

## Heating

# Technical Data

Daikin Altherma low temperature split



EEEN12-725

ERLQ-CV3



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# 1 Features

- Outdoor unit extracts heat from the outdoor air, even at -25°C
- Inverter controlled swing compressor



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## 2 Specifications

2-1 Nominal Capacity And Nominal Input				EHBH04C3V/ ERLQ004CV3	EHBH08C3V/ ERLQ006CV3	EHBH08C9W/ ERLQ006CV3	EHBH08C3V/ ERLQ008CV3	EHBH08C9W/ ERLQ008CV3
Heating capacity	Min.		kW	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)
	Nom.		kW	4.40 (1) / 4.03 (2)	6.00 (1) / 5.67 (2)	6.00 (1) / 5.67 (2)	7.40 (1) / 6.89 (2)	7.40 (1) / 6.89 (2)
	Max.		kW	5.12 (1) / 4.90 (2)	8.35 (1) / 7.95 (2)	8.35 (1) / 7.95 (2)	10.02 (1) / 9.35 (2)	10.02 (1) / 9.35 (2)
Power input	Heating	Nom.	kW	0.87 (1) / 1.13 (2)	1.27 (1) / 1.59 (2)	1.27 (1) / 1.59 (2)	1.66 (1) / 2.01 (2)	1.66 (1) / 2.01 (2)
		Max.	kW	-				
COP				5.04 (1) / 3.58 (2)	4.74 (1) / 3.56 (2)	4.74 (1) / 3.56 (2)	4.45 (1) / 3.42 (2)	4.45 (1) / 3.42 (2)
Pump	Nominal ESP unit	Heating	kPa	55 (3) / 59 (4)	48 (3) / 51 (4)	48 (3) / 51 (4)	37 (3) / 41 (4)	37 (3) / 41 (4)
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	12.6 (3) / 11.6 (4)	17.2 (3) / 16.3 (4)	17.2 (3) / 16.3 (4)	21.2 (3) / 19.8 (4)

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2-2 Nominal Capacity And Nominal Input				EHBH16C3V/ ERLQ011CV3	EHBH16C9W/ ERLQ011CV3	EHBH16C3V/ ERLQ014CV3	EHBH16C9W/ ERLQ014CV3	EHBH16C3V/ ERLQ016CV3	EHBH16C9W/ ERLQ016CV3
Heating capacity	Min.		kW	-					
	Nom.		kW	11.20 (1) / 10.98 (2)	11.20 (1) / 10.98 (2)	14.50 (1) / 13.60 (2)	14.50 (1) / 13.60 (2)	16.00 (1) / 15.20 (2)	16.00 (1) / 15.20 (2)
	Max.		kW	8.81 (3) / 8.16 (4)	8.81 (3) / 8.16 (4)	11.65 (3) / 10.96 (4)	11.65 (3) / 10.96 (4)	12.30 (3) / 11.35 (4)	12.30 (3) / 11.35 (4)
Power input	Heating	Nom.	kW	2.56 (1) / 3.19 (2)	2.56 (1) / 3.19 (2)	3.42 (1) / 4.13 (2)	3.42 (1) / 4.13 (2)	3.81 (1) / 4.66 (2)	3.81 (1) / 4.66 (2)
		Max.	kW	3.52 (3) / 4.14 (4)	3.52 (3) / 4.14 (4)	4.95 (3) / 5.66 (4)	4.95 (3) / 5.66 (4)	5.49 (3) / 6.43 (4)	5.49 (3) / 6.43 (4)
COP				4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)
Pump	Nominal ESP unit	Heating	kPa	86 (1) / 88 (2)	86 (1) / 88 (2)	47 (1) / 59 (2)	47 (1) / 59 (2)	26 (1) / 38 (2)	26 (1) / 38 (2)
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	32.1 (1) / 31.5 (2)	32.1 (1) / 31.5 (2)	41.6 (1) / 39 (2)	41.6 (1) / 39 (2)	45.9 (1) / 43.6 (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) DB/WB 7°C/6°C - LWC 35°C (DT=5°C)
- (4) DB/WB 7°C/6°C - LWC 45°C (DT=5°C)
- (5) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C
- (6) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

2-3 Nominal Capacity And Nominal Input				EHBX04C3V/ ERLQ004CV3	EHBX08C3V/ ERLQ006CV3	EHBX08C9W/ ERLQ006CV3	EHBX08C3V/ ERLQ008CV3	EHBX08C9W/ ERLQ008CV3
Heating capacity	Min.		kW	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)
	Nom.		kW	4.40 (1) / 4.03 (2)	6.00 (1) / 5.67 (2)	6.00 (1) / 5.67 (2)	7.40 (1) / 6.89 (2)	7.40 (1) / 6.89 (2)
	Max.		kW	5.12 (1) / 4.90 (2)	8.35 (1) / 7.95 (2)	8.35 (1) / 7.95 (2)	10.02 (1) / 9.53 (2)	10.02 (1) / 9.53 (2)
Cooling capacity	Min.		kW	2.00 (1) / 2.00 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)
	Nom.		kW	5.00 (1) / 4.17 (2)	6.76 (1) / 4.84 (2)	6.76 (1) / 4.84 (2)	6.86 (1) / 5.3 (2)	6.86 (1) / 5.3 (2)
Power input	Heating	Nom.	kW	0.87 (1) / 1.13 (2)	1.27 (1) / 1.59 (2)	1.27 (1) / 1.59 (2)	1.66 (1) / 2.01 (2)	1.66 (1) / 2.01 (2)
		Max.	kW	-				
	Cooling	Nom.	kW	1.48 (1) / 1.80 (2)	1.96 (1) / 2.07 (2)	1.96 (1) / 2.07 (2)	2.01 (1) / 2.34 (2)	2.01 (1) / 2.34 (2)
COP				5.04 (1) / 3.58 (2)	4.74 (1) / 3.56 (2)	4.74 (1) / 3.56 (2)	4.45 (1) / 3.42 (2)	4.45 (1) / 3.42 (2)
EER				3.37 (1) / 2.32 (2)	3.45 (1) / 2.34 (2)	3.45 (1) / 2.34 (2)	3.42 (1) / 2.29 (2)	3.42 (1) / 2.29 (2)
Pump	Nominal ESP unit	Cooling	kPa	57 (3) / 47 (4)	58 (3) / 42 (4)	58 (3) / 42 (4)	54 (3) / 41 (4)	54 (3) / 41 (4)
		Heating	kPa	55 (5) / 59 (6)	48 (5) / 51 (6)	48 (5) / 51 (6)	37 (5) / 41 (6)	37 (5) / 41 (6)
Water side Heat exchanger	Water flow rate	Cooling	Nom.	l/min	12.0 (3) / 14.3 (4)	13.9 (3) / 19.4 (4)	13.9 (3) / 19.4 (4)	15.4 (3) / 19.7 (4)
		Heating	Nom.	l/min	12.6 (5) / 11.6 (6)	17.2 (5) / 16.3 (6)	17.2 (5) / 16.3 (6)	21.2 (5) / 19.8 (6)

## 2 Specifications

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2-4 Nominal Capacity And Nominal Input				EHBX16C3V/ ERLQ011CV3	EHBX16C9W/ ERLQ011CV3	EHBX16C3V/ ERLQ014CV3	EHBX16C9W/ ERLQ014CV3	EHBX16C3V/ ERLQ016CV3	EHBX16C9W/ ERLQ016CV3	
Heating capacity	Min.			-						
	Nom.	kW		11.20 (1) / 10.98 (2)	11.20 (1) / 10.98 (2)	14.50 (1) / 13.60 (2)	14.50 (1) / 13.60 (2)	16.00 (1) / 15.20 (2)	16.00 (1) / 15.20 (2)	
	Max.	kW		8.81 (3) / 8.16 (4)	8.81 (3) / 8.16 (4)	11.65 (3) / 10.96 (4)	11.65 (3) / 10.96 (4)	12.30 (3) / 11.35 (4)	12.30 (3) / 11.35 (4)	
Cooling capacity	Min.			-						
	Nom.	kW		15.05 (1) / 11.72 (2)	15.05 (1) / 11.72 (2)	16.06 (1) / 12.55 (2)	16.06 (1) / 12.55 (2)	16.76 (1) / 13.12 (2)	16.76 (1) / 13.12 (2)	
Power input	Heating	Nom.	kW		2.56 (1) / 3.19 (2)	2.56 (1) / 3.19 (2)	3.42 (1) / 4.13 (2)	3.42 (1) / 4.13 (2)	3.81 (1) / 4.66 (2)	3.81 (1) / 4.66 (2)
		Max.	kW		3.52 (3) / 4.14 (4)	3.52 (3) / 4.14 (4)	4.95 (3) / 5.66 (4)	4.95 (3) / 5.66 (4)	5.49 (3) / 6.34 (4)	5.49 (3) / 6.34 (4)
	Cooling	Nom.	kW		4.53 (1) / 4.31 (2)	4.53 (1) / 4.31 (2)	5.43 (1) / 5.08 (2)	5.43 (1) / 5.08 (2)	5.16 (1) / 5.73 (2)	5.16 (1) / 5.73 (2)
COP				4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	
EER				3.32 (1) / 2.72 (2)	3.32 (1) / 2.72 (2)	2.96 (1) / 2.47 (2)	2.96 (1) / 2.47 (2)	2.72 (1) / 2.29 (2)	2.72 (1) / 2.29 (2)	
Pump	Nominal ESP unit	Cooling	kPa		80 (2) / 40 (1)	80 (2) / 40 (1)	71 (2) / 26 (1)	71 (2) / 26 (1)	65 (2) / 16 (1)	65 (2) / 16 (1)
		Heating	kPa		86 (1) / 88 (2)	86 (1) / 88 (2)	47 (1) / 59 (2)	47 (1) / 59 (2)	26 (1) / 38 (2)	26 (1) / 38 (2)
Water side Heat exchanger	Water flow rate	Cooling	Nom	l/min	33.6 (2) / 43.1 (1)	33.6 (2) / 43.1 (1)	36.0 (2) / 46.0 (1)	36.0 (2) / 46.0 (1)	37.6 (2) / 48.0 (1)	37.6 (2) / 48.0 (1)
		Heating	Nom	l/min	32.1 (1) / 31.5 (2)	32.1 (1) / 31.5 (2)	41.6 (1) / 39.0 (2)	41.6 (1) / 39.0 (2)	45.9 (1) / 43.6 (2)	45.9 (1) / 43.6 (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) Tamb 35°C - LWE 7°C (DT=5°C)
- (4) Tamb 35°C - LWE 18°C (DT=5°C)
- (5) DB/WB 7°C/6°C - LWC 35°C (DT=5°C)
- (6) DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)
- (7) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C
- (8) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

2-5 Nominal Capacity And Nominal Input				EHVH04S18C3V/ ERLQ004CV3	EHVH08S18C3V/ ERLQ006CV3	EHVH08S26C9W/ ERLQ006CV3	EHVH08S18C3V/ ERLQ008CV3	EHVH08S26C9W/ ERLQ008CV3	
Heating capacity	Min.			-					
	Nom.	kW		1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	
	Max.	kW		5.12 (1) / 4.90 (2)	8.35 (1) / 7.95 (2)	8.35 (1) / 7.95 (2)	10.02 (1) / 9.35 (2)	10.02 (1) / 9.35 (2)	
Power input	Heating	Nom.	kW		0.87 (1) / 1.13 (2)	1.27 (1) / 1.59 (2)	1.27 (1) / 1.59 (2)	1.66 (1) / 2.01 (2)	1.66 (1) / 2.01 (2)
		Max.	kW		-				
COP				5.04 (1) / 3.58 (2)	4.74 (1) / 3.56 (2)	4.74 (1) / 3.56 (2)	4.45 (1) / 3.42 (2)	4.45 (1) / 3.42 (2)	
Pump	Nominal ESP unit	Heating		kPa	52 (3) / 55 (4)	49 (3) / 51 (4)	49 (3) / 51 (4)	37 (3) / 41 (4)	37 (3) / 41 (4)
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	12.6 (3) / 11.6 (4)	17.2 (3) / 16 (4)	17.2 (3) / 16 (4)	21.2 (3) / 19.8 (4)	21.2 (3) / 19.8 (4)

2-6 Nominal Capacity And Nominal Input				EHVH16S18C3V/ ERLQ011CV3	EHVH16S26C9W/ ERLQ011CV3	EHVH16S18C3V/ ERLQ014CV3	EHVH16S26C9W/ ERLQ014CV3	EHVH16S18C3V/ ERLQ016CV3	EHVH16S26C9W/ ERLQ016CV3	
Heating capacity	Min.			-						
	Nom.	kW		11.20 (1) / 10.98 (2)	11.20 (1) / 10.98 (2)	14.50 (1) / 13.60 (2)	14.50 (1) / 13.60 (2)	16.00 (1) / 15.20 (2)	16.00 (1) / 15.20 (2)	
	Max.	kW		8.81 (3) / 8.16 (4)	8.81 (3) / 8.16 (4)	11.65 (3) / 10.96 (4)	11.65 (3) / 10.96 (4)	12.30 (3) / 11.35 (4)	12.30 (3) / 11.35 (4)	
Power input	Heating	Nom.	kW		2.56 (1) / 3.19 (2)	2.56 (1) / 3.19 (2)	3.42 (1) / 4.13 (2)	3.42 (1) / 4.13 (2)	3.81 (1) / 4.66 (2)	3.81 (1) / 4.66 (2)
		Max.	kW		3.52 (3) / 4.14 (4)	3.52 (3) / 4.14 (4)	4.95 (3) / 5.66 (4)	4.95 (3) / 5.66 (4)	5.49 (3) / 6.43 (4)	5.49 (3) / 6.43 (4)
COP				4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	
Pump	Nominal ESP unit	Heating		kPa	83.6 (1) / 85.8 (2)	83.6 (1) / 85.8 (2)	44.1 (1) / 55.9 (2)	44.1 (1) / 55.9 (2)	23.1 (1) / 34.6 (2)	23.1 (1) / 34.6 (2)
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	32.1 (1) / 31.5 (2)	32.1 (1) / 31.5 (2)	41.6 (1) / 39.0 (2)	41.6 (1) / 39.0 (2)	45.9 (1) / 43.6 (2)	45.9 (1) / 43.6 (2)

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## 2 Specifications

### 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) DB/WB 7°C/6°C - LWC 35°C (DT=5°C)
- (4) DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)
- (5) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C
- (6) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

