Daikin Altherma high temperature split Technical Data

EPRA014-018DW

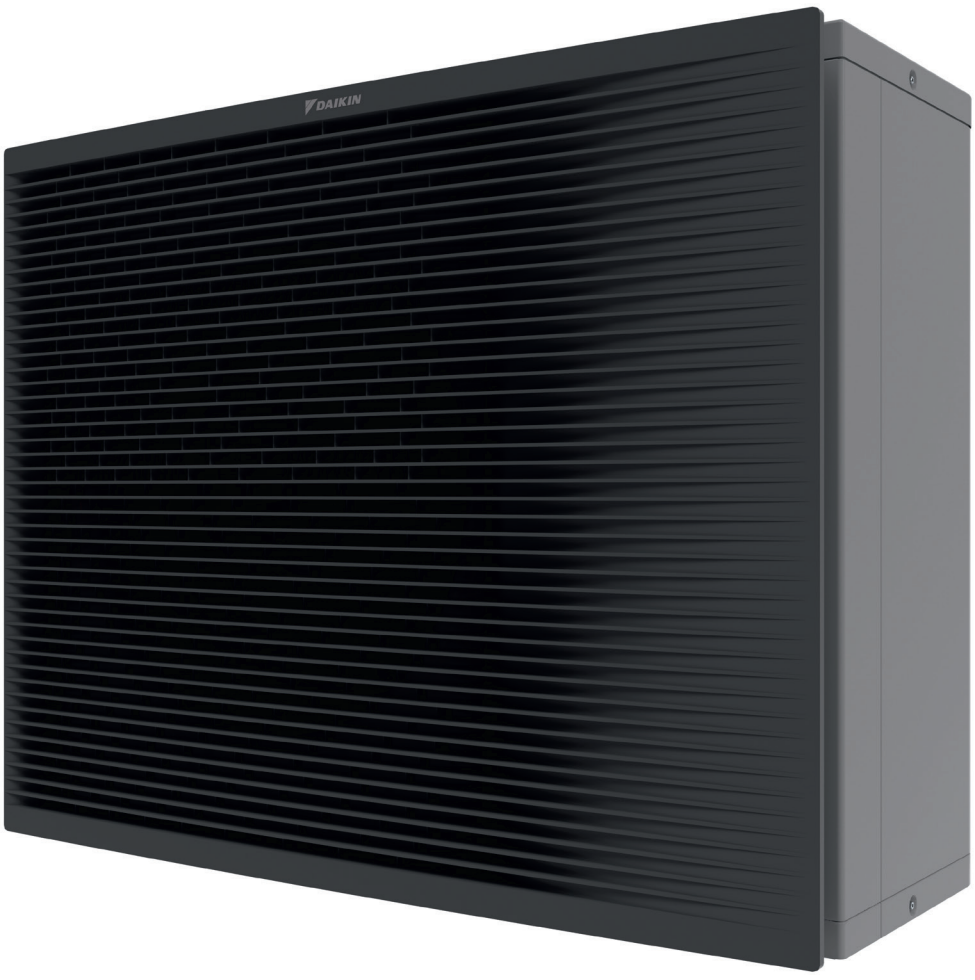


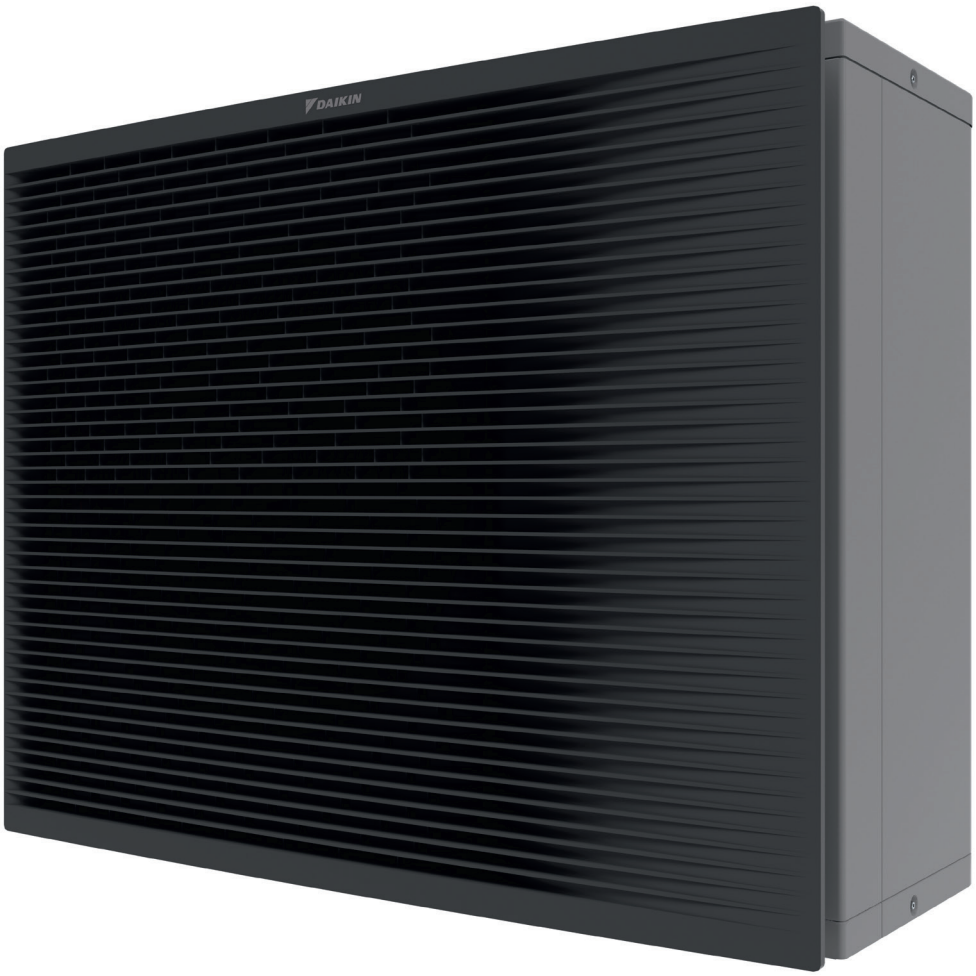
TABLE OF CONTENTS

EPRA014-018DW

1 Features

1 - 1 EPRA014-018DW

› By heat pump operation only, the outdoor unit delivers a leaving water temperature of 70°C at -15°C ambient temperature
› By -15°C ambient temperature, the outdoor unit limits heating capacity loss
› Outdoor unit extracts heat from the outdoor air, even at -28°C
› The unit's sleek design blends in with other household appliances.
› Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A, leads directly to lower energy consumption thanks to its high energy efficiency and has a 30% lower refrigerant charge



Guaranteed operation down to -28°C

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Outdoor unit					EPRA14DAW1	EPRA16DAW1	EPRA18DAW1
Heating capacity	Min.			kW	3.70 (1)	3.96 (1)	4.40 (1)
	Nom.			kW	5.90 (2)	9.00 (2)	
	Max.			kW	9.75 (1)	10.44 (1)	11.60 (1)
Power input	Heating	Min.		kW	0.84 (3)	0.90 (3)	1.00 (3)
		Nom.		kW	1.23 (2)	1.80 (2)	
		Max.		kW	2.17 (3)	2.32 (3)	2.58 (3)
COP					4.79 (2)	5.00 (2)	
Pump	Type				Grundfos UPMXL GEO 25-125 130 PWM		
	Nominal ESP unit	Heating		kPa	111.2 (4)	97.4 (4)	
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.3 (2)	25.8 (2)	
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			Yes		
		Water-to-water heat pump			No		
	LW(A) Sound power level	Indoor		dB(A)	44.0		
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	54.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825		
Space heating general	Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)		kW	0.000		
		Poff (Off mode)		kW	0.031		
		Psb (Standby mode)		kW	0.042		
		Pto (Thermostat off)		kW	0.033		
	Integrated supplementary heater	Psup		kW	6.0		
		Type of energy input			Electrical		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236		
			ηs (Seasonal space heating efficiency)	%	140		
			Prated at -10°C	kW	13		
			Qhe Annual energy consumption (GCV)	Gj	26		
			SCOP		3.57		
			Seasonal space heating eff. class		A++		
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0		

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Space heating	Average climate water outlet 55°C	A Condition (-7°CDB/-8°CWB)	COPd			2.43	
			Pdh	kW		11.1	
			PERd	%		97.2	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.52	
			Pdh	kW		6.7	
			PERd	%		140.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.54	
			Pdh	kW		6.5	
			PERd	%		181.6	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.97	
			Pdh	kW		5.2	
			PERd	%		238.8	
		Tol (temperature operating limit)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			TOL	°C		-10	
			WTOL	°C		55	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.0	
		Tbiv (bivalent temperature)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			Tbiv	°C		-10	
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh		9,658	
			ηs (Seasonal space heating efficiency)	%		125	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		35	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.74	
			Pdh	kW		7.5	
			PERd	%		109.6	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.67	
			Pdh	kW		5.8	
			PERd	%		146.8	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Space heating	Cold climate water outlet 55°C	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.69	
			Pdh	kW		5.6	
			PERd	%		187.6	
		D Condition (12°CDB/11°CWB)	COPd			6.12	
			Pdh	kW		6.2	
			PERd	%		244.8	
		Tol (temperature operating limit)	COPd			1.65	
			Pdh	kW		10.6	
			PERd	%		66.0	
			TOL	°C		-22	
			WTOL	°C		55	
		G Condition (-15°CDB/-)	COPd			2.17	
			Pdh	kW		10.3	
			PERd	%		86.8	
		Tbiv (bivalent temperature)	COPd			1.90	
			Pdh	kW		11.0	
			PERd	%		76.0	
			Tbiv	°C		-18	
		Rated heat output	Psup (at Tdesign -22°C)	kW		1.9	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh		4,063	
			ηs (Seasonal space heating efficiency)	%		161	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		15	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.62	
			Pdh	kW		11.4	
			PERd	%		104.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.65	
			Pdh	kW		8.2	
			PERd	%		146.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.37	
			Pdh	kW		6.1	
			PERd	%		214.8	
		Tbiv (bivalent temperature)	COPd			3.18	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Space heating	Warm climate water outlet 55°C	Tbiv (bivalent temperature)	Pdh	kW		11.0	
			PERd	%		127.2	
			Tbiv	°C		4	
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1	11.8	
	Average climate water outlet 35°C	General	Annual energy consumption	kWh		5,479	
			ηs (Seasonal space heating efficiency)	%		186	
			Prated at -10°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		20	
			SCOP			4.71	
			Seasonal space heating eff. class			A+++	
		A Condition (-7°CDB/-8°CWB)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.94	
			Pdh	kW		6.9	
			PERd	%		197.6	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.95	
			Pdh	kW		6.2	
			PERd	%		238.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.07	
			Pdh	kW		5.6	
			PERd	%		282.8	
		Tol (temperature operating limit)	COPd			2.88	
			Pdh	kW		12.1	
			PERd	%		115.2	
			TOL	°C		-10	
			WTOL	°C		35	
		Tbiv (bivalent temperature)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
			Tbiv	°C		-7	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.4	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh		7,425	
			ηs (Seasonal space heating efficiency)	%		163	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Space heating	Cold climate water outlet 35°C	General	Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		27	
		A Condition (-7°CDB/-8°CWB)	COPd			3.50	
			Pdh	kW		8.0	
			PERd	%		140.0	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.07	
			Pdh	kW		4.9	
			PERd	%		202.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			6.10	
			Pdh	kW		5.3	
			PERd	%		244.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.03	
			Pdh	kW		5.7	
			PERd	%		281.2	
		Tol (temperature operating limit)	COPd			2.16	
			Pdh	kW		10.1	
			PERd	%		86.4	
			TOL	°C		-22	
			WTOL	°C		35	
		G Condition (-15°CDB/-)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
		Tbiv (bivalent temperature)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
			Tbiv	°C		-15	
		Rated heat output	Psup (at Tdesign -22°C)	kW		2.4	
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh		2,992	
			ηs (Seasonal space heating efficiency)	%		220	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		11	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.51	
			Pdh	kW		10.0	
Space heating	Warm climate water outlet 35°C	B Condition (2°CDB/1°CWB)	PERd	%		140.4	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.67	
			Pdh	kW		8.3	
			PERd	%		226.8	
		Tbiv (bivalent temperature)	COPd			4.96	
			Pdh	kW		9.8	
			PERd	%		198.4	
			Tbiv	°C		5	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.04	
			Pdh	kW		5.7	
			PERd	%		281.6	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
Test at Ta DB/WB 7°C/6°C. According to EN 16147.

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Outdoor unit					EPRA14DAW1	EPRA16DAW1	EPRA18DAW1
Heating capacity	Min.			kW	3.70 (1)	3.96 (1)	4.40 (1)
	Nom.			kW	5.90 (2)	9.00 (2)	
	Max.			kW	9.75 (1)	10.44 (1)	11.60 (1)
Power input	Heating	Min.		kW	0.84 (3)	0.90 (3)	1.00 (3)
		Nom.		kW	1.23 (2)	1.80 (2)	
		Max.		kW	2.17 (3)	2.32 (3)	2.58 (3)
COP					4.79 (2)	5.00 (2)	
Pump	Type				Grundfos UPMXL GEO 25-125 130 PWM		
	Nominal ESP unit	Heating		kPa	111.2 (4)	97.4 (4)	
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.3 (2)	25.8 (2)	
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			Yes		
		Water-to-water heat pump			No		
	LW(A) Sound power level	Indoor		dB(A)	44.0		
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	54.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825		
Space heating general	Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)		kW	0.000		
		Poff (Off mode)		kW	0.031		
		Psb (Standby mode)		kW	0.042		
		Pto (Thermostat off)		kW	0.033		
	Integrated supplementary heater	Psup		kW	9.0		
		Type of energy input			Electrical		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236		
			ηs (Seasonal space heating efficiency)	%	140		
			Prated at -10°C	kW	13		
			Qhe Annual energy consumption (GCV)	Gj	26		
			SCOP		3.57		
			Seasonal space heating eff. class		A++		
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0		

