				Propeller fan				
	Quantity				2				
	Discharge direction				Horizontal				
	Air flow rate	Heating	High	m ³ /min	90.0				
Cooling		High	m ³ /min	97.0				-	
Fan motor	Quantity				2				
	Model				Brushless DC motor				
	Speed	Steps			8				
		Heating	Nom.	rpm	760				
		Cooling	Nom.	rpm	780				-
	Output			W	70				
Drive				Direct drive					
Fan motor 2	Speed	Heating	Nom.	rpm	760				
		Cooling	Nom.	rpm	780				-
	Drive				Direct drive				
Compressor	Quantity				1				
	Model				JT100G-VD@B2	JT1G-VDYR@B2	JT100G-VD@B2	JT1G-VDYR@B2	
	Type				Hermetically sealed scroll compressor				
	Output			W	2,200.0				
	Starting method				Inverter driven				
Operation range	Heating	Ambient	Min.	°CWB	-25 (9)				
			Max.	°CWB	35 (9)				
		Water side	Min.	°C	25 (9)				
			Max.	°C	55 (9)				
	Cooling	Ambient	Min.	°CDB	10				-
			Max.	°CDB	46				-
		Water side	Min.	°C	5				-
			Max.	°C	22				-
	Domestic hot water	Ambient	Min.	°CDB	-25				
			Max.	°CDB	35				
		Water side	Min.	°C	25				
			Max.	°C	80				
Water side Heat exchanger	Type				Brazed plate				
	Quantity				1				
	Water volume			l	1.00				
	Water flow rate	Max.		l/min	46.0				
	Insulation material				Elastomeric foam				
Refrigerant	Type				R-410A				
	GWP				2,087.5				
	Charge	kg			3.40				
		TCO _{2eq}			7.10				
	Control				Expansion valve (electronic type)				
	Circuits	Quantity			1				
Refrigerant oil	Type				Daphne FVC68D				
	Charged volume			l	1.5				
Sound power level	Heating	Nom.		dBA	66 (5)				
	Cooling	Nom.		dBA	69 (6)				
Sound pressure level	Heating	Nom.		dBA	52 (7)				
	Cooling	Nom.		dBA	54 (7)				
	Night quiet mode	Heating			dBA	43 (7)			
		Cooling			dBA	46 (7)			
Defrost method				Reversed cycle					
Defrost control				Sensor for outdoor heat exchanger temperature					
Water filter	Diameter perforations			mm	1.0				
	Material				Copper - brass - stainless steel				

2 Specifications

2-3 Technical Specifications				EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1	
Water circuit	Piping connections diameter	inch	G 1" (male)					
	Safety valve	bar	3					
	Manometer		No					
	Drain valve / fill valve		Yes					
	Shut off valve		Yes					
	Air purge valve		Yes					
	Total water volume	l	1.8 (8)					
Safety devices	Item	01	High pressure switch					
		02	Fan thermal protector					
		03	Fuse					
PED	Category		Category I					
	Most critical part	Name	Compressor					
		Ps*V	Bar*l	164				
Heater capacity	Step 1	kW	3					
General	Supplier/ Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium				
		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		Yes				
		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)		66				
Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					

2-4 Technical Specifications				EKMBUHC3V3	EKMBUHC9W1	EKCB07CV3	EK2CB07CV3		
Power input	Heating			-					
Casing	Colour			White					
	Material			Precoated sheet metal					
Dimensions	Unit	Height	mm	560		360			
		Width	mm	250		340			
		Depth	mm	210		97.0			
	Packed unit	Height	mm	650		406			
		Width	mm	300		392			
		Depth	mm	270		136			
Weight	Unit		kg	11.0	13.0	4.00			
	Packed unit		kg	12.0	14.0	5.00			
Packing	Material			Cardboard / EPS					
Heat exchanger				-					
Operation range	Heating	Ambient		-					
Sound power level				-					
Sound pressure level	Night quiet mode			-					
Water circuit	Piping connections diameter	inch	G 1" (male)				-		
	Air purge valve			Yes				-	
	Total water volume	l	155	145	-				
Heater capacity	Step 1	kW	3		-				
General	Product description			-					

2-5 Electrical Specifications				EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1
Power supply	Name			V3	W1	V3	W1
	Phase			1~	3N~	1~	3N~
	Frequency		Hz	50			
	Voltage		V	230	400	230	400
Voltage range	Min.	%		-10			
	Max.	%		10			

2 Specifications

2

2-5 Electrical Specifications				EBLQ011CV3	EBLQ011CW1	EDLQ011CV3	EDLQ011CW1
Current	Maximum running current	Heating	A	34.2	16.3	34.2	16.3
	Zmax	Text	Ω	0.22			
	Minimum Ssc value		kVa	525			
	Recommended fuses		A	40	20	40	20
Wiring connections	For power supply	Remark	See installation manual outdoor unit				

2-6 Electrical Specifications				EBLQ014CV3	EBLQ014CW1	EDLQ014CV3	EDLQ014CW1
Power supply	Name			V3	W1	V3	W1
	Phase			1~	3N~	1~	3N~
	Frequency		Hz	50			
	Voltage		V	230	400	230	400
Voltage range	Min.		%	-10			
	Max.		%	10			
Current	Maximum running current	Heating	A	34.2	16.3	34.2	16.3
	Zmax	Text	Ω	0.22			
	Minimum Ssc value		kVa	525			
	Recommended fuses		A	40	20	40	20
Wiring connections	For power supply	Remark	See installation manual outdoor unit				

2-7 Electrical Specifications				EBLQ016CV3	EBLQ016CW1	EDLQ016CV3	EDLQ016CW1
Power supply	Name			V3	W1	V3	W1
	Phase			1~	3N~	1~	3N~
	Frequency		Hz	50			
	Voltage		V	230	400	230	400
Voltage range	Min.		%	-10			
	Max.		%	10			
Current	Maximum running current	Heating	A	34.2	16.3	34.2	16.3
	Zmax	Text	Ω	0.22			
	Minimum Ssc value		kVa	525			
	Recommended fuses		A	40	20	40	20
Wiring connections	For power supply	Remark	See installation manual outdoor unit				

2-8 Electrical Specifications				EKMBUHC3V3	EKMBUHC9W1	EKCB07CV3	EK2CB07CV3
Power supply	Phase			-	-	1~	
	Frequency		Hz	-	-	50	
	Voltage		V	-	-	230	
Current	Recommended fuses		A	-	-	10	
Wiring connections	For power supply	Remark	(3)			Cable section 2.5 mm ²	

Notes

- (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) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C
- (4) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C
- (5) Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)
- (6) Condition: Ta 35°C - LWE 7°C (DT = 5°C)
- (7) The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value depending on the distance and acoustic environment. Refer to sound spectrum drawing for more information.
- (8) Including piping + PHE; excluding expansion vessel
- (9) Including BUH and / or booster heater. For more details see data-book.

Equipment complying with EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current $I > 16A$ and $\leq 75A$ per phase

Refer to installation manual or drawing 4D097266

Select diameter and type according to national and local regulations

Between *KCB*C* and *K2CB*C*

3 Options

3 - 1 Options

E(B-D)LQ011-016CV3_CW1

Kit availability for *(B/D)LQ*C*

Reference	Description		#
*KCB07CAV3	Control box	(1)	0
*KRUCBL1...8C	User interface language group 1...8	(19)	0
*KRUCBSC	Simplified user interface	(7)	0
*KRSCA1	Remote sensor for outdoor	(3)	0
KPCCAB	PC cable kit	(16)	0
BRP069A61	LAN adapter for smartphone control + Smart Grid applications	(17)	0
BRP069A62	LAN adapter for smartphone control	(17)	0

Kit availability for *KCB*C* (1)

Reference	Description		#
*K2CB07CAV3	Option box	(2)	0
*KMBUHC*3V3	Backup heater kit	(8) (10) (11)	0
*KMBUHC*9W1	Backup heater kit	(8) (10) (11)	0
*KMBHBP1	Bypass kit	(9)	0
*KHWCFA	Control board (field supply)	(12)	0
FWXV15AVEB	Heat pump convector	(14)	0
FWXV20AVEB	Heat pump convector	(14)	0
*KVKHPC	Heat pump convector valve kit	(14)	0
*KHWS150D*3V3	Domestic hot water tank LT 150 l 1~230V (incl. booster heater)		0
*KHWS180D*3V3	Domestic hot water tank LT 180 l 1~230V (incl. booster heater)		0
*KHWS200D*3V3	Domestic hot water tank LT 200 l 1~230V (incl. booster heater)		0
*KHWS250D*3V3	Domestic hot water tank LT 250 l 1~230V (incl. booster heater)		0
*KHWS300D*3V3	Domestic hot water tank LT 300 l 1~230V (incl. booster heater)		0
*KHWSU150D*3V3	Domestic hot water tank LT 150 l 1~230V (incl. booster heater)	(10) (only for UK)	0
*KHWSU180D*3V3	Domestic hot water tank LT 180 l 1~230V (incl. booster heater)	(10) (only for UK)	0
*KHWSU200D*3V3	Domestic hot water tank LT 200 l 1~230V (incl. booster heater)	(10) (only for UK)	0
*KHWSU250D*3V3	Domestic hot water tank LT 200 l 1~230V (incl. booster heater)	(10) (only for UK)	0
*KHWSU300D*3V3	Domestic hot water tank LT 300 l 1~230V (incl. booster heater)	(10) (only for UK)	0
*KHWP300B	Domestic hot water tank 300 l	(18) (5)	0
*KHWP500B	Domestic hot water tank 500 l	(5)	0
*KHWP300PB	Domestic hot water tank 300 l, with solar support	(5)	0
*KHWP500PB	Domestic hot water tank 500 l, with solar support	(5)	0
KSRPS4A	Solar kit	(15)	0
KBH3X	Booster heater	(13) (15)	0
BZKA7V3	Bizone kit		0
*KRTWA	Wired room thermostat		0
*KRTR1	Wireless room thermostat		0
*KRTE TS	External temperature sensor option kit	(4)	0

Factory-mounted optional equipment for KMBUHC*

Description	#	
	*KMBUH*3V3	*KMBUH*9W1 (6)
Backup heater 3kW 1N~230 V	0	0
Backup heater 6kW 1N~230 V		0
Backup heater 6kW 3N~400 V		0

Kit availability for *K2CB*C* (2)

Reference	Description		#
KRCS01-1	Remote sensor for indoor	(3)	0

NOTES

- To be able to use these options, it is required that control box *KCB*C is part of the system.
 - Domestic hot water
 - Backup heater
 - External room thermostat
 - Option box
 - Electricity meter
- To be able to use these options, it is required that option box *K2CB*C* is part of the system.
 - Control external heat source (bivalent operation).
 - Output remote ON/OFF signal space heating/cooling
 - Remote alarm output
 - External indoor thermistor
- Only 1 remote sensor can be connected: indoor OR outdoor sensor.
- Can only be used in combination with wireless room thermostat EKTRTR(1).
- Dedicated connection kit available.
- Unified model, the actual backup heater capacity depends on the actual internal wiring.
- The simplified user interface (EKUCBS) can only be used in combination with a main user interface (EKUCBL1...8).
- In these cases, only 1 BUH units can be installed.
- If condensation is expected, the installation of valve kit EKMBHBP1 is required.
- Only possible in combination with EKEXPVES
- The installation of a backup heater kit is required in some operating conditions. For more information, see the operation range drawing.
- Only for OCEANIA
- Only for LT application
- Valve kit EKVHPC is mandatory if a heat pump convector is installed on a reversible model (not mandatory for heating only models).
- For the combination with KHWP, refer to the combination table of KHWP.
- Data cable for connection with PC.
- It is not possible to combine simplified user interface KRUCBSC and a LAN adapter.
- If the system does not contain a backup heater, the installation of BS1 is required.
- Mandatory option

REMARK

Other combinations than mentioned in this combination table are prohibited.

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4 Capacity tables

4 - 1 Cooling Capacity Tables

4

E(B-D)LQ011-016CV3_CW1

Maximum cooling capacity

	Tamb [°C]	20		25		30		35		40		45	
		LWE [°C]	CC [kW]	PI [kW]	CC [kW]	PI [kW]	CC [kW]	PI [kW]	CC [kW]	PI [kW]	CC [kW]	PI [kW]	CC [kW]
EBLQ011*	7	12,99	3,26	12,88	3,57	12,44	3,92	11,72	4,31	10,74	4,74	9,54	5,22
	10	13,79	3,29	13,67	3,61	13,20	3,97	12,44	4,37	11,40	4,81	10,14	5,30
	13	15,16	3,33	15,02	3,65	14,51	4,02	13,67	4,43	12,54	4,88	11,00	5,54
	15	16,10	3,35	15,95	3,68	15,41	4,05	14,52	4,47	13,33	4,92	11,40	5,41
	18	17,77	3,38	17,18	3,70	16,26	4,11	15,05	4,53	13,61	4,99	11,54	5,00
	22	19,82	3,43	19,17	3,78	18,16	4,18	16,83	4,61	15,23	5,08	12,10	4,47
EBLQ014*	7	13,92	3,88	13,81	4,23	13,34	4,63	12,55	5,09	11,13	4,88	9,85	5,37
	10	14,98	3,94	14,85	4,30	14,34	4,71	13,49	5,18	11,97	4,96	10,61	5,46
	13	16,45	4,01	16,30	4,38	15,74	4,79	14,81	5,27	13,15	5,05	11,00	5,54
	15	17,46	4,05	17,30	4,41	16,71	4,85	15,73	5,33	13,97	5,11	11,40	5,41
	18	19,00	4,12	18,36	4,50	17,37	4,94	16,06	5,42	14,05	5,19	11,54	5,00
	22	21,16	4,21	20,45	4,61	19,36	5,06	17,93	5,55	15,71	5,31	12,10	4,47
EBLQ016*	7	14,55	4,39	14,46	4,79	13,98	5,24	13,12	5,74	11,59	5,48	9,85	5,37
	10	15,67	4,48	15,56	4,89	15,02	5,34	14,09	5,85	12,45	5,58	10,61	5,46
	13	17,22	4,57	17,08	4,99	16,48	5,45	15,47	5,96	13,67	5,68	11,00	5,54
	15	18,29	4,63	18,13	5,06	17,49	5,52	16,42	6,04	14,52	5,75	11,40	5,41
	18	19,91	4,73	19,23	5,16	18,17	5,63	16,76	6,15	14,60	5,85	11,54	5,00
	22	22,18	4,86	21,42	5,30	20,25	5,79	18,69	6,31	16,31	5,99	12,10	4,47

SYMBOLS

- CC = Cooling capacity at maximum operating frequency, measured according to 'Eurovent 6/C/003-2006'.
 HC = Heating capacity at maximum operating frequency, measured according to 'Eurovent 6/C/003-2006'.
 PI = Power input, measured according to 'Eurovent 6/C/003-2006'.
 LWE = Leaving water evaporator temperature [°C]
 LWC = Leaving water condensor temperature [°C]
 Tamb = Ambient temperature; RH (heating) = 85%

NOTES

1. The bottom plate heater is factory mounted and controlled by the outdoor unit.
2. The capacity and power input is valid for 'V3' models at '230-V' and for 'W' models at '400-V'.
3. The capacity and power input for Ta ≤ -7 °C is at maximum operation and '100%' power input.
4. The capacity and power input for Ta > -7 °C is at nominal operation (nominal = maximum).

