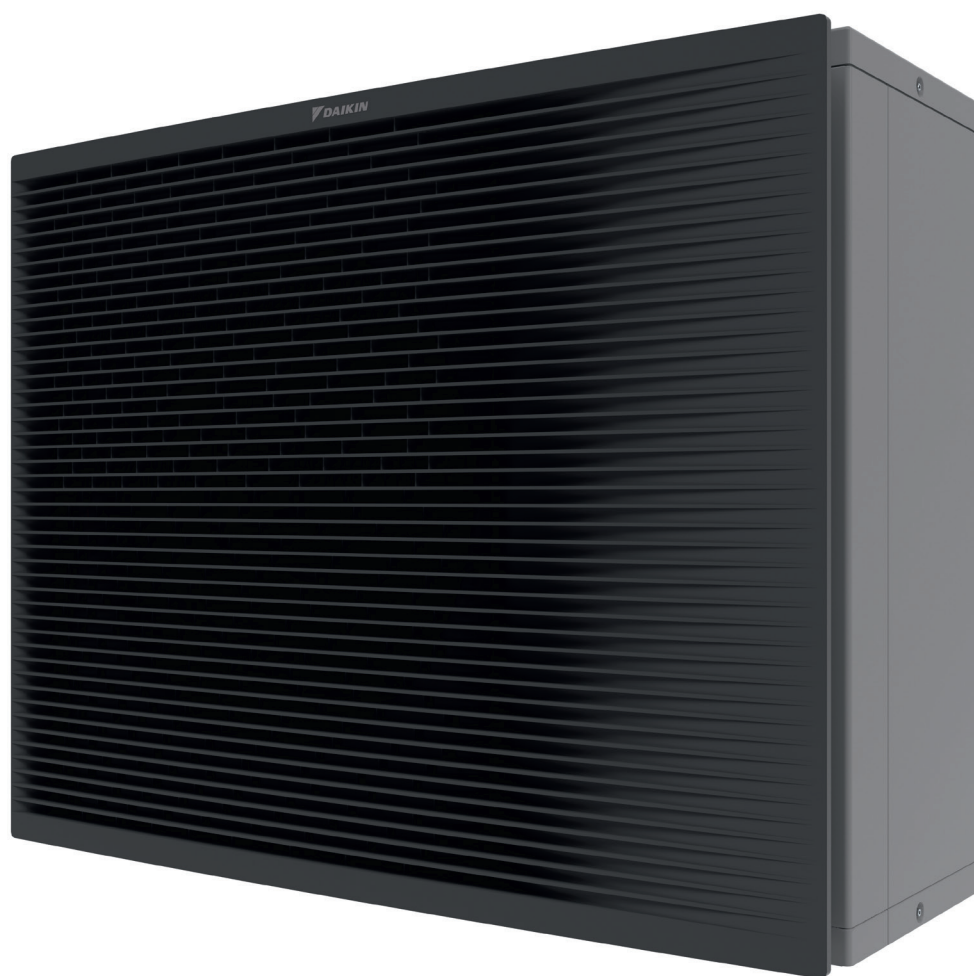




Daikin Altherma high  
temperature split  
Technical Data  
EPRA014-018DW





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# EPRA014-018DW

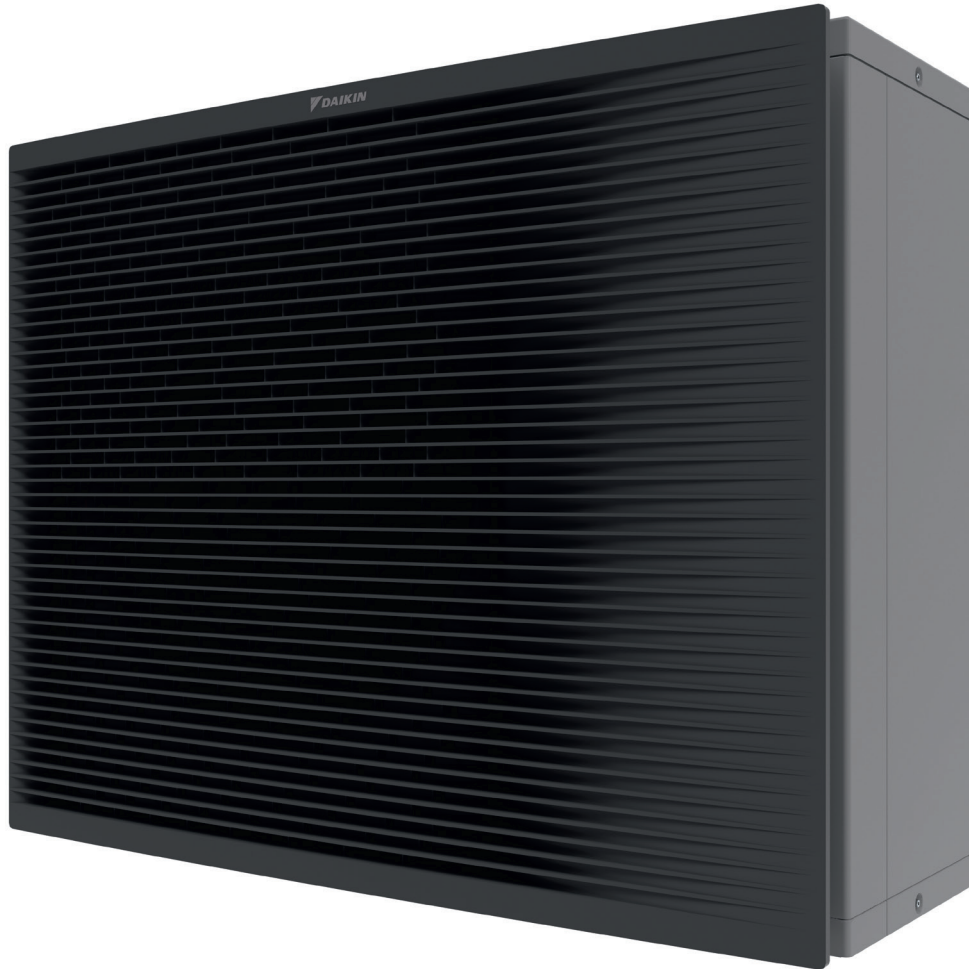
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# 1 Features

## 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


1



Guaranteed  
operation  
down to -28°C

## 2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1	
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/Manu- facturer details		Name and address Name or trademark					Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Daikin Europe N.V.
	Product descrip- tion	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 (according to EN14825)	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			
	Inte- grated supple- mentary 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	Cdh (Degradation heating)		1.0		
			(-7°CDB/-8°CWB)	COPd		2.43		


## 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)	Pdh	kW		11.1	
		PERd	%		97.2	
	B Con- dition (2°CDB- B/1°CWB)	Cdhd (Degradation heating)			1.0	
		COPd			3.52	
		Pdh	kW		6.7	
		PERd	%		140.8	
	C Con- dition (7°CDB- B/6°CWB)	Cdhd (Degradation heating)			1.0	
		COPd			4.54	
		Pdh	kW		6.5	
		PERd	%		181.6	
	D Condition (12°CDB/11°CWB)	Cdhd (Degradation heating)			1.0	
		COPd			5.97	
		Pdh	kW		5.2	
	Tol (tem- perature operat- ing limit)	PERd		%	238.8	
		COPd			2.12	
		Pdh	kW		12.5	
		PERd	%		84.8	