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Space heating	Average climate water outlet 55°C	A Condition (-7°CDB/-8°CWB)	COPd			2.43	
			Pdh	kW		11.1	
			PERd	%		97.2	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.52	
			Pdh	kW		6.7	
			PERd	%		140.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.54	
			Pdh	kW		6.5	
			PERd	%		181.6	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.97	
			Pdh	kW		5.2	
			PERd	%		238.8	
		Tol (temperature operating limit)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			TOL	°C		-10	
			WTOL	°C		55	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.0	
		Tbiv (bivalent temperature)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			Tbiv	°C		-10	
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh		9,658	
			ηs (Seasonal space heating efficiency)	%		125	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		35	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.74	
			Pdh	kW		7.5	
			PERd	%		109.6	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.67	
			Pdh	kW		5.8	
			PERd	%		146.8	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Space heating	Cold climate water outlet 55°C	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.69	
			Pdh	kW		5.6	
			PERd	%		187.6	
		D Condition (12°CDB/11°CWB)	COPd			6.12	
			Pdh	kW		6.2	
			PERd	%		244.8	
		Tol (temperature operating limit)	COPd			1.65	
			Pdh	kW		10.6	
			PERd	%		66.0	
			TOL	°C		-22	
			WTOL	°C		55	
		G Condition (-15°CDB/-)	COPd			2.17	
			Pdh	kW		10.3	
			PERd	%		86.8	
		Tbiv (bivalent temperature)	COPd			1.90	
			Pdh	kW		11.0	
			PERd	%		76.0	
			Tbiv	°C		-18	
		Rated heat output	Psup (at Tdesign -22°C)	kW		1.9	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh		4,063	
			ηs (Seasonal space heating efficiency)	%		161	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		15	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.62	
			Pdh	kW		11.4	
			PERd	%		104.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.65	
			Pdh	kW		8.2	
			PERd	%		146.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.37	
			Pdh	kW		6.1	
			PERd	%		214.8	
		Tbiv (bivalent temperature)	COPd			3.18	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Space heating	Warm climate water outlet 55°C	Tbiv (bivalent temperature)	Pdh	kW		11.0	
			PERd	%		127.2	
			Tbiv	°C		4	
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1	11.8	
	Average climate water outlet 35°C	General	Annual energy consumption	kWh		5,479	
			ηs (Seasonal space heating efficiency)	%		186	
			Prated at -10°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		20	
			SCOP			4.71	
			Seasonal space heating eff. class			A+++	
		A Condition (-7°CDB/-8°CWB)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.94	
			Pdh	kW		6.9	
			PERd	%		197.6	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.95	
			Pdh	kW		6.2	
			PERd	%		238.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.07	
			Pdh	kW		5.6	
			PERd	%		282.8	
		Tol (temperature operating limit)	COPd			2.88	
			Pdh	kW		12.1	
			PERd	%		115.2	
			TOL	°C		-10	
			WTOL	°C		35	
		Tbiv (bivalent temperature)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
			Tbiv	°C		-7	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.4	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh		7,425	
			ηs (Seasonal space heating efficiency)	%		163	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Space heating	Cold climate water outlet 35°C	General	Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		27	
		A Condition (-7°CDB/-8°CWB)	COPd			3.50	
			Pdh	kW		8.0	
			PERd	%		140.0	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.07	
			Pdh	kW		4.9	
			PERd	%		202.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			6.10	
			Pdh	kW		5.3	
			PERd	%		244.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.03	
			Pdh	kW		5.7	
			PERd	%		281.2	
		Tol (temperature operating limit)	COPd			2.16	
			Pdh	kW		10.1	
			PERd	%		86.4	
			TOL	°C		-22	
			WTOL	°C		35	
		G Condition (-15°CDB/-)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
		Tbiv (bivalent temperature)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
			Tbiv	°C		-15	
		Rated heat output	Psup (at Tdesign -22°C)	kW		2.4	
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh		2,992	
			ηs (Seasonal space heating efficiency)	%		220	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		11	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.51	
			Pdh	kW		10.0	
Space heating	Warm climate water outlet 35°C	B Condition (2°CDB/1°CWB)	PERd	%		140.4	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.67	
			Pdh	kW		8.3	
			PERd	%		226.8	
		Tbiv (bivalent temperature)	COPd			4.96	
			Pdh	kW		9.8	
			PERd	%		198.4	
			Tbiv	°C		5	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.04	
			Pdh	kW		5.7	
			PERd	%		281.6	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
Test at Ta DB/WB 7°C/6°C. According to EN 16147.

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Outdoor unit					EPRA14DAW1	EPRA16DAW1	EPRA18DAW1
Heating capacity	Min.			kW	3.70 (1)	3.96 (1)	4.40 (1)
	Nom.			kW	5.90 (2)	9.00 (2)	
	Max.			kW	9.75 (1)	10.44 (1)	11.60 (1)
Cooling capacity	Nom.			kW	10.6 (3) / 6.90 (4)	11.5 (3) / 7.88 (4)	12.5 (3) / 8.86 (4)
Power input	Heating	Min.		kW	0.84 (5)	0.90 (5)	1.00 (5)
		Nom.		kW	1.23 (2)	1.80 (2)	
		Max.		kW	2.17 (5)	2.32 (5)	2.58 (5)
	Cooling	Nom.		kW	2.55 (3) / 2.56 (4)	2.80 (3) / 2.93 (4)	3.05 (3) / 3.31 (4)
COP					4.79 (2)	5.00 (2)	
EER					4.13 (3) / 2.70 (4)	4.11 (3) / 2.69 (4)	4.09 (3) / 2.68 (4)
Pump	Type				Grundfos UPMXL GEO 25-125 130 PWM		
	Nominal ESP unit	Heating		kPa	111.2 (6)	97.4 (6)	
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.3 (2)	25.8 (2)	
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			Yes		
		Water-to-water heat pump			No		
	LW(A) Sound power level	Indoor		dB(A)	44.0		
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	54.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825		
Space heating general	Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)		kW	0.000		
		Poff (Off mode)		kW	0.031		
		Psb (Standby mode)		kW	0.042		
		Pto (Thermostat off)		kW	0.033		
	Integrated supplementary heater	Psup		kW	6.0		
		Type of energy input			Electrical		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,122		
			ηs (Seasonal space heating efficiency)	%	142		
			Prated at -10°C	kW	13		
			Qhe Annual energy consumption (GCV)	Gj	26		

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	SCOP			3.63	
			Seasonal space heating eff. class			A++	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.43	
			Pdh	kW		11.1	
			PERd	%		97.2	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.52	
			Pdh	kW		6.7	
			PERd	%		140.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.54	
			Pdh	kW		6.5	
			PERd	%		181.6	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.97	
			Pdh	kW		5.2	
			PERd	%		238.8	
		Tol (temperature operating limit)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			TOL	°C		-10	
			WTOL	°C		55	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.0	
		Tbiv (bivalent temperature)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			Tbiv	°C		-10	
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh		9,589	
			ηs (Seasonal space heating efficiency)	%		126	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		35	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.74	
			Pdh	kW		7.5	
			PERd	%		109.6	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating	Cold climate water outlet 55°C	B Condition (2°CDB/1°CWB)	COPd			3.67	
			Pdh	kW		5.8	
			PERd	%		146.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.69	
			Pdh	kW		5.6	
			PERd	%		187.6	
		D Condition (12°CDB/11°CWB)	COPd			6.12	
			Pdh	kW		6.2	
			PERd	%		244.8	
		Tol (temperature operating limit)	COPd			1.65	
			Pdh	kW		10.6	
			PERd	%		66.0	
			TOL	°C		-22	
			WTOL	°C		55	
		G Condition (-15°CDB/-)	COPd			2.17	
			Pdh	kW		10.3	
			PERd	%		86.8	
		Tbiv (bivalent temperature)	COPd			1.90	
			Pdh	kW		11.0	
			PERd	%		76.0	
			Tbiv	°C		-18	
		Rated heat output	Psup (at Tdesign -22°C)	kW		1.9	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh		3,926	
			ηs (Seasonal space heating efficiency)	%		167	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		14	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.62	
			Pdh	kW		11.4	
			PERd	%		104.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.65	
			Pdh	kW		8.2	
			PERd	%		146.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.37	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating	Warm climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Pdh	kW		6.1	
			PERd	%		214.8	
			COPd			3.18	
		Tbiv (bivalent temperature)	Pdh	kW		11.0	
			PERd	%		127.2	
			Tbiv	°C		4	
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1	11.8	
	Average climate water outlet 35°C	General	Annual energy consumption	kWh		5,366	
			ηs (Seasonal space heating efficiency)	%		190	
			Prated at -10°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		19	
			SCOP			4.81	
			Seasonal space heating eff. class			A+++	
		A Condition (-7°CDB/-8°CWB)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.94	
			Pdh	kW		6.9	
			PERd	%		197.6	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.95	
			Pdh	kW		6.2	
			PERd	%		238.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.07	
			Pdh	kW		5.6	
			PERd	%		282.8	
		Tol (temperature operating limit)	COPd			2.88	
			Pdh	kW		12.1	
			PERd	%		115.2	
			TOL	°C		-10	
			WTOL	°C		35	
		Tbiv (bivalent temperature)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
			Tbiv	°C		-7	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating	Average climate water outlet	Rated heat output	Psup (at Tdesign -10°C)	kW		0.4	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh		7,356	
			ηs (Seasonal space heating efficiency)	%		165	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		26	
		A Condition (-7°CDB/-8°CWB)	COPd			3.50	
			Pdh	kW		8.0	
			PERd	%		140.0	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.07	
			Pdh	kW		4.9	
			PERd	%		202.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			6.10	
			Pdh	kW		5.3	
			PERd	%		244.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.03	
			Pdh	kW		5.7	
			PERd	%		281.2	
		Tol (temperature operating limit)	COPd			2.16	
			Pdh	kW		10.1	
			PERd	%		86.4	
			TOL	°C		-22	
			WTOL	°C		35	
		G Condition (-15°CDB/-)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
		Tbiv (bivalent temperature)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
			Tbiv	°C		-15	
		Rated heat output	Psup (at Tdesign -22°C)	kW		2.4	
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh		2,855	
			ηs (Seasonal space heating efficiency)	%		231	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		10	
Space heating	Warm climate water outlet 35°C	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.51	
			Pdh	kW		10.0	
			PERd	%		140.4	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.67	
			Pdh	kW		8.3	
			PERd	%		226.8	
		Tbiv (bivalent temperature)	COPd			4.96	
			Pdh	kW		9.8	
			PERd	%		198.4	
			Tbiv	°C		5	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.04	
			Pdh	kW		5.7	
			PERd	%		281.6	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

2 Specifications

1 - 1 EPRA014-018DW

(6)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed | Test at Ta DB/WB 7°C/6°C. According to EN 16147.

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Outdoor unit					EPRA14DAW1	EPRA16DAW1	EPRA18DAW1
Heating capacity	Min.			kW	3.70 (1)	3.96 (1)	4.40 (1)
	Nom.			kW	5.90 (2)	9.00 (2)	
	Max.			kW	9.75 (1)	10.44 (1)	11.60 (1)
Cooling capacity	Nom.			kW	10.6 (3) / 6.90 (4)	11.5 (3) / 7.88 (4)	12.5 (3) / 8.86 (4)
Power input	Heating	Min.		kW	0.84 (5)	0.90 (5)	1.00 (5)
		Nom.		kW	1.23 (2)	1.80 (2)	
		Max.		kW	2.17 (5)	2.32 (5)	2.58 (5)
	Cooling	Nom.		kW	2.55 (3) / 2.56 (4)	2.80 (3) / 2.93 (4)	3.05 (3) / 3.31 (4)
COP					4.79 (2)	5.00 (2)	
EER					4.13 (3) / 2.70 (4)	4.11 (3) / 2.69 (4)	4.09 (3) / 2.68 (4)
Pump	Type				Grundfos UPMXL GEO 25-125 130 PWM		
	Nominal ESP unit	Heating		kPa	111.2 (6)	97.4 (6)	
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.3 (2)	25.8 (2)	
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			Yes		
		Water-to-water heat pump			No		
	LW(A) Sound power level	Indoor		dB(A)	44.0		
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	54.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825		
Space heating general	Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)		kW	0.000		
		Poff (Off mode)		kW	0.031		
		Psb (Standby mode)		kW	0.042		
		Pto (Thermostat off)		kW	0.033		
	Integrated supplementary heater	Psup		kW	9.0		
		Type of energy input			Electrical		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,122		
			ηs (Seasonal space heating efficiency)	%	142		
			Prated at -10°C	kW	13		
			Qhe Annual energy consumption (GCV)	Gj	26		

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	SCOP			3.63	
			Seasonal space heating eff. class			A++	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.43	
			Pdh	kW		11.1	
			PERd	%		97.2	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.52	
			Pdh	kW		6.7	
			PERd	%		140.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.54	
			Pdh	kW		6.5	
			PERd	%		181.6	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.97	
			Pdh	kW		5.2	
			PERd	%		238.8	
		Tol (temperature operating limit)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			TOL	°C		-10	
			WTOL	°C		55	
		Rated heat output	Psup (at Tdesign -10°C)	kW		0.0	
		Tbiv (bivalent temperature)	COPd			2.12	
			Pdh	kW		12.5	
			PERd	%		84.8	
			Tbiv	°C		-10	
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh		9,589	
			ηs (Seasonal space heating efficiency)	%		126	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		35	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.74	
			Pdh	kW		7.5	
			PERd	%		109.6	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Space heating	Cold climate water outlet 55°C	B Condition (2°CDB/1°CWB)	COPd			3.67	
			Pdh	kW		5.8	
			PERd	%		146.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.69	
			Pdh	kW		5.6	
			PERd	%		187.6	
		D Condition (12°CDB/11°CWB)	COPd			6.12	
			Pdh	kW		6.2	
			PERd	%		244.8	
		Tol (temperature operating limit)	COPd			1.65	
			Pdh	kW		10.6	
			PERd	%		66.0	
			TOL	°C		-22	
			WTOL	°C		55	
		G Condition (-15°CDB/-)	COPd			2.17	
			Pdh	kW		10.3	
			PERd	%		86.8	
		Tbiv (bivalent temperature)	COPd			1.90	
			Pdh	kW		11.0	
			PERd	%		76.0	
			Tbiv	°C		-18	
		Rated heat output	Psup (at Tdesign -22°C)	kW		1.9	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh		3,926	
			ηs (Seasonal space heating efficiency)	%		167	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		14	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.62	
			Pdh	kW		11.4	
			PERd	%		104.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.65	
			Pdh	kW		8.2	
			PERd	%		146.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.37	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Space heating	Warm climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Pdh	kW		6.1	
			PERd	%		214.8	
		Tbiv (bivalent temperature)	COPd			3.18	
			Pdh	kW		11.0	
			PERd	%		127.2	
			Tbiv	°C		4	
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1	11.8	
	Average climate water outlet 35°C	General	Annual energy consumption	kWh		5,366	
			ηs (Seasonal space heating efficiency)	%		190	
			Prated at -10°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		19	
			SCOP			4.81	
			Seasonal space heating eff. class			A+++	
		A Condition (-7°CDB/-8°CWB)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			4.94	
			Pdh	kW		6.9	
			PERd	%		197.6	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.95	
			Pdh	kW		6.2	
			PERd	%		238.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.07	
			Pdh	kW		5.6	
			PERd	%		282.8	
		Tol (temperature operating limit)	COPd			2.88	
			Pdh	kW		12.1	
			PERd	%		115.2	
			TOL	°C		-10	
			WTOL	°C		35	
		Tbiv (bivalent temperature)	COPd			2.97	
			Pdh	kW		10.7	
			PERd	%		118.8	
			Tbiv	°C		-7	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Space heating	Average climate water outlet	Rated heat output	Psup (at Tdesign -10°C)	kW		0.4	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh		7,356	
			ηs (Seasonal space heating efficiency)	%		165	
			Prated at -22°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		26	
		A Condition (-7°CDB/-8°CWB)	COPd			3.50	
			Pdh	kW		8.0	
			PERd	%		140.0	
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.07	
			Pdh	kW		4.9	
			PERd	%		202.8	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			6.10	
			Pdh	kW		5.3	
			PERd	%		244.0	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.03	
			Pdh	kW		5.7	
			PERd	%		281.2	
		Tol (temperature operating limit)	COPd			2.16	
			Pdh	kW		10.1	
			PERd	%		86.4	
			TOL	°C		-22	
			WTOL	°C		35	
		G Condition (-15°CDB/-)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
		Tbiv (bivalent temperature)	COPd			2.62	
			Pdh	kW		10.7	
			PERd	%		104.8	
			Tbiv	°C		-15	
		Rated heat output	Psup (at Tdesign -22°C)	kW		2.4	
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh		2,855	
			ηs (Seasonal space heating efficiency)	%		231	
			Prated at 2°C	kW		13	
			Qhe Annual energy consumption (GCV)	Gj		10	
Space heating	Warm climate water outlet 35°C	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			3.51	
			Pdh	kW		10.0	
			PERd	%		140.4	
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.67	
			Pdh	kW		8.3	
			PERd	%		226.8	
		Tbiv (bivalent temperature)	COPd			4.96	
			Pdh	kW		9.8	
			PERd	%		198.4	
			Tbiv	°C		5	
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
			COPd			7.04	
			Pdh	kW		5.7	
			PERd	%		281.6	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

2 Specifications

1 - 1 EPRA014-018DW

(6)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed | Test at Ta DB/WB 7°C/6°C. According to EN 16147.