2-7 Nominal Capacity And Nominal Input				EHVX04S18C3V/ ERLQ004CV3	EHVX08S18C3V/ ERLQ006CV3	EHVX08S26C9W/ ERLQ006CV3	EHVX08S18C3V/ ERLQ008CV3	EHVX08S26C9W/ ERLQ008CV3
Heating capacity	Min.	kW		1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)	1.80 (1) / 1.80 (2)
	Nom.	kW		4.40 (1) / 4.03 (2)	6.00 (1) / 5.67 (2)	6.00 (1) / 5.67 (2)	7.40 (1) / 6.89 (2)	7.40 (1) / 6.89 (2)
	Max.	kW		5.12 (1) / 4.90 (2)	8.35 (1) / 7.95 (2)	8.35 (1) / 7.95 (2)	10.02 (1) / 9.53 (2)	10.02 (1) / 9.53 (2)
Cooling capacity	Min.	kW		2.00 (1) / 2.00 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)	2.50 (1) / 2.50 (2)
	Nom.	kW		5.00 (1) / 4.17 (2)	6.76 (1) / 4.84 (2)	6.76 (1) / 4.84 (2)	6.86 (1) / 5.36 (2)	6.86 (1) / 5.36 (2)
Power input	Heating	Nom.	kW	0.87 (1) / 1.13 (2)	1.27 (1) / 1.59 (2)	1.27 (1) / 1.59 (2)	1.66 (1) / 2.01 (2)	1.66 (1) / 2.01 (2)
		Max.	-					
	Cooling	Nom.	kW	1.48 (1) / 1.80 (2)	1.96 (1) / 2.07 (2)	1.96 (1) / 2.07 (2)	2.01 (1) / 2.34 (2)	2.01 (1) / 2.34 (2)
COP				5.04 (1) / 3.58 (2)	4.74 (1) / 3.56 (2)	4.74 (1) / 3.56 (2)	4.45 (1) / 3.42 (2)	4.45 (1) / 3.42 (2)
EER				3.37 (1) / 2.32 (2)	3.45 (1) / 2.34 (2)	3.45 (1) / 2.34 (2)	3.42 (1) / 2.29 (2)	3.42 (1) / 2.29 (2)
Pump	Nominal ESP unit	Cooling	kPa	54 (3) / 45 (4)	57 (3) / 42 (4)	57 (3) / 42 (4)	54 (3) / 41 (4)	54 (3) / 41 (4)
		Heating	kPa	52 (5) / 55 (6)	49 (5) / 51 (6)	49 (5) / 51 (6)	37 (5) / 41 (6)	37 (5) / 41 (6)
Water side Heat exchanger	Water flow rate	Cooling	Nom. l/min	12.0 (3) / 14.3 (4)	13.9 (3) / 19.4 (4)	13.9 (3) / 19.4 (4)	15.4 (3) / 19.7 (4)	15.4 (3) / 19.7 (4)
		Heating	Nom. l/min	12.6 (5) / 11.6 (6)	17.2 (5) / 16.3 (6)	17.2 (5) / 16.3 (6)	21.2 (5) / 19.8 (6)	21.2 (5) / 19.8 (6)

2-8 Nominal Capacity And Nominal Input				EHVX16S18C3V/ ERLQ011CV3	EHVX16S26C9W/ ERLQ011CV3	EHVX16S18C3V/ ERLQ014CV3	EHVX16S26C9W/ ERLQ014CV3	EHVX16S18C3V/ ERLQ016CV3	EHVX16S26C9W/ ERLQ016CV3
Heating capacity	Min.	kW		-	-	-	-	-	-
	Nom.	kW		11.20 (1) / 10.98 (2)	11.20 (1) / 10.98 (2)	14.50 (1) / 13.60 (2)	14.50 (1) / 13.60 (2)	16.00 (1) / 15.20 (2)	16.00 (1) / 15.20 (2)
	Max.	kW		8.81 (3) / 8.16 (4)	8.81 (3) / 8.16 (4)	11.65 (3) / 10.96 (4)	11.65 (3) / 10.96 (4)	12.30 (3) / 11.35 (4)	12.30 (3) / 11.35 (4)
Cooling capacity	Min.	kW		-	-	-	-	-	-
	Nom.	kW		15.05 (1) / 11.72 (2)	15.05 (1) / 11.72 (2)	16.06 (1) / 12.55 (2)	16.06 (1) / 12.55 (2)	16.76 (1) / 13.12 (2)	16.76 (1) / 13.12 (2)
Power input	Heating	Nom.	kW	2.56 (1) / 3.19 (2)	2.56 (1) / 3.19 (2)	3.42 (1) / 4.13 (2)	3.42 (1) / 4.13 (2)	3.81 (1) / 4.66 (2)	3.81 (1) / 4.66 (2)
		Max.	kW	3.52 (3) / 4.14 (4)	3.52 (3) / 4.14 (4)	4.95 (3) / 5.66 (4)	4.95 (3) / 5.66 (4)	5.49 (3) / 6.34 (4)	5.49 (3) / 6.34 (4)
	Cooling	Nom.	kW	4.53 (1) / 4.31 (2)	4.53 (1) / 4.31 (2)	5.43 (1) / 5.08 (2)	5.43 (1) / 5.08 (2)	5.16 (1) / 5.73 (2)	5.16 (1) / 5.73 (2)
COP				4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.38 (1) / 2.50 (3) / 3.44 (2) / 1.97 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.24 (1) / 2.35 (3) / 3.29 (2) / 1.94 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)	4.20 (1) / 2.24 (3) / 3.26 (2) / 1.79 (4)
EER				3.32 (1) / 2.72 (2)	3.32 (1) / 2.72 (2)	2.96 (1) / 2.47 (2)	2.96 (1) / 2.47 (2)	2.72 (1) / 2.29 (2)	2.72 (1) / 2.29 (2)
Pump	Nominal ESP unit	Cooling	kPa	78.0 (2) / 37.0 (1)	78.0 (2) / 37.0 (1)	68.6 (2) / 22.5 (1)	68.6 (2) / 22.5 (1)	61.9 (2) / 12.1 (1)	61.9 (2) / 12.1 (1)
		Heating	kPa	83.6 (1) / 85.8 (2)	83.6 (1) / 85.8 (2)	44.1 (1) / 55.9 (2)	44.1 (1) / 55.9 (2)	23.1 (1) / 34.6 (2)	23.1 (1) / 34.6 (2)
Water side Heat exchanger	Water flow rate	Cooling	Nom. l/min	33.6 (2) / 43.1 (1)	33.6 (2) / 43.1 (1)	36.0 (2) / 46.0 (1)	36.0 (2) / 46.0 (1)	37.6 (2) / 48.0 (1)	37.6 (2) / 48.0 (1)
		Heating	Nom. l/min	32.1 (1) / 31.5 (2)	32.1 (1) / 31.5 (2)	41.6 (1) / 39.0 (2)	41.6 (1) / 39.0 (2)	45.9 (1) / 43.6 (2)	45.9 (1) / 43.6 (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) Tamb 35°C - LWE 7°C (DT=5°C)
- (4) Tamb 35°C - LWE 18°C (DT=5°C)
- (5) DB/WB 7°C/6°C - LWC 35°C (DT=5°C)
- (6) DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)
- (7) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C
- (8) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

## 2 Specifications

2-9 Technical Specifications				ERLQ004CV3	ERLQ006CV3	ERLQ008CV3	ERLQ011CV3	ERLQ014CV3	ERLQ016CV3	
Capacity control	Method			Inverter controlled						
Casing	Colour			Ivory white						
	Material			Polyester painted galvanised steel plate			Painted galvanized steel plate			
Dimensions	Unit	Height	mm	735			1,345			
		Width	mm	832			900			
		Depth	mm	307			320			
	Packed unit	Height	mm	797			1,524			
		Width	mm	990			980			
		Depth	mm	390			420			
Weight	Unit		kg	54	56		113			
	Packed unit		kg	57	59		128			
Packing	Material			EPS / Carton	EPS / Carton	EPS / Carton	Wood / EPS / Carton / PE (Straps)	Wood / EPS / Carton / PE (Straps)	Wood / EPS / Carton / PE (Straps)	
	Weight			kg	3			15		
Heat exchanger	Length		mm	845			857			
	Rows	Quantity		2						
	Fin pitch		mm	1.8			1.4			
	Passes	Quantity		-			7			
	Face area		m <sup>2</sup>	-			1.131			
	Stages	Quantity		32			60			
	Empty tubeplate hole	Quantity		-			0			
	Tube type			ø8 Hi-XA			ø8 Hi-XSS			
	Fin	Fin	Type		WF fin					
		Treatment		Anti-corrosion treatment (PE)						
Fan	Type			Propeller fan						
	Quantity			1			2			
	Air flow rate	Heating	High	m <sup>3</sup> /min	45	47		-		
		Cooling	High	m <sup>3</sup> /min	52.5			-		
	Discharge direction			Horizontal						
Fan motor	Quantity			1			2			
	Model			-			Brushless DC motor			
	Output		W	53			70			
	Drive			-						
	Speed	Steps		-						
		Heating	Nom.	rpm	-		740	750	760	
Cooling	Nom.	rpm	-		780					
Compressor	Quantity			1						
	Model			2YC36BXD#C	2YC45DXD#C		JT100G-VD (B2)			
	Type			Hermetically sealed swing compressor			Hermetically sealed scroll compressor			
	Output		W	-			2,200			
	Starting method			-						
	Motor	Crankcase heater	Output	W	-			33		
Operation range	Heating	Min.	°CDB	-25						
		Max.	°CDB	25			35			
	Cooling	Min.	°CDB	10						
		Max.	°CDB	43		46.0				
	Domestic hot water	Min.	°CDB	-25			-20			
		Max.	°CDB	35						
Refrigerant	Type			R-410A						
	Charge		kg	1.45	1.60		3.4			
	Control			Expansion valve (electronic type)						
	Circuits	Quantity		1						
Refrigerant oil	Type			FVC50K			Daphne FVC68D			
	Charged volume		l	0.75			1.5			



## 2 Specifications

2-9 Technical Specifications				ERLQ004CV3	ERLQ006CV3	ERLQ008CV3	ERLQ011CV3	ERLQ014CV3	ERLQ016CV3	
Piping connections	Liquid	Quantity		-			1			
		Type		Flare connection						
		OD	mm	6.35			9.52			
	Gas	Quantity		-			1			
		Type		Flare connection						
		OD	mm	15.9						
	Drain	Quantity		2			3			
		Type		Hole						
		OD	mm	1x ø15 + 1x ø20			26			
	Drain 2	Quantity		-			1			
		Type		-						
		OD	mm	-						
	Piping length	OU - IU	Max.	m	30			50		
			System	Equivalent	m	-			70	
		Chargeless	m	-			10			
Additional refrigerant charge			kg/m	-			See installation manual			
Level difference	IU - OU	Max.	m	20			30			
Heat insulation				-			Both liquid and gas pipes			
Sound power level	Heating	Nom.	dBa	61		62	64		66	
	Cooling	Nom.	dBa	63			64	66	69	
Sound pressure level	Heating	Nom.	dBa	48 (3)		49 (3)	51		52	
	Cooling	Nom.	dBa	48 (3)	49 (3)	50 (3)	50	52	54	
	Night quiet mode	Heating	dBa	-			42		43	
		Cooling	dBa	-			45		46	
Defrost method				Reversed cycle			Pressure equalising			
Defrost control				Sensor for outdoor heat exchanger temperature						
Safety devices	Item	01		-			High pressure switch			
		02		-			Fan motor thermal protection			
		03		-			Fuse			
PED	Category		Category I			-				

2-10 Electrical Specifications				ERLQ004CV3	ERLQ006CV3	ERLQ008CV3	ERLQ011CV3	ERLQ014CV3	ERLQ016CV3
Power supply	Name		V3						
	Phase		1~						
	Frequency		Hz	50					
	Voltage		V	230					
	Voltage range	Min.	%	10			-10		
		Max.	%	10					
Current	Zmax	Text	-			0.22			
	Minimum Ssc value		kVa	-			525		
	Starting current	Heating	A	18			-		
		Cooling	A	18			-		
	Maximum running current	Heating	A	-			34.2		
		Cooling	A	-			34.2		
Recommended fuses		A	20			40			
Wiring connections	For power supply	Quantity	3			-			
		Remark	-			See installation manual outdoor unit			
	For connection with indoor	Quantity	3			-			
		Remark	No earth wiring			See installation manual outdoor unit			
Power supply intake				-			Outdoor unit only		

### Notes

- (1) Operation range heating (outdoor unit): range increase by support back-up heater
- (2) See operation range drawing: range increase by support booster heater or backup heater
- (3) 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.
- (4) Minimum Ssc value: 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 systems with input current  $I > 16A$  and  $\leq 75A$  per phase
- (5) PED unit category: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC

## 2 Specifications

(6) Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(7) Condition: Ta 35°C - LWE 7°C (DT = 5°C)

(8) Operation range domestic hot water (outdoor unit): range increase by support booster heater

(9) See separate drawing for operation range

(10) In accordance with EN/IEC 61000-3-11, respectively EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with  $Z_{sys} \leq Z_{max}$ , respectively  $S_{sc} \geq$  minimum  $S_{sc}$  value.

(11) Minimum  $S_{sc}$  (=Short-circuit power) value: 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 systems with input current  $I > 16A$  and  $\leq 75A$  per phase

### 3 Capacity tables

#### 3 - 1 Heating Capacity Tables

##### ERLQ004-008CV3

###### Maximum heating capacity - Peak values

	LWC [°C]	30		35		40		45		50		55	
	Tamb [°C]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]
*RLQ004*	-20	2.42	1.58	2.40	1.79	2.35	1.97	2.30	2.19	2.21	2.41		
	-15	3.53	1.57	3.32	1.79	3.38	1.96	3.13	2.21	3.04	2.41	2.80	2.52
	-7	5.02	1.57	4.91	1.75	4.81	1.93	4.64	2.13	4.34	2.36	4.04	2.49
	-2	5.16	1.39	5.07	1.56	4.92	1.75	4.82	1.93	4.55	2.17	4.34	2.29
	2	5.20	1.22	5.10	1.37	4.98	1.58	4.88	1.74	4.69	1.98	4.54	2.08
	7	5.25	0.99	5.12	1.12	5.00	1.31	4.90	1.44	4.70	1.66	4.54	1.76
	12	5.29	0.77	5.20	0.86	5.05	1.01	4.91	1.21	4.73	1.47	4.57	1.52
	15	5.47	0.76	5.29	0.81	5.16	0.98	5.06	1.20	4.76	1.37	4.63	1.48
	20	6.02	0.74	5.85	0.81	5.73	0.96	5.51	1.13	5.18	1.32	4.89	1.45
*RLQ006*	-20	3.26	2.10	3.19	2.27	3.16	2.44	3.02	2.55	2.84	2.63		
	-15	4.21	2.05	4.13	2.22	4.06	2.38	3.93	2.50	3.71	2.57	3.42	2.61
	-7	6.22	1.99	6.01	2.16	5.80	2.33	5.69	2.44	5.40	2.51	4.97	2.58
	-2	6.99	1.94	6.81	2.10	6.52	2.26	6.33	2.39	5.99	2.46	5.48	2.54
	2	7.48	1.90	7.26	2.04	6.96	2.20	6.76	2.33	6.57	2.41	5.96	2.50
	7	8.48	1.84	8.35	1.99	8.17	2.15	7.95	2.32	7.53	2.40	7.08	2.48
	12	9.20	1.82	8.97	1.95	8.73	2.11	8.37	2.29	8.01	2.39	7.52	2.47
	15	10.03	1.79	9.77	1.91	9.46	2.08	9.10	2.26	8.65	2.37	8.14	2.47
	20	11.51	1.76	11.21	1.87	10.85	2.05	10.44	2.24	9.89	2.36	9.31	2.47
*RLQ008*	-20	3.91	2.68	3.83	2.90	3.79	3.11	3.62	3.25	3.40	3.35		
	-15	5.06	2.61	4.95	2.83	4.87	3.04	4.72	3.18	4.45	3.28	4.10	3.33
	-7	7.47	2.54	7.21	2.76	6.96	2.97	6.82	3.11	6.48	3.21	5.97	3.29
	-2	8.38	2.48	8.17	2.68	7.82	2.89	7.60	3.04	7.19	3.14	6.57	3.24
	2	8.97	2.42	8.71	2.61	8.35	2.81	8.12	2.97	7.89	3.08	7.16	3.20
	7	10.17	2.35	10.02	2.54	9.81	2.74	9.53	2.96	9.04	3.07	8.50	3.16
	12	11.04	2.32	10.76	2.49	10.48	2.70	10.05	2.92	9.61	3.05	9.03	3.15
	15	12.04	2.28	11.72	2.44	11.35	2.66	10.92	2.89	10.38	3.03	9.76	3.15
	20	13.81	2.25	13.46	2.38	13.01	2.62	12.52	2.85	11.87	3.01	11.17	3.15