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4 Capacity tables

4 - 3 Certification Programs

E(B-D)LQ011-016CV3_CW1

Rated data for certification programmes - heating mode

		Certification programme	Required setup of unit for test	Ta [°C]	EWG [°C]	LWC [°C]	HC [kW]	COP	Minimum required COP	NF PAC	Minimum required COP	EHPA	Minimum required COP	Ecotablet	Minimum required COP	SPF (DAB)		
(B-D)LQ011CA	Floor	EHPA	f=94Hz	10		35	11.20	4.85	-	-	-	-	-	-	-	-	-	-
		NF PAC, EHPA	f=107Hz	7/6	30	35	11.20	4.60	3.40	-	-	-	-	-	-	-	-	-
		EHPA	f=107Hz	2/1		35	8.56	3.60	-	-	3.10	-	-	-	-	-	-	-
	Fan coil	SPF (DAB)		2/1	30	35	5.71	3.71	-	-	-	-	-	-	-	3.71	-	-
		NF PAC, EHPA	f=107Hz	-7/-8		45	8.60	2.75	2.10	-	-	-	-	-	-	-	-	-
		NF PAC	f=107Hz	7/6	40	45	11.00	3.55	2.70	-	-	-	-	-	-	-	-	-
	Radiator	NF PAC	f=107Hz	2/1		45	8.20	2.84	-	-	-	-	2.60	-	-	-	-	-
		NF PAC	f=107Hz	-7/-8		45	8.60	2.10	1.60	-	-	-	-	-	-	-	-	-
		EHPA		7/6	47	55	10.76	2.71	-	-	-	-	-	-	-	-	-	-
	(B-D)LQ014CA	Floor	EHPA	f=123Hz	10		35	14.30	4.70	-	-	-	-	-	-	-	-	-
			NF PAC, EHPA	f=139Hz	7/6	30	35	12.57	4.59	3.40	-	-	-	-	-	-	-	-
			EHPA	f=139Hz	2/1		35	10.20	3.35	-	-	3.10	-	-	-	-	-	-
Fan coil		SPF (DAB)		2/1	30	35	5.71	3.71	-	-	-	-	-	-	-	3.71	-	-
		NF PAC, EHPA	f=139Hz	-7/-8		45	10.50	2.61	2.10	-	-	-	-	-	-	-	-	-
		NF PAC	f=139Hz	7/6	40	45	11.59	3.50	2.70	-	-	-	-	-	-	-	-	
Radiator		NF PAC	f=139Hz	2/1		45	9.90	2.63	-	-	-	-	-	-	-	-	-	-
		NF PAC	f=139Hz	-7/-8		45	10.70	2.05	1.60	-	-	-	-	-	-	-	-	-
		EHPA		7/6	47	55	13.30	2.71	-	-	-	-	-	-	-	-	-	
(B-D)LQ016CA		Floor	EHPA	f=147Hz	10		35	15.70	4.50	-	-	-	-	-	-	-	-	-
			NF PAC, EHPA	f=155Hz	7/6	30	35	16.32	4.32	3.40	-	-	-	-	-	-	-	-
			EHPA	f=155Hz	2/1		35	10.90	3.31	-	-	3.10	-	-	-	-	-	-
	Fan coil	SPF (DAB)		2/1	30	35	5.71	3.71	-	-	-	-	-	-	-	3.71	-	-
		NF PAC, EHPA	f=155Hz	-7/-8		45	11.30	2.61	2.10	-	-	-	-	-	-	-	-	-
		NF PAC	f=155Hz	7/6	40	45	13.16	3.40	2.70	-	-	-	-	-	-	-	-	
	Radiator	NF PAC	f=155Hz	2/1		45	10.80	2.63	-	-	-	-	2.60	-	-	-	-	-
		NF PAC	f=155Hz	-7/-8		45	10.80	2.07	1.60	-	-	-	-	-	-	-	-	-
		EHPA		7/6	47	55	15.04	2.80	-	-	-	-	-	-	-	-	-	

Rated data for certification programmes - standby power consumption

Certification programme	Required setup of unit for test	Standby power consumption [W]
*(B-D)LQ011CA*V3	Indoor unit: DIP1 ON Outdoor unit: JIS mode → 153Hz, SC=5	22W
*(B-D)LQ011CA*W1		25W
*(B-D)LQ014CA*V3	Indoor unit: DIP1 ON Outdoor unit: JIS mode → 153Hz, SC=5	22W
*(B-D)LQ014CA*W1		25W
*(B-D)LQ016CA*V3		22W
*(B-D)LQ016CA*W1		25W

Symbols

- CC= Cooling capacity at nominal operating frequency, measured according to EN14511.
- HC= Heating capacity at nominal operating frequency, measured according to EN14511.
- COP/EER= Coefficient of Performance/Energy efficiency ratio according to EN 14511.
- LWE= Leaving water evaporator temperature [°C]
- LWC= Leaving water condenser temperature [°C]
- Ta= Ambient temperature [°C DB/WB]

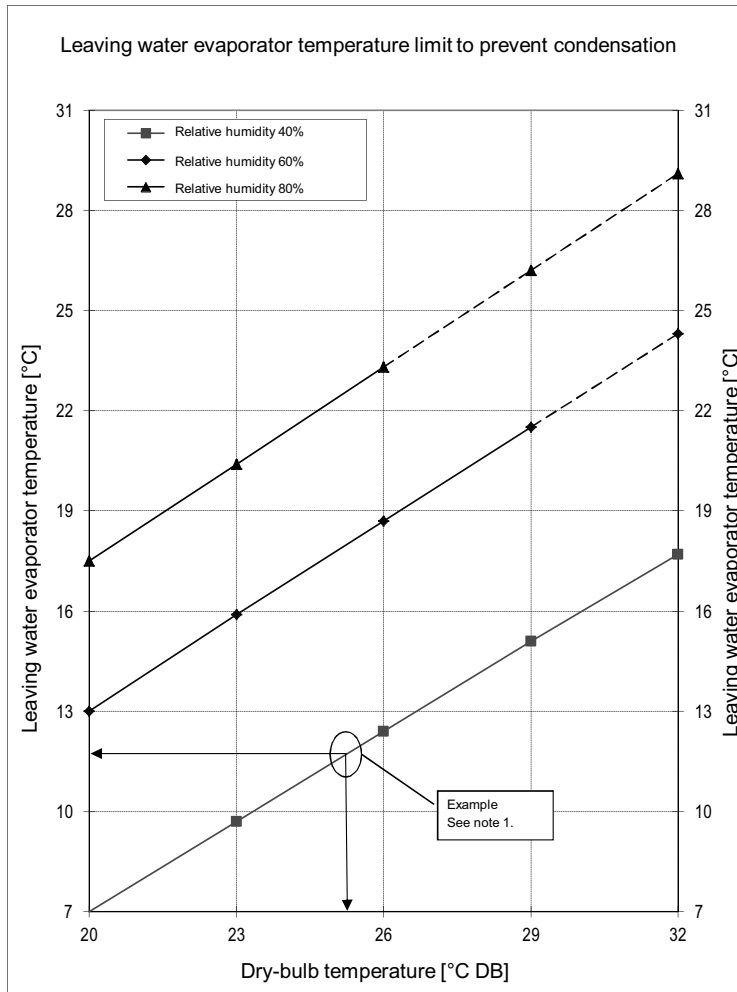
3D116502

4 Capacity tables

4 - 4 Domestic Hot Water performance

4

EKMBUHC3V3 / EKMBUHC9W1



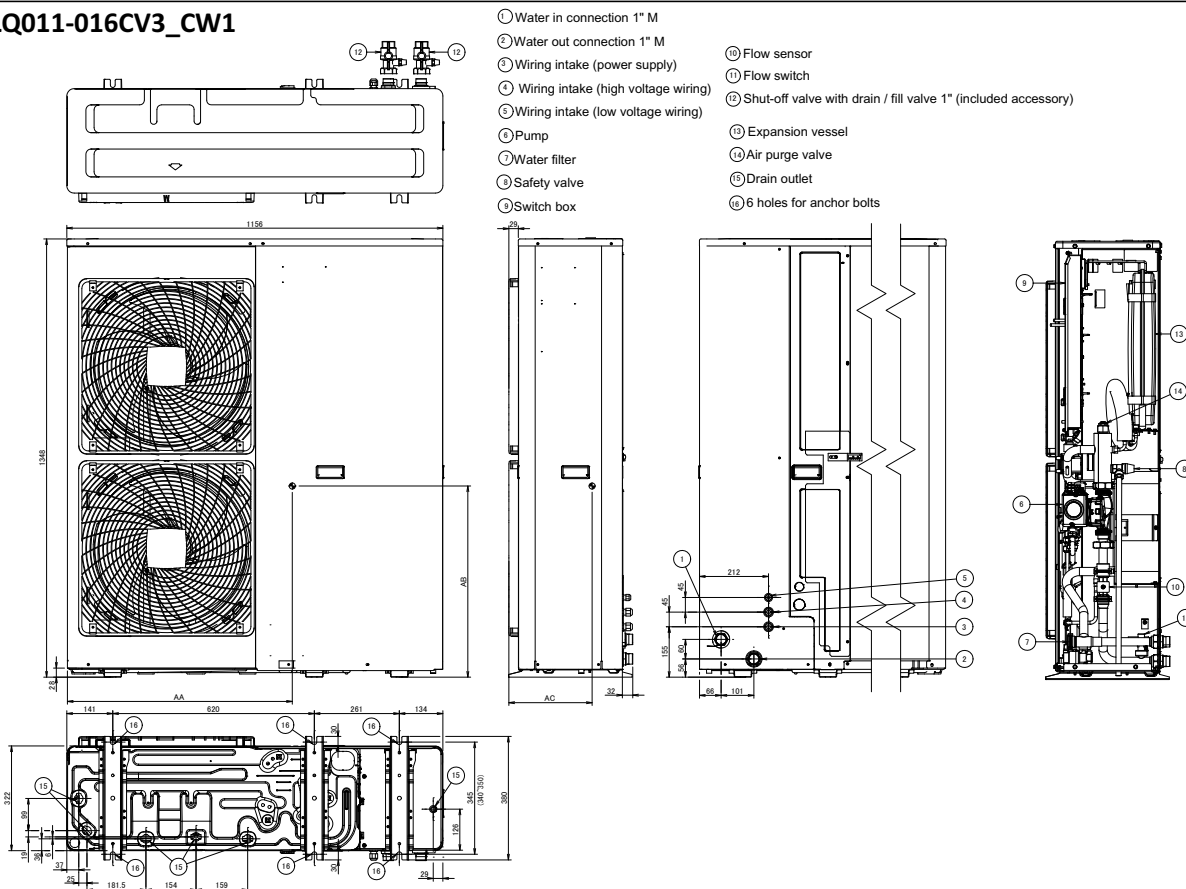
- Notes
1. With an ambient temperature of 25°C and a relative humidity of 40%.
If the leaving water evaporator temperature is < 12°C, condensation on the water piping will occur.
 2. See the psychrometric chart for more information.
 3. If condensation is expected, the installation of valve kit EKMBHBP1 is required.

4D099671

5 Dimensional drawings

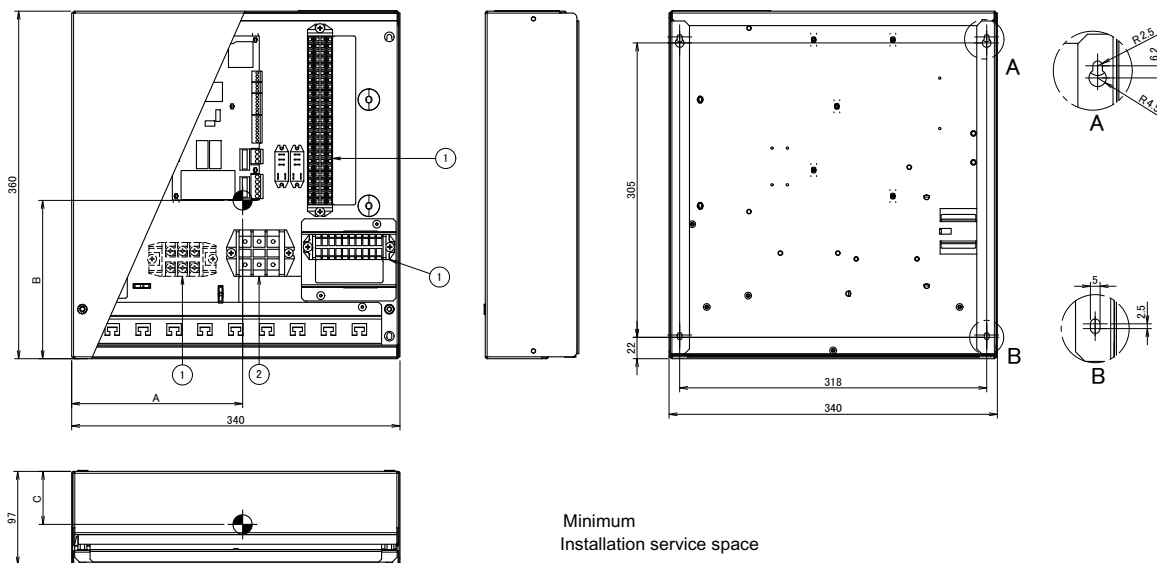
5 - 1 Dimensional Drawings

E(B-D)LQ011-016CV3_CW1



3D115221

EK2CB-CV3 / EKCB-CV3



3D097270A

5 Dimensional drawings

5 - 1 Dimensional Drawings

5

EKMBUHC3V3 Backup heater configuration (only for *KMBUHCA3V)

Backup heater configuration (only for *KMBUHCA9W)

Minimum installation service space

* When installing optional accessories, refer to their respective documentation.

1	Water in connection 1" M
2	Water out connection 1" M
3	Air purge
4	Backup heater
5	Contactor backup heater
6	Thermal cutout
7	Backup heater overcurrent fuse
8	Terminal block

Centre of gravity

MODEL	A	B	C
*3V3	132	272	103
*9W1	138	273	99

3D097269B

EKMBUHC9W1

Backup heater configuration (only for EKMBUHCA3V)

Backup heater configuration (only for EKMBUHCA9W)

Minimum Installation service space

* When installing optional accessories, refer to their respective documentation.