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Outdoor unit					EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.			kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.			kW	5.90 (2)		9.00 (2)			
	Max.			kW	9.75 (1)		10.44 (1)		11.60 (1)	
Power input	Heating	Min.		kW	0.84 (3)		0.90 (3)		1.00 (3)	
		Nom.		kW	1.23 (2)		1.80 (2)			
		Max.		kW	2.17 (3)		2.32 (3)		2.58 (3)	
	Domestic hot water from 10°C	Nom.		kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)
Heat up time from 10°C to 50°C				hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP					4.79 (2)		5.00 (2)			
Pump	Type				Grundfos UPMXL GEO 25-125 130 PWM					
	Nominal ESP unit	Heating		kPa	111.2 (5)		97.4 (5)			
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.3 (2)		25.8 (2)			
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			Yes					
		Water-to-water heat pump			No					
	LW(A) Sound power level	Indoor		dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	54.0					
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name				Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Air to water unit	Rated airflow (outdoor)		m^3/h	3,918	-	3,918	-	3,960	-
	Other	Capacity control			Inverter					
		Pck (Crankcase heater mode)		kW	0.000					
		Poff (Off mode)		kW	0.031					
		Psb (Standby mode)		kW	0.042					
		Pto (Thermostat off)		kW	0.033					
Domestic hot water heating	General	Declared load profile			L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup		kW	6.0					
		Type of energy input			Electrical					
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)		kWh	969	1,572	969	1,572	969	1,572
		COPdhw			2.51	2.55	2.51	2.55	2.51	2.55

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Domestic hot water heating	Average climate	Heat up time			1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
		ηwh (water heating efficiency)		%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)		kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class			A					
	Cold climate	AEC (Annual electricity consumption)		kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw			2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time			1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)		%	91					
		Qelec (Daily electricity consumption)		kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)		kWh	876	1,413	876	1,413	876	1,413
		COPdhw			2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time			1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)		%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)		kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	41.6	55.4	41.6	55.4	41.6	55.4
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236					
			ηs (Seasonal space heating efficiency)	%	140					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.54					
			Pdh	kW	6.5					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	PERd	%	181.6					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,658					
			ηs (Seasonal space heating efficiency)	%	125					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					
			Pdh	kW	10.6					
			PERd	%	66.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	TOL	°C	-22					
			WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	4,063					
			ηs (Seasonal space heating efficiency)	%	161					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	15					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,479					
			ηs (Seasonal space heating efficiency)	%	186					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	20					
			SCOP		4.71					
			Seasonal space heating eff. class		A+++					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,425					
			ηs (Seasonal space heating efficiency)	%	163					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	27					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					
			PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 35°C	C Condition (7°CDB/6°CWB)	COPd		6.10					
			Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,992					
			ηs (Seasonal space heating efficiency)	%	220					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	11					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent temperature)	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
			Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
Space heating	Warm climate water outlet	D Condition (12°CDB/11°CWB)	COPd		7.04					
			Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Outdoor unit				EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.		kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.		kW	5.90 (2)		9.00 (2)			
	Max.		kW	9.75 (1)		10.44 (1)		11.60 (1)	
Power input	Heating	Min.	kW	0.84 (3)		0.90 (3)		1.00 (3)	
		Nom.	kW	1.23 (2)		1.80 (2)			
		Max.	kW	2.17 (3)		2.32 (3)		2.58 (3)	
	Domestic hot water from 10°C	Nom.	kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)
Heat up time from 10°C to 50°C			hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP				4.79 (2)		5.00 (2)			

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Pump	Type			Grundfos UPMXL GEO 25-125 130 PWM					
	Nominal ESP unit	Heating	kPa	111.2 (5)		97.4 (5)			
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.3 (2)		25.8 (2)			
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		Yes					
		Water-to-water heat pump		No					
	LW(A) Sound power level	Indoor	dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	54.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Other	Capacity control		Inverter					
		Pck (Crankcase heater mode)	kW	0.000					
		Poff (Off mode)	kW	0.031					
		Psb (Standby mode)	kW	0.042					
		Pto (Thermostat off)	kW	0.033					
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup	kW	9.0					
		Type of energy input		Electrical					
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	969	1,572	969	1,572	969	1,572
		COPdhw		2.51	2.55	2.51	2.55	2.51	2.55
		Heat up time		1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
Domestic hot water heating	Average climate	ηwh (water heating efficiency)	%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)	kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class		A					
	Cold climate	AEC (Annual electricity consumption)	kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw		2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time		1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)	%	91					
		Qelec (Daily electricity consumption)	kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)	kWh	876	1,413	876	1,413	876	1,413
		COPdhw		2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time		1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)	%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)	kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	41.6	55.4	41.6	55.4	41.6	55.4

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236					
			ηs (Seasonal space heating efficiency)	%	140					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.54					
			Pdh	kW	6.5					
			PERd	%	181.6					
Space heating	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,658					
			ηs (Seasonal space heating efficiency)	%	125					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					
			Pdh	kW	10.6					
			PERd	%	66.0					
			TOL	°C	-22					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	4,063					
			ηs (Seasonal space heating efficiency)	%	161					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	15					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,479					
			ηs (Seasonal space heating efficiency)	%	186					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	20					
			SCOP		4.71					
			Seasonal space heating eff. class		A+++					
		A Condition (-7°CDB/-8°CWB)	COPd		2.97					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,425					
			ηs (Seasonal space heating efficiency)	%	163					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	27					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					
			PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		6.10					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 35°C	C Condition (7°CDB/6°CWB)	Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,992					
			ηs (Seasonal space heating efficiency)	%	220					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	11					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent temperature)	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
			Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.04					
Space heating	Warm climate water outlet 35°C	D Condition (12°CDB/11°CWB)	Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical specifications				ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Outdoor unit				EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.		kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.		kW	5.90 (2)		9.00 (2)			
	Max.		kW	9.75 (1)		10.44 (1)		11.60 (1)	
Cooling capacity	Nom.		kW	10.6 (3) / 6.90 (4)		11.5 (3) / 7.88 (4)		12.5 (3) / 8.86 (4)	
Power input	Heating	Min.	kW	0.84 (5)		0.90 (5)		1.00 (5)	
		Nom.	kW	1.23 (2)		1.80 (2)			
		Max.	kW	2.17 (5)		2.32 (5)		2.58 (5)	
	Cooling	Nom.	kW	2.55 (3) / 2.56 (4)		2.80 (3) / 2.93 (4)		3.05 (3) / 3.31 (4)	
	Domestic hot water from 10°C	Nom.	kWh	2.57 (6)	2.85 (6)	2.57 (6)	2.85 (6)	2.57 (6)	2.85 (6)
Heat up time from 10°C to 50°C			hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP				4.79 (2)		5.00 (2)			
EER				4.13 (3) / 2.70 (4)		4.11 (3) / 2.69 (4)		4.09 (3) / 2.68 (4)	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Pump	Type			Grundfos UPMXL GEO 25-125 130 PWM					
	Nominal ESP unit	Heating	kPa	111.2 (7)		97.4 (7)			
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.3 (2)		25.8 (2)			
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		Yes					
		Water-to-water heat pump		No					
	LW(A) Sound power level	Indoor	dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	54.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Other	Capacity control		Inverter					
		Pck (Crankcase heater mode)	kW	0.000					
		Poff (Off mode)	kW	0.031					
		Psb (Standby mode)	kW	0.042					
		Pto (Thermostat off)	kW	0.033					
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup	kW	6.0					
		Type of energy input		Electrical					
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	969	1,572	969	1,572	969	1,572
		COPdhw		2.51	2.55	2.51	2.55	2.51	2.55
		Heat up time		1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
		ηwh (water heating efficiency)	%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)	kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class		A					
	Cold climate	AEC (Annual electricity consumption)	kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw		2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time		1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)	%	91					
		Qelec (Daily electricity consumption)	kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)	kWh	876	1,413	876	1,413	876	1,413
		COPdhw		2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time		1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)	%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)	kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	41.6	55.4	41.6	55.4	41.6	55.4

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,122					
			ηs (Seasonal space heating efficiency)	%	142					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.63					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
Space heating	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	COPd		4.54					
			Pdh	kW	6.5					
			PERd	%	181.6					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,589					
			ηs (Seasonal space heating efficiency)	%	126					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	Pdh	kW	10.6					
			PERd	%	66.0					
			TOL	°C	-22					
			WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	3,926					
			ηs (Seasonal space heating efficiency)	%	167					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	14					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,366					
			ηs (Seasonal space heating efficiency)	%	190					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	19					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 35°C	General	SCOP		4.81					
			Seasonal space heating eff. class		A+++					
		A Condition (-7°CDB/-8°CWB)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,356					
			ηs (Seasonal space heating efficiency)	%	165					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E6V + EPRA14DW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DW1	ETVX16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 35°C	B Condition (2°CDB/1°CWB)	PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		6.10					
			Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,855					
			ηs (Seasonal space heating efficiency)	%	231					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	10					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent tempera-	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
Space heating	Warm climate water outlet 35°C	Tbiv (bivalent temperature)	Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.04					
			Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications			ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Outdoor unit			EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.	kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.	kW	5.90 (2)		9.00 (2)			
	Max.	kW	9.75 (1)		10.44 (1)		11.60 (1)	
Cooling capacity	Nom.	kW	10.6 (3) / 6.90 (4)		11.5 (3) / 7.88 (4)		12.5 (3) / 8.86 (4)	

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Power input	Heating	Min.	kW	0.84 (5)		0.90 (5)		1.00 (5)	
		Nom.	kW	1.23 (2)		1.80 (2)			
		Max.	kW	2.17 (5)		2.32 (5)		2.58 (5)	
	Cooling	Nom.	kW	2.55 (3) / 2.56 (4)		2.80 (3) / 2.93 (4)		3.05 (3) / 3.31 (4)	
	Domestic hot water from 10°C	Nom.	kWh	2.57 (6)	2.85 (6)	2.57 (6)	2.85 (6)	2.57 (6)	2.85 (6)
Heat up time from 10°C to 50°C			hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP				4.79 (2)		5.00 (2)			
EER				4.13 (3) / 2.70 (4)		4.11 (3) / 2.69 (4)		4.09 (3) / 2.68 (4)	
Pump	Type			Grundfos UPMXL GEO 25-125 130 PWM					
	Nominal ESP unit	Heating	kPa	111.2 (7)		97.4 (7)			
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.3 (2)		25.8 (2)			
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		Yes					
		Water-to-water heat pump		No					
	LW(A) Sound power level	Indoor	dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	54.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Other	Capacity control		Inverter					
		Pck (Crankcase heater mode)	kW	0.000					
		Poff (Off mode)	kW	0.031					
		Psb (Standby mode)	kW	0.042					
		Pto (Thermostat off)	kW	0.033					
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup	kW	9.0					
		Type of energy input		Electrical					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)		kWh	969	1,572	969	1,572	969	1,572
		COPdhw			2.51	2.55	2.51	2.55	2.51	2.55
		Heat up time			1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
		ηwh (water heating efficiency)		%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)		kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class			A					
	Cold climate	AEC (Annual electricity consumption)		kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw			2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time			1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)		%	91					
		Qelec (Daily electricity consumption)		kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)		kWh	876	1,413	876	1,413	876	1,413
		COPdhw			2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time			1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)		%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)		kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature		°C	52.5					
		Stand-by power input		W	41.6	55.4	41.6	55.4	41.6	55.4
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,122					
			ηs (Seasonal space heating efficiency)	%	142					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.63					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	COPd		4.54					
			Pdh	kW	6.5					
			PERd	%	181.6					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,589					
			ηs (Seasonal space heating efficiency)	%	126					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	Pdh	kW	10.6					
			PERd	%	66.0					
			TOL	°C	-22					
			WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	3,926					
			ηs (Seasonal space heating efficiency)	%	167					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	14					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C/-)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,366					
			ηs (Seasonal space heating efficiency)	%	190					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	19					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 35°C	General	SCOP		4.81					
			Seasonal space heating eff. class		A+++					
		A Condition (-7°CDB/-8°CWB)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,356					
			ηs (Seasonal space heating efficiency)	%	165					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 35°C	B Condition (2°CDB/1°CWB)	PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		6.10					
			Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,855					
			ηs (Seasonal space heating efficiency)	%	231					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	10					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent tempera-	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
Space heating	Warm climate water outlet 35°C	Tbiv (bivalent temperature)	Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.04					
			Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications				ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Outdoor unit				EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.		kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.		kW	5.90 (2)		9.00 (2)			
	Max.		kW	9.75 (1)		10.44 (1)		11.60 (1)	
Power input	Heating	Min.	kW	0.84 (3)		0.90 (3)		1.00 (3)	
		Nom.	kW	1.23 (2)		1.80 (2)			
		Max.	kW	2.17 (3)		2.32 (3)		2.58 (3)	
	Domestic hot water from 10°C	Nom.	kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Heat up time from 10°C to 50°C			hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP				4.79 (2)		5.00 (2)			
Pump	Type			Grundfos UPML GEO 25-105 130 PWM					
Pump Additional Zone	Nominal ESP unit	Heating	kPa	97.6 (5)		84.1 (5)			
Pump Main Zone	Nominal ESP unit	Heating	kPa	90.2 (5)		80.0 (5)			
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.3 (2)		25.8 (2)			
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		Yes					
		Water-to-water heat pump		No					
	LW(A) Sound power level	Indoor	dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	54.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Other	Capacity control		Inverter					
		Pck (Crankcase heater mode)	kW	0.000					
		Poff (Off mode)	kW	0.031					
		Psb (Standby mode)	kW	0.042					
		Pto (Thermostat off)	kW	0.033					
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup	kW	6.0					
		Type of energy input		Electrical					
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	969	1,572	969	1,572	969	1,572
		COPdhw		2.51	2.55	2.51	2.55	2.51	2.55
Domestic hot water heating	Average climate	Heat up time		1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
		ηwh (water heating efficiency)	%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)	kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class		A					
	Cold climate	AEC (Annual electricity consumption)	kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw		2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time		1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)	%	91					
		Qelec (Daily electricity consumption)	kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)	kWh	876	1,413	876	1,413	876	1,413
		COPdhw		2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time		1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)	%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)	kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	41.6	55.4	41.6	55.4	41.6	55.4