###### Maximum heating capacity - Integrated value

	LWC [°C]	30		35		40		45		50		55	
	Tamb [°C]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]
*RLQ004*	-20	2.26	1.53	2.24	1.74	2.20	1.91	2.16	2.13	2.08	2.34		
	-15	3.30	1.53	3.11	1.73	3.17	1.90	2.93	2.15	2.86	2.34	2.64	2.44
	-7	4.70	1.53	4.60	1.70	4.51	1.88	4.34	2.07	4.08	2.29	3.81	2.41
	-2	4.84	1.36	4.76	1.52	4.63	1.71	4.53	1.88	4.28	2.11	4.10	2.22
	2	4.90	1.19	4.81	1.34	4.69	1.54	4.60	1.70	4.42	1.93	4.27	2.02
	7	5.25	0.99	5.12	1.12	5.00	1.31	4.90	1.44	4.70	1.66	4.54	1.76
	12	5.29	0.77	5.20	0.86	5.05	1.01	4.91	1.21	4.73	1.47	4.57	1.52
	15	5.47	0.76	5.29	0.81	5.16	0.98	5.06	1.20	4.76	1.37	4.63	1.48
	20	6.02	0.74	5.85	0.81	5.73	0.96	5.51	1.13	5.18	1.32	4.89	1.45
*RLQ006*	-20	3.16	1.89	3.11	2.12	2.93	2.37	2.75	2.50	2.71	2.59		
	-15	4.13	1.86	4.01	2.07	3.77	2.30	3.60	2.45	3.54	2.52	3.26	2.55
	-7	5.48	1.81	5.34	2.02	5.29	2.22	5.21	2.38	4.99	2.45	4.58	2.52
	-2	6.15	1.79	6.08	1.96	6.04	2.14	5.69	2.28	5.58	2.37	5.14	2.46
	2	6.58	1.76	6.40	1.90	6.19	2.06	6.07	2.19	5.97	2.29	5.49	2.40
	7	8.48	1.84	8.35	1.99	8.17	2.15	7.95	2.32	7.53	2.40	7.08	2.48
	12	9.20	1.82	8.97	1.95	8.73	2.11	8.37	2.29	8.01	2.39	7.52	2.47
	15	10.03	1.79	9.77	1.91	9.46	2.08	9.10	2.26	8.65	2.37	8.14	2.47
	20	11.51	1.76	11.21	1.87	10.85	2.05	10.44	2.24	9.89	2.36	9.31	2.47
*RLQ008*	-20	3.79	2.41	3.73	2.71	3.51	3.03	3.29	3.19	3.25	3.30		
	-15	4.96	2.38	4.81	2.64	4.52	2.93	4.33	3.12	4.24	3.21	3.92	3.26
	-7	6.57	2.31	6.41	2.58	6.35	2.83	6.25	3.03	5.99	3.13	5.50	3.21
	-2	7.38	2.28	7.29	2.50	7.25	2.73	6.82	2.91	6.70	3.02	6.16	3.14
	2	7.90	2.25	7.68	2.42	7.43	2.63	7.28	2.79	7.16	2.92	6.59	3.06
	7	10.17	2.35	10.02	2.54	9.81	2.74	9.53	2.96	9.04	3.07	8.50	3.16
	12	11.04	2.32	10.76	2.49	10.48	2.70	10.05	2.92	9.61	3.05	9.03	3.15
	15	12.04	2.28	11.72	2.44	11.35	2.66	10.92	2.89	10.38	3.03	9.76	3.15
	20	13.81	2.25	13.46	2.38	13.01	2.62	12.52	2.85	11.87	3.01	11.17	3.15

**Symbols:**

HC Heating capacity at maximum operating frequency, measured acc standard EN14511  
 PI Power input, measured acc EN14511  
 LWE Leaving Water Evaporator temperature  
 LWC Leaving Water Condensor temperature  
 Tamb Ambient temperature RH: (heating) = 85%

**Conditions:**

- 1 Heating capacity  
Capacity is according to standard EN 14511 and valid for heated water range ΔT = 3–8°C
- 2 Power input  
Power input is total input of indoor and outdoor unit, inclusive the circulation pump; according to standard EN 14511

**Notes:**

- The capacity and power input is valid for V3-models at 230V.
- The capacity and power input is at maximum operation.

### 3 Capacity tables

#### 3 - 1 Heating Capacity Tables

##### ERLQ011-016CV3

###### Maximum heating capacity - Peak values

	LWC [°C]	30		35		40		45		50		55	
	Tamb [°C]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]
*RLQ011*	-20	8,64	3,87	8,61	4,22	8,61	4,64	7,99	4,89				
	-15	10,37	4,12	10,24	4,49	10,03	4,89	9,19	4,89	8,13	4,89		
	-7	10,79	3,33	10,41	3,62	10,04	3,97	9,83	4,28	9,45	4,80	8,39	4,89
	-2	11,80	3,15	11,31	3,44	10,83	3,78	10,70	4,14	10,48	4,56	9,68	4,89
	2	11,91	2,83	11,33	3,10	10,75	3,42	10,69	3,71	10,32	4,05	9,72	4,49
	7	11,92	2,38	11,38	2,64	11,18	2,92	11,00	3,25	10,65	3,61	9,99	4,02
	12	12,93	2,31	12,31	2,56	12,20	2,85	12,02	3,18	11,69	3,55	11,01	3,96
	15	13,99	2,29	13,34	2,54	13,24	2,83	13,07	3,17	12,74	3,54	12,02	3,95
	20	15,90	2,23	15,20	2,49	15,13	2,79	14,98	3,13	14,22	3,51	13,46	3,93
*RLQ014*	-20	10,54	5,17	10,49	5,52	10,37	5,89	8,45	5,89				
	-15	12,46	5,27	12,29	5,66	11,70	5,89	10,46	5,89	9,68	5,89		
	-7	14,01	4,73	13,69	5,16	13,40	5,64	12,88	5,89	11,51	5,89	10,26	5,89
	-2	14,59	4,25	14,19	4,64	13,79	5,09	13,59	5,52	12,84	5,89	11,21	5,89
	2	14,78	3,79	14,30	4,13	13,81	4,53	13,39	4,88	12,90	5,29	12,38	5,84
	7	15,11	3,16	14,55	3,43	13,90	3,81	13,59	4,22	13,35	4,65	12,73	5,14
	12	15,99	3,06	15,36	3,36	14,74	3,71	14,40	4,10	14,18	4,53	13,54	5,01
	15	17,33	3,05	16,66	3,35	16,00	3,70	15,64	4,10	15,41	4,54	14,72	5,02
	20	19,77	3,02	19,04	3,33	18,30	3,68	17,92	4,09	17,17	4,53	16,41	5,02
*RLQ016*	-20	11,52	5,85	11,64	6,26	11,56	6,59	9,26	6,58				
	-15	12,89	6,11	12,88	6,57	11,95	6,59	11,55	6,59	10,64	6,59	11,12	6,59
	-7	15,23	5,27	14,89	5,71	14,54	6,19	13,74	6,59	12,42	6,59	12,18	6,59
	-2	15,83	4,84	15,41	5,28	15,01	5,77	14,89	6,31	13,64	6,59	13,46	6,59
	2	16,09	4,30	15,62	4,68	15,16	5,14	14,97	5,55	14,43	6,18	13,46	6,59
	7	16,63	3,55	16,10	3,83	15,47	4,26	15,22	4,71	14,51	5,17	13,92	5,71
	12	17,34	3,45	16,74	3,78	16,13	4,15	15,76	4,58	15,13	5,05	14,51	5,58
	15	18,81	3,45	18,16	3,78	17,51	4,16	17,10	4,58	16,43	5,06	15,75	5,59
	20	21,49	3,43	20,77	3,77	20,04	4,15	19,59	4,59	18,83	5,07	18,07	5,61

###### Maximum heating capacity - Integrated value

	LWC [°C]	30		35		40		45		50		55	
	Tamb [°C]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]	HC [kW]	PI [kW]
*RLQ011*	-20	7,31	3,79	7,29	4,14	7,29	4,55	6,76	4,79				
	-15	8,78	3,99	8,67	4,36	8,49	4,75	7,78	4,76	6,88	4,78		
	-7	9,14	3,23	8,81	3,52	8,50	3,85	8,16	4,14	8,00	4,69	7,10	4,77
	-2	9,56	3,00	9,16	3,27	8,77	3,59	8,56	3,90	8,59	4,38	7,84	4,69
	2	9,53	2,66	9,06	2,92	8,60	3,22	8,87	3,53	8,36	3,87	7,58	4,27
	7	11,92	2,38	11,38	2,64	11,18	2,92	11,00	3,25	10,65	3,61	9,99	4,02
	12	12,93	2,31	12,31	2,56	12,20	2,85	12,02	3,18	11,69	3,55	11,01	3,96
	15	13,99	2,29	13,34	2,54	13,24	2,83	13,07	3,17	12,74	3,54	12,02	3,95
	20	15,90	2,23	15,20	2,49	15,13	2,79	14,98	3,13	14,22	3,51	13,46	3,93
*RLQ014*	-20	8,96	5,01	8,92	5,35	8,82	5,71	7,19	5,71				
	-15	10,34	5,06	10,20	5,43	9,71	5,65	8,90	5,66	8,24	5,69		
	-7	11,91	4,54	11,65	4,95	11,39	5,42	10,96	5,66	9,79	5,68	8,73	5,68
	-2	11,38	3,81	11,07	4,16	10,76	4,56	10,46	4,92	10,20	5,33	8,92	5,33
	2	11,24	3,34	10,87	3,65	10,50	4,00	10,65	4,43	10,26	4,77	9,84	5,27
	7	15,11	3,16	14,55	3,43	13,90	3,81	13,59	4,22	13,35	4,65	12,73	5,14
	12	15,99	3,06	15,36	3,36	14,74	3,71	14,40	4,10	14,18	4,53	13,54	5,01
	15	17,33	3,05	16,66	3,35	16,00	3,70	15,64	4,10	15,41	4,54	14,72	5,02
	20	19,77	3,02	19,04	3,33	18,30	3,68	17,92	4,09	17,17	4,53	16,41	5,02
*RLQ016*	-20	9,56	5,67	9,66	6,07	9,59	6,40	7,69	6,38				
	-15	10,57	5,84	10,56	6,28	9,86	6,30	9,55	6,34	8,79	6,38		
	-7	12,59	5,07	12,30	5,49	12,02	5,95	11,35	6,34	10,26	6,37	9,18	6,37
	-2	12,11	4,32	11,79	4,71	11,48	5,15	11,39	5,63	10,44	5,86	9,32	5,86
	2	11,74	3,75	11,40	4,09	11,07	4,48	11,37	4,84	11,04	5,51	10,29	5,88
	7	16,63	3,55	16,10	3,83	15,47	4,26	15,22	4,71	14,51	5,17	13,92	5,71
	12	17,34	3,45	16,74	3,78	16,13	4,15	15,76	4,58	15,13	5,05	14,51	5,58
	15	18,81	3,45	18,16	3,78	17,51	4,16	17,10	4,58	16,43	5,06	15,75	5,59
	20	21,49	3,43	20,77	3,77	20,04	4,15	19,59	4,59	18,83	5,07	18,07	5,61

**Symbols:**  
 HC Heating capacity at maximum operating frequency, measured acc EN14511  
 PI Power input, measured acc EN14511  
 LWE Leaving Water Evaporator temperature  
 LWC Leaving Water Condenser temperature  
 Tamb Ambient temperature; RH (heating) = 85%

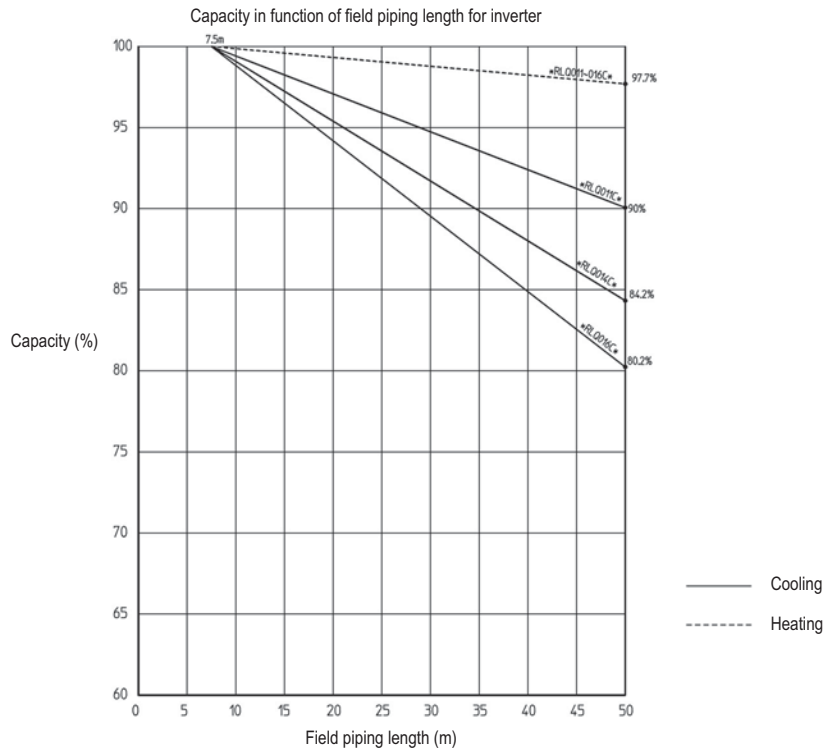
**Notes:**  
 - The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included.  
 - The capacity and power input is valid for V3-models at 230V or W1-models at 400V.  
 - The capacity and power input for Ta ≤ 7°C is at maximum operation and power input 100%  
 - The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