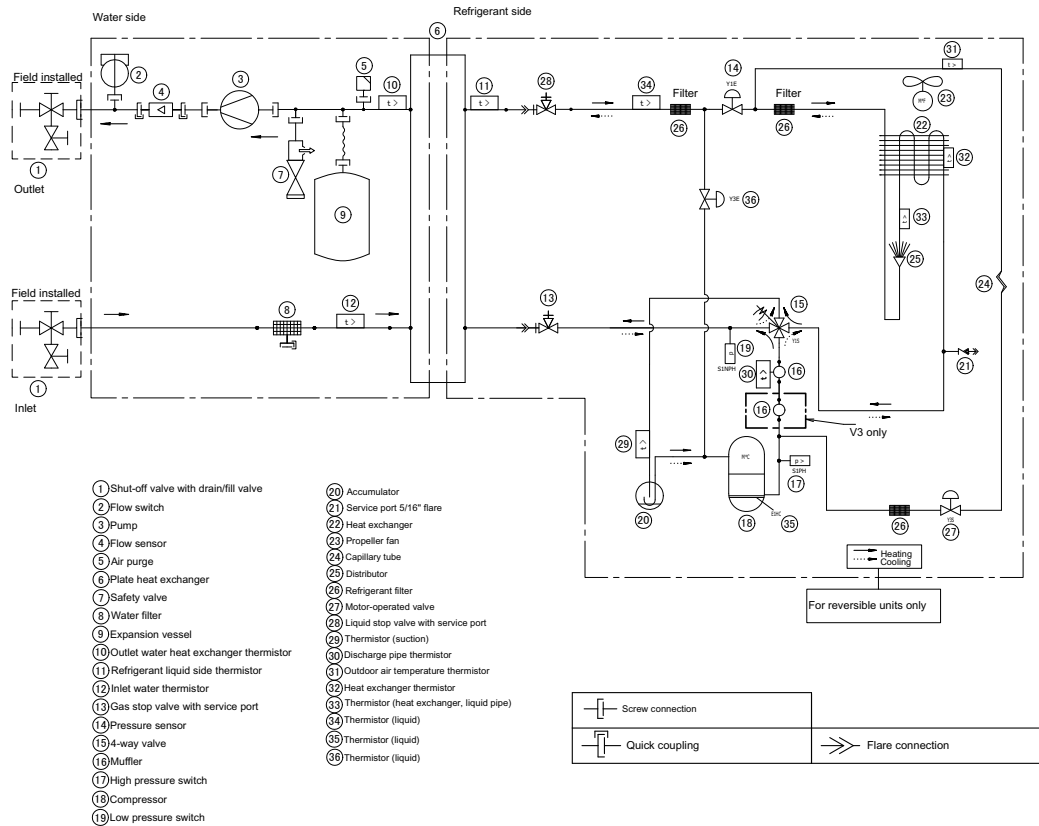
1	Water in connection 1" M
2	Water out connection 1" M
3	Air purge
4	Backup heater
5	Contactor backup heater
6	Thermal fuse backup heater
7	Backup heater overcurrent fuse
8	Terminal block

3D097269B

6 Piping diagrams

6 - 1 Piping Diagrams

E(B-D)LQ011-016CV3_CW1



3D115219

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

7

E(B-D)LQ011-016CV3

NOTES to go through before starting the unit

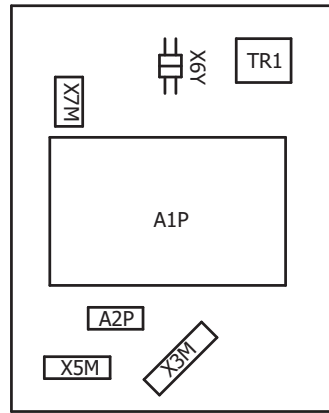
- X1M : Main terminal
- : Earth wiring
- 15 : Wire number 15
- : Field supply
- ① : Several wiring possibilities
- [] : Option
- [] : Wiring depending on model
- [] : switch box
- [] : PCB

NOTES

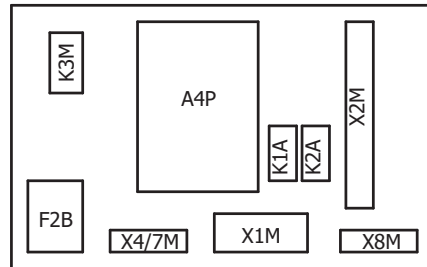
1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS4 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL, S1NPH.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.

- User installed options:
- Remote user interface
 - Ext. outdoor thermistor
 - Control box
 - BUH option
 - BUH configuration (only for *9W)
 - 6V3 (1N~, 230V, 6kW)
 - 6WN (3N~, 400V, 6kW)
 - 9WN (3N~, 400V, 9kW)
 - Main LWT:
 - On/OFF thermostat (wired)
 - On/OFF thermostat (wireless)
 - Ext. thermistor
 - Heat pump convector
 - Add LWT:
 - On/OFF thermostat (wired)
 - On/OFF thermostat (wireless)
 - Ext. thermistor
 - Heat pump convector
 - Option box
 - External indoor ambient thermistor

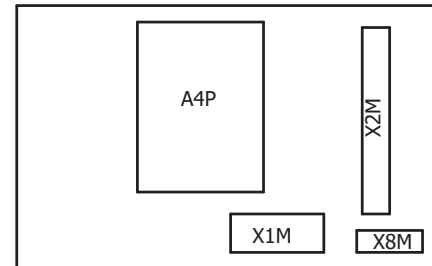
POSITION IN SWITCH BOX



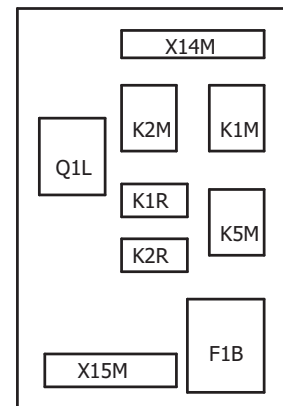
Hydro switch box



Control box



Option box



BUH Kit

4D115042

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

E(B-D)LQ011-016CV3

LEGEND (Outdoor Hydro)

Part n°	Description
A1P	Main PCB
A2P	Current loop PCB
B1L	Flow sensor
E11H	Flextube heater (15,6W)
E12H	Expansion vessel heater (50W)
E13H	PHE heater (33W)
E14H	Internal pipe heater 1 (50W)
E15H	Internal pipe heater 2 (33W)
FU1 (A1P)	Fuse T 5 A 250 V
K*R (A1P)	Magnetic relay
M1P	Main supply pump
Q4DI	# Earth leakage circuit breaker
R1T	Outlet water heat exchanger thermistor
R3T	Refrigerant liquid side thermistor
R4T	Inlet water thermistor
R6T	* Ext. outdoor ambient thermistor
S1L	Flow switch
TR1	Power supply transformer
X*A, X*Y (A*P)	Connector
X*M	Terminal strip

LEGEND (Indoor control box)

Part n°	Description
A3P	* On/OFF thermostat (PC=power circuit)
A3P	* Heat pump convector
A4P	* Extension PCB (control, optional)
A5P	User interface PCB
A7P	* Receiver PCB (wireless On/OFF thermostat)
DS1(A4P)	* Dipswitch
E4H	* Booster heater (3 kW)
F1U	Fuse T 5 A 500 V
F1U (A4P)	Fuse T 2 A 250 V
F2B	* Overcurrent fuse booster heater
F2U (A4P)	Fuse T 2 A 250 V for 3 way valve
K1A	Relay for heating
K1	* Terminal strip
K2A	Relay for cooling
K2	* Booster heater
K3M	* Contactor booster heater
M2P	# DHW pump
M2S	# Shut-OFF Valve
M3S	3 way valve for domestic hot water
M4S	* Valve Kit
PC (A7P)	Power circuit
Q2L	* Thermal protector booster heater
Q5-6DI	# Earth leakage circuit breaker
R1H (A3P)	* Humidity sensor
R1T (A3P)	* Ambient sensor On/OFF thermostat
R1T (A5P)	Ambient sensor user interface
R2T	* Ext. indoor floor/ambient thermistor
R5T	* Domestic hot water thermistor
S1S	# Preferential kWh rate PS contact
STB	* Thermal protector booster heater
X*A (A4P)	Connector
X*M	Terminal strip

LEGEND (Indoor BUH option)

Part n°	Description
E1H	BUH element (1 kW)
E2H	BUH element (2 kW)
E3H	BUH element
F1B	* Overcurrent fuse BUH
F1T, F2T	* Thermal fuse backup heater
F1U	Fuse T 5 A 500 V BUH option
K1M	* Contactor BUH (step 1)
K1R	* Relay backup heater (step 1)
K2M	* Contactor BUH (step 2) (only *9W)
K2R	* Relay backup heater (step 2) (only *9W)
K5M	* Safety contactor BUH (only *9W)
Q1DI	# Earth leakage circuit breaker
Q1L	* Thermal protector backup heater
R2T	* Outlet backup heater thermistor
X*M	Terminal strip

LEGEND (Indoor option box)

Part n°	Description
A4P	Extension PCB (control, optional)
DS1(A4P)	Dipswitch
F1U (A4P)	Fuse T 2 A 250 V
F2U (A4P)	Fuse T 2 A 250 V for 3 way valve
R6T	* Ext. indoor ambient sensor option
S5-6P	# Electrical meters
X*A (A4P)	Connector
X*M	Terminal strip

* : optional
: field supply

4D115042

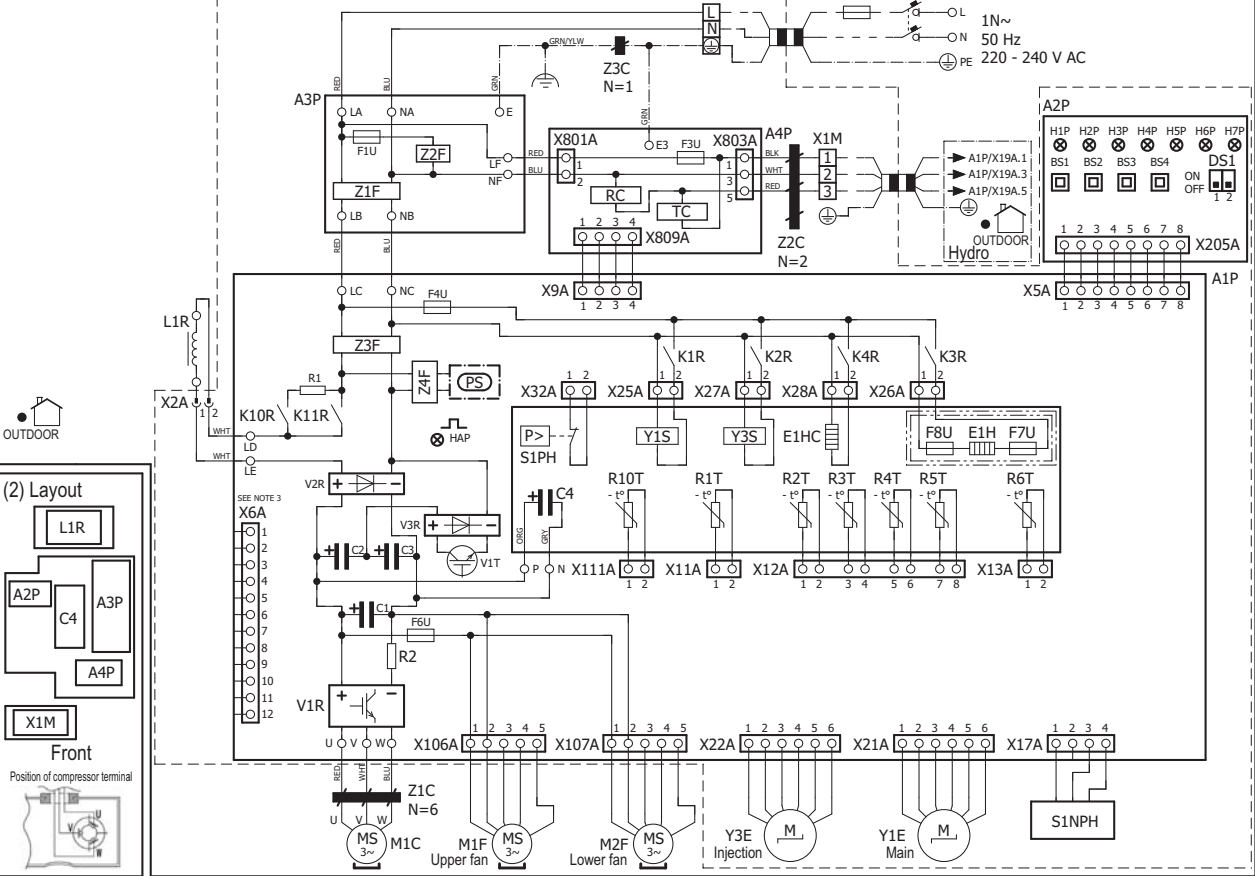
7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

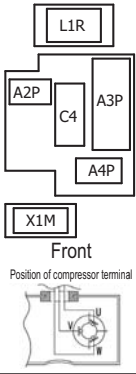
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E(B-D)LQ011-016CV3

(1) Connection diagram



(2) Layout



(3) NOTES

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

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (service)
A3P	Printed circuit board (noise filter)
A4P	Printed circuit board (communication)
BS1-4 (A2P)	Push-button switch
C1-4 (A1P)	Capacitor
DS1 (A2P)	Dipswitch
E1H	* Bottom plate heater
E1HC	Crankcase heater
F1U, F3U, F4U (A*P)	Fuse T 6,3 A 250 V
F6U (A1P)	Fuse T 5 A 250 V
F7-8U	* Fuse F 1 A 250 V
H1-7P (A2P)	Indication light emitting diode (service monitor is orange)
HAP (A1P)	Light emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y3S)
K3R (A1P)	Magnetic relay (E1H)
K4R (A1P)	Magnetic relay (E1HC)
K10R (A1P)	Magnetic relay (Upload)
K11R (A1P)	Magnetic relay (Main)
L1R	Reactor
M1C	Compressor motor
M1F, M2F	Fan motor
PS (A1P)	Switching power supply

Part n°	Description
Q1DI	# Earth leakage circuit breaker (30mA)
R1, R2 (A1P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R10T	Thermistor (fin)
RC (A4P)	Signal receiver circuit
S1NPH	Pressure sensor
S1PH	High pressure switch
TC (A4P)	Signal transmission circuit
1R (A1P)	Power module
V2-3R (A1P)	Diode module
V1T (A1P)	IGBT
X1M	Terminal strip
X*A (A*P)	Connector
Y1E, Y3E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Y3S	Solenoid valve (hot gas pass)
Z1-3C	Noise filter (ferrite core)
Z1-4F (A*P)	Noise filter

* : optional
: field supply

NOTES

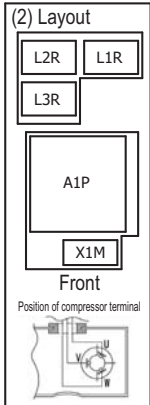
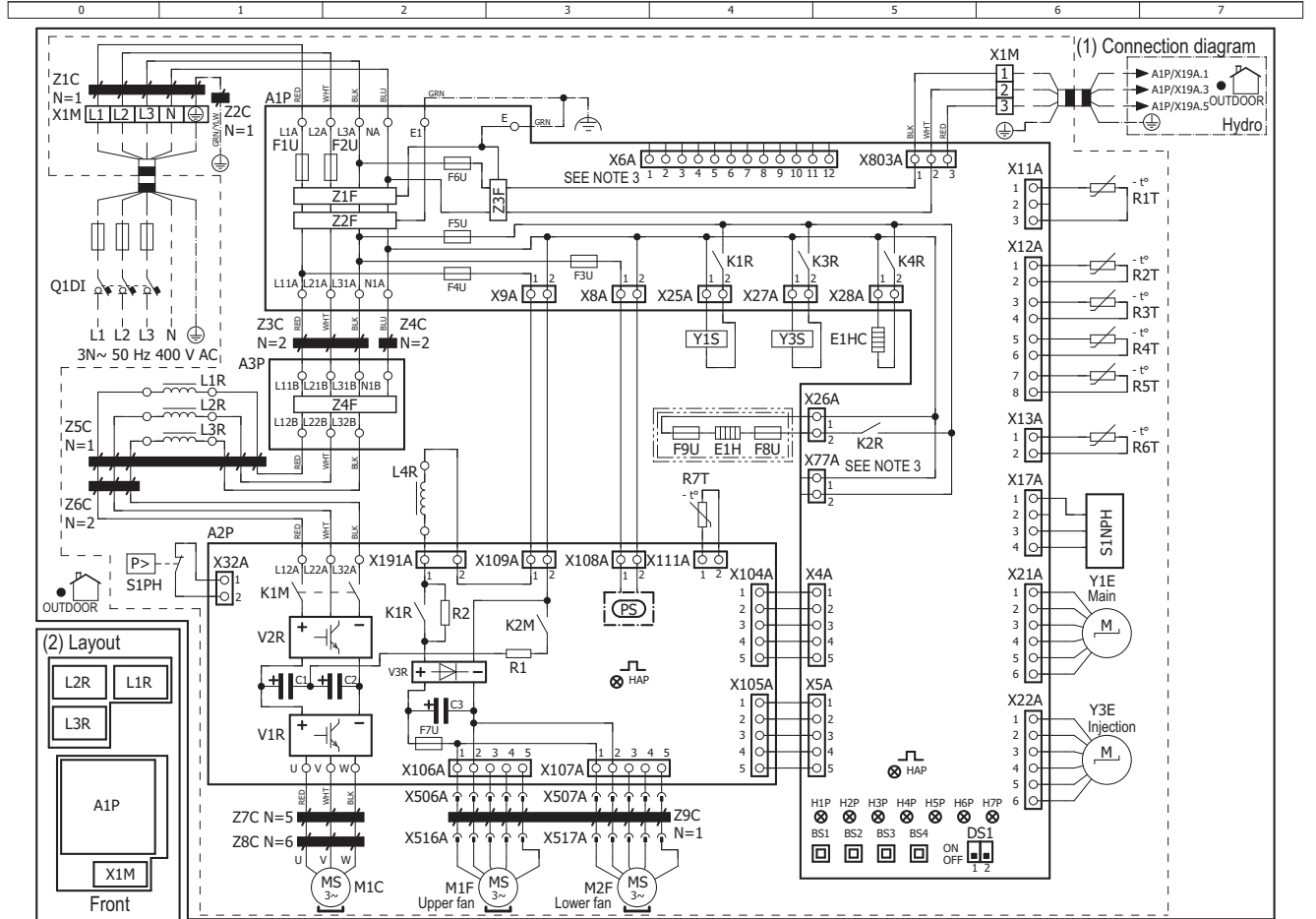
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS4 and DS1 switches.
- When operating, do not short-circuit protection device S1PH.
- Refer to the combination table and the option manual for how to connect the wiring to X6A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green; BRN:brown; YLW:yellow; ORG:orange
- Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: OFF