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236					
			ηs (Seasonal space heating efficiency)	%	140					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.54					
			Pdh	kW	6.5					
Space heating	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	PERd	%	181.6					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,658					
			ηs (Seasonal space heating efficiency)	%	125					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					
			Pdh	kW	10.6					
			PERd	%	66.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	TOL	°C	-22					
			WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	4,063					
			ηs (Seasonal space heating efficiency)	%	161					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	15					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,479					
			ηs (Seasonal space heating efficiency)	%	186					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	20					
			SCOP		4.71					
			Seasonal space heating eff. class		A+++					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Space heating	Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,425					
			ηs (Seasonal space heating efficiency)	%	163					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	27					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					
			PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Space heating	Cold climate water outlet 35°C	C Condition (7°CDB/6°CWB)	COPd		6.10					
			Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,992					
			ηs (Seasonal space heating efficiency)	%	220					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	11					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent temperature)	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
			Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
Space heating	Warm climate water outlet 35°C	D Condition (12°CDB/11°CWB)	COPd		7.04					
			Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical specifications				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Outdoor unit				EPRA14DAW1		EPRA16DAW1		EPRA18DAW1	
Heating capacity	Min.		kW	3.70 (1)		3.96 (1)		4.40 (1)	
	Nom.		kW	5.90 (2)		9.00 (2)			
	Max.		kW	9.75 (1)		10.44 (1)		11.60 (1)	
Power input	Heating	Min.	kW	0.84 (3)		0.90 (3)		1.00 (3)	
		Nom.	kW	1.23 (2)		1.80 (2)			
		Max.	kW	2.17 (3)		2.32 (3)		2.58 (3)	
	Domestic hot water from 10°C	Nom.	kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)
Heat up time from 10°C to 50°C			hr	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature	1h02min at 7°C ambient temperature	1h13min at 7°C ambient temperature
COP				4.79 (2)		5.00 (2)			
Pump	Type			Grundfos UPML GEO 25-105 130 PWM					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Pump Additional Zone	Nominal ESP unit	Heating	kPa	97.6 (5)		84.1 (5)			
Pump Main Zone	Nominal ESP unit	Heating	kPa	90.2 (5)		80.0 (5)			
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.3 (2)		25.8 (2)			
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		Yes					
		Water-to-water heat pump		No					
	LW(A) Sound power level	Indoor	dB(A)	44.0					
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	54.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825					
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L
Space heating general	Other	Capacity control		Inverter					
		Pck (Crankcase heater mode)	kW	0.000					
		Poff (Off mode)	kW	0.031					
		Psb (Standby mode)	kW	0.042					
		Pto (Thermostat off)	kW	0.033					
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL
Space heating general	Integrated supplementary heater	Psup	kW	9.0					
		Type of energy input		Electrical					
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	969	1,572	969	1,572	969	1,572
		COPdhw		2.51	2.55	2.51	2.55	2.51	2.55
Domestic hot water heating	Average climate	Heat up time		1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min
		ηwh (water heating efficiency)	%	106	107	106	107	106	107
		Qelec (Daily electricity consumption)	kWh	4.650	7.480	4.650	7.480	4.650	7.480
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	42.9	58.5	42.9	58.5	42.9	58.5
		Water heating energy efficiency class		A					
	Cold climate	AEC (Annual electricity consumption)	kWh	1,124	1,839	1,124	1,839	1,124	1,839
		COPdhw		2.17	2.19	2.17	2.19	2.17	2.19
		Heat up time		1h 04min	1h 16min	1h 04min	1h 16min	1h 04min	1h 16min
		ηwh (water heating efficiency)	%	91					
		Qelec (Daily electricity consumption)	kWh	5.370	8.720	5.370	8.720	5.370	8.720
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7
	Warm climate	AEC (Annual electricity consumption)	kWh	876	1,413	876	1,413	876	1,413
		COPdhw		2.76	2.83	2.76	2.83	2.76	2.83
		Heat up time		1h 15min	1h 30min	1h 15min	1h 30min	1h 15min	1h 30min
		ηwh (water heating efficiency)	%	117	119	117	119	117	119
		Qelec (Daily electricity consumption)	kWh	4.220	6.740	4.220	6.740	4.220	6.740
		Reference hot water temperature	°C	52.5					
		Stand-by power input	W	41.6	55.4	41.6	55.4	41.6	55.4

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236					
			ηs (Seasonal space heating efficiency)	%	140					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
			Seasonal space heating eff. class		A++					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.43					
			Pdh	kW	11.1					
			PERd	%	97.2					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.52					
			Pdh	kW	6.7					
			PERd	%	140.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.54					
			Pdh	kW	6.5					
Space heating	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	PERd	%	181.6					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.97					
			Pdh	kW	5.2					
			PERd	%	238.8					
		Tol (temperature operating limit)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			TOL	°C	-10					
			WTOL	°C	55					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.0					
		Tbiv (bivalent temperature)	COPd		2.12					
			Pdh	kW	12.5					
			PERd	%	84.8					
			Tbiv	°C	-10					
	Cold climate water outlet 55°C	General	Annual energy consumption	kWh	9,658					
			ηs (Seasonal space heating efficiency)	%	125					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	35					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.74					
			Pdh	kW	7.5					
			PERd	%	109.6					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.67					
			Pdh	kW	5.8					
			PERd	%	146.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.69					
			Pdh	kW	5.6					
			PERd	%	187.6					
		D Condition (12°CDB/11°CWB)	COPd		6.12					
			Pdh	kW	6.2					
			PERd	%	244.8					
		Tol (temperature operating limit)	COPd		1.65					
			Pdh	kW	10.6					
			PERd	%	66.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	TOL	°C	-22					
			WTOL	°C	55					
		G Condition (-15°CDB/-)	COPd		2.17					
			Pdh	kW	10.3					
			PERd	%	86.8					
		Tbiv (bivalent temperature)	COPd		1.90					
			Pdh	kW	11.0					
			PERd	%	76.0					
			Tbiv	°C	-18					
		Rated heat output	Psup (at Tdesign -22°C)	kW	1.9					
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	4,063					
			ηs (Seasonal space heating efficiency)	%	161					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	15					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		2.62					
			Pdh	kW	11.4					
			PERd	%	104.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.65					
			Pdh	kW	8.2					
			PERd	%	146.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.37					
			Pdh	kW	6.1					
			PERd	%	214.8					
		Tbiv (bivalent temperature)	COPd		3.18					
			Pdh	kW	11.0					
			PERd	%	127.2					
			Tbiv	°C	4					
	Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8			
	Average climate water outlet 35°C	General	Annual energy consumption	kWh	5,479					
			ηs (Seasonal space heating efficiency)	%	186					
			Prated at -10°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	20					
			SCOP		4.71					
			Seasonal space heating eff. class		A+++					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Space heating	Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		4.94					
			Pdh	kW	6.9					
			PERd	%	197.6					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.95					
			Pdh	kW	6.2					
			PERd	%	238.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.07					
			Pdh	kW	5.6					
			PERd	%	282.8					
		Tol (temperature operating limit)	COPd		2.88					
			Pdh	kW	12.1					
			PERd	%	115.2					
			TOL	°C	-10					
			WTOL	°C	35					
		Tbiv (bivalent temperature)	COPd		2.97					
			Pdh	kW	10.7					
			PERd	%	118.8					
			Tbiv	°C	-7					
		Rated heat output	Psup (at Tdesign -10°C)	kW	0.4					
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	7,425					
			ηs (Seasonal space heating efficiency)	%	163					
			Prated at -22°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	27					
		A Condition (-7°CDB/-8°CWB)	COPd		3.50					
			Pdh	kW	8.0					
			PERd	%	140.0					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.07					
			Pdh	kW	4.9					
			PERd	%	202.8					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					

2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
Space heating	Cold climate water outlet 35°C	C Condition (7°CDB/6°CWB)	COPd		6.10					
			Pdh	kW	5.3					
			PERd	%	244.0					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.03					
			Pdh	kW	5.7					
			PERd	%	281.2					
		Tol (temperature operating limit)	COPd		2.16					
			Pdh	kW	10.1					
			PERd	%	86.4					
			TOL	°C	-22					
			WTOL	°C	35					
		G Condition (-15°CDB/-)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
		Tbiv (bivalent temperature)	COPd		2.62					
			Pdh	kW	10.7					
			PERd	%	104.8					
			Tbiv	°C	-15					
		Rated heat output	Psup (at Tdesign -22°C)	kW	2.4					
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	2,992					
			ηs (Seasonal space heating efficiency)	%	220					
			Prated at 2°C	kW	13					
			Qhe Annual energy consumption (GCV)	Gj	11					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)		1.0					
			COPd		3.51					
			Pdh	kW	10.0					
			PERd	%	140.4					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0					
			COPd		5.67					
			Pdh	kW	8.3					
			PERd	%	226.8					
		Tbiv (bivalent temperature)	COPd		4.96					
			Pdh	kW	9.8					
			PERd	%	198.4					
			Tbiv	°C	5					
		D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
Space heating	Warm climate water out-	D Condition (12°CDB/11°CWB)	COPd		7.04					
			Pdh	kW	5.7					
			PERd	%	281.6					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical Specifications				EPRA14DW1	EPRA16DW1	EPRA18DW1
Casing	Colour			Silver / Black		
	Material			Polyester painted galvanised steel plate		
Dimensions	Unit	Height	mm	1,003		
		Width	mm	1,270		
		Depth	mm	533		
	Packed unit	Height	mm	1,340		
		Width	mm	1,440		
		Depth	mm	690		
Weight	Unit		kg	151		
	Packed unit		kg	186		
Packing	Material			Carton / Wood (pallet) / PE (Straps) / Plastic foil		
	Weight		kg	27		

2 Specifications

1 - 1 EPRA014-018DW

Technical Specifications					EPRA14DW1	EPRA16DW1	EPRA18DW1
Heat exchanger	Length			mm	1,200		
	Rows	Quantity			3		
	Fin pitch			mm	2.20		
	Passes	Quantity			10		
	Face area			m^2	119		
	Stages	Quantity			44		
	Tube type				ø7 Hi-XSL		
	Fin	Type			WF fin		
		Treatment			Anti-corrosion treatment (PE)		
Fan	Type				Propeller fan		
	Quantity				1		
	Air flow rate	Heating	Nom.	m^3/min	65.3		66.0
		Cooling	Nom.	m^3/min	106		
	Discharge direction				Horizontal		
Fan motor	Quantity				1		
	Model				Brushless DC motor		
	Output			W	210		
	Drive				Direct drive		
	Speed	Steps			12		
		Heating	Nom.	rpm	470		475
		Cooling	Nom.	rpm	750		
Compressor	Quantity				1		
	Model				JT9KFDMYR@SP		
	Type				Hermetically sealed scroll compressor		
Compressor	Starting method				Inverter driven		
PED	Category				Category III		
Operation range	Heating	Min.		°CDB	-28.0		
		Max.		°CDB	35		
	Cooling	Min.		°CDB	10		
		Max.		°CDB	43		
	Domestic hot water	Max.		°CDB	35		
		Min.		°CDB	-28		
PED	Most critical part	Name			Compressor		
		Ps*V		Bar*l	213		
Piping connections	Water inlet heat exchanger diameter			inch	G1" (male)		
	Water outlet heat exchanger diameter			inch	G1" (male)		
Sound power level	Heating	Nom.		dBA	56.0 (1)		59.0 (1)
	Cooling	Nom.		dBA	56.0 (1)		59.0 (1)
Sound pressure level	Heating	Nom.		dBA	43.0 (2)		48.0 (2)
	Cooling	Nom.		dBA	43.0 (2)		48.0 (2)
	Night quiet mode	Heating		dBA	54.0 (2)		
Refrigerant	Type				R-32		
	GWP				675.0		
	Charge			TCO2Eq	2.84		
	Charge			kg	4.20		
	Control				Expansion valve		
	Circuits	Quantity			1		
Refrigerant oil	Type				FW68DE		
	Charged volume			l	1.85		
Piping connections	Piping length	OU - IU	Max.	m	50		
	High pressure side	Design pressure		bar	56		
	Level difference	IU - OU	Max.	m	10.0		
	Water circuit	Filter ball valve			Yes		
Defrost method					Reversed cycle		
Defrost control					Sensor for outdoor heat exchanger temperature		
Capacity control	Method				Inverter controlled		
Safety devices	Item	01			High pressure switch		
		02			Low pressure switch		
		03			Fuse		
		04			Compressor motor protection		
		05			Pressure relief valve		

2 Specifications

1 - 1 EPRA014-018DW

Electrical Specifications					EPRA14DW1	EPRA16DW1	EPRA18DW1
Power supply	Name				W1		
	Phase				3~		
	Frequency			Hz	50		
	Voltage			V	400		
	Voltage range	Min.		%	-10		
		cos phi	Nom.		0.82		0.87
			Max.		0.98		
		Max.		%	10		
Current	Minimum Ssc value			kVa	Equipment complying with EN / IEC 61000-3-2		
	Recommended fuses			A	16		
	Inverter modula-	Min.		%	40 (3)	39 (3)	37 (3)
Wiring connections	For power supply	Remark			See installation manual indoor unit		
	For connec-	Remark			See installation manual indoor unit		

(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)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. Condition: Ta DB/WB 7°C/6°C - LWC 3 |
(3)Percentage of heating capacity at Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

3 Electrical data

3 - 1 Electrical Data

EPRA014-018DV
EPRA014-018DW

* Electrical meter specification

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

-
- Possible number of pulses
  - ·0.1· pulse/kWh
  - ·1· pulse/kWh
  - ·10· pulse/kWh
  - ·100· pulse/kWh
  - ·1000· pulse/kWh
- Pulse duration
  - minimum On time: ·40ms·
  - Minimum OFF time: ·100ms·
- Measurement type (depending on installation)
  - Single-phase AC meter
  - Three-phase AC meter
    - Balanced loads
  - Three-phase AC meter
    - Unbalanced loads

* Electrical meter installation guideline

- It is the responsibility of the installer to cover the complete power consumption with electrical meters (combination of estimation and metering is not allowed).