### 3 Capacity tables

#### 3 - 1 Heating Capacity Tables

3

ERLQ011-016C



**NOTE**

Capacity drop is at nominal capacity

3TW60332-5A

### 3 Capacity tables

#### 3 - 2 Cooling Capacity Tables

##### ERLQ004-008CV3

###### 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]	PI [kW]
*RLC004*	7	6.07	1.54	5.56	1.70	5.04	1.87	4.53	2.04	3.50	1.84	2.89	1.71
	10	6.45	1.50	5.94	1.66	5.42	1.83	4.91	2.00	3.83	1.80	3.19	1.68
	13	6.79	1.46	6.29	1.62	5.78	1.78	5.27	1.95	4.15	1.75	3.48	1.63
	15	7.01	1.44	6.52	1.59	6.01	1.75	5.50	1.91	4.36	1.72	3.67	1.60
	18	7.36	1.40	6.87	1.55	6.37	1.70	5.87	1.86	4.69	1.67	3.98	1.56
	22	7.98	1.34	7.52	1.49	6.99	1.64	6.49	1.78	5.23	1.60	4.47	1.49
*RLC006*	7	7.56	2.34	6.90	2.38	6.19	2.44	5.46	2.51	3.77	2.23	2.75	2.05
	10	8.18	2.29	7.48	2.32	6.71	2.38	5.93	2.45	4.25	2.19	3.24	2.04
	13	8.82	2.23	8.07	2.26	7.24	2.32	6.41	2.38	4.77	2.16	3.79	2.02
	15	9.27	2.20	8.49	2.22	7.61	2.27	6.74	2.34	5.14	2.13	4.18	2.00
	18	9.98	2.14	9.11	2.16	8.20	2.21	7.26	2.27	5.74	2.09	4.83	1.98
	22	11.02	2.07	10.13	2.08	9.06	2.12	8.02	2.17	6.65	2.03	5.83	1.95
*RLC008*	7	8.79	2.98	8.01	3.03	7.19	3.11	6.35	3.20	4.10	2.48	2.75	2.05
	10	9.50	2.91	8.68	2.96	7.79	3.03	6.89	3.12	4.61	2.44	3.24	2.04
	13	10.24	2.85	9.38	2.88	8.41	2.95	7.44	3.04	5.16	2.40	3.79	2.02
	15	10.76	2.80	9.86	2.83	8.84	2.90	7.83	2.98	5.55	2.37	4.18	2.00
	18	11.59	2.73	10.59	2.76	9.52	2.81	8.43	2.89	6.18	2.32	4.83	1.98
	22	12.80	2.64	11.77	2.65	10.52	2.70	9.32	2.77	7.14	2.26	5.83	1.95

**Symbols:**

- CC Cooling capacity at maximum operating frequency, measured acc. standard EN14511
- PI Power input, measured acc. EN14511
- LWE Leaving Water Evaporator temperature
- LWC Leaving Water Condensor temperature
- Tamb Ambient temperature RH; (heating) = 85%

**Conditions:**

- 1 Cooling capacity  
Capacity is according to standard EN 14511 and valid for chilled water range  $\Delta T = 3-8^{\circ}C$   
→ Capacity values may not be extrapolated below 7°C leaving water temperature
- 2 Power input  
Power input is total input of indoor and outdoor unit, inclusive the circulation pump, according to standard EN 14511

**Notes:**

- The capacity and power input is valid for V3-models at 230V.
- The capacity and power input is at maximum operation.

3TW60812-1A

### 3 Capacity tables

#### 3 - 2 Cooling Capacity Tables

##### ERLQ011-016CV3

###### 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]	PI [kW]
*RLQ011*	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	3,72	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	
*RLQ014*	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	4,43	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	
*RLQ016*	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 acc. EN14511
- PI Power input, measured acc. EN14511
- LWE Leaving Water Evaporator temperature
- LWC Leaving Water Condenser temperature
- Tamb Ambient temperature; RH (heating) = 85%

**Notes:**

- The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included.
- The capacity and power input is valid for V3-models at 230V or W1-models at 400V.
- The capacity and power input for Ta ≤ 7°C is at maximum operation and power input 100%
- The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

### 3 Capacity tables

#### 3 - 3 Certification Programs

##### ERLQ004-008CV3

##### Rated data for certification programs - Heating mode

		Certification program	Ta [°C]	EWC [°C]	LWC [°C]	HC [kW]	COP	Min. Required COP Vivitec	Min. Required COP NF PAC	Min. Required COP EHPA	Min. Required COP Ecolabel	Min. Required COP SEI	Min. Required COP microgeneration
*RLQ004*	Floor	EHPA	10/8	30	35	4.47	5.12	4.00	-	-	-	-	-
		Crédit d'impôt, NF PAC, Microgeneration	7/6	30	35	4.40	5.04	4.00	3.40	-	-	-	3.20
		EHPA, SEI, Ecolabel	2/1	-	35	3.27	4.02	-	-	3.10	3.10	3.00	-
	Fan coil	NF PAC	-7/-8	-	35	4.37	2.81	2.00	2.10	-	-	-	-
		NF PAC	7/6	40	45	4.03	3.58	2.50	2.70	-	-	-	-
		Ecolabel	2/1	-	45	3.97	2.77	1.50	-	-	2.60	-	-
*RLQ006*	Floor	EHPA	10/8	30	35	6.25	5.07	4.00	-	-	-	-	-
		Crédit d'impôt, NF PAC, Microgeneration	7/6	30	35	6.00	4.74	4.00	3.40	-	-	-	3.20
		EHPA, SEI, Ecolabel	2/1	-	35	4.58	3.68	-	-	3.10	3.10	3.00	-
	Fan coil	NF PAC	-7/-8	-	35	5.31	2.84	2.00	2.10	-	-	-	-
		NF PAC	7/6	40	45	5.67	3.56	2.50	2.70	-	-	-	-
		Ecolabel	2/1	-	45	5.69	2.81	1.50	-	-	2.60	-	-
*RLQ008*	Floor	EHPA	10/8	30	35	7.39	4.75	4.00	-	-	-	-	-
		Crédit d'impôt, NF PAC, Microgeneration	7/6	30	35	7.40	4.45	4.00	3.40	-	-	-	3.20
		EHPA, SEI, Ecolabel	2/1	-	35	5.80	3.53	-	-	3.10	3.10	3.00	-
	Fan coil	NF PAC	-7/-8	-	35	5.46	2.71	2.00	2.10	-	-	-	-
		NF PAC	7/6	40	45	6.89	3.42	2.50	2.70	-	-	-	-
		Ecolabel	2/1	-	45	6.08	2.63	-	-	-	2.60	-	-
		NF PAC	-7/-8	-	45	6.13	2.12	1.50	1.60	-	-	-	-

##### Rated data for certification programs - Cooling mode

		Certification program	Ta [°C]	EWC [°C]	LWC [°C]	CC [kW]	EER	Min. Required EER Vivitec
*RLQ004*	Floor	Ecolabel	35	23	18	5.00	3.37	2.20
	Fan coil	Ecolabel	35	12	7	4.17	2.32	2.20
*RLQ006*	Floor	Ecolabel	35	23	18	6.76	3.45	2.20
	Fan coil	Ecolabel	35	12	7	4.84	2.34	2.20
*RLQ008*	Floor	Ecolabel	35	23	18	6.86	3.42	2.20
	Fan coil	Ecolabel	35	12	7	5.36	2.29	2.20

##### Rated data for certification programs - Standby power consumption

	Certification program	Taux
*RLQ004*	NF PAC	7.5W
*RLQ006*	NF PAC	7.5W
*RLQ008*	NF PAC	7.5W

##### Sound power measurements

		Certification program	Required setup of unit for test	Ta [°C]	EW [°C]	LW [°C]	Mode	dBa
EHB(H/X)008* EHV(H/X)008*	Promotelec, Ecolabel, Eurovent		Nominal	35	12	7	Cooling	40
								42
EHB(H/X)008* EHV(H/X)008*	NF PAC, Ecolabel		Nominal	7/6	30	35	Heating	40
								42

##### Symbols:

- CC Cooling capacity at maximum operating frequency, measured acc. EN14511
- HC Heating capacity at maximum operating frequency, measured acc. EN14511
- COP/EER Coefficient of Performance/Energy efficiency ration acc. EN14511
- LWE Leaving Water Evaporator temperature [°C]
- LWC Leaving Water Condensor temperature [°C]
- Ta Ambient temperature [°C] DB/WB

3TW60819-3C



### 3 Capacity tables

#### 3 - 3 Certification Programs

3

#### ERLQ011-016CV3

Rated data for certification programs - Heating mode

		Certification program	Ta [°C]	EWC [°C]	LWC [°C]	HC [kW]	COP	Min. Required COP NF PAC	Min. Required COP EHPA	Min. Required COP Ecolabel				
*RLQ011C*	Floor	EHPA	10		35	11.20	4.85	-	-	-	-	-	-	-
		NF PAC	7/6	30	35	11.20	4.60	3.40	-	-	-	-	-	-
		EHPA, Ecolabel	2/1		35	8.56	3.60	-	3.10	3.10	-	-	-	-
		NF PAC	-7/-8		35	8.60	2.75	2.10	-	-	-	-	-	-
	Fan coil	NF PAC	7/6	40	45	11.00	3.55	2.70	-	-	-	-	-	-
		Ecolabel	2/1		45	8.20	2.84	-	-	2.60	-	-	-	-
NF PAC		-7/-8		45	8.60	2.10	1.60	-	-	-	-	-	-	
*RLQ014C*	Floor	EHPA	10		35	14.30	4.70	-	-	-	-	-	-	
		NF PAC	7/6	30	35	14.50	4.30	3.40	-	-	-	-	-	
		EHPA, Ecolabel	2/1		35	10.30	3.41	-	3.10	3.10	-	-	-	-
		NF PAC	-7/-8		35	10.00	2.65	2.10	-	-	-	-	-	-
	Fan coil	NF PAC	7/6	40	45	13.60	3.32	2.70	-	-	-	-	-	-
		Ecolabel	2/1		45	10.00	2.70	-	-	2.60	-	-	-	-
NF PAC		-7/-8		45	10.80	2.08	1.60	-	-	-	-	-	-	
*RLQ016C*	Floor	EHPA	10		35	15.70	4.50	-	-	-	-	-	-	
		NF PAC	7/6	30	35	16.00	4.25	3.40	-	-	-	-	-	
		EHPA, Ecolabel	2/1		35	11.10	3.35	-	3.10	3.10	-	-	-	-
		NF PAC	-7/-8		35	11.10	2.64	2.10	-	-	-	-	-	-
	Fan coil	NF PAC	7/6	40	45	15.20	3.26	2.70	-	-	-	-	-	-
		Ecolabel	2/1		45	10.90	2.66	-	-	2.60	-	-	-	-
NF PAC		-7/-8		45	10.90	2.09	1.60	-	-	-	-	-	-	

Rated data for certification programs - Cooling mode

		Certification program	Ta [°C]	EWC [°C]	LWC [°C]	CC [kW]	EER	Min. Required EER Ecolabel						
*RLQ011C*	Floor	Ecolabel	35	23	18	15.05	3.32	2.20	-	-	-	-	-	-
	Fan coil	Ecolabel	35	12	7	11.72	2.72	2.20	-	-	-	-	-	-
*RLQ014C*	Floor	Ecolabel	35	23	18	16.06	2.96	2.20	-	-	-	-	-	-
	Fan coil	Ecolabel	35	12	7	12.55	2.47	2.20	-	-	-	-	-	-
*RLQ016C*	Floor	Ecolabel	35	23	18	16.76	2.72	2.20	-	-	-	-	-	-
	Fan coil	Ecolabel	35	12	7	13.12	2.29	2.20	-	-	-	-	-	-

Rated data for certification programs - Standby power consumption

		Certification program	Taux
*RLQ011C*V3		NF PAC	22W
*RLQ014C*V3		NF PAC	22W
*RLQ016C*V3		NF PAC	22W

**Symbols:**

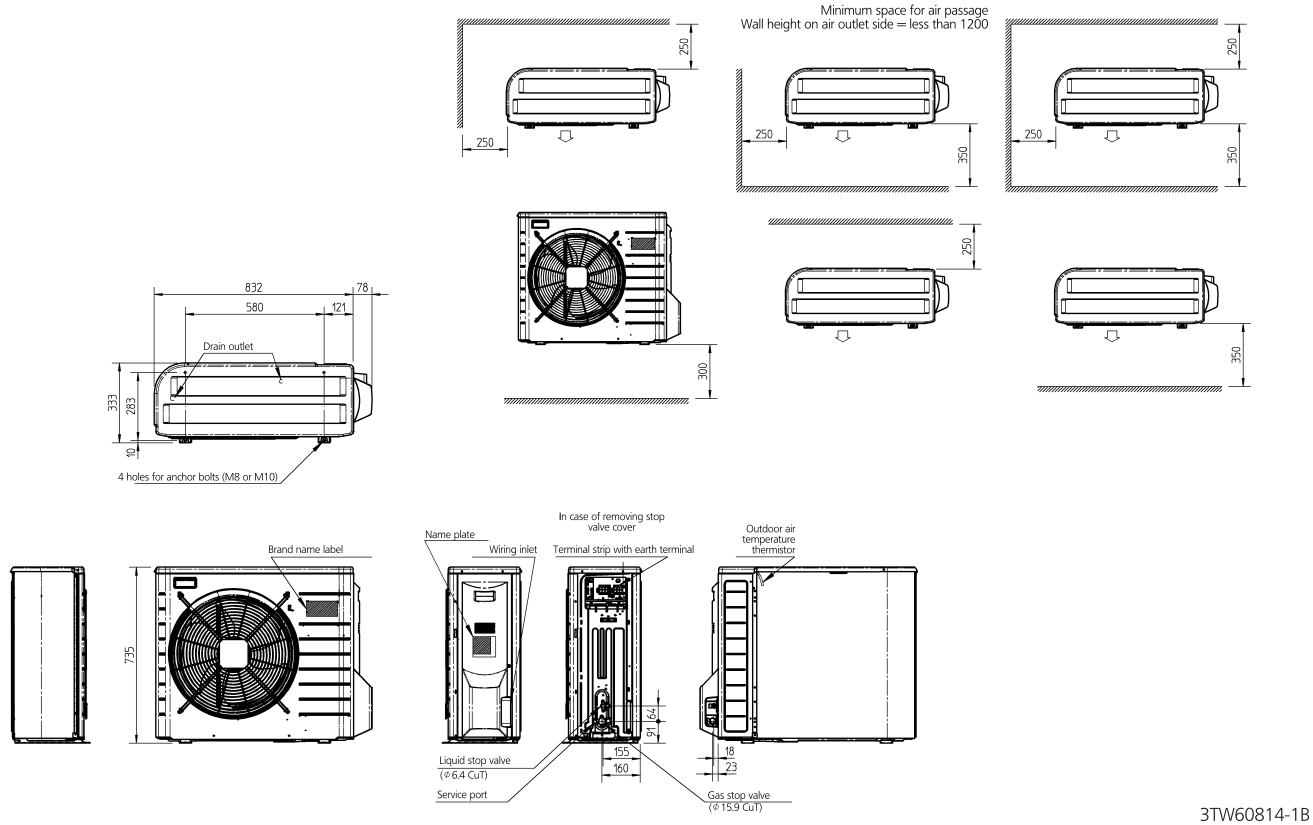
- CC : Cooling capacity at nominal operating frequency, measured acc. EN14511
- HC : Heating capacity at nominal operating frequency, measured acc. EN14511
- COP/EER : Coefficient of Performance/Energy efficiency ration acc. EN14511
- LWE : Leaving Water Evaporator temperature [°C]
- LWC : Leaving Water Condensor temperature [°C]
- Ta : Ambient temperature [°C] DB/WB