4D115042

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

E(B-D)LQ011-016CV3



(3) NOTES

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

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (inv.)
A3P	Printed circuit board (noise filter)
BS1-4 (A1P)	Push-button switch
C1-3(A2P)	Capacitor
DS1 (A1P)	Dipswitch
E1H	* Bottom plate heater
E1HC	Crankcase heater
F1-2U (A1P)	Fuse 31,5 A 500 V
F3-6U (A1P)	Fuse T 6,3 A 250 V
F7U (A2P)	Fuse T 5 A 250 V
F8-9U	* Fuse F 1 A 250 V
H1-7P (A1P)	Indication light emitting diode (service monitor is orange)
HAP (A1-2P)	Light emitting diode (service monitor is green)
K1-2M (A2P)	Magnetic contactor (Main-Upload)
K1R (A1P)	Magnetic relay (Y1S)
K1R (A2P)	Magnetic relay (Upload)
K2R (A1P)	Magnetic relay (E1H)
K3R (A1P)	Magnetic relay (Y3S)
K4R (A1P)	Magnetic relay (E1HC)
L1-3R	Reactor
L4R	Reactor (Outdoor fan motor)

Part n°	Description
M1C	Compressor motor
M1F, M2F	Fan motor
PS (A2P)	Switching power supply
Q1DI	# Earth leakage circuit breaker (30mA)
R1-2 (A2P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
S1NPH	Pressure sensor
S1PH	High pressure switch
V1-2R (A2P)	Power module
V3R (A2P)	Diode module
X1M	Terminal strip
X*A (A*P)	Connector
Y1E, Y3E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Y3S	Solenoid valve (hot gas pass)
Z1-9C	Noise filter (ferrite core)
Z1-3F (A1P)	Noise filter
Z4F (A3P)	Noise filter

* : optional
: field supply

NOTES

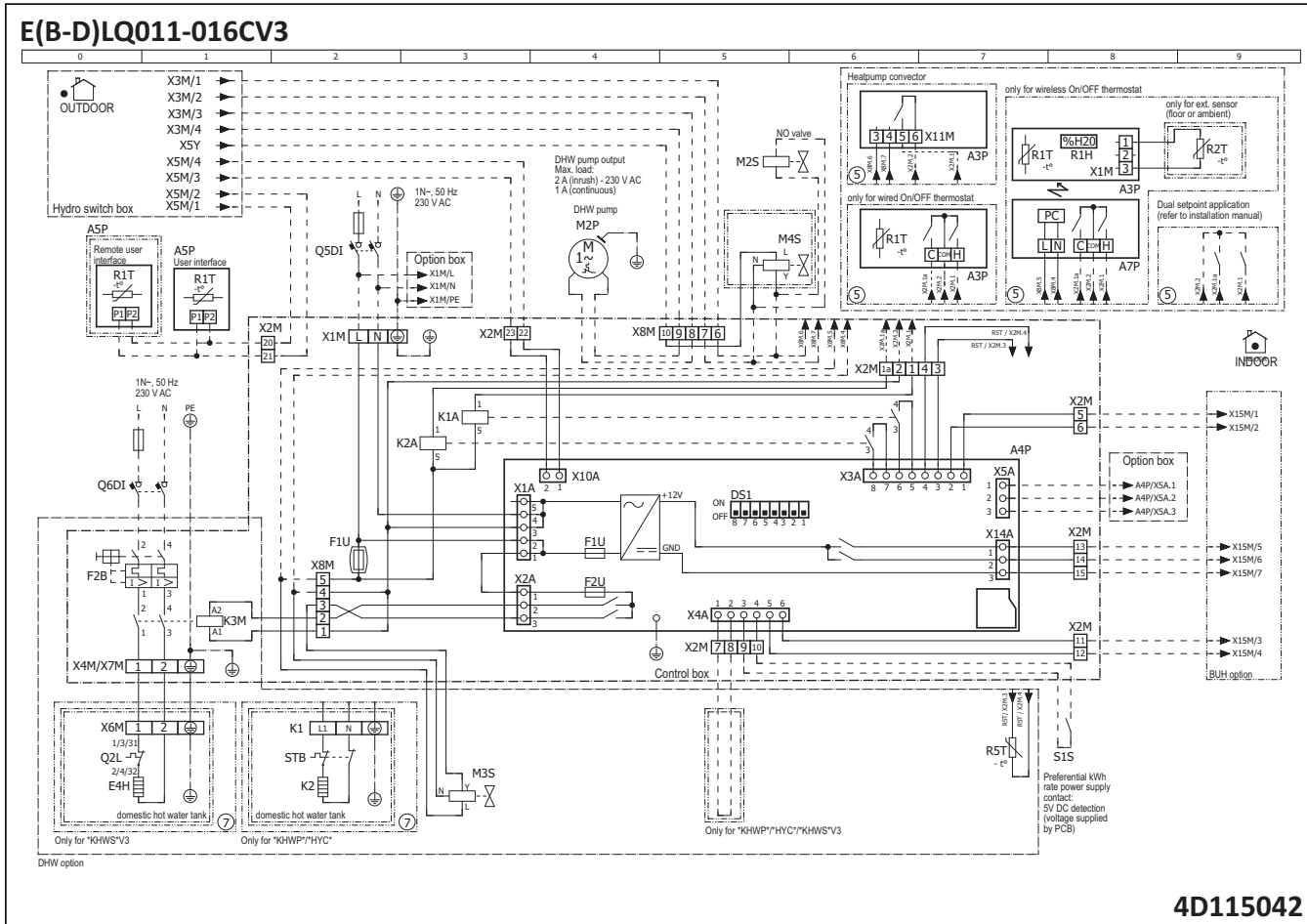
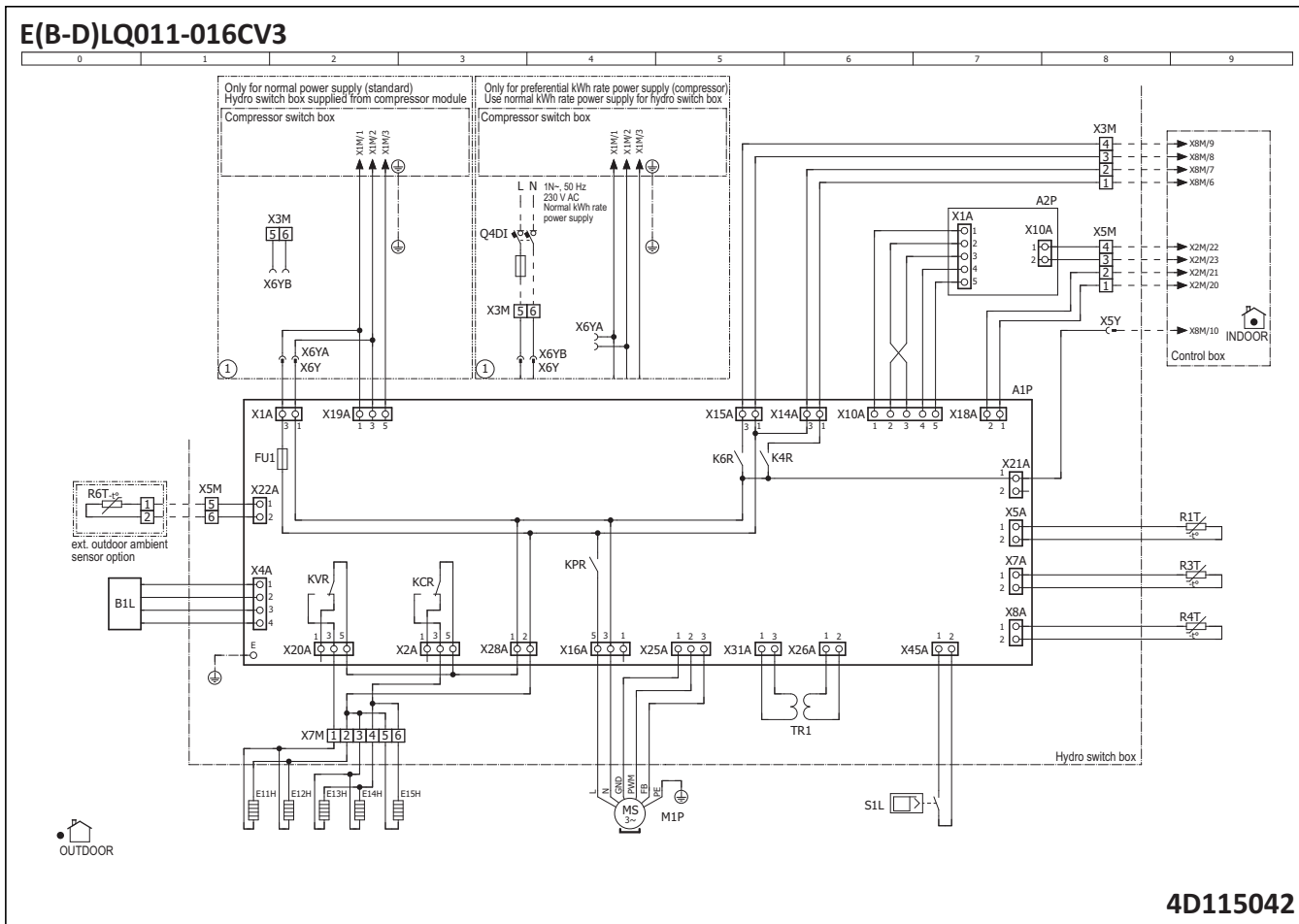
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS4 and DS1 switches.
- When operating, do not short-circuit protection device S1PH.
- Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green; BRN:brown; YLW:yellow; ORG:orange
- Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: OFF

4D115042

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

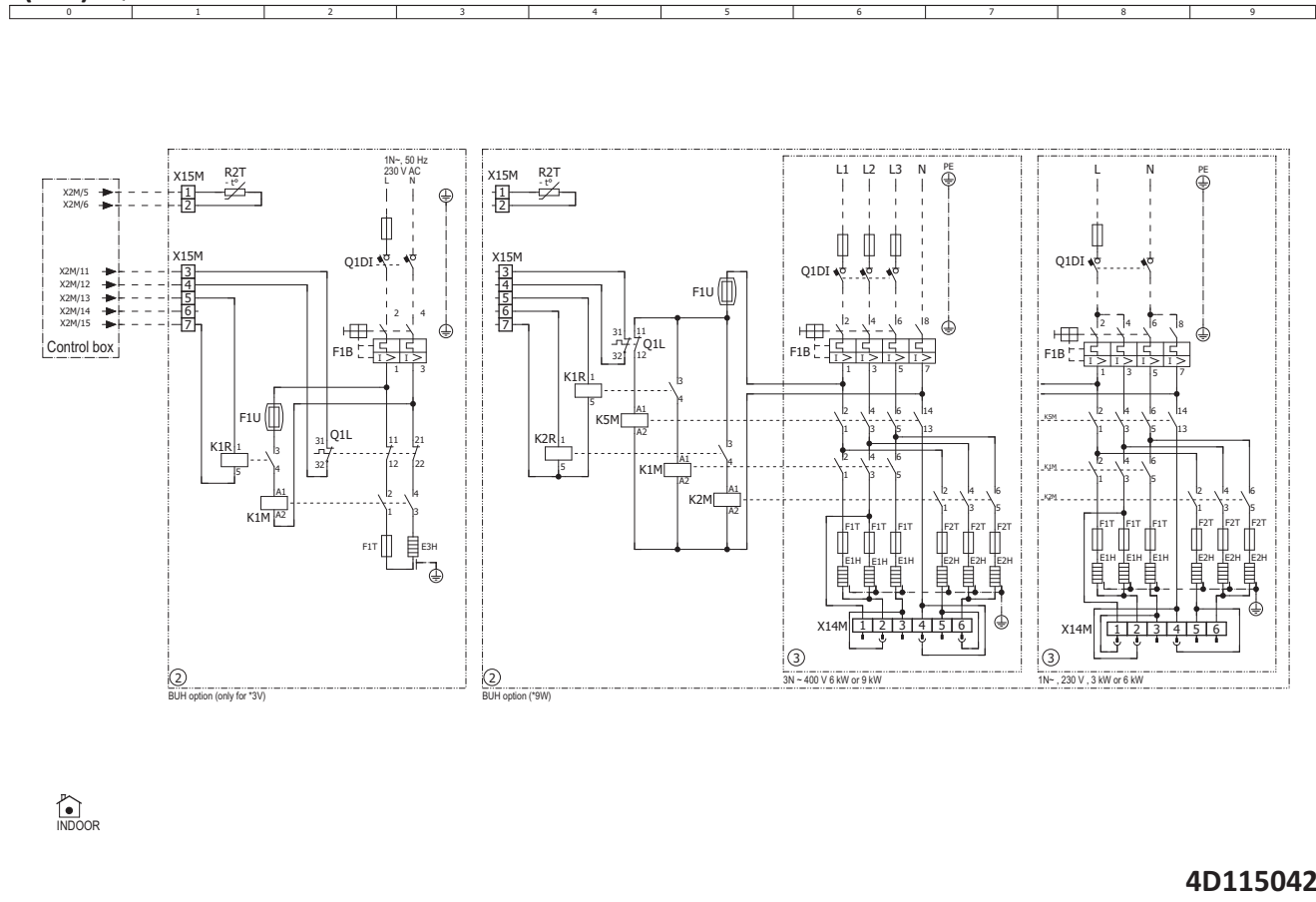
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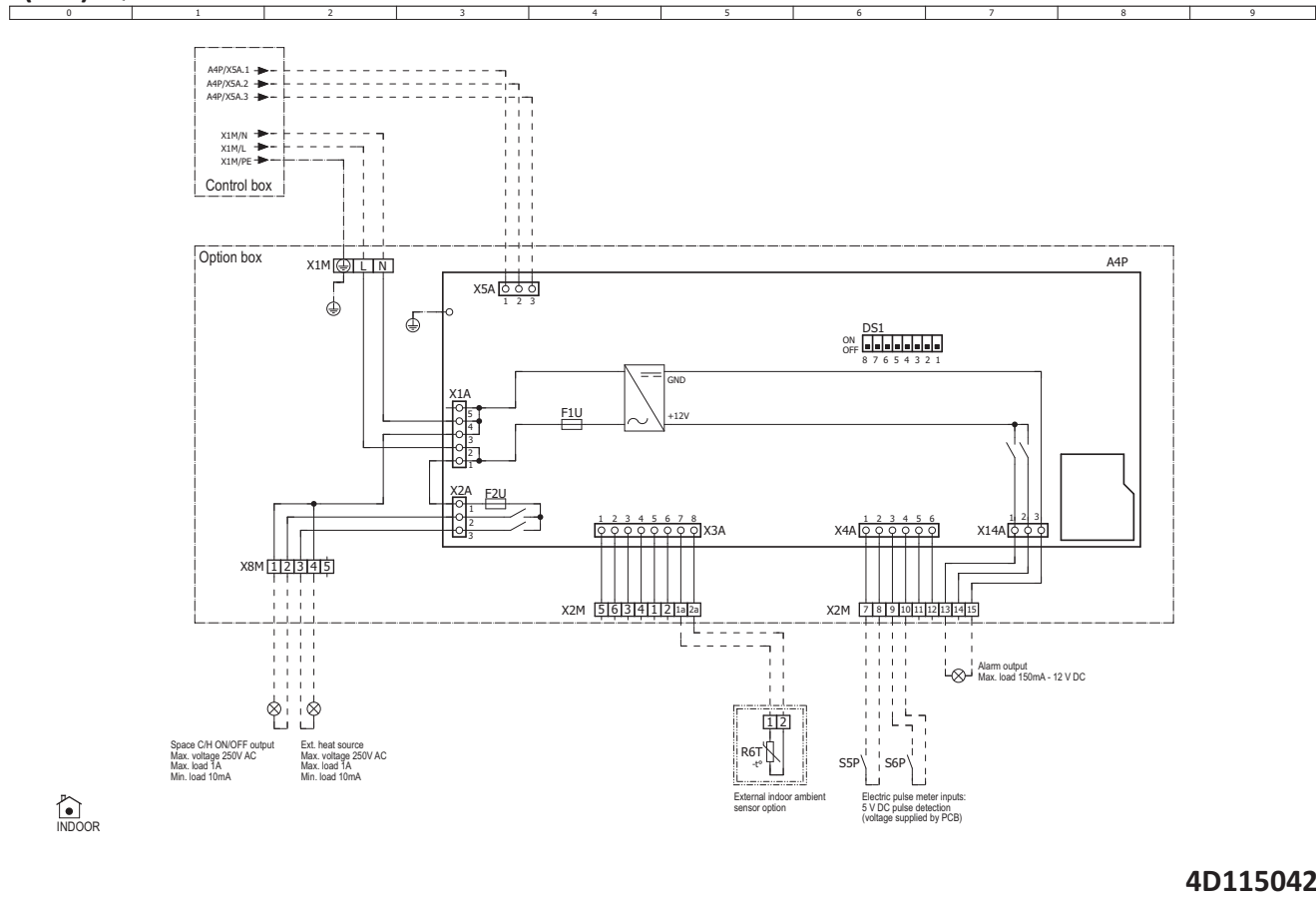
7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