	Rated heat output supple- mentary capacity	TOL		°C	-10	
		WTOL		°C	55	
		Psup (at Tdesign -10°C)		kW	0.0	
Tbiv		COPd		2.12		
Cold climate water outlet 55°C	(bivalent tempera- ture)	Pdh	kW	12.5		
		PERd	%	84.8		
	Tbiv		°C	-10		
	General		Annual energy consumption	kWh	9,658	
		ηs (Seasonal space heating efficiency)	%	125		
		Prated at -22°C	kW	13		
		Qhe Annual ener- gy consumption (GCV)	Gj	35		
A Condition (7°CDB/-8°CWB)	Cdhd (Degradation heating)			1.0		
	COPd			2.74		
	Pdh	kW		7.5		
	PERd	%		109.6		
B Con- dition (2°CDB- B/1°CWB)	Cdhd (Degradation heating)			1.0		
	COPd			3.67		
	Pdh	kW		5.8		
	PERd	%		146.8		
C Con- dition (7°CDB- B/6°CWB)	Cdhd (Degradation heating)			1.0		

## 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)	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	
	G Condition (-15°CDB/ )	WTOL	°C	55		
		COPd		2.17		
		Pdh	kW	10.3		
	Rated heat output supplementary capacity	PERd	%	86.8		
		Tbiv	COPd	1.90		
		Pdh	kW	11.0		
		PERd	%	76.0		
	Warm climate water outlet 55°C	General	Tbiv	°C	-18	
			Psup (at Tdesign -22°C)	kW	1.9	
			Annual energy consumption	kWh	4,063	
ηs (Seasonal space heating efficiency)			%	161		
Prated at 2°C			kW	13		
B Condition (2°CDB/1°CWB)		Qhe Annual energy consumption (GCV)	Gj	15		
		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			
D Condition (12°CDB/11°CWB)	PERd	%	146.0			
	Cdh (Degradation heating)		1.0			
	COPd		5.37			
Tbiv (bivalent temperature)	Pdh	kW	6.1			
	PERd	%	214.8			
	COPd		3.18			
		Pdh	kW	11.0		