3TW60332-3C

## 4 Dimensional drawings

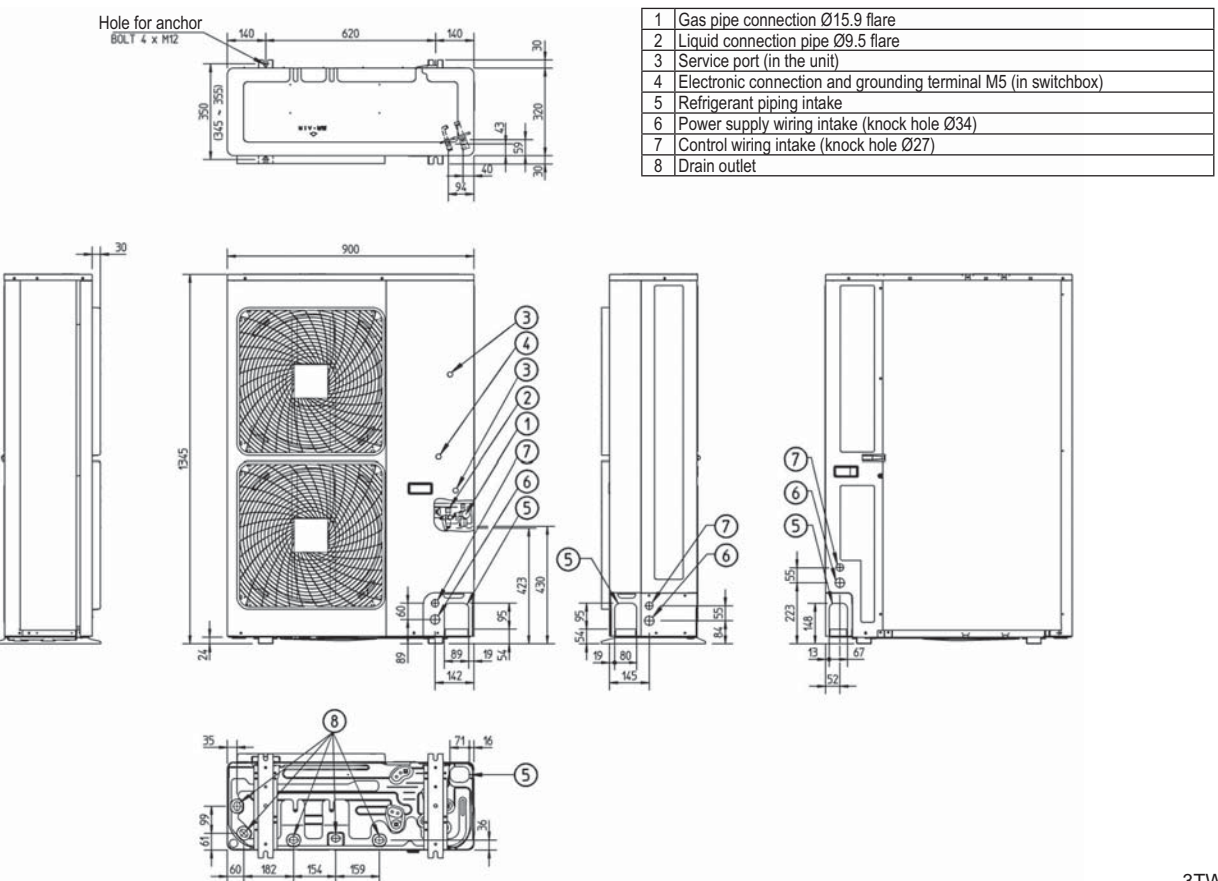
### 4 - 1 Dimensional Drawings

#### ERLQ004-008CV3



3TW60814-1B

#### ERLQ011-016CV3



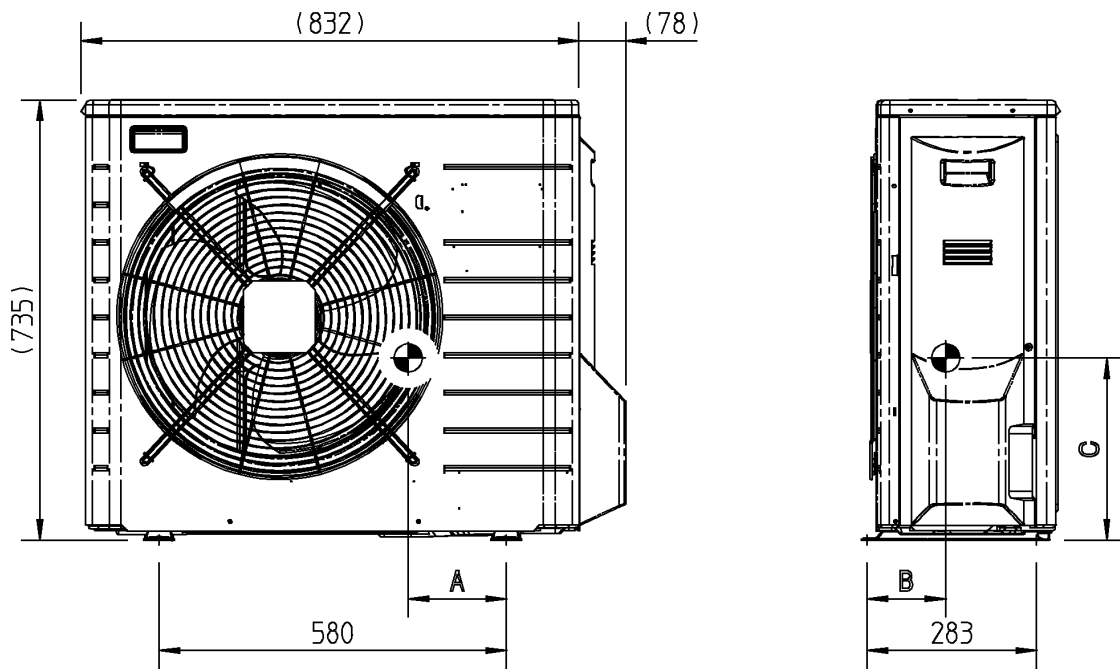
3TW60334-2

## 5 Centre of gravity

### 5 - 1 Centre of Gravity

5

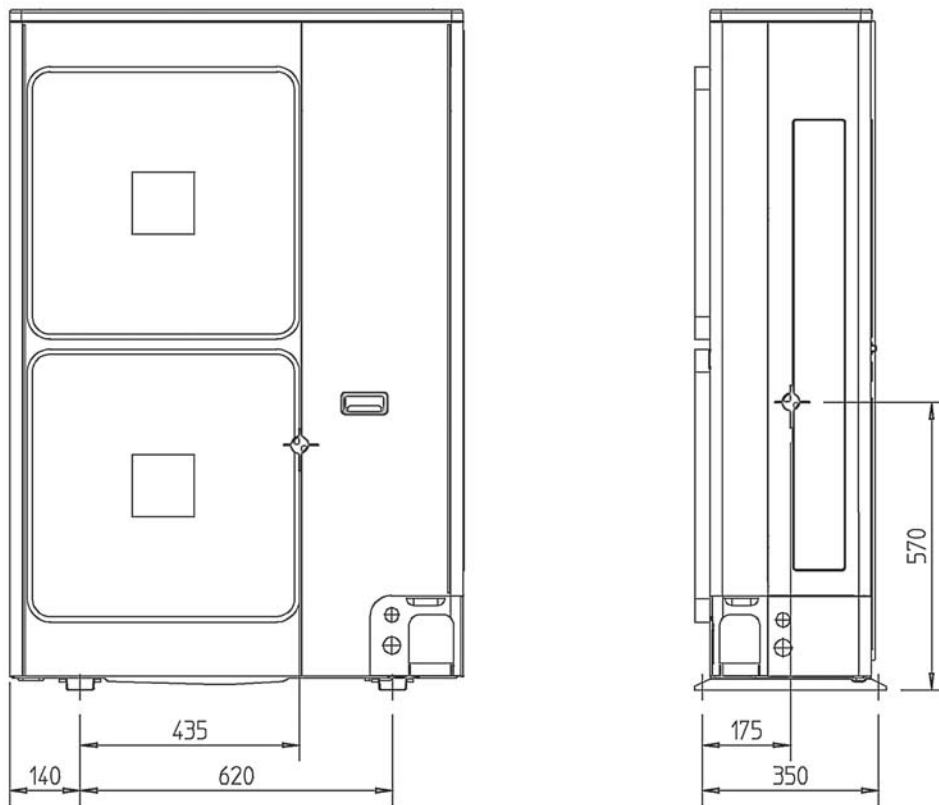
ERLQ004-008CV3



UNIT	A	B	C
ERLQ*004	169	130	306
ERLQ*006/8	164	131	306

4TW60819-1

ERLQ011-016CV3

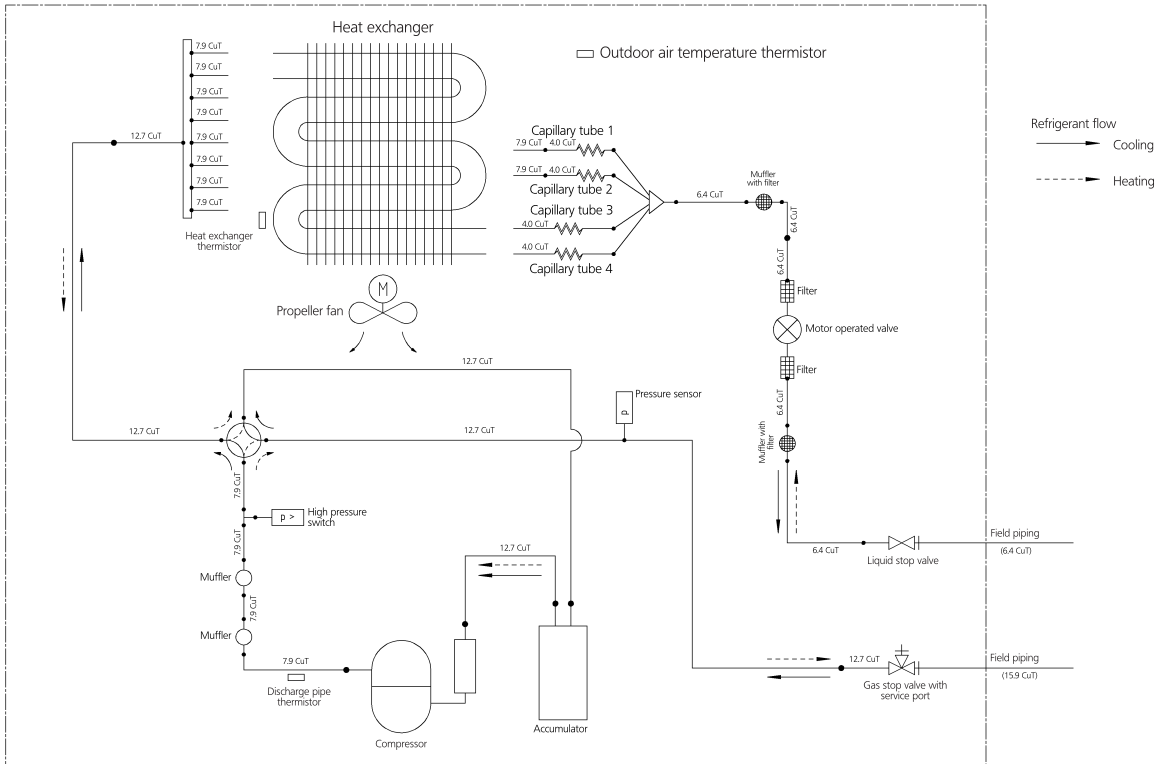


4TW31729-4

# 6 Piping diagrams

## 6 - 1 Piping Diagrams

ERLQ004-008CV3



3TW60815-1

ERLQ011-016C

R1T	Thermistor (air)
R2T	Thermistor (Discharge)
R3T	Thermistor (Suction)
R4T	Thermistor (Hex)
R5T	Thermistor (Middle hex)
R6T	Thermistor (Liquid)
S1NPH	Pressure sensor
Y1E	Electronic expansion valve (Main)
Y3E	Electronic expansion valve (NU)
E1HC	Crankcase heater
Y1S	4 way valve
Y3S	Solenoid valve (Hot gas pass)
S1PH	High pressure switch
M1F	Fan motor
M1C	Compressor

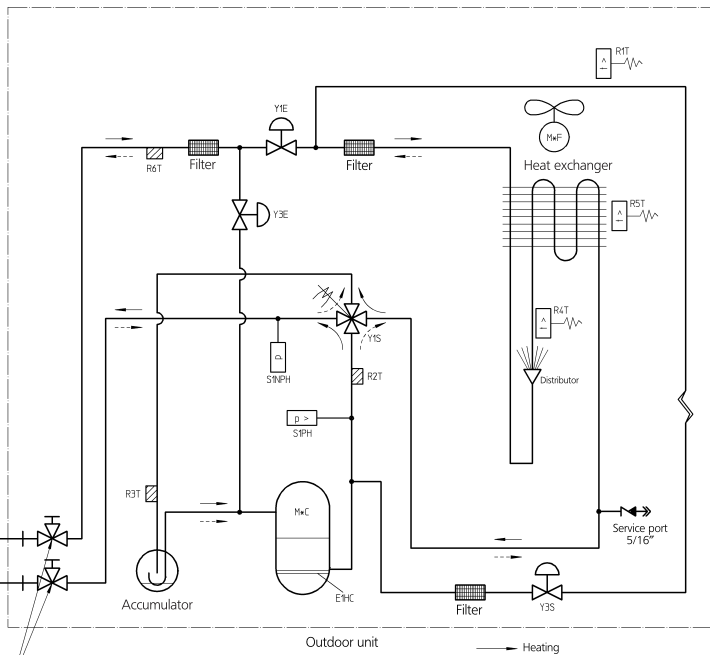
\*KH-B\*016\*

Field piping  $\phi$  9.5 C 1220T-0

Field piping  $\phi$  15.9 C 1220T-0

Indoor unit

Stop valve (with service port 5/16" flare)



Check valve   Flare connection   Screw connection   Range connection   Rinsed pipe   Spinned pipe   Motor operated valve