E(B-D)LQ011-016CV3



E(B-D)LQ011-016CV3



7 Wiring diagrams

7 - 2 Wiring Diagrams - Three Phase

7

E(B-D)LQ011-016CW1

NOTES to go through before starting the unit

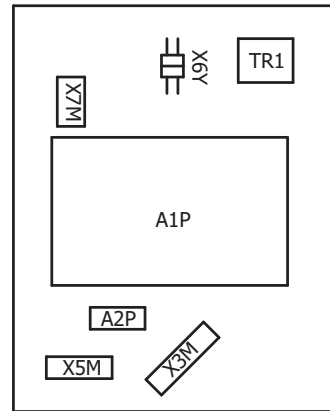
- X1M : Main terminal
- : Earth wiring
- 15 : Wire number 15
- : Field supply
- ① : Several wiring possibilities
- [] : Option
- [] : Wiring depending on model
- [] : switch box
- [] : PCB

NOTES

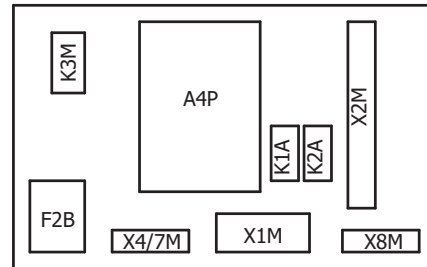
1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS4 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL, S1NPH.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.

- User installed options:
- Remote user interface
 - Ext. outdoor thermistor
 - Control box
 - BUH option
 - BUH configuration (only for *9W)
 - 6V3 (1N~, 230V, 6kW)
 - 6WN (3N~, 400V, 6kW)
 - 9WN (3N~, 400V, 9kW)
 - Main LWT:
 - On/OFF thermostat (wired)
 - On/OFF thermostat (wireless)
 - Ext. thermistor
 - Heat pump convector
 - Add LWT:
 - On/OFF thermostat (wired)
 - On/OFF thermostat (wireless)
 - Ext. thermistor
 - Heat pump convector
 - Option box
 - External indoor ambient thermistor

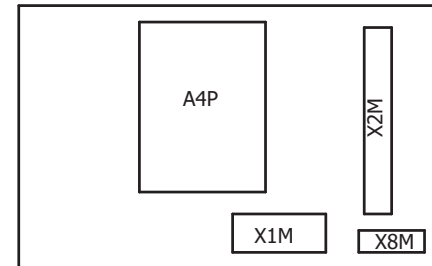
POSITION IN SWITCH BOX



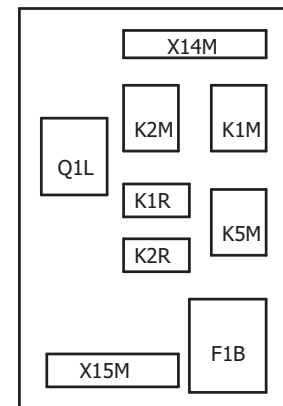
Hydro switch box



Control box



Option box



BUH Kit

4D115042

7 Wiring diagrams

7 - 2 Wiring Diagrams - Three Phase

E(B-D)LQ011-016CW1

LEGEND (Outdoor Hydro)

Part n°	Description
A1P	Main PCB
A2P	Current loop PCB
B1L	Flow sensor
E11H	Flextube heater (15,6W)
E12H	Expansion vessel heater (50W)
E13H	PHE heater (33W)
E14H	Internal pipe heater 1 (50W)
E15H	Internal pipe heater 2 (33W)
FU1 (A1P)	Fuse T 5 A 250 V
K*R (A1P)	Magnetic relay
M1P	Main supply pump
Q4DI	# Earth leakage circuit breaker
R1T	Outlet water heat exchanger thermistor
R3T	Refrigerant liquid side thermistor
R4T	Inlet water thermistor
R6T	* Ext. outdoor ambient thermistor
S1L	Flow switch
TR1	Power supply transformer
X*A, X*Y (A*P)	Connector
X*M	Terminal strip

LEGEND (Indoor control box)

Part n°	Description
A3P	* On/OFF thermostat (PC=power circuit)
A3P	* Heat pump convector
A4P	* Extension PCB (control, optional)
A5P	User interface PCB
A7P	* Receiver PCB (wireless On/OFF thermostat)
DS1(A4P)	* Dipswitch
E4H	* Booster heater (3 kW)
F1U	Fuse T 5 A 500 V
F1U (A4P)	Fuse T 2 A 250 V
F2B	* Overcurrent fuse booster heater
F2U (A4P)	Fuse T 2 A 250 V for 3 way valve
K1A	Relay for heating
K1	* Terminal strip
K2A	Relay for cooling
K2	* Booster heater
K3M	* Contactor booster heater
M2P	# DHW pump
M2S	# Shut-OFF Valve
M3S	3 way valve for domestic hot water
M4S	* Valve Kit
PC (A7P)	Power circuit
Q2L	* Thermal protector booster heater
Q5-6DI	# Earth leakage circuit breaker
R1H (A3P)	* Humidity sensor
R1T (A3P)	* Ambient sensor On/OFF thermostat
R1T (A5P)	Ambient sensor user interface
R2T	* Ext. indoor floor/ambient thermistor
R5T	* Domestic hot water thermistor
S1S	# Preferential kWh rate PS contact
STB	* Thermal protector booster heater
X*A (A4P)	Connector
X*M	Terminal strip

LEGEND (Indoor BUH option)

Part n°	Description
E1H	BUH element (1 kW)
E2H	BUH element (2 kW)
E3H	BUH element
F1B	* Overcurrent fuse BUH
F1T, F2T	* Thermal fuse backup heater
F1U	Fuse T 5 A 500 V BUH option
K1M	* Contactor BUH (step 1)
K1R	* Relay backup heater (step 1)
K2M	* Contactor BUH (step 2) (only *9W)
K2R	* Relay backup heater (step 2) (only *9W)
K5M	* Safety contactor BUH (only *9W)
Q1DI	# Earth leakage circuit breaker
Q1L	* Thermal protector backup heater
R2T	* Outlet backup heater thermistor
X*M	Terminal strip

LEGEND (Indoor option box)

Part n°	Description
A4P	Extension PCB (control, optional)
DS1(A4P)	Dipswitch
F1U (A4P)	Fuse T 2 A 250 V
F2U (A4P)	Fuse T 2 A 250 V for 3 way valve
R6T	* Ext. indoor ambient sensor option
S5-6P	# Electrical meters
X*A (A4P)	Connector
X*M	Terminal strip

* : optional
: field supply

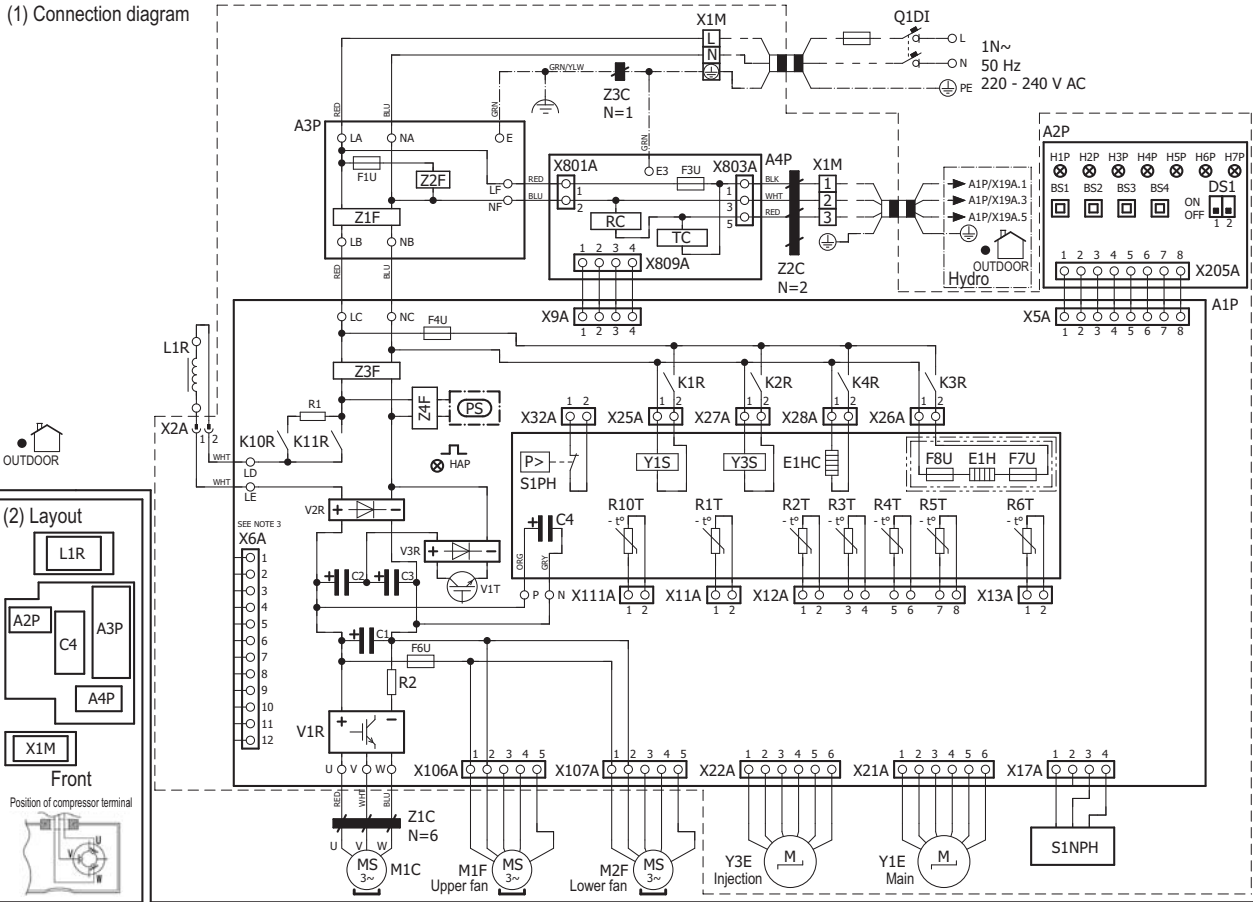
4D115042

7 Wiring diagrams

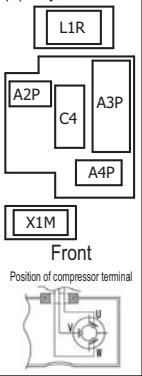
7 - 2 Wiring Diagrams - Three Phase

E(B-D)LQ011-016CW1

(1) Connection diagram



(2) Layout



(3) NOTES

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

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (service)
A3P	Printed circuit board (noise filter)
A4P	Printed circuit board (communication)
BS1~4 (A2P)	Push-button switch
C1~4 (A1P)	Capacitor
DS1 (A2P)	Dipswitch
E1H	* Bottom plate heater
E1HC	Crankcase heater
F1U, F3U, F4U (A*P)	Fuse T 6,3 A 250 V
F6U (A1P)	Fuse T 5 A 250 V
F7~8U	* Fuse F 1 A 250 V
H1~7P (A2P)	Indication light emitting diode (service monitor is orange)
HAP (A1P)	Light emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y3S)
K3R (A1P)	Magnetic relay (E1H)
K4R (A1P)	Magnetic relay (E1HC)
K10R (A1P)	Magnetic relay (Upload)
K11R (A1P)	Magnetic relay (Main)
L1R	Reactor
M1C	Compressor motor
M1F, M2F	Fan motor
PS (A1P)	Switching power supply

Part n°	Description
Q1DI	# Earth leakage circuit breaker (30mA)
R1, R2 (A1P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R10T	Thermistor (fin)
RC (A4P)	Signal receiver circuit
S1NPH	Pressure sensor
S1PH	High pressure switch
TC (A4P)	Signal transmission circuit
1R (A1P)	Power module
V2~3R (A1P)	Diode module
V1T (A1P)	IGBT
X1M	Terminal strip
X*A (A*P)	Connector
Y1E, Y3E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Y3S	Solenoid valve (hot gas pass)
Z1~3C	Noise filter (ferrite core)
Z1~4F (A*P)	Noise filter