## 2 Specifications

1 - 1 EPRA014-018DW

2

Technical specifications					ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1	
Space heating	Warm climate water outlet 55°C	Tbiv	PERd	%	127.2			
		(bivalent temperature)	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			
Tbiv (bivalent temperature)	COPd				35			
		Pdh	kW		2.97			
		PERd	%		10.7			
		Tbiv	°C		118.8			
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)				-7			
					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			



## 2 Specifications

### 1 - 1 EPRA014-018DW

Technical specifications				ETBH16E6V + EPRA14DW1	ETBH16E6V + EPRA16DW1	ETBH16E6V + EPRA18DW1
Space heating Cold climate water outlet 35°C	General	Qhe Annual energy consumption (GCV)	Gj		27	
		A Condition (7°CDB/4-8°CWB)	COPd		3.50	
		B Condition (2°CDB/11°CWB)	Cdh (Degradation heating)		1.0	
			COPd		5.07	
			Pdh kW		4.9	
		C Condition (7°CDB/6°CWB)	PERd %		202.8	
			Cdh (Degradation heating)		1.0	
			COPd		6.10	
		D Condition (12°CDB/11°CWB)	Pdh kW		5.3	
			PERd %		244.0	
			Cdh (Degradation heating)		1.0	
		Tol (temperature operating limit)	COPd		7.03	
			Pdh kW		5.7	
			PERd %		281.2	
			COPd		2.16	
			Pdh kW		10.1	
		G Condition (-15°CDB/ )	PERd %		86.4	
			TOL °C		-22	
			WTOL °C		35	
		Rated heat output supplementary capacity	COPd		2.62	
Pdh kW			10.7			
PERd %			104.8			
Psup (at Tdesign -22°C)	kW			2.4		
Tbiv °C			-15			
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/11°CWB)	Cdh (Degradation heating)		1.0		
		COPd		3.51		
		Pdh kW		10.0		
	C Condition (7°CDB/6°CWB)	PERd %		140.4		
		Cdh (Degradation heating)		1.0		
		COPd		5.67		
Space heating Warm climate water outlet 35°C	D Condition (12°CDB/11°CWB)	Pdh kW		8.3		
		PERd %		226.8		
		Tbiv °C		4.96		
	Tbiv (bivalent temperature)	Pdh kW		9.8		
		PERd %		198.4		
Space heating Warm climate water outlet 35°C	D Condition (12°CDB/11°CWB)	Tbiv °C		5		
		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		
		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	
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/Manu- facturer details	Name and address Name or trademark Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Daikin Europe N.V.						
	Product descrip- tion	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 (according to EN14825)	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		
	Inte- grated supple- mentary 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	Cdh (Degradation heating)		1.0		
			(-7°CDB/-8°CWB)	COPd		2.43		

## 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)	Pdh	kW		11.1		
			PERd	%		97.2		
		B Condition (2°CDB/-8°CWB)	CdH (Degradation heating)				1.0	
			COPd				3.52	
			Pdh	kW		6.7		
			PERd	%		140.8		
		C Condition (7°CDB/-8°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		
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)		kW		0.0	
			Tbiv		COPd		2.12	
			Pdh	kW		12.5		
			PERd	%		84.8		
		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/-8°CWB)	CdH (Degradation heating)				1.0			
	COPd				3.67			
	Pdh		kW		5.8			
		PERd	%		146.8			
C 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	Cold climate water outlet 55°C	C Condition (7°CDB/6°CWB)	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 supplementary capacity	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			



## 2 Specifications

1 - 1 EPRA014-018DW

Technical specifications					ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1
Space heating Warm climate water outlet 55°C Water outlet 45°C Average climate water outlet 35°C Cold climate water outlet 35°C	Tbiv	PERd	%		127.2		
	(bivalent temperature)	Tbiv	°C		4		
	H Condition (-2°C / -)	Max.	kW		11.1	11.8	
	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 supplementary capacity	Psup (at Tdesign -10°C)	kW		0.4			
General	Annual energy consumption	kWh		7,425			
	ηs (Seasonal space heating efficiency)	%		163			
	Prated at -22°C	kW		13			