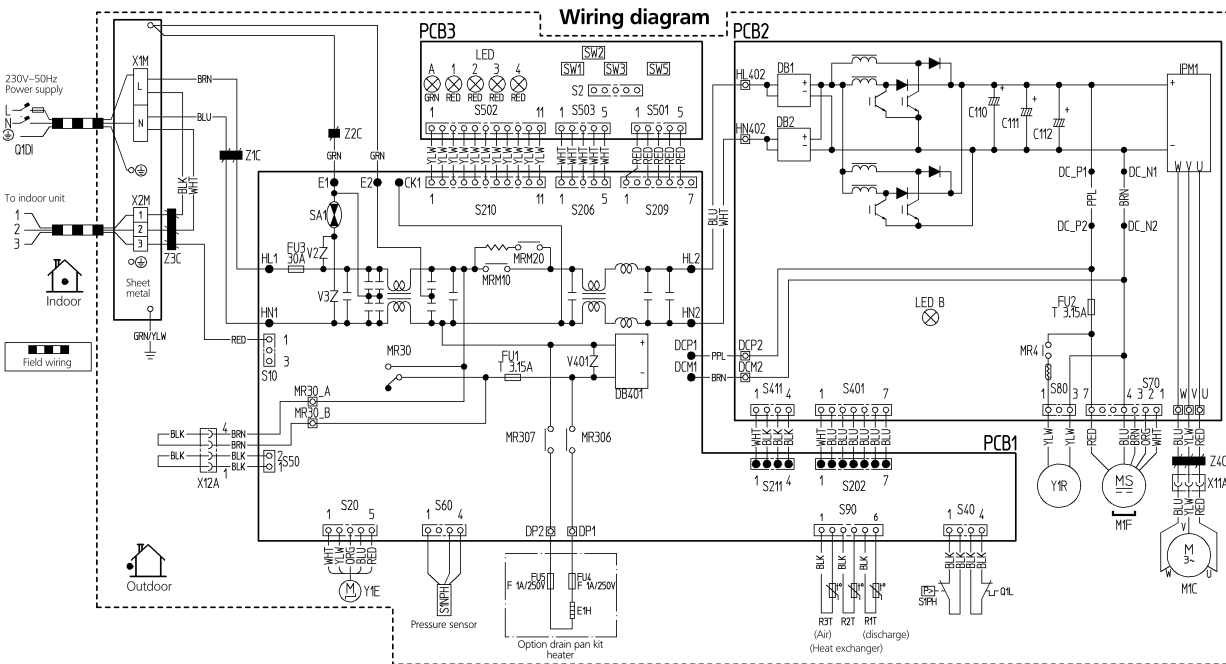
3TW60335-1

# 7 Wiring diagrams

## 7 - 1 Wiring Diagrams - Single Phase

7

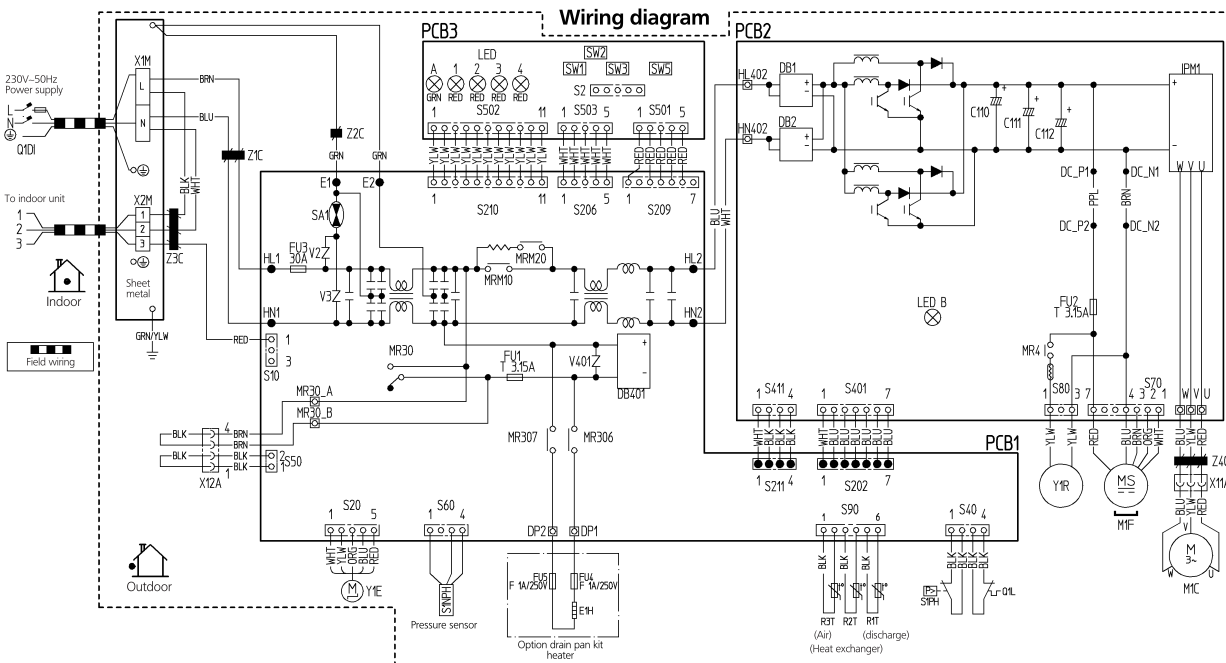
ERLQ004-008CV3



- |                                     |                                   |                    |                               |                  |                                    |
|-------------------------------------|-----------------------------------|--------------------|-------------------------------|------------------|------------------------------------|
| Z1C-Z4C                             | : Ferrite core                    | MR30, MRM10, MRM20 | : Magnetic relay              | PCB1             | : Printed circuit board (Main)     |
| X1M, X2M                            | : Terminal strip                  | MR307, MR306, MR4  | : Thermistor (Discharge)      | PCB2             | : Printed circuit board (Inverter) |
| Y1E                                 | : Electronic expansion valve coil | R1T                | : Thermistor (Heat exchanger) | PCB3             | : Printed circuit board (Service)  |
| V2, V3, V401                        | : Vanistor                        | R2T                | : Thermistor (Air)            | M1C              | : Compressor motor                 |
| FL1, FL2, FL3, FL4, FUS             | : Surge arrester                  | R3T                | : Thermistor (Heat exchanger) | M1F              | : Fan motor                        |
| HL1, HN1, HL2, HN2                  | : Fuse                            | S2-5S03            | : Connector                   | MIF              | : Intelligent power module         |
| U, V, W, X1T, X1TA, X1ZA            |                                   | S2-5S02            | : Pilot lamp                  | LED 1-4          | : LED 1-4                          |
| E1, E2, DP1, DP2, DPX1, DDM1        |                                   | S2-5S01            | : Intelligent power module    | Q1L              | : Live                             |
| DCP2, DCM2, HN402, HN402, DC_P1     |                                   | S20                | : Live                        | Q1N              | : Neutral                          |
| DC_N1, DC_P2, DC_N2, MR30_A, MR30_B |                                   | S60                | : Neutral                     | DB1, DB2, DB401  | : Push buttons                     |
| IPM1                                | : Connector                       | DP2, DP1           | : Push buttons                | Y1R              | : Dip switches                     |
| HL402, HN402, DC_P1, DC_N1          | : Drain pan heater                | DP1                | : Dip switches                | S70              | : Sheet metal                      |
| E1E                                 | : Pressure sensor                 | DP2                | : Capacitor                   | C110, C111, C112 | : Capacitor                        |
| S1NPH                               | : Pressure sensor (high)          |                    |                               |                  |                                    |
| S1PH                                | : Pressure switch (high)          |                    |                               |                  |                                    |
- Notes:  
 1. Refer to purchasing specification AS303002, unless otherwise specified.  
 2. This drawing was drawn on CAD system.  
 3. Size: length 140 x width 230.

3TW60816-1A

ERLQ006-008CV3



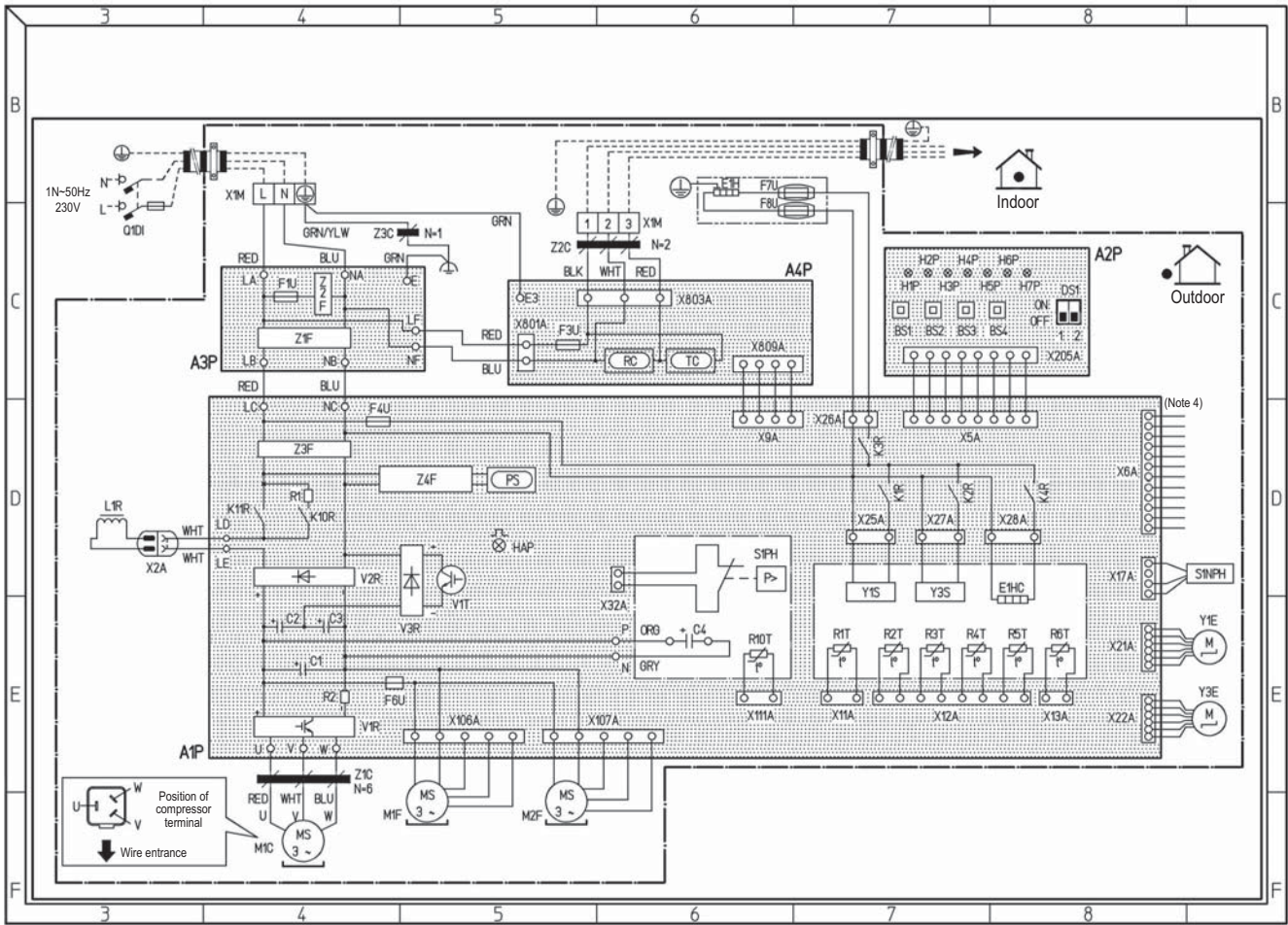
- |                              |                                   |                    |                               |                  |                                    |
|------------------------------|-----------------------------------|--------------------|-------------------------------|------------------|------------------------------------|
| Z1C-Z4C                      | : Ferrite core                    | MR30, MRM10, MRM20 | : Magnetic relay              | PCB1             | : Printed circuit board (Main)     |
| X1M, X2M                     | : Terminal strip                  | MR307, MR306, MR4  | : Thermistor (Discharge)      | PCB2             | : Printed circuit board (Inverter) |
| Y1E                          | : Electronic expansion valve coil | R1T                | : Thermistor (Heat exchanger) | PCB3             | : Printed circuit board (Service)  |
| V2, V3, V401                 | : Vanistor                        | R2T                | : Thermistor (Air)            | M1C              | : Compressor motor                 |
| FL1, FL2, FL3, FL4, FUS      | : Surge arrester                  | R3T                | : Thermistor (Heat exchanger) | M1F              | : Fan motor                        |
| HL1, HN1, HL2, HN2           | : Fuse                            | S2-5S03            | : Connector                   | MIF              | : Intelligent power module         |
| U, V, W, X1T, X1TA, X1ZA     |                                   | S2-5S02            | : Pilot lamp                  | LED 1-4          | : LED 1-4                          |
| E1, E2, DP1, DP2             |                                   | S2-5S01            | : Intelligent power module    | Q1L              | : Live                             |
| HL402, HN402, DC_P1, DC_N1   |                                   | S20                | : Live                        | Q1N              | : Neutral                          |
| DC_P2, DC_N2, MR30_A, MR30_B |                                   | S60                | : Neutral                     | DB1, DB2, DB401  | : Push buttons                     |
| IPM1                         | : Connector                       | DP2, DP1           | : Push buttons                | Y1R              | : Dip switches                     |
| HL402, HN402, DC_P1, DC_N1   | : Drain pan heater                | DP1                | : Dip switches                | S70              | : Sheet metal                      |
| E1E                          | : Pressure sensor                 | DP2                | : Capacitor                   | C110, C111, C112 | : Capacitor                        |
| S1NPH                        | : Pressure sensor (high)          |                    |                               |                  |                                    |
| S1PH                         | : Pressure switch (high)          |                    |                               |                  |                                    |
- Notes:  
 1. Refer to purchasing specification AS303002, unless otherwise specified.  
 2. This drawing was drawn on CAD system.  
 3. Size: length 140 x width 230.