* : optional
: field supply

NOTES

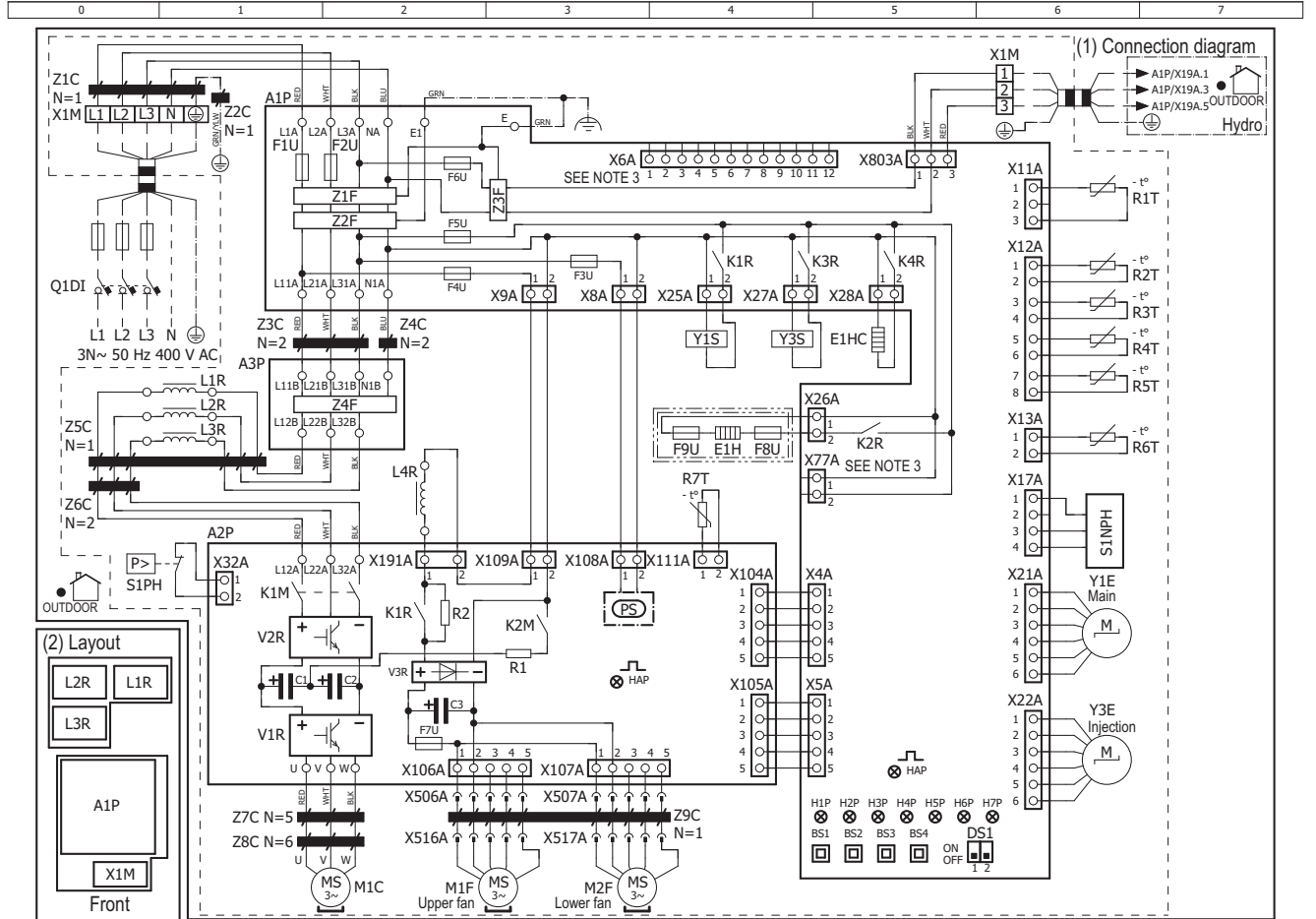
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1~BS4 and DS1 switches.
- When operating, do not short-circuit protection device S1PH.
- Refer to the combination table and the option manual for how to connect the wiring to X6A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green; BRN:brown; YLW:yellow; ORG:orange
- Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: OFF

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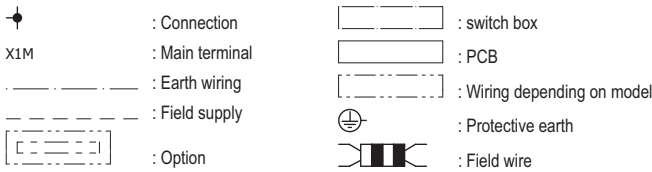
7 Wiring diagrams

7 - 2 Wiring Diagrams - Three Phase

E(B-D)LQ011-016CW1



(3) NOTES



(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (inv.)
A3P	Printed circuit board (noise filter)
BS1~4 (A1P)	Push-button switch
C1~3(A2P)	Capacitor
DS1 (A1P)	Dipswitch
E1H	* Bottom plate heater
E1HC	Crankcase heater
F1~2U (A1P)	Fuse 31,5 A 500 V
F3~6U (A1P)	Fuse T 6,3 A 250 V
F7U (A2P)	Fuse T 5 A 250 V
F8~9U	* Fuse F 1 A 250 V
H1~7P (A1P)	Indication light emitting diode (service monitor is orange)
HAP (A1~2P)	Light emitting diode (service monitor is green)
K1~2M (A2P)	Magnetic contactor (Main-Upload)
K1R (A1P)	Magnetic relay (Y1S)
K1R (A2P)	Magnetic relay (Upload)
K2R (A1P)	Magnetic relay (E1H)
K3R (A1P)	Magnetic relay (Y3S)
K4R (A1P)	Magnetic relay (E1HC)
L1~3R	Reactor
L4R	Reactor (Outdoor fan motor)

Part n°	Description
M1C	Compressor motor
M1F, M2F	Fan motor
PS (A2P)	Switching power supply
Q1DI	# Earth leakage circuit breaker (30mA)
R1~2 (A2P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
S1NPH	Pressure sensor
S1PH	High pressure switch
V1~2R (A2P)	Power module
V3R (A2P)	Diode module
X1M	Terminal strip
X*A (A*P)	Connector
Y1E, Y3E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Y3S	Solenoid valve (hot gas pass)
Z1~9C	Noise filter (ferrite core)
Z1~3F (A1P)	Noise filter
Z4F (A3P)	Noise filter

* : optional
: field supply

NOTES

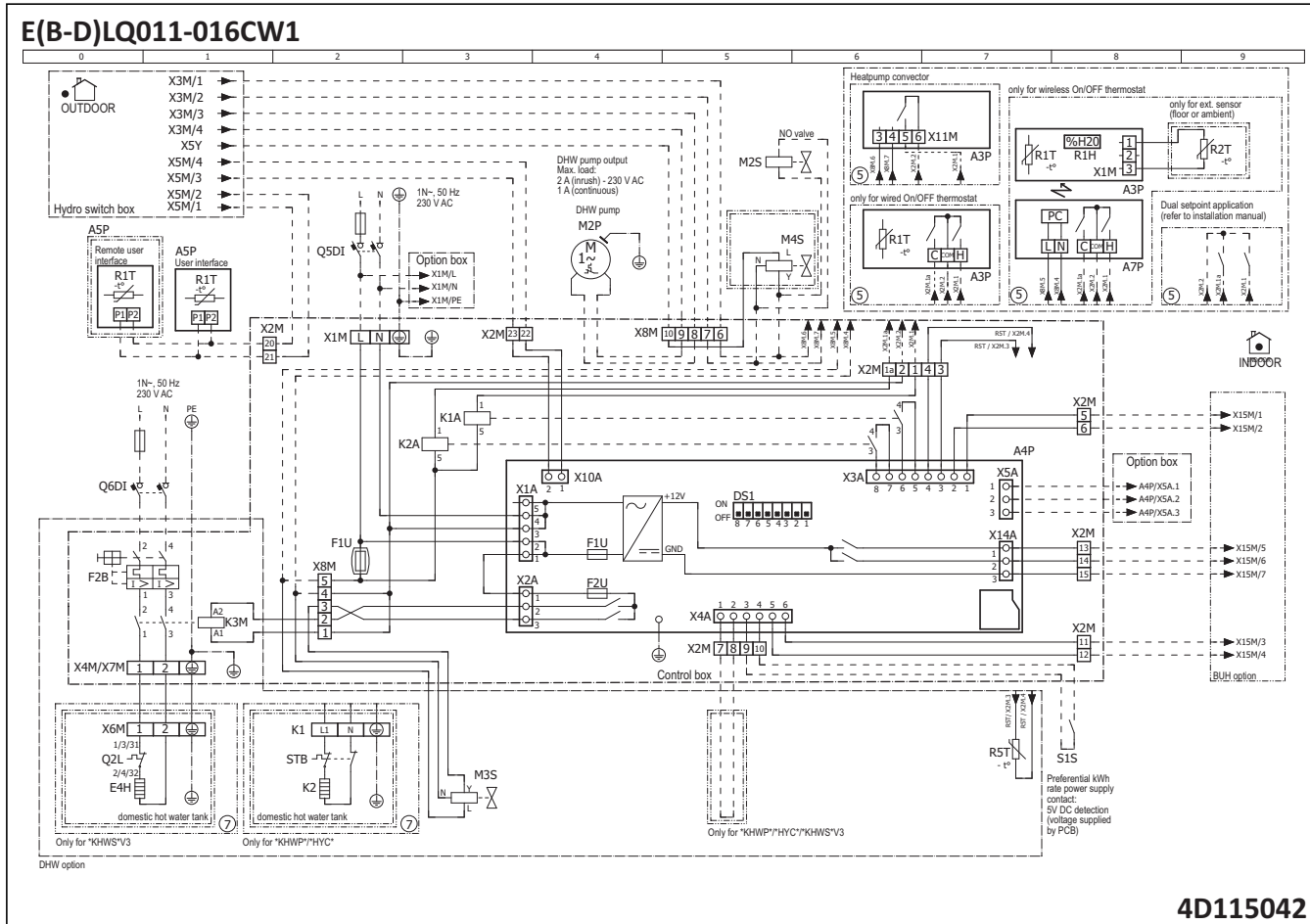
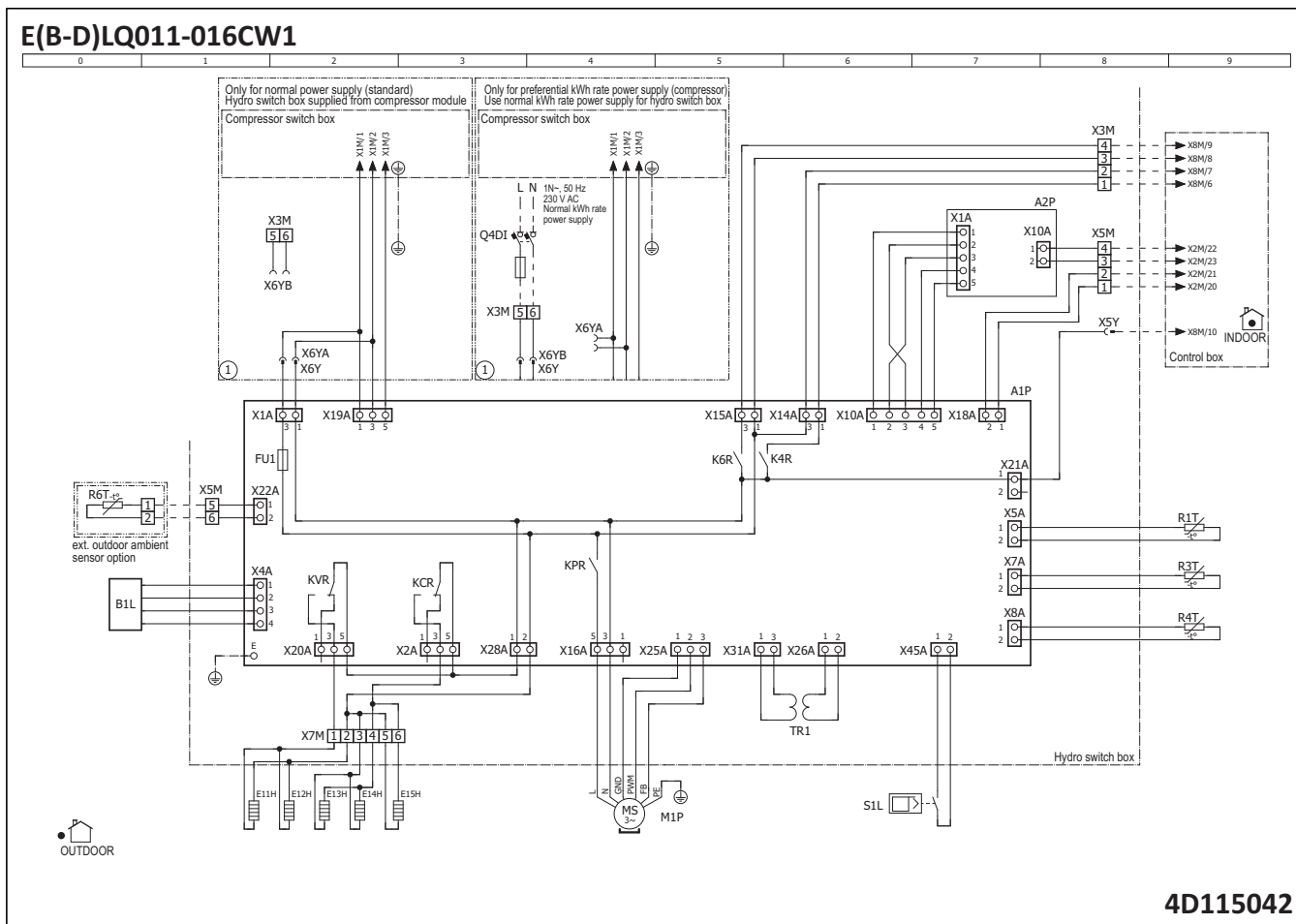
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1~BS4 and DS1 switches.
- When operating, do not short-circuit protection device S1PH.
- Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green; BRN:brown; YLW:yellow; ORG:orange
- Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: OFF