## 2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETBH16E9W + EPRA14DW1	ETBH16E9W + EPRA16DW1	ETBH16E9W + EPRA18DW1		
Space heating 	Cold climate water outlet 35°C	General	Qhe Annual energy consumption (GCV)		27			
			A Condition (7°CDB/4-8°CWB)	COPd		3.50		
				Pdh	kW	8.0		
				PERd	%	140.0		
				Cdh (Degradation heating)		1.0		
				COPd		5.07		
				Pdh	kW	4.9		
				PERd	%	202.8		
				Cdh (Degradation heating)		1.0		
				COPd		6.10		
				Pdh	kW	5.3		
				PERd	%	244.0		
				Cdh (Degradation heating)		1.0		
				COPd		7.03		
				Pdh	kW	5.7		
				PERd	%	281.2		
				Tol (temperature operating limit)	COPd	2.16		
					Pdh	10.1		
					PERd	86.4		
					TOL	-22		
		WTOL	35					
		COPd	2.62					
		Pdh	10.7					
		PERd	104.8					
		Tbiv (bivalent temperature)	COPd	2.62				
			Pdh	10.7				
			PERd	104.8				
			Tbiv	-15				
		Rated heat output supplementary capacity	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			
			Cdh (Degradation heating)		1.0			
			COPd		3.51			
			Pdh	kW	10.0			
			PERd	%	140.4			
		Space heating 	Warm climate water outlet 35°C	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)		1.0	
					COPd		5.67	
Pdh	kW				8.3			
PERd	%				226.8			
	COPd					4.96		
	Pdh				kW	9.8		
	PERd				%	198.4		
	Tbiv				°C	5		
	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	
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 Name or trademark Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium 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 (according to EN14825)	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			
			$\eta_s$ (Seasonal space heating efficiency)	%	142			
		Prated at -10°C			kW	13		
		Qhe Annual energy consumption (GCV)			Gj	26		
		SCOP				3.63		

## 2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating Average climate water outlet 55°C	General	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 supplementary capacity	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



## 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)	Pdh	kW		5.8		
		PERd	%		146.8		
		Cdh (Degradation heating)				1.0	
		COPd				4.69	
		Pdh	kW		5.6		
		PERd	%		187.6		
		D Condition (12°CDB/11°CWB)				6.12	
		COPd				6.2	
		Pdh	kW		244.8		
		PERd				1.65	
		Tol (temperature operating limit)				10.6	
	COPd				66.0		
	Pdh				-22		
	WTOL				55		
	G Condition (-15°CDB/ )				2.17		
	COPd				10.3		
	Pdh				86.8		
	PERd				1.90		
	Tbiv (bivalent temperature)				11.0		
	COPd				76.0		
	Pdh				-18		
	PERd				1.9		
	Tbiv (°C)						
Rated heat output supplementary capacity							
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)				1.0	
	COPd				2.62		
	Pdh				11.4		
	PERd				104.8		
	C Condition (7°CDB/6°CWB)				1.0		
	COPd				3.65		
	Pdh				8.2		
	PERd				146.0		
	D Condition (12°CDB/11°CWB)				1.0		
COPd				5.37			
Pdh				6.1			

## 2 Specifications

### 1 - 1 EPRA014-018DW

2



Technical specifications				ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating	Warm climate water outlet 55°C	D Condition (12°CDB/11°CWB)	PERd	%	214.8	
		Tbiv (bivalent temperature)	COPd		3.18	
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
Water outlet 35°C	General	ηs (Seasonal space heating efficiency)		%	190	
		Prated at -10°C		kW	13	
Water outlet 35°C	General	Qhe Annual energy consumption (GCV)		Gj	19	
		SCOP			4.81	
Water outlet 35°C	General	Seasonal space heating eff. class			A+++	
		A Condition (-7°CDB/-8°CWB)	COPd		2.97	
Water outlet 35°C	General	Pdh		kW	10.7	
		PERd		%	118.8	
Water outlet 35°C	B Condition (2°CDB/1°CWB)	Cd (Degradation heating)			1.0	
		COPd			4.94	
Water outlet 35°C	B Condition (2°CDB/1°CWB)	Pdh		kW	6.9	
		PERd		%	197.6	
Water outlet 35°C	C Condition (7°CDB/6°CWB)	Cd (Degradation heating)			1.0	
		COPd			5.95	
Water outlet 35°C	C Condition (7°CDB/6°CWB)	Pdh		kW	6.2	
		PERd		%	238.0	
Water outlet 35°C	D Condition (12°CDB/11°CWB)	Cd (Degradation heating)			1.0	
		COPd			7.07	
Water outlet 35°C	D Condition (12°CDB/11°CWB)	Pdh		kW	5.6	
		PERd		%	282.8	
Water outlet 35°C	Tol (temperature operating limit)	COPd			2.88	
		Pdh		kW	12.1	
Water outlet 35°C	Tol (temperature operating limit)	PERd		%	115.2	
		TOL		°C	-10	
Water outlet 35°C	Tol (temperature operating limit)	WTOL		°C	35	
		Tbiv (bivalent temperature)	COPd		2.97	
Water outlet 35°C	Tol (temperature operating limit)	Pdh		kW	10.7	
		PERd		%	118.8	
Water outlet 35°C	Tol (temperature operating limit)	Tbiv		°C	-7	
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)		kW	0.4