- Required number of electrical meters

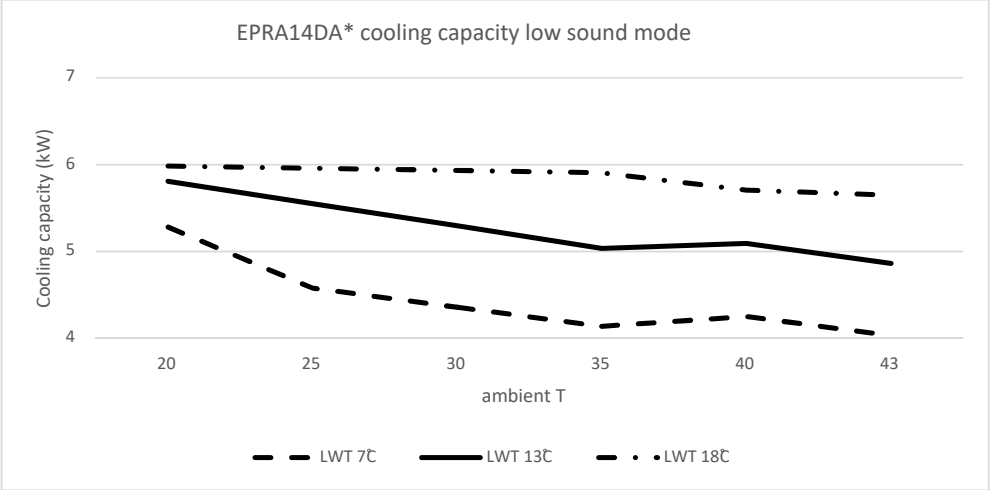
Outdoor unit type		EPRA(14/16/18)(D/E)A*					
Indoor unit type		ETB(H/X)16(D/E)A*			ETV(H/X/Z)16S*(D/E)A*		
	Backup heater type	6V		9W	6V		9W
	Backup heater power supply	1~ 230V	3~ 230V	3~ 400V	1~ 230V	3~ 230V	3~ 400V
	Backup heater configuration	2 / 4 / 6 kW	6 kW	3 / 6 / 9 kW	2 / 4 / 6 kW	6 kW	3 / 6 / 9 kW
		Normal kWh rate power supply					
Electrical meter type	1~	1	-	-	1	-	-
	3~ balanced	-	-	-	-	-	-
	3~ unbalanced	-	1	1	-	1	1
		Preferential kWh rate power supply					
Electrical meter type	1~	2	1	1	2	1	1
	3~ balanced	-	-	-	-	-	-
	3~ unbalanced	-	1	1	-	1	1