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7 Wiring diagrams

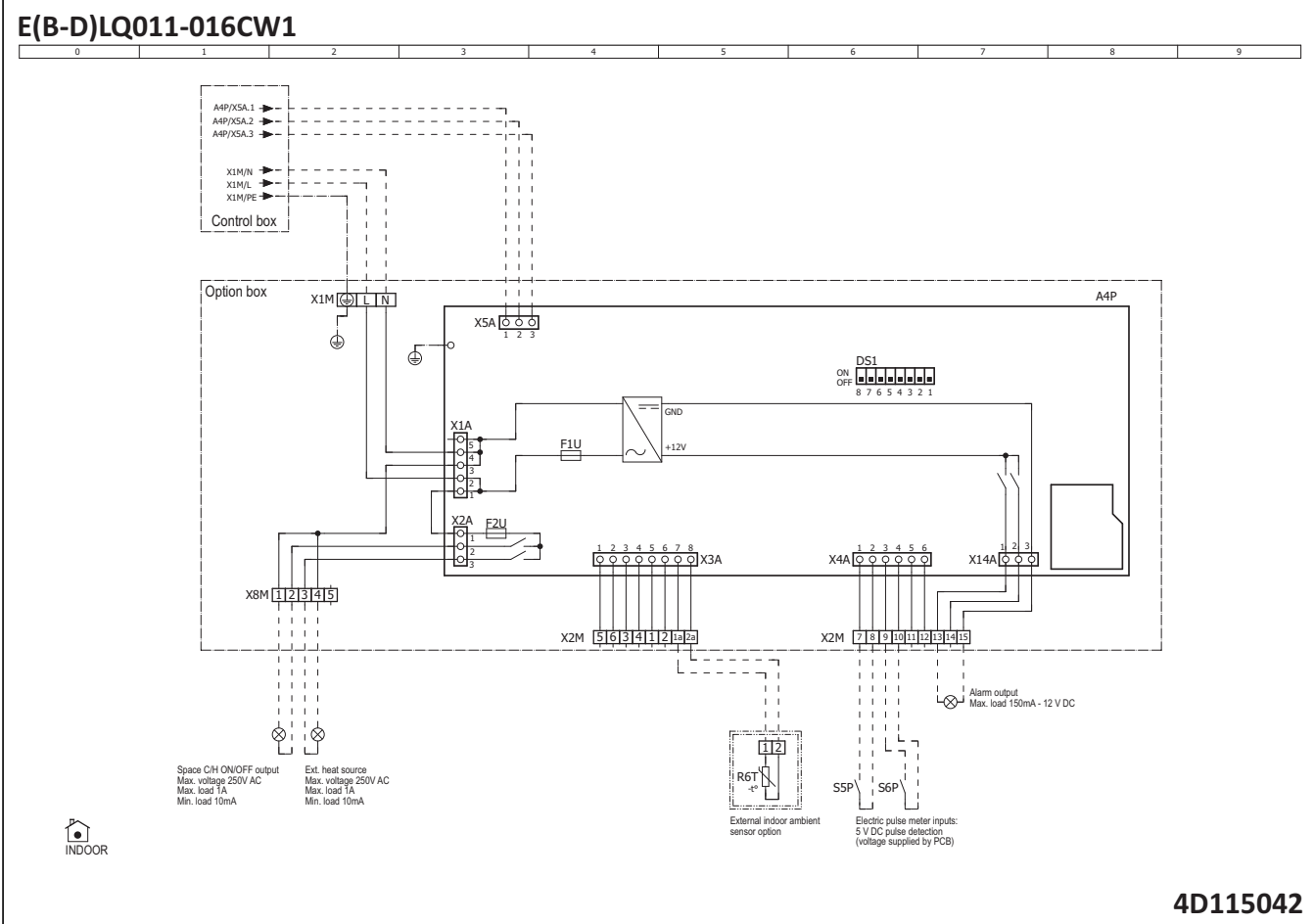
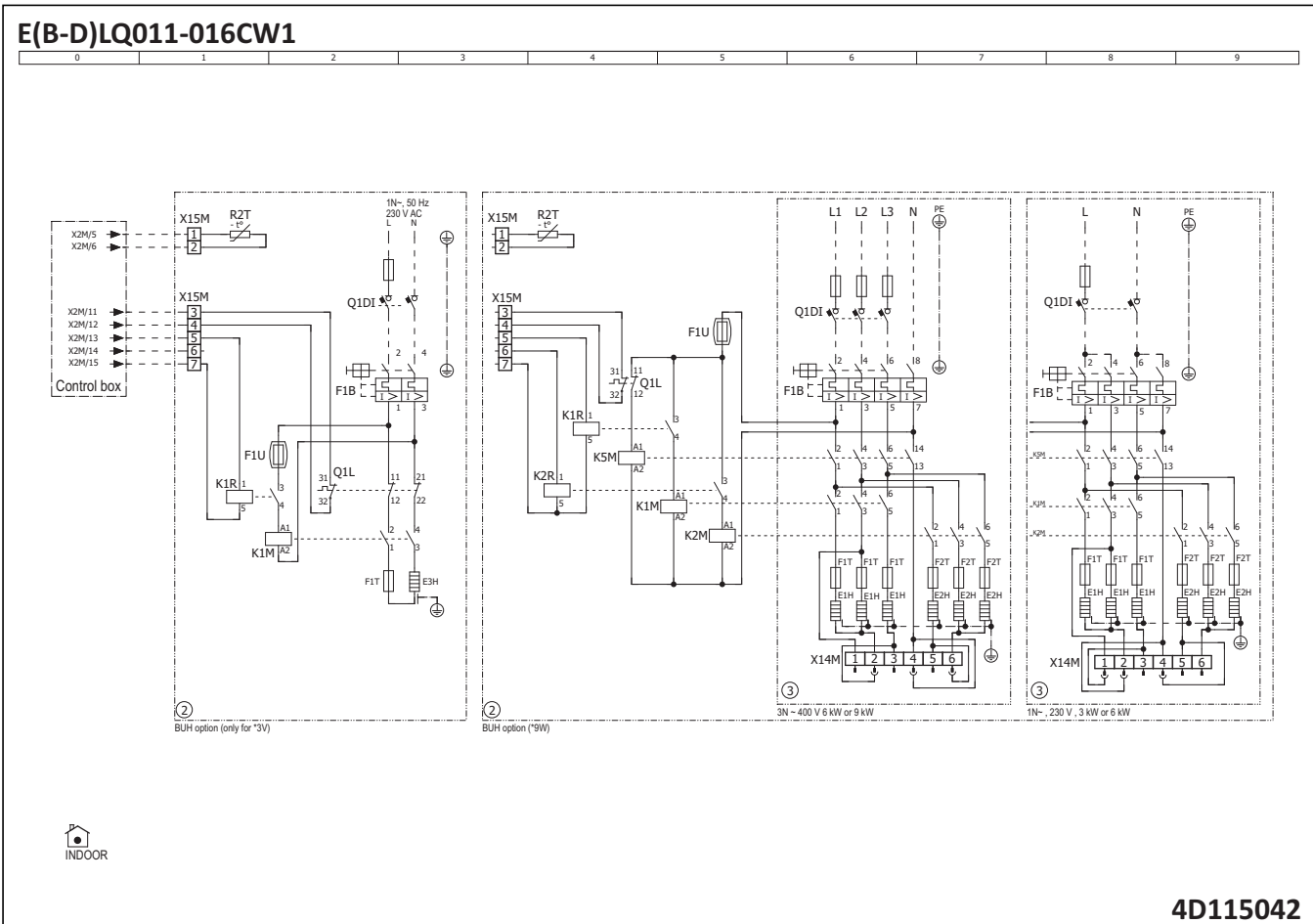
7 - 2 Wiring Diagrams - Three Phase

7



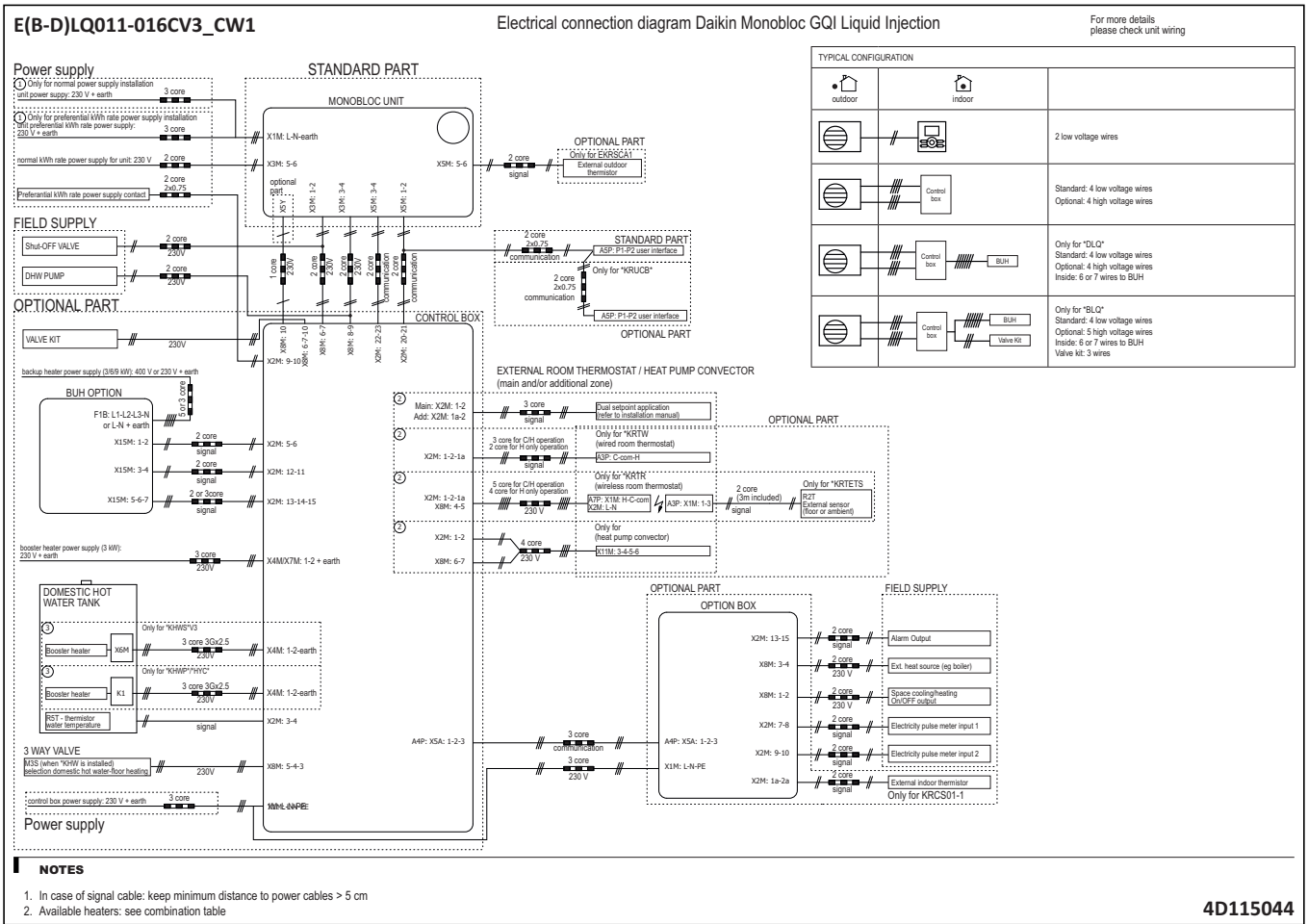
7 Wiring diagrams

7 - 2 Wiring Diagrams - Three Phase



8 External connection diagrams

8 - 1 External Connection Diagrams

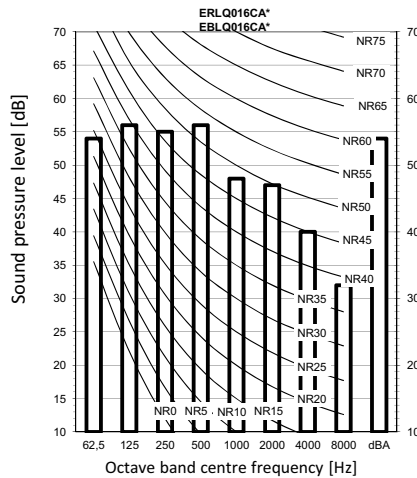
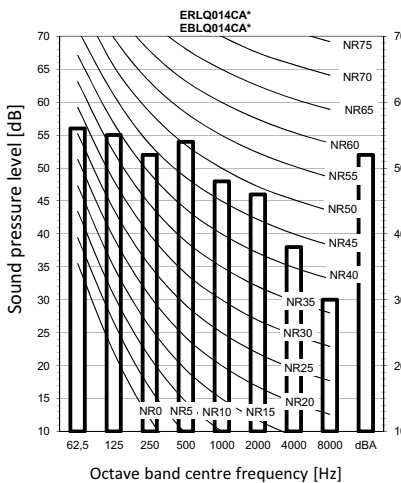
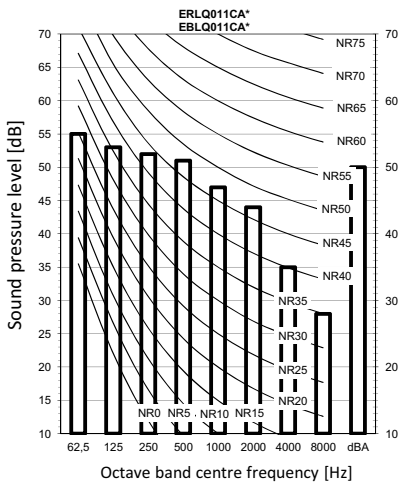


9 Sound data

9 - 1 Sound Pressure Spectrum - Cooling

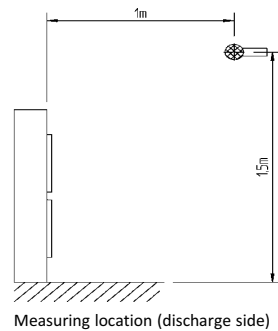
E(B-D)LQ011-016CV3_CW1

Cooling



Notes

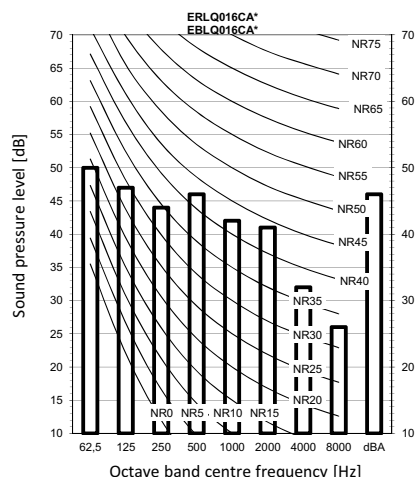
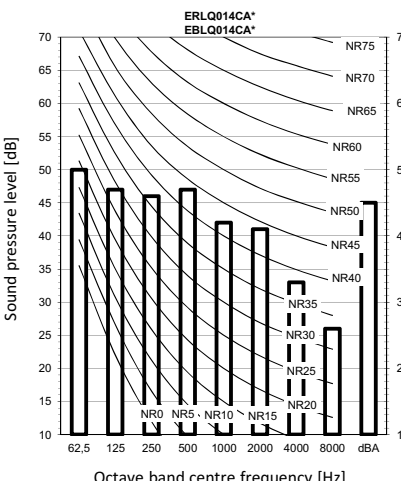
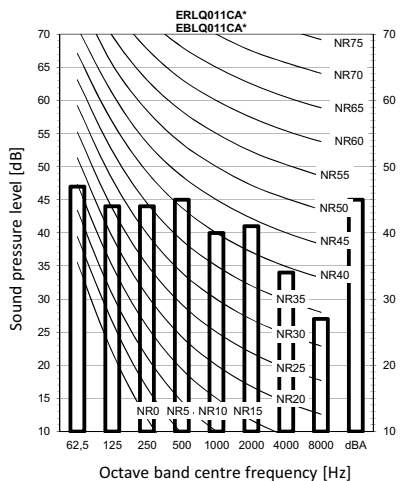
1. Data is valid at free field condition.
Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 μ Pa
5. If the sound is measured under actual installation conditions,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