3TW60816-2

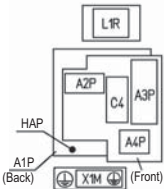
# 7 Wiring diagrams

## 7 - 1 Wiring Diagrams - Single Phase

ERLQ011-016CV3



El. compo. assy. (position of elements)



A1P	Printed circuit board (main)	K2R	Magnetic relay (Y3S)	R5T	Thermistor (heat exchanger middle)
A2P	Printed circuit board (service)	K3R	Magnetic relay (E1H)	R6T	Thermistor (liquid)
A3P	Printed circuit board (noise filter)	K4R	Magnetic relay (E1HC)	RC	Signal receiver circuit
A4P	Printed circuit board (communication)	K10R	Magnetic relay (upload)	R10T	Thermistor (fin)
BS1~BS4	Push button switch	K11R	Magnetic relay (main)	S1NPH	Pressure sensor
C1~C4	Capacitor	L1R	Reactor	S1PH	Pressure switch (high)
DS1	Dip switch	M1C	Motor (compressor)	TC	Signal transmission circuit
E1H	Bottomplate heater	M1F	Motor (fan) (upper)	V1R	Power module
E1HC	Crankcase heater	M2F	Motor (fan) (lower)	V2R,V3R	Diode module
F1U,F3U,F4U	Fuse (T 3.6A / 250V)	PS	Switching power supply	V1T	IGBT
F6U	Fuse (T 5.0A / 250V)	Q1DI	Earth leakage circuit breaker	X1M	Terminal strip (power supply)
F7U,F8U	Fuse (F 1.0A / 250V)	R1	Resistor	Y1E	Electronic expansion valve (main)
H1P~7P (A2P)	Light emit. diode (serv. monitor-orange) Peppare, test ..... flickering Malfunction detection.....light up	R2	Resistor	Y3E	Electronic expansion valve (inj)
HAP (A1P)	Light emitting diode (Service monitor green)	R1T	Thermistor (air)	Y1S	Solenoid valve (4 way valve)
K1R	Magnetic relay (Y1S)	R2T	Thermistor (discharge)	Y3S	Solenoid valve (hot gas pass)
		R3T	Thermistor (suction)	Z1C~Z3C	Noise filter (ferrity core)
		R4T	Thermistor (heat exchanger)	Z1F~Z4F	Noise filter

2TW60336-2

### NOTES

- This wiring diagram only applies to the outdoor unit
- L: live, N: neutral, : field wiring
- : terminal strip, : connector, : connection, : protective earth (screw), : connector, : noiseless earth, : terminal
- Refer to the option manual, for connecting wiring to X6A.
- Refer to the 'wiring diagram sticker' (on back of front plate) on how to use BS1~BS4 and DS1 switch
- Do not operate the unit by short-circuiting protection device S1PH
- Colors: BLU= blue, BRN= brown, GRN= green, RED= red, WHT= white, YLW= yellow, ORG= orange, BLK= black
- Confirm the method of setting the selector switches (DS1) by service manual; Factory setting of all switches: "off"
- : option, : wiring dependent on model

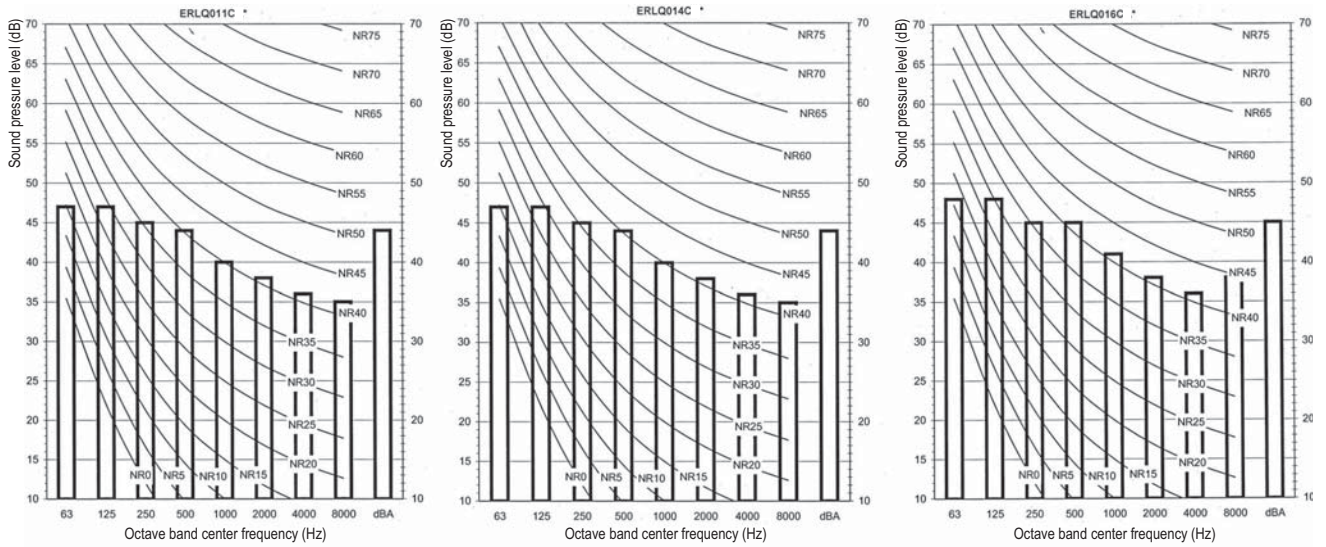


# 8 Sound data

## 8 - 1 Sound Power Spectrum Quiet Mode

8

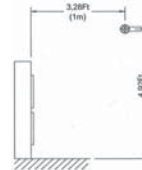
### Heating



#### NOTES

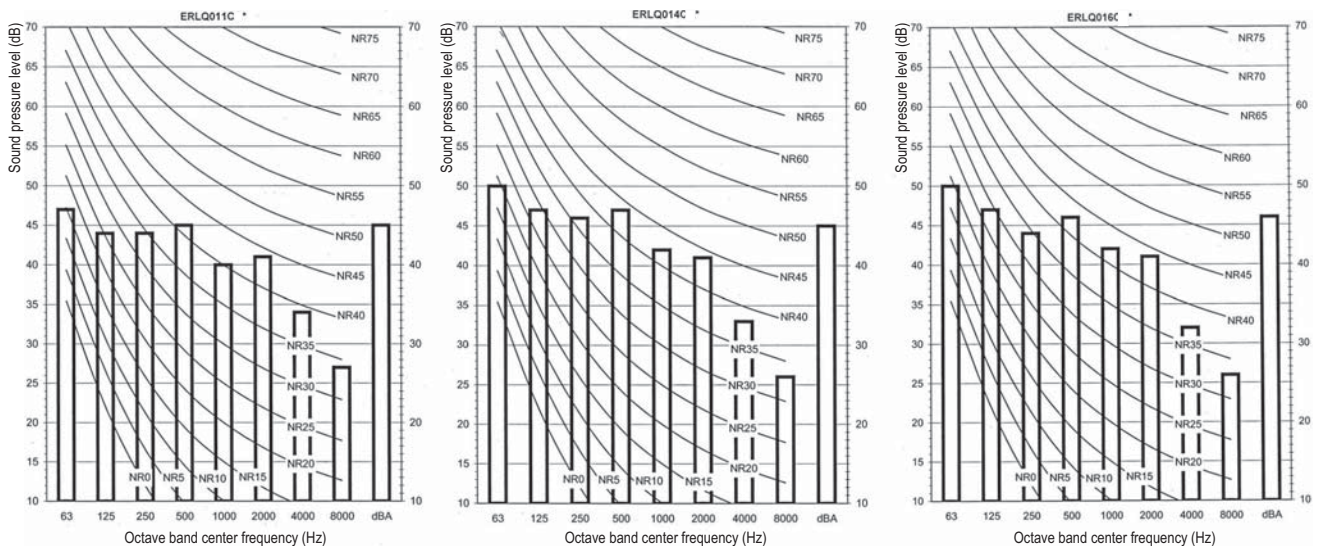
- 1 Data is valid at free field condition (measured in a semi-anechoic room).
- 2 dBA = A-weighted sound pressure level. (A-scale according to IEC)
- 3 Reference acoustic pressure 0dB = 20μPa.
- 4 If the sound is measured under actual installation conditions, the measured value will be higher due to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

Measuring location (discharge side):



3TW60337-4

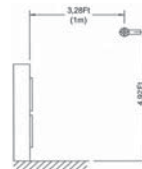
### Cooling



#### NOTES

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

Measuring location (discharge side):

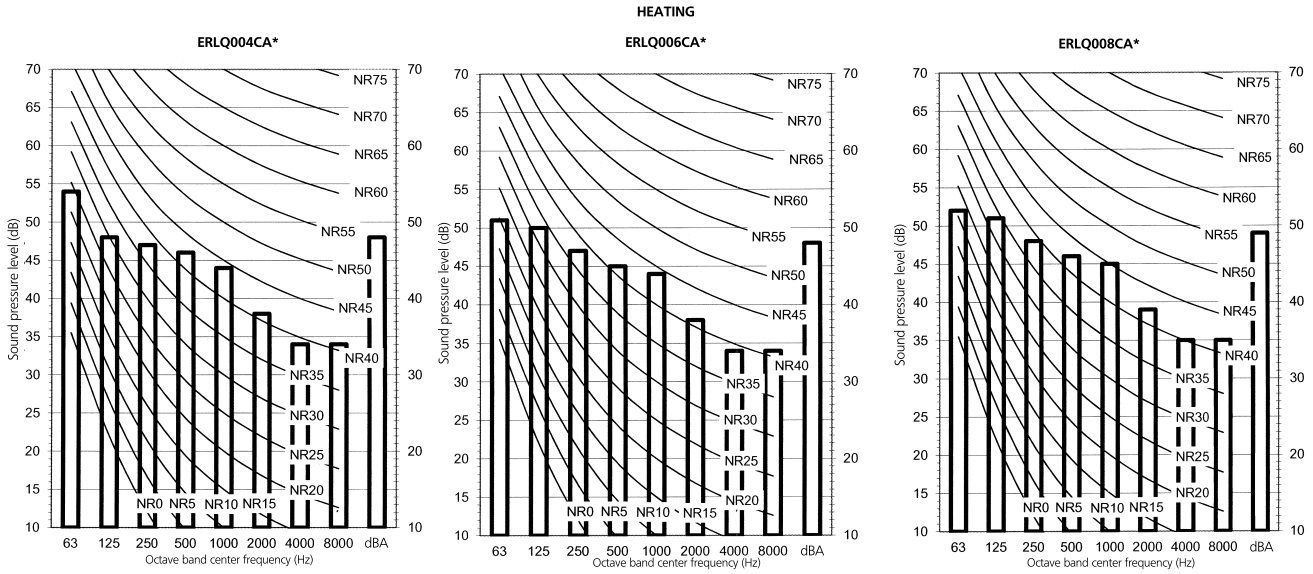


3TW60337-3

# 8 Sound data

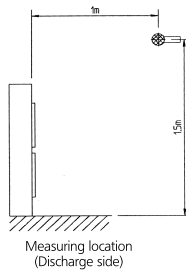
## 8 - 2 Sound Pressure Spectrum - Heating

ERLQ004-008CV3



**Notes:**

- 1 Data is valid at free field condition.
- 2 Data is valid at nominal operation condition.
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC).
- 4 Reference acoustic pressures 0dB = 20μPa.



3TW60817-2

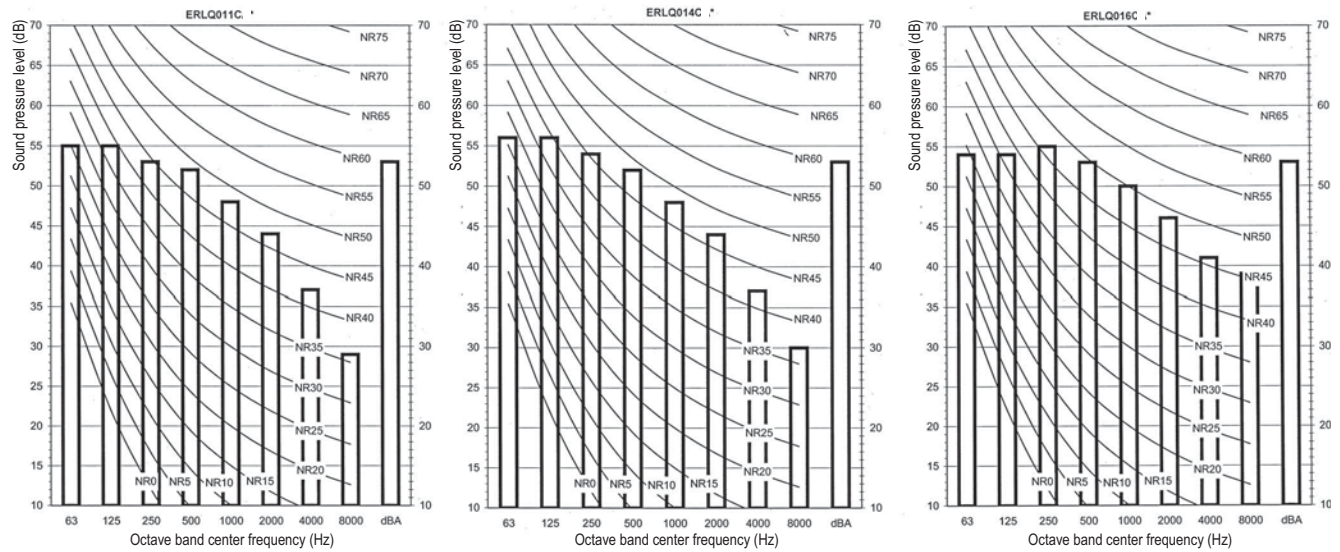


# 8 Sound data

## 8 - 2 Sound Pressure Spectrum - Heating

8

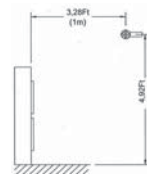
Heating



### NOTES

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

Measuring location (discharge side):

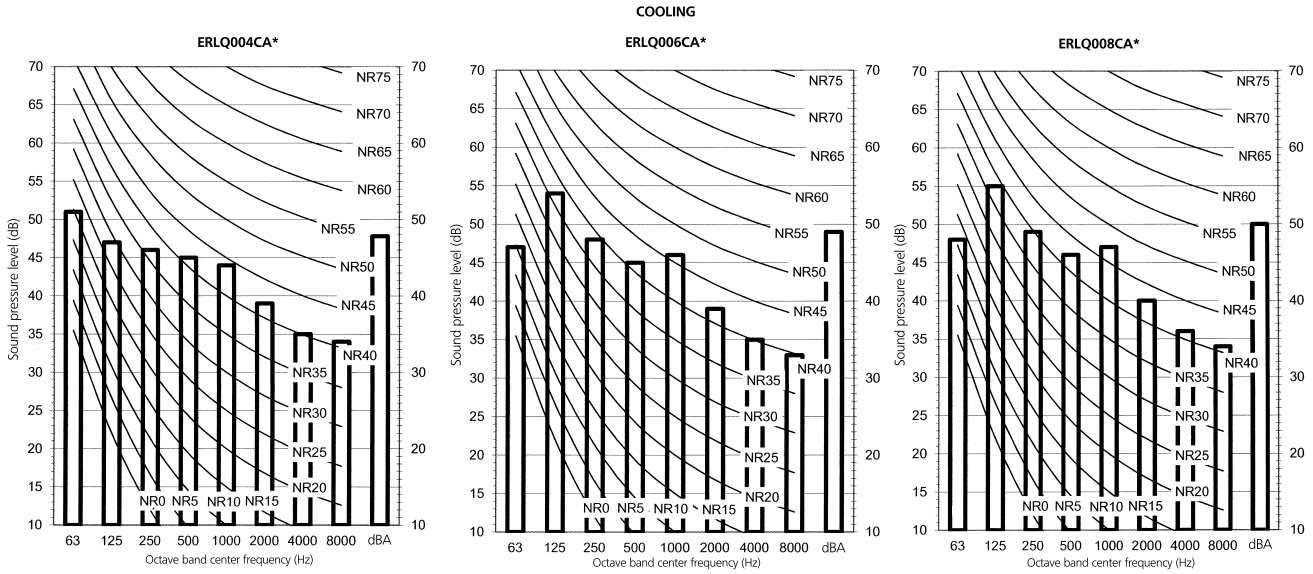


3TW60337-2

# 8 Sound data

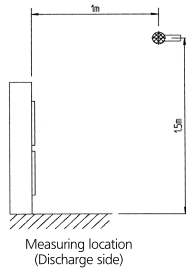
## 8 - 3 Sound Pressure Spectrum - Cooling

ERLQ004-008CV3



**Notes:**

- 1 Data is valid at free field condition.
- 2 Data is valid at nominal operation condition.
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC).
- 4 Reference acoustic pressures OctB = 20μPa.