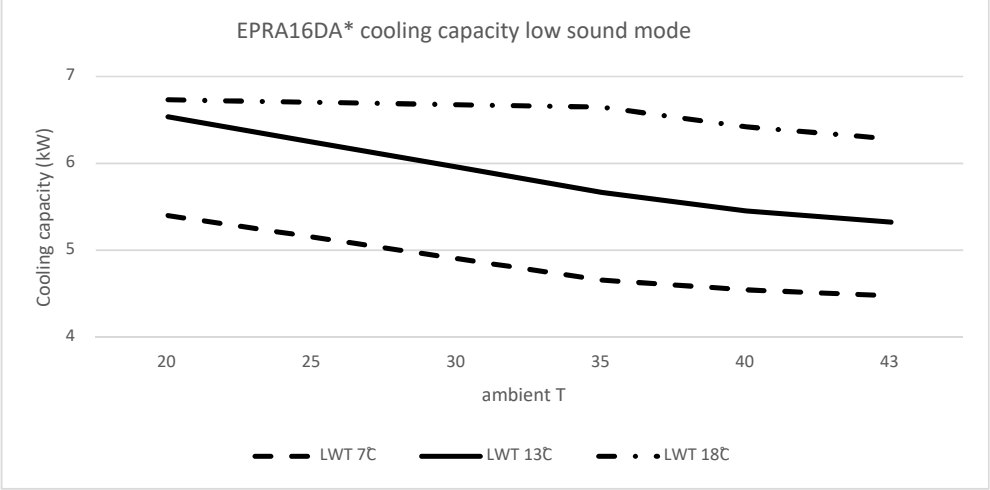
4D126533A

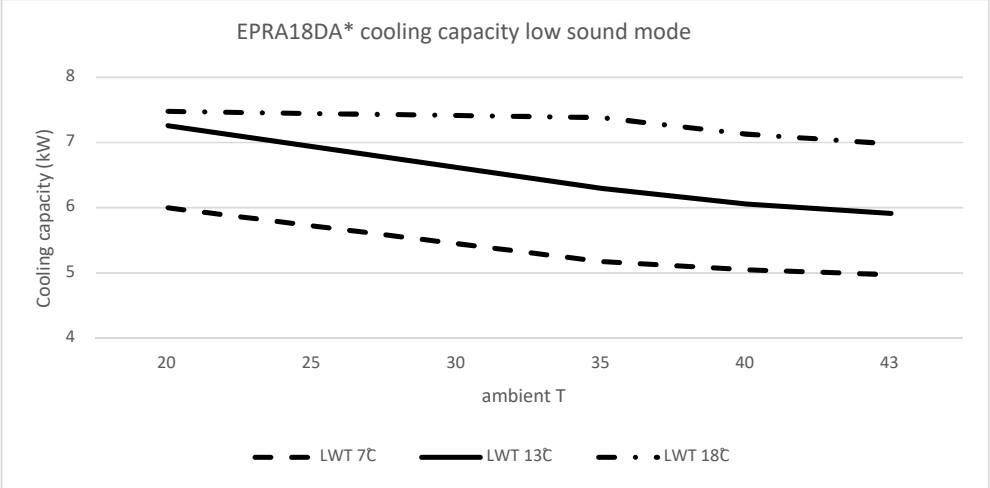
4 Capacity graphs

4 - 1 Cooling Capacity Graphs

EPRA014-018DV
EPRA014-018DW





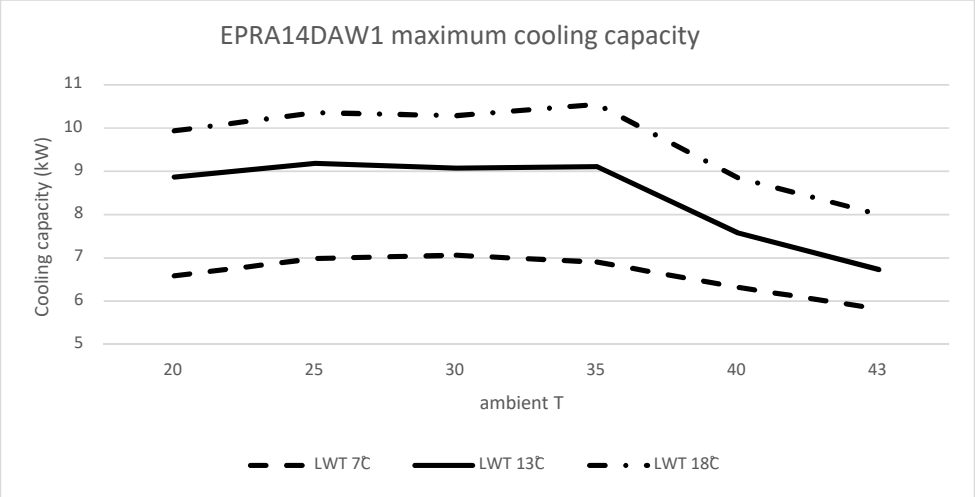


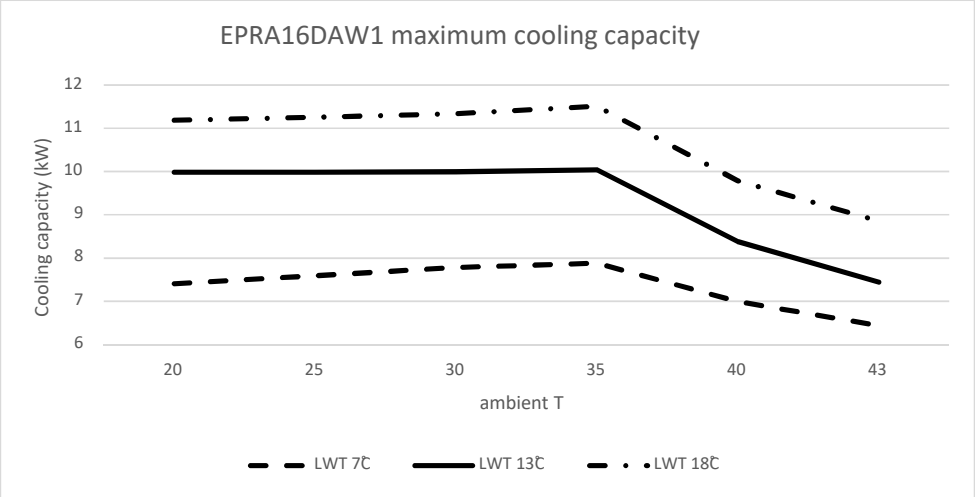
4D126947

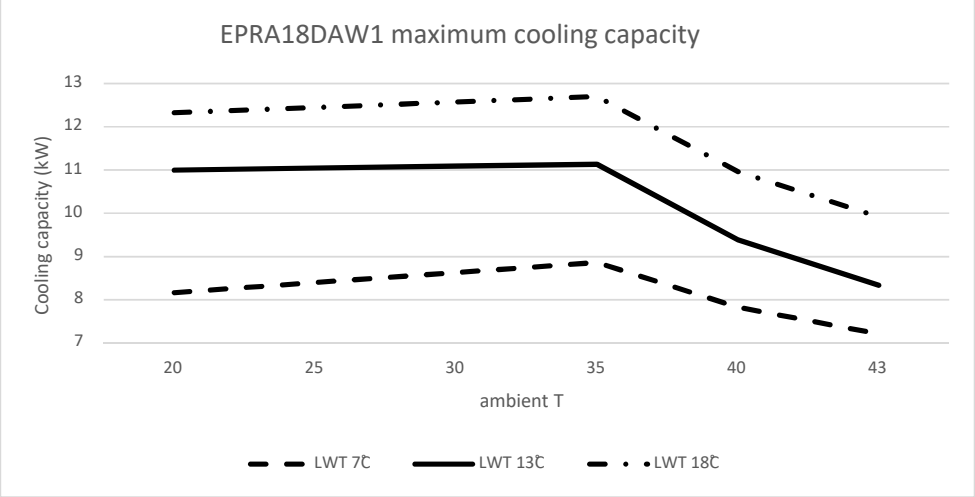
4 Capacity graphs

4 - 1 Cooling Capacity Graphs

EPRA014-018DW





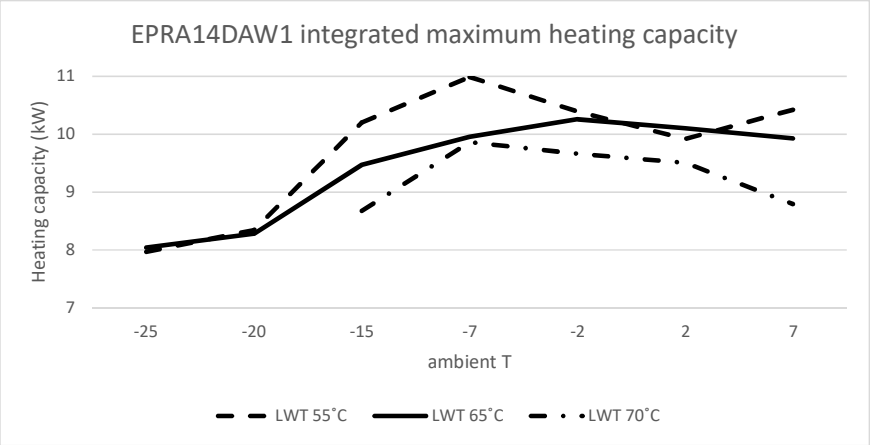


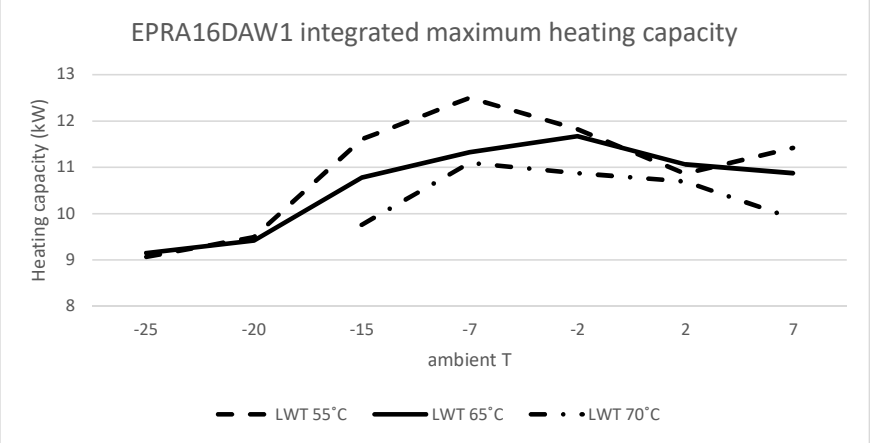
4D126949

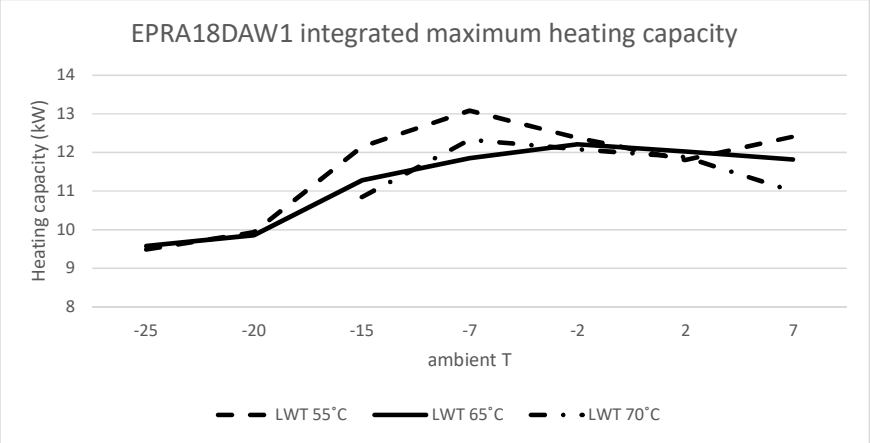
4 Capacity graphs

4 - 2 Heating Capacity Graphs

EPRA014-018DW





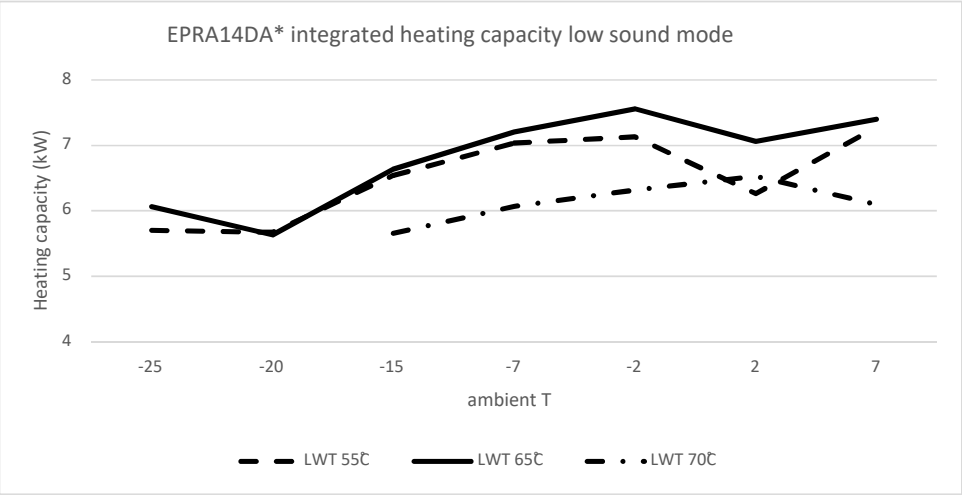


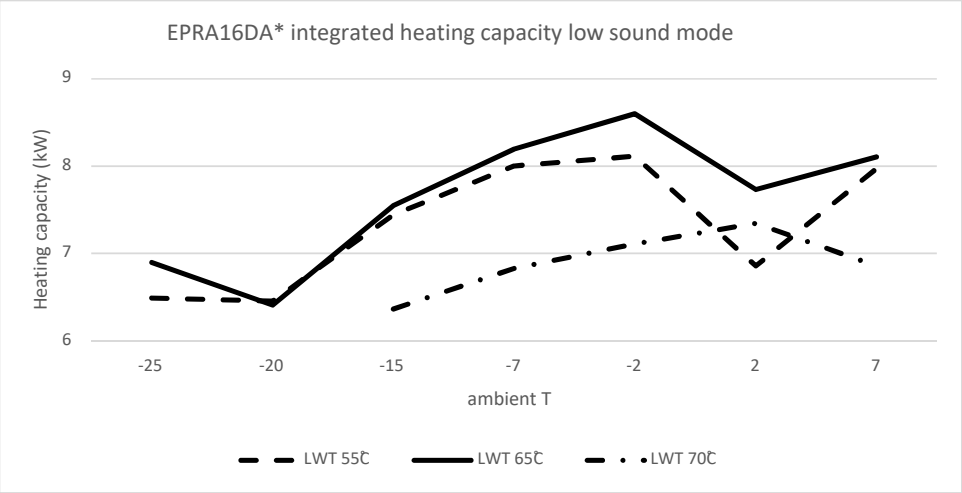
4D126946

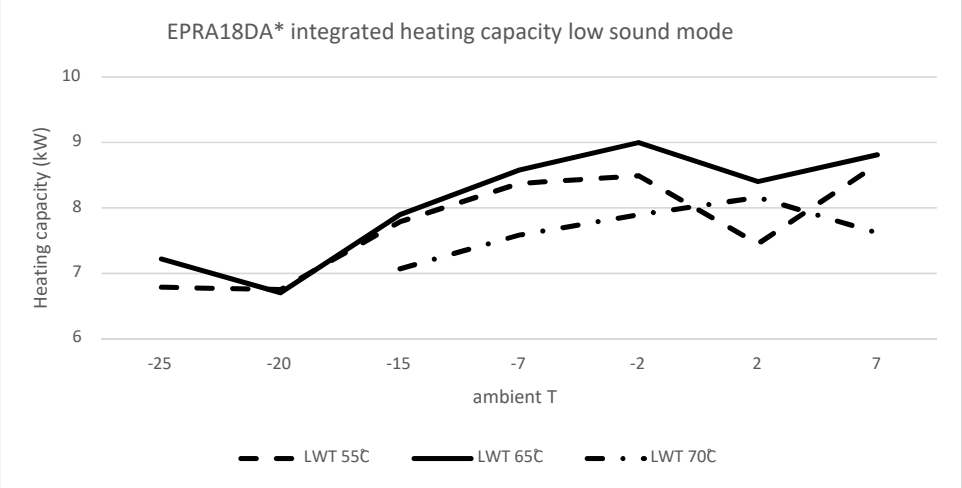
4 Capacity graphs

4 - 2 Heating Capacity Graphs

EPRA014-018DV
EPRA014-018DW







4D126948

5 Capacity tables

5 - 1 Certification Programs

EPRA014-018DW

EPRA014-018DV

5

Rated data for certification programmes - heating mode

Tamb [°C]	EWC [°C]	LWC [°C]	EPRA14DAV3 HC [kW]	EPRA14DAV3 COP	EPRA16DAV3 HC [kW]	EPRA16DAV3 COP	EPRA18DAV3 HC [kW]	EPRA18DAV3 COP	EPRA14DAW1 HC [kW]	EPRA14DAW1 COP	EPRA16DAW1 HC [kW]	EPRA16DAW1 COP	EPRA18DAW1 HC [kW]	EPRA18DAW1 COP	Used for:
7/6	30	35	5,69	4,67	9,00	5,00	9,00	5,00	5,90	4,79	9,00	5,00	9,00	5,00	Keymark, EHPA
2/1	(30)	35	7,88	4,31	7,88	4,31	7,88	4,31	7,52	4,09	7,52	4,09	7,52	4,09	EHPA
-7/-8	(30)	35	10,81	3,27	11,78	3,21	12,78	3,15	10,18	3,21	11,40	3,13	12,67	3,05	General
7/6	40	45	7,92	3,42	7,92	3,42	7,92	3,42	7,92	3,42	7,92	3,42	7,92	3,42	General
7/6	47	55	7,24	3,01	7,24	3,01	7,24	3,01	7,24	2,93	7,24	2,93	7,24	2,93	Keymark, EHPA
-7/-8	47	55	9,81	2,25	9,81	2,25	9,81	2,25	9,21	2,22	9,21	2,22	9,21	2,22	GET Databse

Rated data for certification programmes - cooling mode

Tamb [°C]	EWE [°C]	LWE [°C]	EPRA14DAV3 CC [kW]	EPRA14DAV3 EER	EPRA16DAV3 CC [kW]	EPRA16DAV3 EER	EPRA18DAV3 CC [kW]	EPRA18DAV3 EER	EPRA14DAW1 CC [kW]	EPRA14DAW1 EER	EPRA16DAW1 CC [kW]	EPRA16DAW1 EER	EPRA18DAW1 CC [kW]	EPRA18DAW1 EER	Used for:
35	23	18	10,55	4,13	11,51	4,11	12,46	4,09	10,55	4,13	11,51	4,11	12,46	4,09	General
35	12	7	6,90	2,7	7,88	2,69	8,86	2,68	6,90	2,7	7,88	2,69	8,86	2,68	DAPT General

Rated data for certification programmes - domestic hot water performance

Indoor unit		ETV*16S18(D/E)A*		ETV*16S23(D/E)A*		ETSH16P30DA		ETSHB16P30DA		ETSX16P30DA		ETSXB16P30DA		ETSH16P50DA		ETSHB16P50DA		ETSX16P50DA		ETSXB16P50DA		Used for:
Outdoor unit		EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	
Application		Average climate		Average climate		Average climate								Average climate								
Domestic hot water tank volume		180L		230L		294L								477L								
Tapping pattern		L		XL		L								XL								
Heat-up time (hh:mm:ss)		01:06:36		01:19:36		01:25:00	01:41:00	01:25:00	01:41:00	01:25:00	01:41:00	01:25:00	01:41:00	02:18:00		01:46:00	02:11:00	02:18:00		01:46:00	02:11:00	
ϑ_{wh}	[°C]	52,5		52,5		47,0								47,0			48,0	47,0			48,0	Keymark
P_{es}	[W]	34,2	42,9	49,2	58,5	49,0								51,0	57,1		57,6	51,0	57,1		57,6	
V_{es}	[l]	240		298		149,0								237,2	215,7		211,0	237,2	215,7		211,0	
η_{wh}	[%]	109,5	105,7	108,3	106,6	101								111	115		108	111	115		108	
COP_{DHW}	[-]	2,62	2,51	2,61	2,55	2,38								2,67	2,75		2,58	2,67	2,75		2,58	

Symbols

HC	Heating capacity measured according to EN 14511	
CC	Cooling capacity, measured according to ·EN 14511·.	
COP/EER	Coefficient of Performance/Energy efficiency ratio according to EN 14511.	
EWC	Entering water condenser temperature [°C]	
LWC	Leaving water condensor temperature [°C]	
EWE	Entering water evaporator temperature [°C]	
LWE	Leaving water evaporator temperature [°C]	
Tamb	Ambient temperature [°C DB/WB]	
ϑ_{wh}	Reference Domestic hot water temperature [°C]	According to EN16147.
P_{es}	Standby power input	According to EN16147.
V_{eq40}	Equivalent domestic hot water volume [l]	According to EN16147.
η_{wh}	Efficiency [%] Domestic hot water heating mode	According to EN16147.
COP_{DHW}	Domestic hot water COP	

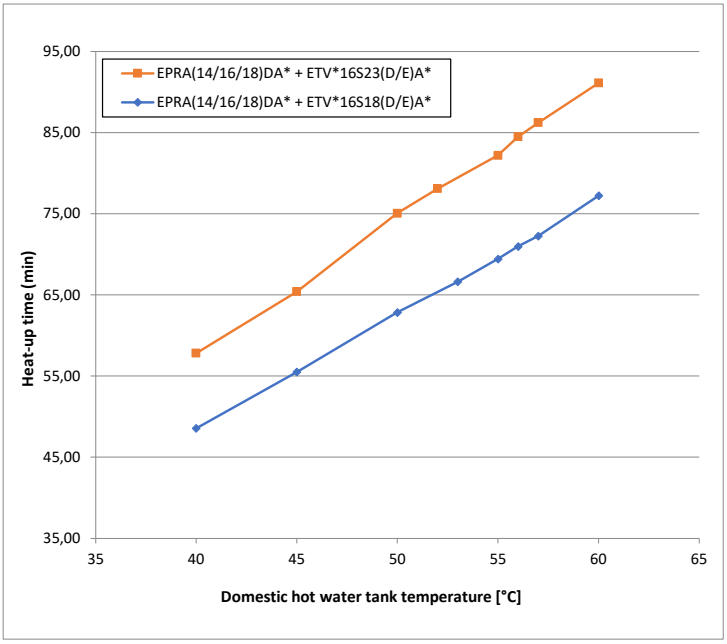
4D126945D

5 Capacity tables

5 - 2 Domestic Hot Water performance

EPRA014-018DV
EPRA014-018DW

Heat-up times



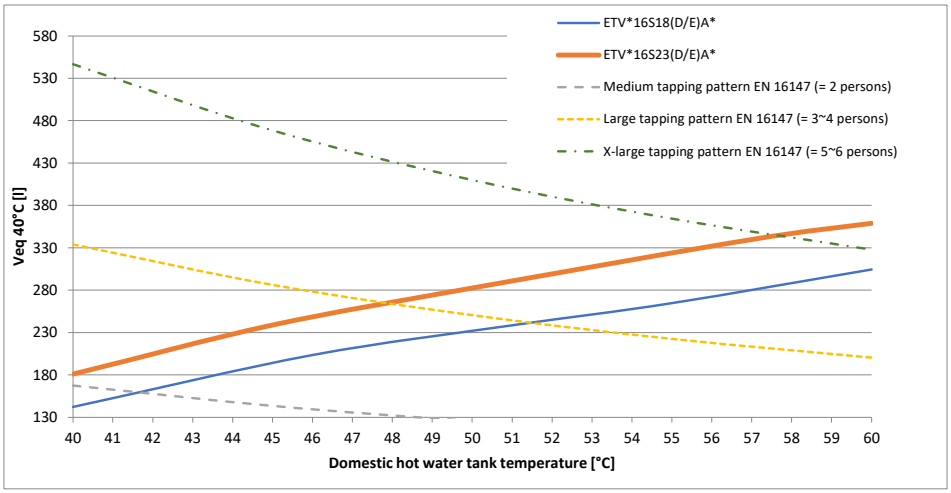
Model name	Heat-up time domestic hot water tank until 45°C
EPRA(14/16/18)DA* + ETV*16S18(D/E)A*	·55· min.
EPRA(14/16/18)DA* + ETV*16S23(D/E)A*	·65· min.

Notes

1. Time the indoor unit (**heat pump only operation**) requires to heat up the domestic hot water tank from 10°C to the indicated temperature.
   See the operation range for maximum domestic hot water tank temperature during heat pump only operation.

Selection guide for the domestic hot water tank volume (1)

Veq 40°C = the amount of water with a temperature of 40°C that can be tapped when the domestic hot water tank is heated to a certain temperature, and the temperature of the cold inlet water is 10°C.



If a higher daily Veq 40°C is required, then additional heat-up cycles are required within 24 hours.
See the operation manual for more information.

Notes

(1) According to EN16147.

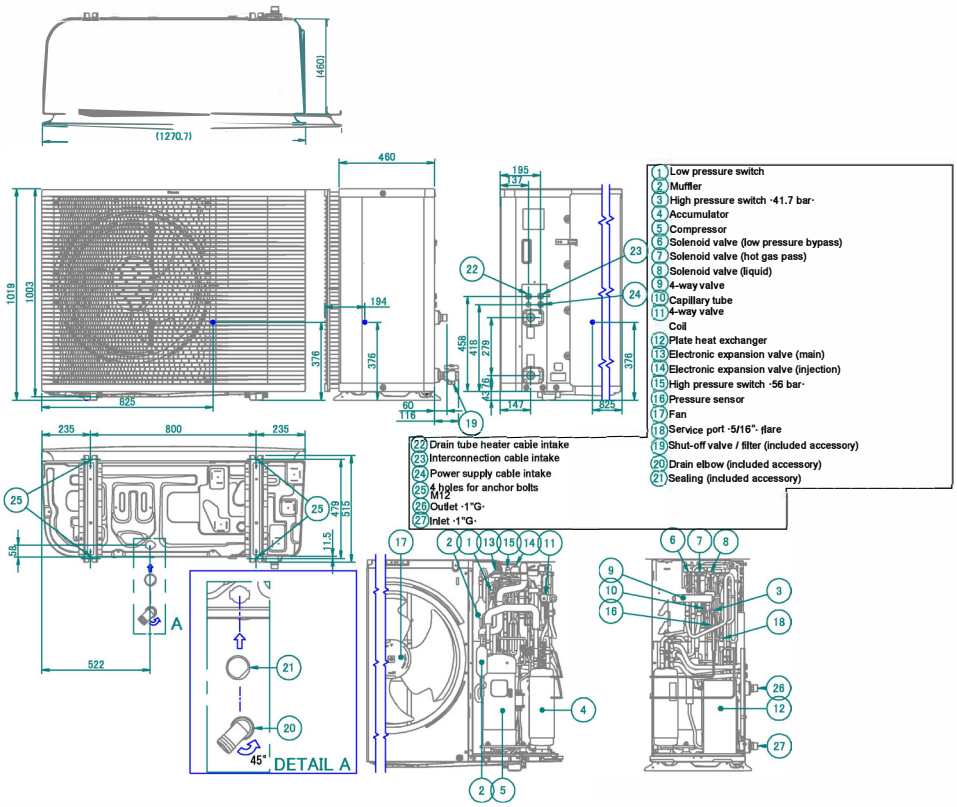
4D126944A

6 Dimensional drawings

6 - 1 Dimensional Drawings

6

EPRA014-018DV
EPRA014-018DW

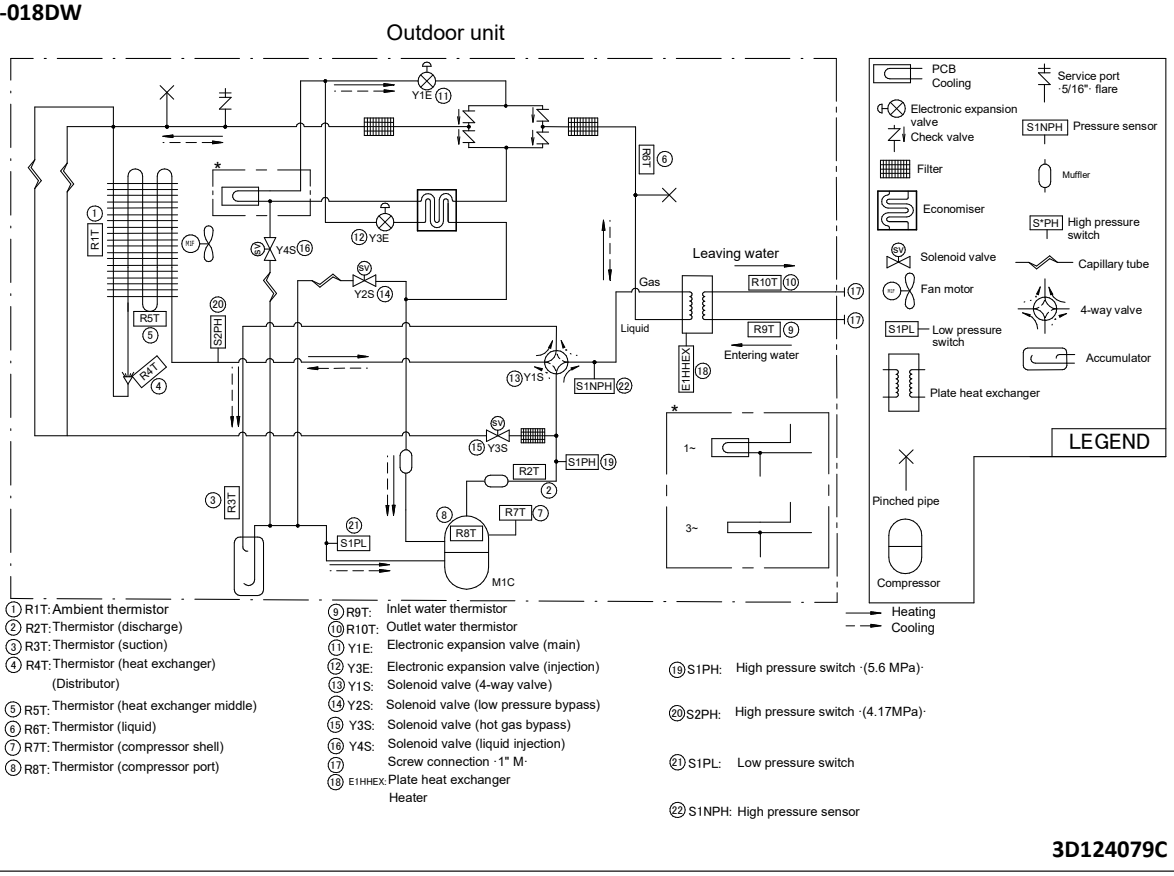


3D124101C

7 Piping diagrams

7 - 1 Piping Diagrams

EPRA014-018DV
EPRA014-018DW



① R1T: Ambient thermistor
② R2T: Thermistor (discharge)
③ R3T: Thermistor (suction)
④ R4T: Thermistor (heat exchanger) (Distributor)
⑤ R5T: Thermistor (heat exchanger middle)
⑥ R6T: Thermistor (liquid)
⑦ R7T: Thermistor (compressor shell)
⑧ R8T: Thermistor (compressor port)