3TW60337-1A

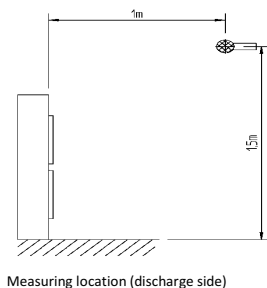
E(B-D)LQ011-016CV3_CW1

Cooling



Notes

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



3TW60337-3A

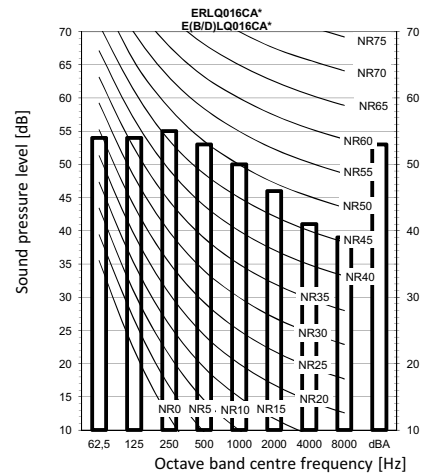
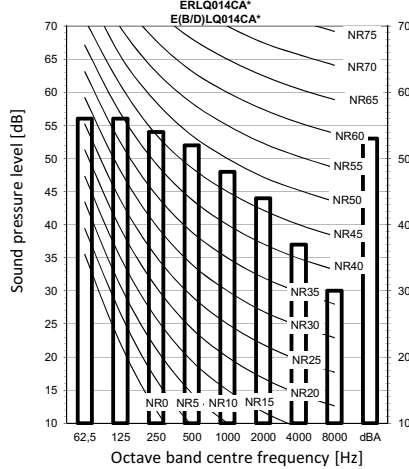
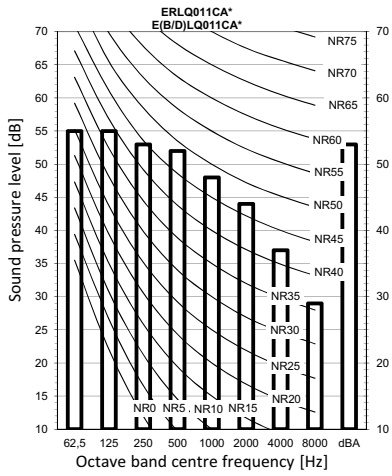
9 Sound data

9 - 2 Sound Pressure Spectrum - Heating

9

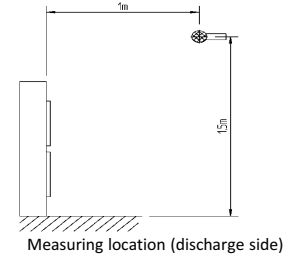
E(B-D)LQ011-016CV3_CW1

Heating



Notes

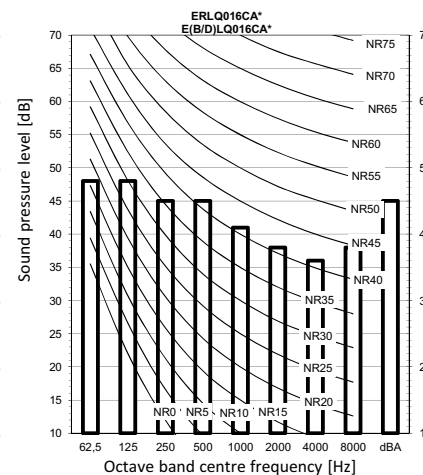
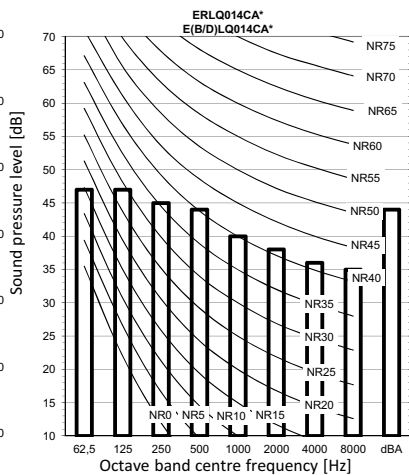
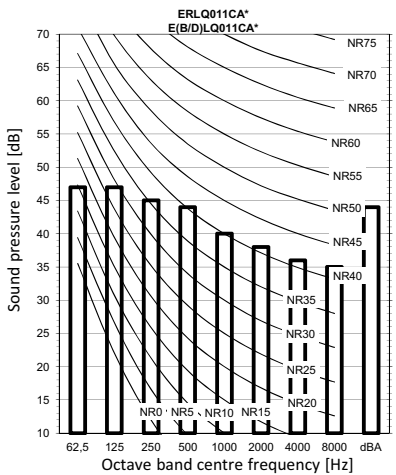
1. Data is valid at free field condition.
Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 μ Pa
5. If the sound is measured under actual installation conditions,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



3TW60337-2A

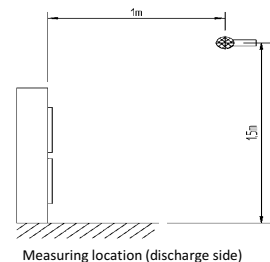
E(B-D)LQ011-016CV3_CW1

Heating



Notes

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

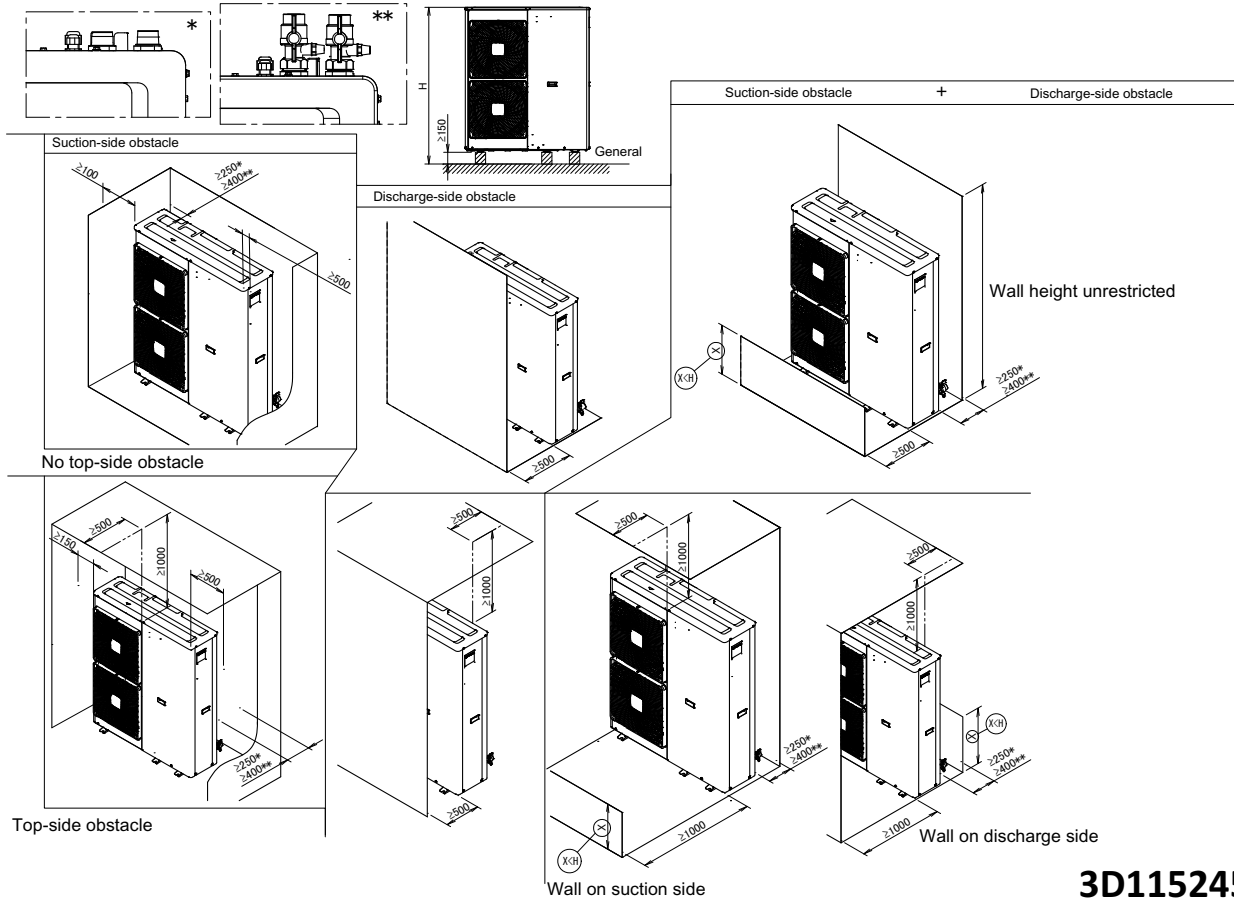


3TW60337-4A

10 Installation

10 - 1 Installation Method

E(B-D)LQ011-016CV3_CW1



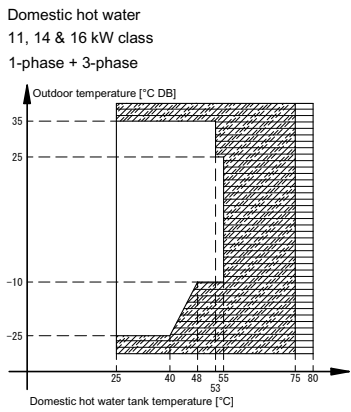
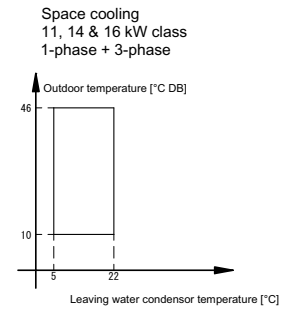
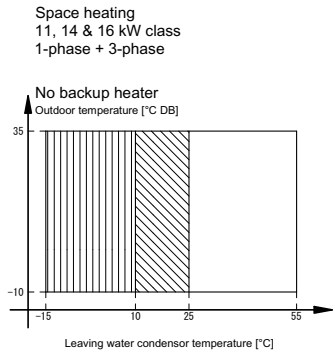
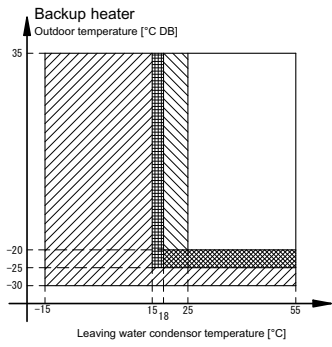
3D115245

11 Operation range

11 - 1 Operation Range

11

E(B-D)LQ011-016CV3_CW1



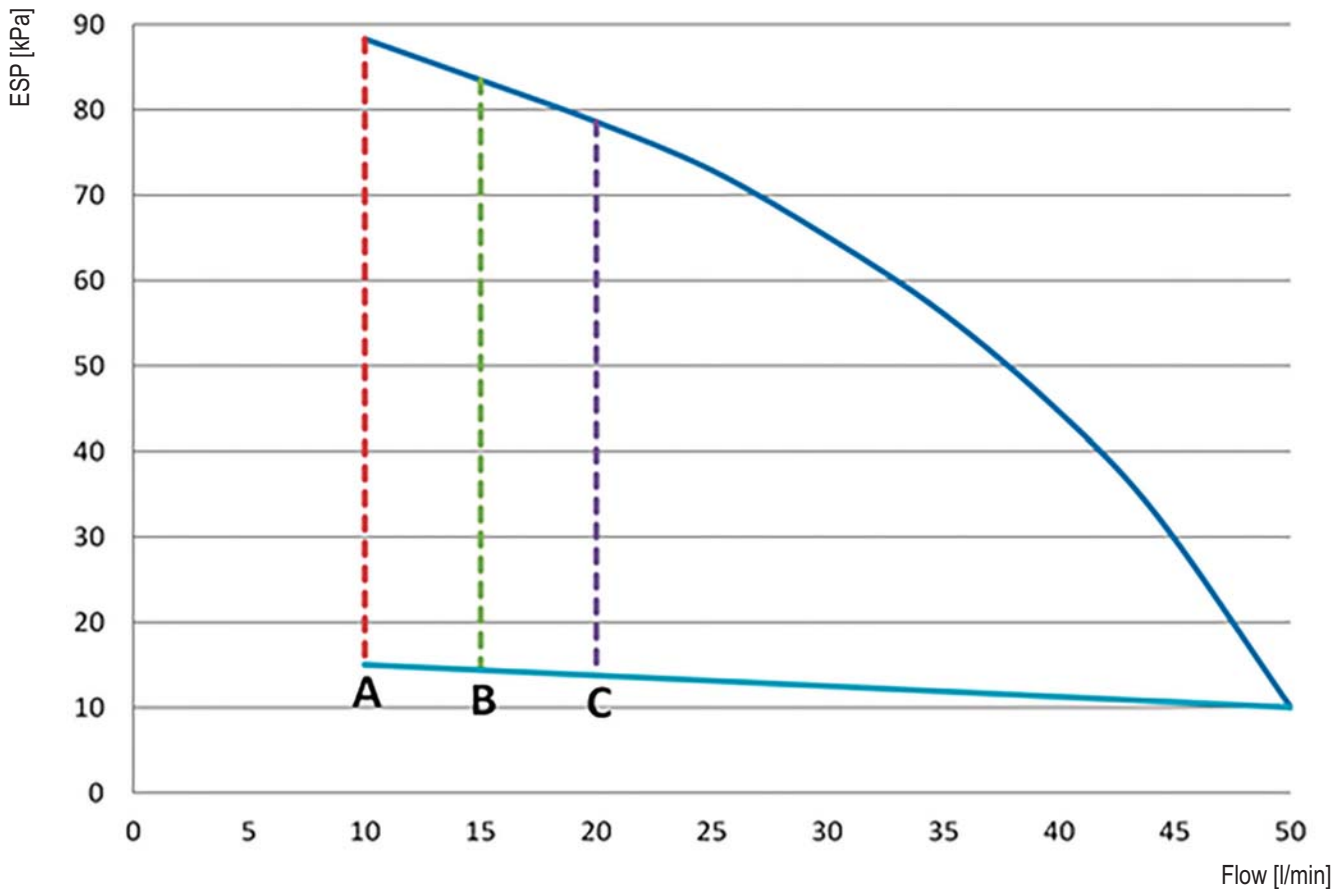
- Legend**
- Backup heater only operation
No outdoor unit operation
 - Heat pump + backup heater operation
Pull-up operation
 - Outdoor unit operation if setpoint ≥ 25°C
Pull-up operation
 - Operation of outdoor unit possible, but with possible capacity reduction.
If the outdoor temperature < -25°C, the outdoor unit will stop.
Indoor unit and backup heater operation will continue.
 - Circulation pump operation only
 - EKHWS'D* only
 - Booster heater only operation
EKHWP* only

3D115225

12 Hydraulic performance

12 - 1 Static Pressure Drop Unit

E(B-D)LQ011-016CV3_CW1



ESP = External static pressure [kPa] Space heating/cooling circuit
 Flow = Water/glycol flow through the unit Space heating/cooling circuit

- A = Minimum water flow rate during normal operation
- B = Minimum water flow rate during defrost operation in case the system contains a backup heater, domestic hot water tank with recirculation pump, or glycol
- C = Minimum water flow rate during defrost operation in case the system does NOT contain a backup heater, domestic hot water tank with recirculation pump (see Note 4), or glycol

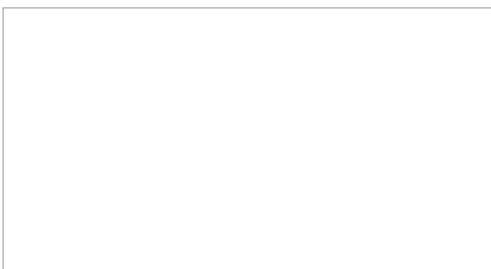
NOTES

1. The operation area is extended to lower flow rates only in case the unit operates with heat pump only, and the temperature of the flow medium is sufficiently high.
 This does not apply to start-up operation, defrost operation, and backup heater operation in case a backup heater is installed.
 See dashed lines
2. The higher operation range limit is only valid if the flow medium is water. If glycol is added to the system, the limit is lower.
3. 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
4. If the system contains an EKHWP domestic hot water tank, a recirculation pump is not required.

4D115246



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EEDEN18 04/18



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