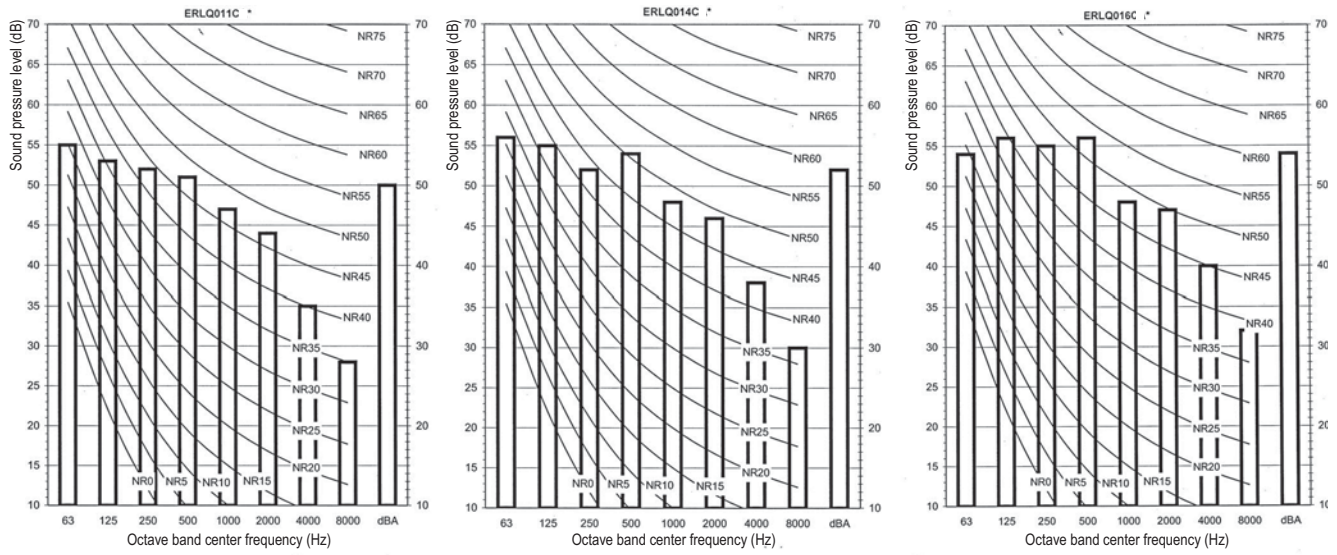


3TW60817-1

# 8 Sound data

## 8 - 3 Sound Pressure Spectrum - Cooling

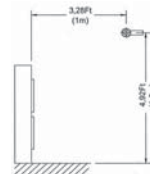
Cooling



### NOTES

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

Measuring location (discharge side):



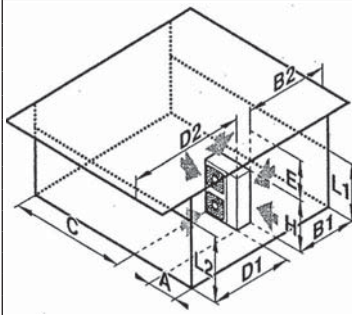
3TW60337-1

# 9 Installation

## 9 - 1 Installation Method

ERLQ011-016C

### Installation servicing space



		↙	↗	↘	↖	↓	A	B1	B2	C	D1	D2	E	L1/L2
✓								≥200						
✓		✓	✓				≥200	≥200		≥200				
✓				✓				≥200				≥500	≥1000	
✓		✓	✓	✓	✓		≥300	≥300		≥300		≥500	≥1000	1
	✓										≥500			
	✓			✓				≥500			≥500		≥1000	
	✓	✓					L1<L2	≥200			≥500			
							L2<L1	≥200			≥500			
	✓					L1<L2	L1≤H	≥350	≥500		≥750 ≥1000		≥1000	0<L1≤1/2H 0<L1≤1/2H
							H<L1				L1≤H			
	✓	✓				L2<L1	L2≤H	≥200 ≥300			≥1000	≥500	≥1000	0<L2≤1/2H 1/2H<L2≤H
							H<L2				L2≤H			

### NOTES

Legend (Unit: mm)

- ↙ Suction side obstacle
- ↗ Discharge side obstacle
- ↘ Left side obstacle
- ↖ Right side obstacle
- ↓ Top side obstacle
- ✓ Obstacle is present
- ☐ This situation is not allowed

- 1 Recommended installation set-up for the ERLQ011-016\*  
(to prevent exposure to wind or that the heat exchanger coil is affected by snow)
- 2 In these cases, close bottom of the installation frame to prevent discharged air from being bypassed

3TW60339-1

# 9 Installation

## 9 - 1 Installation Method

ERLQ011-016C

### Installation guidelines / precautions Daikin Altherma

#### Outdoor unit

##### Installation location (general)

Select an installation site that meets the following requirements:

- The foundation must be strong enough to support the weight of the unit. The floor is flat to prevent vibrations and noise generation and to have sufficient stability.
- The space around the unit is adequate for maintenance/servicing and allows for sufficient air circulation. (Refer to "Installation and service space" information sheet)
- There is no danger of fire due to leakage of inflammable gas.
- The equipment is not intended for use in a potentially explosive atmosphere.
- Select the location of the unit in such a way that the sound and discharged cold/hot air generated by the unit does not disturb anyone, and the location is selected according the applicable legislation.
- All piping lengths and distances have been taken into consideration (refer to "Technical specification" information sheet).
- Take care that in the event of a water leak, water cannot cause any damage to the installation space and surroundings.
- Install units, power cords and inter-unit cables at least 3 m away from television and radio sets. This is to prevent interference to images and sounds.
- Depending on radio wave conditions, electromagnetic interference may still occur even if installed more than 3 m away.

Do not install in the following locations:

- Locations where sulphurous acids and other corrosive gases may be present in the atmosphere.
- Locations where a mineral oil mist, spray or vapour may be present in the atmosphere.
- Locations where flammable gases may leak, where thinner, gasoline and other volatile substances are handled, or where carbon dust and other incendiary substances are found in the atmosphere.
- In areas where the air contains high levels of salt such as that near the ocean.
- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side (left and back) may be exposed directly to wind, snow. (See "Installation and Service space" information sheet and figure 1)

##### Installation location (in cold climates)

- To prevent exposure to wind, install a baffle plate on the air discharge side of the outdoor unit.
- Unit should be installed in a way that a minimum of 10 cm free space is assured below the unit's bottom plate at all conditions (prevent burying in snow), e.g.: heavy snowfall (if necessary construct a pedestal).
- In heavy snowfall areas it is very important to select an installation site where the snow will not affect the unit. Make sure that the heat exchanger coil (left and back side) is not affected by the snow (if necessary construct a lateral canopy and baffle plate on the air side).
- Recommended installation set-up. (See "Installation and Service space" information sheet and figure 2)

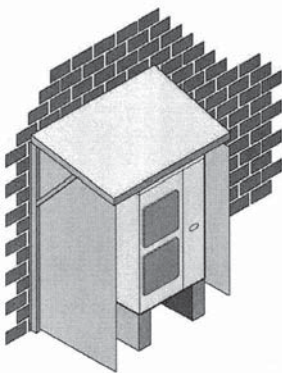


Figure 1: construction to prevent exposure to wind and snow

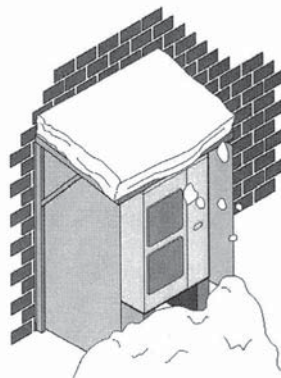


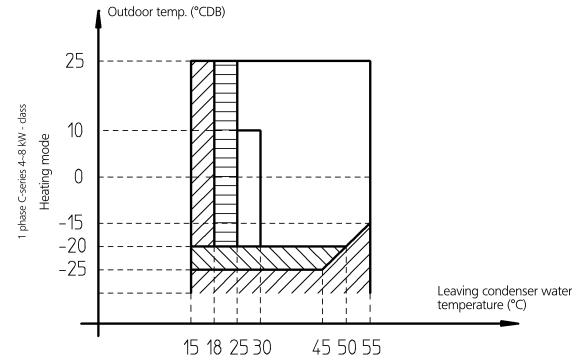
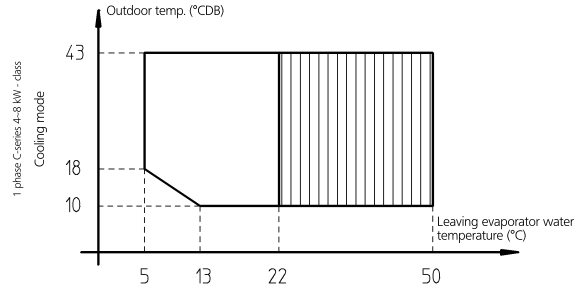
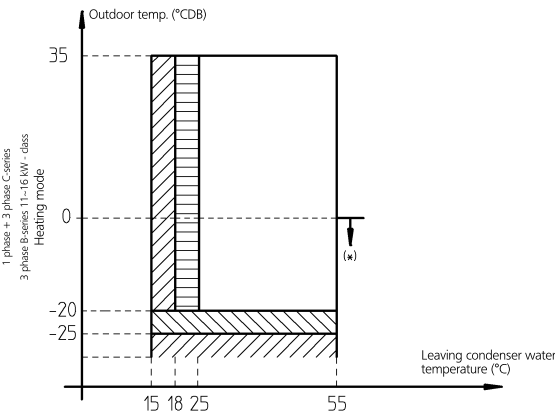
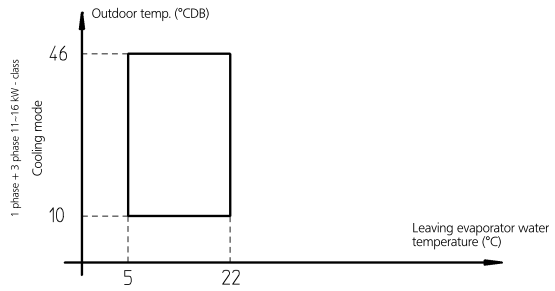
Figure 2: construction to prevent affect of snow to the unit

4TW60339-2

# 10 Operation range

## 10 - 1 Operation Range

ERLQ-CV3



**LEGEND:**

- : Only backup heater operation (no outdoor unit operation)
- : Outdoor unit operation if setpoint  $\geq 25^{\circ}\text{C}$
- : Operation of outdoor unit possible, but no guarantee of capacity (if outdoor temperature  $< -20^{\circ}\text{C}$  or  $< -25^{\circ}\text{C}$  outdoor unit will stop) (indoor unit and backup heater operation will continue)
- : Pull down area

Remark: for restricted power supply condition mode outdoor unit, booster heater and back-up heater can operate separately.

(\*) \*RLQ units include special equipment (insulation, heater sheet, ...) to ensure good operation in areas where low ambient temperature can occur together with high humidity conditions. In such conditions the \*RLQ models may experience problems with severe ice build up on the aircooled coil. In case such conditions are expected, the \*RLQ must be installed instead. These models contain countermeasures (insulation, heater sheet, ...) to prevent freeze up.

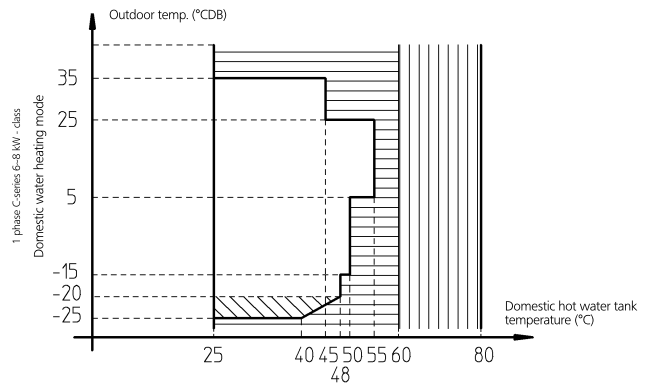
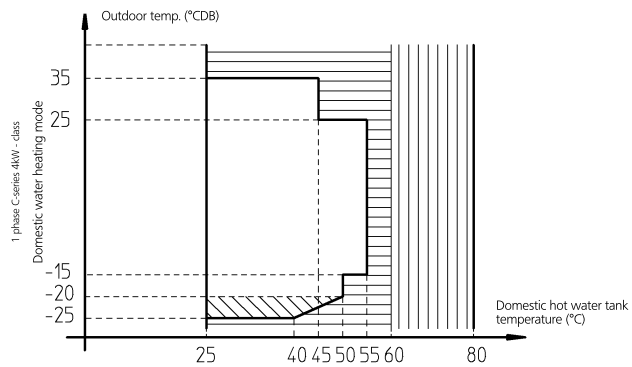
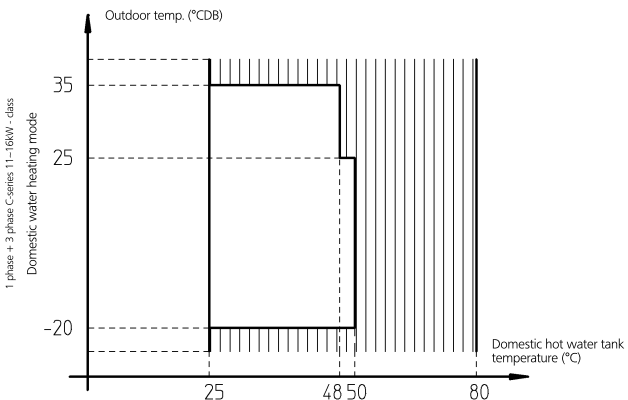
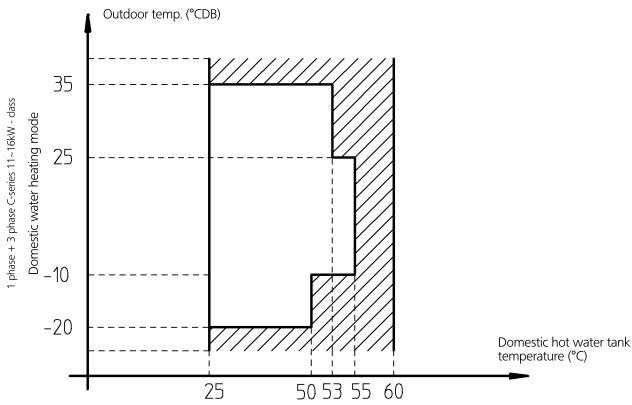
3TW60813-1A

# 10 Operation range

## 10 - 1 Operation Range

10

ERLQ-CV3



LEGEND:

- ▨ : Only booster heater operation (EKHW\* only)
- ▩ : Only backup heater operation (EKHV\*BB\* + EKHTS\*, EHV\*CA\* only)
- ▧ : Only booster heater operation (EKHW\* only)
- ▦ : Only backup heater operation (EKHV\*BB\* + EKHTS\*, EHV\*CA\* only)
- ▤ : Operation of outdoor unit possible, but no guarantee of capacity. (if outdoor temperature < -25°C outdoor unit will stop) (indoor unit and booster/back-up heater operation will continue)

Remark: for restricted power supply condition mode (EKHW\* only) outdoor unit, booster heater and back-up heater can only operate separately.

3TW60813-2B



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