⑨ R9T: Inlet water thermistor
⑩ R10T: Outlet water thermistor
⑪ Y1E: Electronic expansion valve (main)
⑫ Y3E: Electronic expansion valve (injection)
⑬ Y1S: Solenoid valve (4-way valve)
⑭ Y2S: Solenoid valve (low pressure bypass)
⑮ Y3S: Solenoid valve (hot gas bypass)
⑯ Y4S: Solenoid valve (liquid injection)
⑰ Screw connection ·1" M·
⑱ E1HHEX: Plate heat exchanger Heater

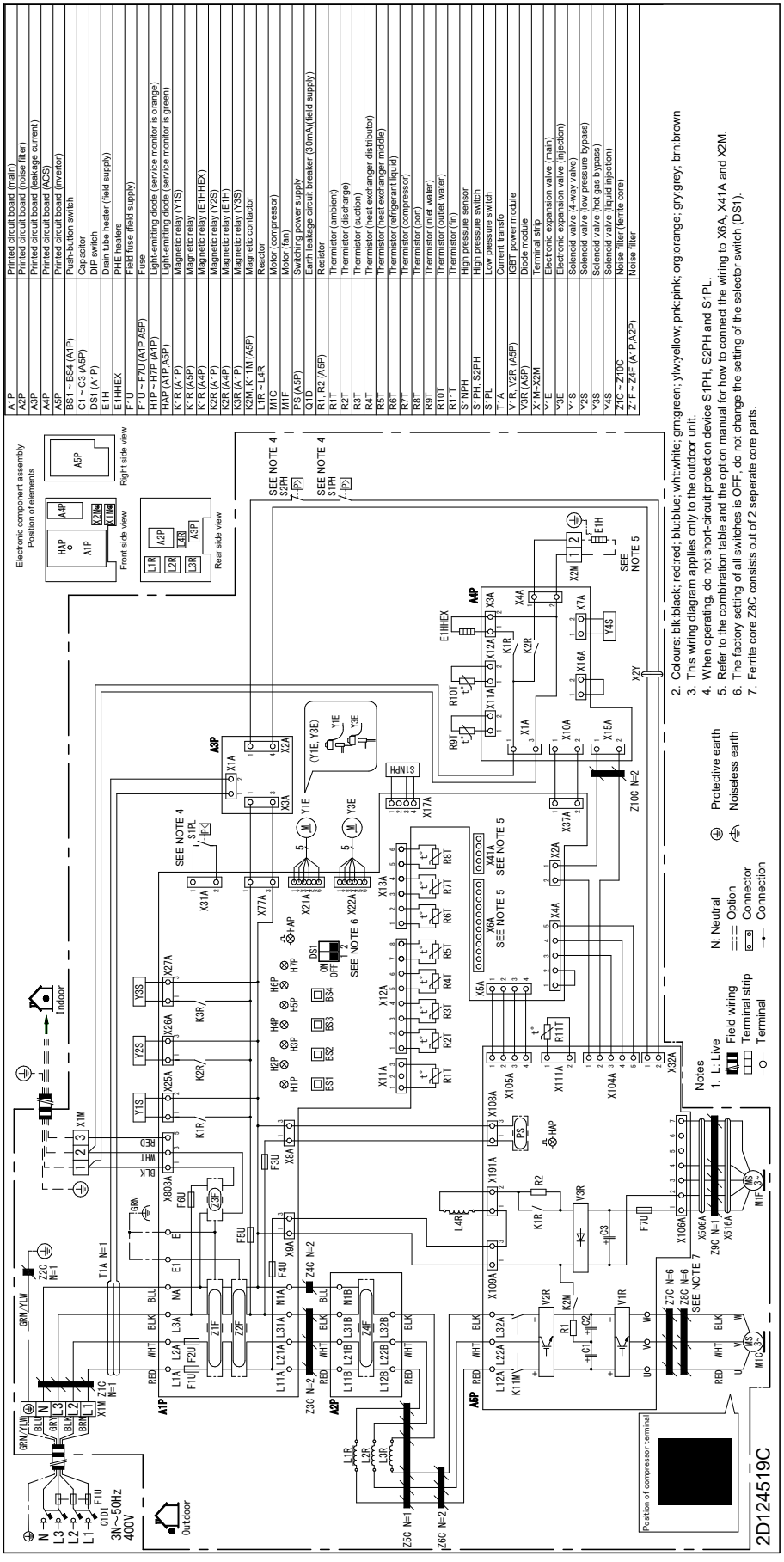
⑲ S1PH: High pressure switch ·(5.6 MPa)·
⑳ S2PH: High pressure switch ·(4.17MPa)·
㉑ S1PL: Low pressure switch
㉒ S1NPH: High pressure sensor

3D124079C

8 Wiring diagrams

8 - 1 Wiring Diagrams - Three Phase

EPRA014-018DW



2D124519C

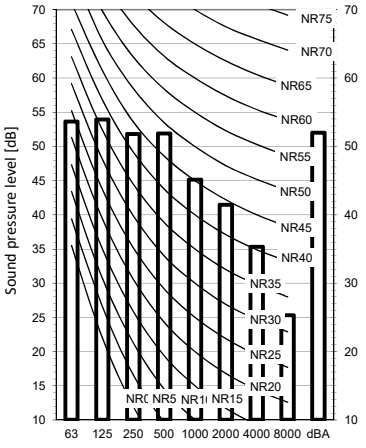
9 Sound data

9 - 1 Sound Pressure Spectrum - Cooling

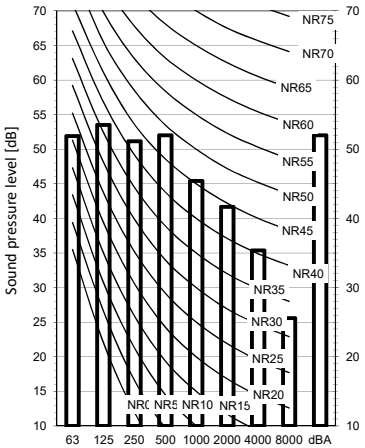
EPRA014-018DV
EPRA014-018DW

Cooling Sound

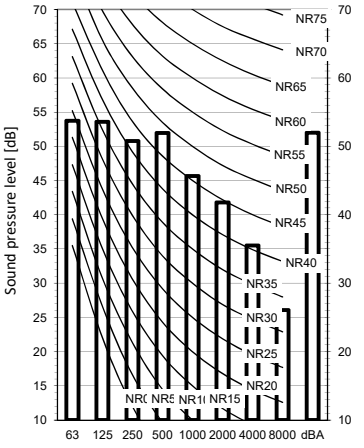
EPRA14*



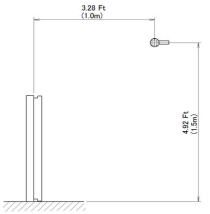
EPRA16*



EPRA18*



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

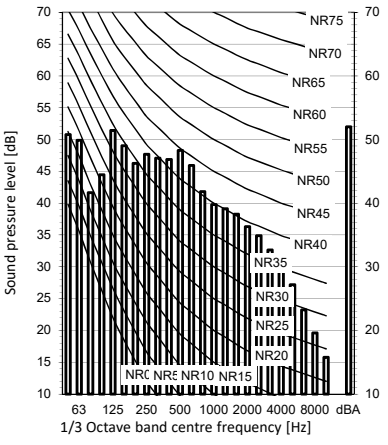


Measuring location (discharge side)

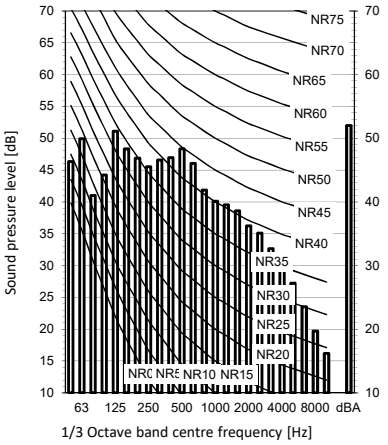
3D126758-1

EPRA014-018DV
EPRA014-018DW

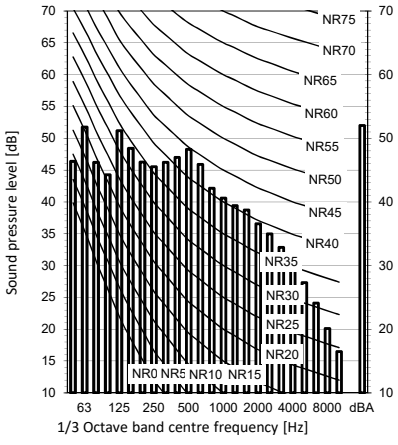
EPRA14*



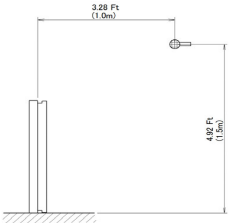
EPRA16*



EPRA18*



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



Measuring location (discharge side)

3D126758-2

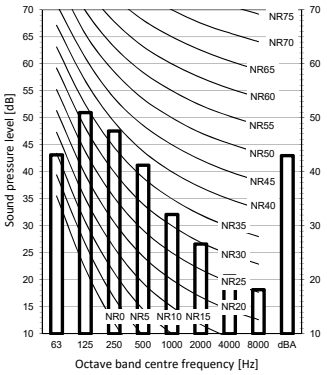
9 Sound data

9 - 2 Sound Pressure Spectrum - Heating

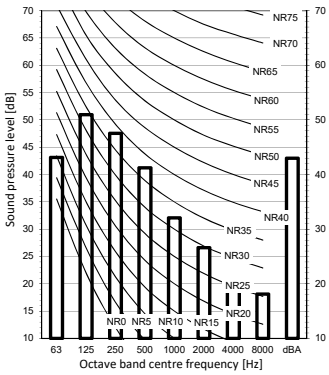
EPRA014-018DV
EPRA014-018DW

Heating Sound

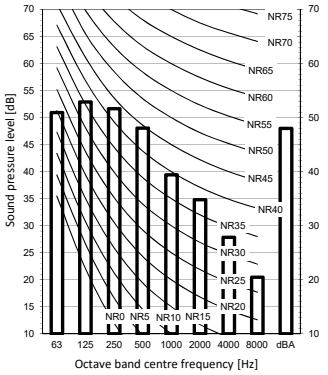
EPRA14*



EPRA16*



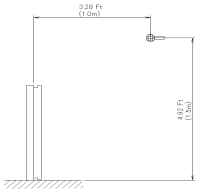
EPRA18*



Notes (graphics only)

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

		Day			Night		
		Sound power level [dB]			Sound power level [dB]		
Day	Night	EPRA14*	EPRA16*	EPRA18*	EPRA14*	EPRA16*	EPRA18*
Default	Low noise level ·2·	60,2	60,2	60,2	53,7	53,7	53,7
Low noise level ·2·	Low noise level ·3·	53,7	53,7	53,7	49,5	49,5	49,5
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)							

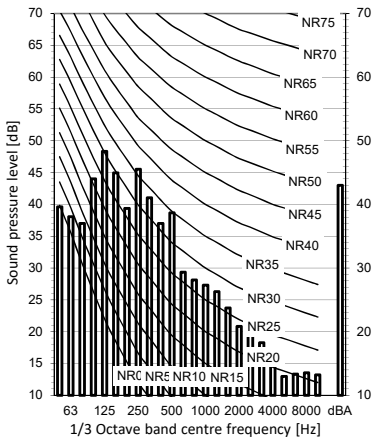


Measuring location (discharge side)

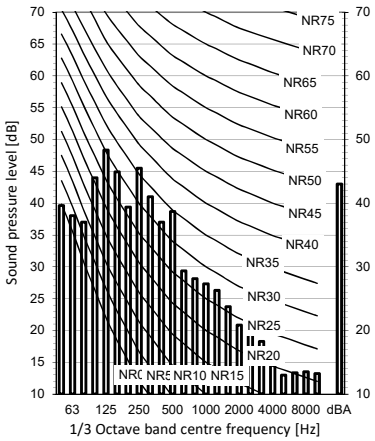
3D125215A-1

EPRA014-018DV
EPRA014-018DW

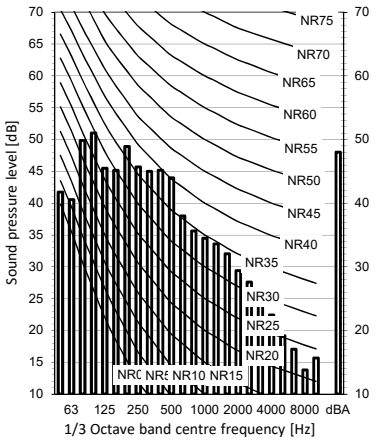
EPRA14*



EPRA16*

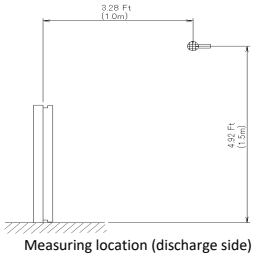


EPRA18*



Notes

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



Measuring location (discharge side)

3D125215A-2

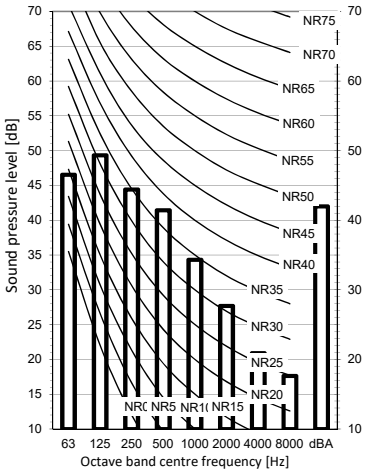
9 Sound data

9 - 3 Sound Pressure Spectrum Quiet Mode

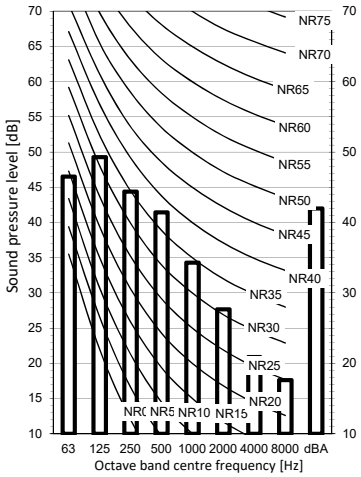
EPRA014-018DV
EPRA014-018DW

Heating Low Sound Mode 2

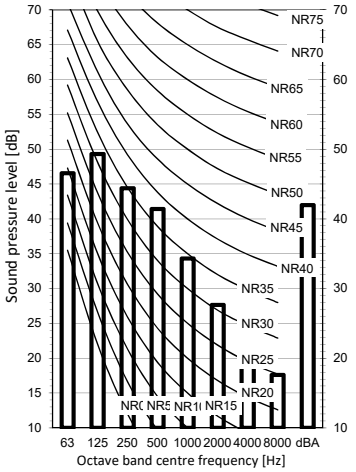
EPRA14*



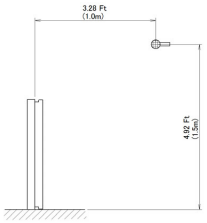
EPRA16*



EPRA18*



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

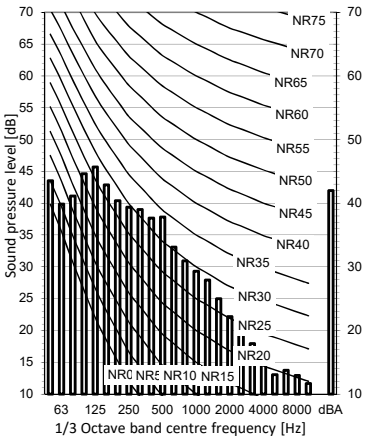


Measuring location (discharge side)

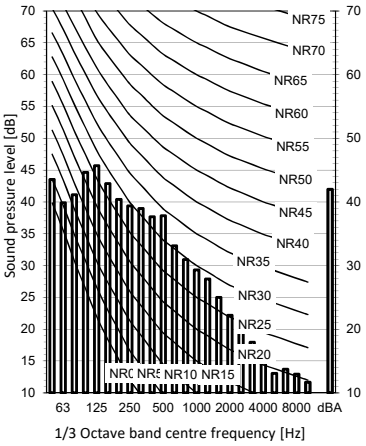
3D125214-1

EPRA014-018DV
EPRA014-018DW

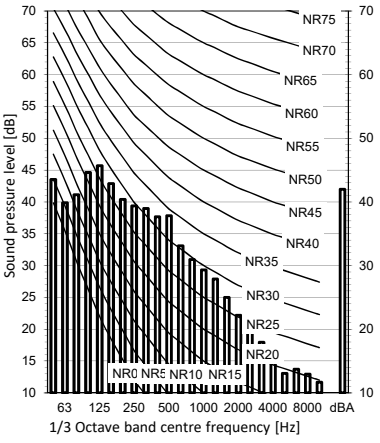
EPRA14*



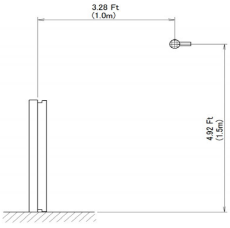
EPRA16*



EPRA18*



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



Measuring location (discharge side)

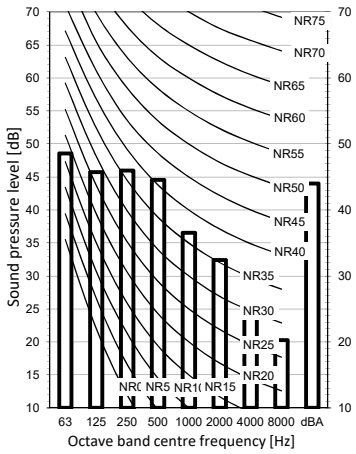
3D125214-2

9 Sound data

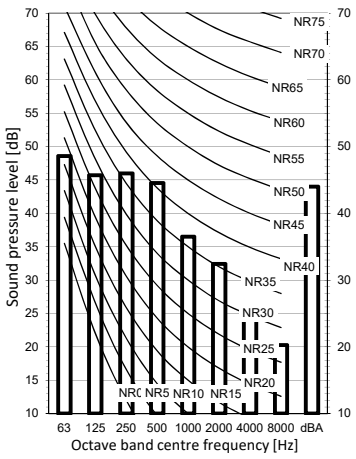
9 - 3 Sound Pressure Spectrum Quiet Mode

EPRA014-018DV
EPRA014-018DW **Cooling: Low Sound Mode 2**

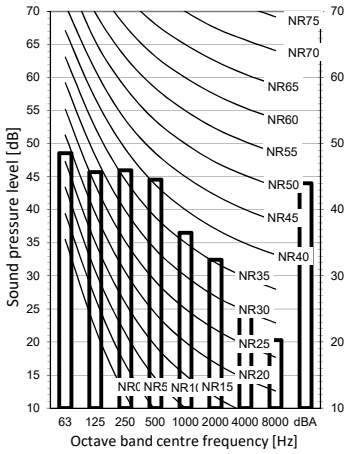
EPRA14*



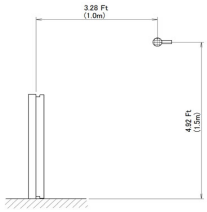
EPRA16*



EPRA18*



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

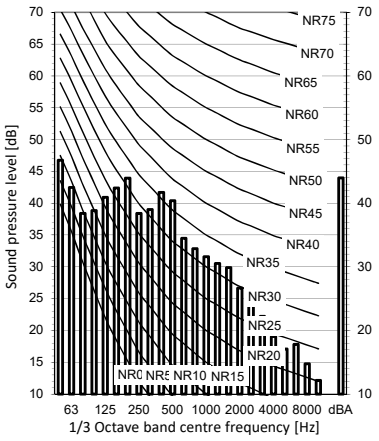


Measuring location (discharge side)

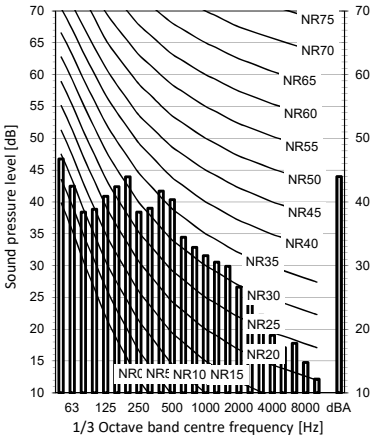
3D126757-1

EPRA014-018DV
EPRA014-018DW

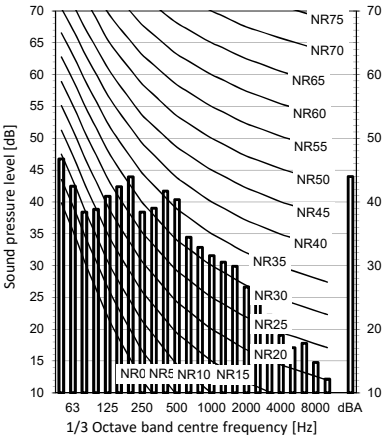
EPRA14*



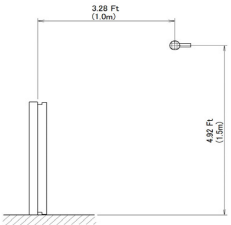
EPRA16*



EPRA18*



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



Measuring location (discharge side)

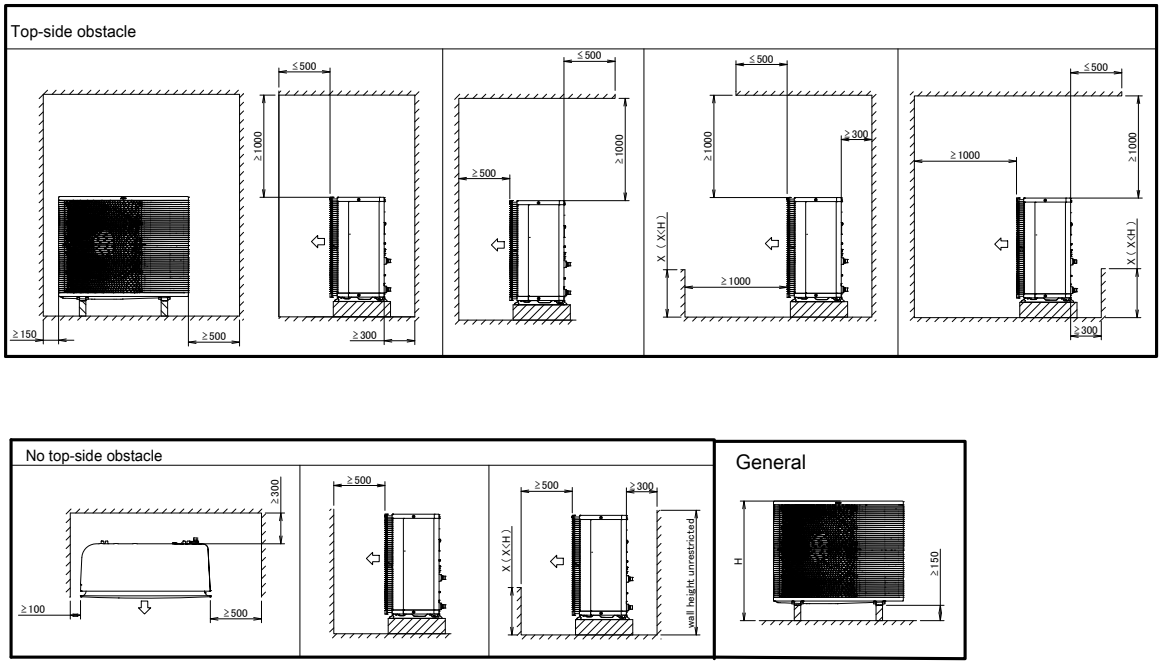
3D126757-2

10 Installation

10 - 1 Installation Method

EPRA014-018DV
EPRA014-018DW

Minimum space for air passage



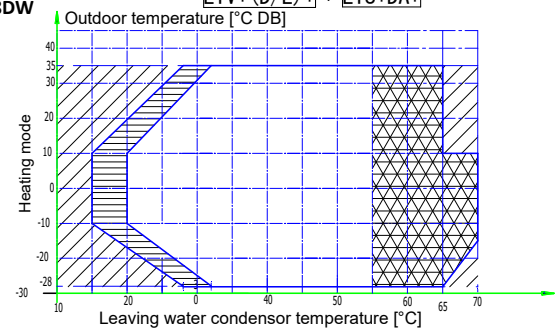
3D124412

11 Operation range

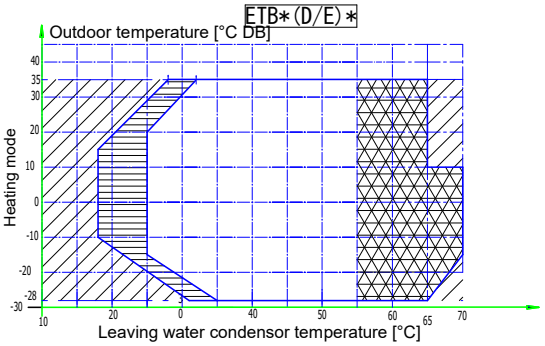
11 - 1 Operation Range

EPRA014-018DV
EPRA014-018DW

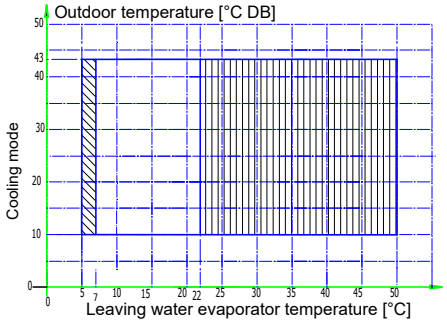
ETV*(D/E)* + ETS*DA*



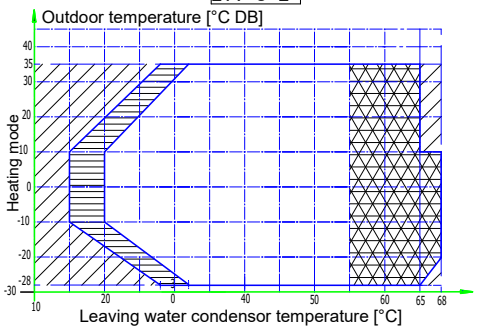
ETB*(D/E)*



ETV*(D/E)* + ETB*(D/E)* + ETS*DA*



ETV*U*E*



Legend
- Backup heater only operation
- No outdoor unit operation
- Outdoor unit operation if setpoint ≥ ·20·
- Pull-down area
- Outdoor unit operation if setpoint >·55·°C and ΔT = ·10·°C (ΔT = outlet temperature – inlet temperature)
- In case valve kit ·AFVALVE1· is part of the system, then the minimum setpoint is ·7·°C.

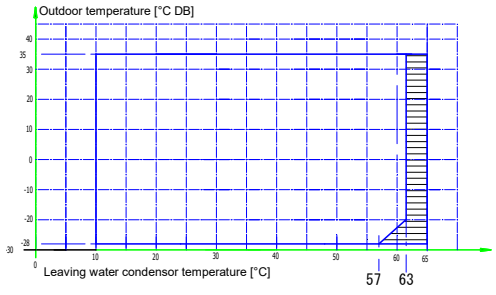
Remark
In restricted power supply mode, the outdoor unit, booster heater and backup heater can only operate separately.

3D125788B

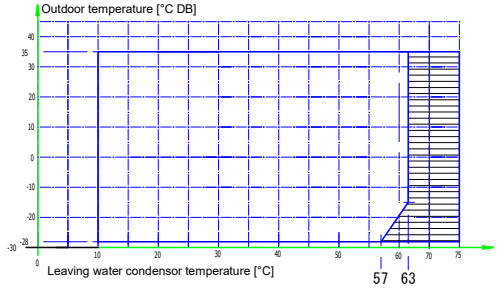
EPRA014-018DV
EPRA014-018DW

Domestic hot water heating mode

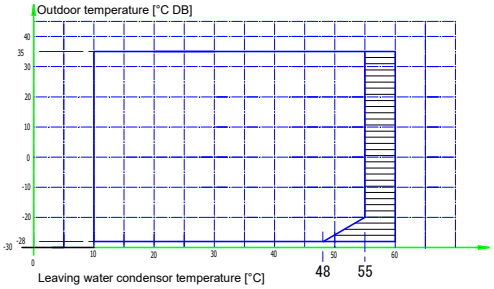
ETV*



EKHWP* + ETS* + EKHWS*200* EKHWS*250* EKHWS*300* + Third-party with identical specifications as ·EKHWS*200*



EKHWS*150*
EKHWS*180*
+
Third-party with identical specifications as ·EKHWS*150*·



Legend
- Backup heater only operation (or booster heater, if part of the system)

Remark
1. In restricted power supply mode (·EKHW*· only), the outdoor unit, booster heater and backup heater can only operate separately.
2. Third-party with identical specifications as ·EHKWS*150*·
   Coil surface >·1.05·m2
   Tank thermistor: top part of heat pump coil. Small overlap.
3. Third-party with identical specifications as ·EKHWS*200*·
   Coil surface >·1.8·m2
   Tank thermistor: top part of heat pump coil. Small overlap.

3D125789B

Daikin Europe N.V. Naamloze Vennootschap · Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Responsible Editor)

EEDEN21 05/2021