## 2 Specifications

1 - 1 EPRA014-018DW

Technical specifications				ETBX16E6V + EPRA14DW1	ETBX16E6V + EPRA16DW1	ETBX16E6V + EPRA18DW1
Space heating 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/-B/1°CWB)	Cdh (Degradation heating)		1.0	
			COPd		5.07	
			Pdh	kW	4.9	
			PERd	%	202.8	
		C Condition (7°CDB/-B/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	
Rated heat output supplementary capacity	Tbiv	°C	-15			
	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/-B/1°CWB)	Cdh (Degradation heating)		1.0	
			COPd		3.51	
			Pdh	kW	10.0	
			PERd	%	140.4	
		C Condition (7°CDB/-B/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			
Space heating Warm climate water outlet 35°C	B Condition (2°CDB/-B/1°CWB)	COPd		3.51		
		Pdh	kW	10.0		
		PERd	%	140.4		
		C Condition (7°CDB/-B/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			

## 2 Specifications

### 1 - 1 EPRA014-018DW

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

**2**

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1	
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/Manu- facturer 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		
	LW(A) Sound power level (according to EN14825)	Indoor			dB(A)	44.0		
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 climate water outlet 55°C	General	Annual energy consumption kWh			7,122			
		$\eta_s$ (Seasonal space heating efficiency) %			142			
		Prated at $-10^{\circ}\text{C}$ kW			13			
		Qhe Annual energy consumption (GCV) GJ			26			
		SCOP			3.63			

## 2 Specifications

### 1 - 1 EPRA014-018DW

Technical specifications				ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1		
Space heating 	Average climate water outlet 55°C	General	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 supplementary capacity	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		

## 2 Specifications

1 - 1 EPRA014-018DW

2

Technical specifications					ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1	
Space heating Cold climate water outlet 55°C	B Condition (2°CDB/1°CWB)	Pdh	kW			5.8		
		PERd	%			146.8		
		C Condition (7°CDB/6°CWB)	Cd <sub>h</sub> (Degradation heating)				1.0	
			COP <sub>d</sub>				4.69	
			Pdh	kW			5.6	
			PERd	%			187.6	
		D Condition (12°CDB/11°CWB)	COP <sub>d</sub>				6.12	
			Pdh	kW			6.2	
		Tol (temperature operating limit)	PERd				244.8	
			COP <sub>d</sub>				1.65	
	Pdh		kW			10.6		
	PERd		%			66.0		
	G Condition (-15°CDB/ )	TOL				-22		
		WTOL				55		
	Tbiv (bivalent temperature)	COP <sub>d</sub>				2.17		
		Pdh	kW			10.3		
	Rated heat output supplementary capacity	PERd					86.8	
			Tbiv				1.90	
		COP <sub>d</sub>				11.0		
		PERd				76.0		
Warm climate water outlet 55°C	General	Tbiv				-18		
		P <sub>sup</sub> (at T <sub>design</sub> -22°C)				1.9		
		Annual energy consumption			kWh	3,926		
		η <sub>s</sub> (Seasonal space heating efficiency)			%	167		
	Prated at 2°C			kW	13			
	Q <sub>he</sub> Annual energy consumption (GCV)			Gj	14			
	B Condition (2°CDB/1°CWB)	Cd <sub>h</sub> (Degradation heating)				1.0		
		COP <sub>d</sub>				2.62		
	C Condition (7°CDB/6°CWB)	Pdh	kW			11.4		
		PERd	%			104.8		
D Condition (12°CDB/11°CWB)	Cd <sub>h</sub> (Degradation heating)				1.0			
	COP <sub>d</sub>				3.65			
	Pdh	kW			8.2			
	PERd	%			146.0			
					6.1			

## 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)	PERd	%	214.8			
		Tbiv (bivalent temperature)	COPd		3.18			
		Pdh	kW	11.0				
	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				
	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				
	Tol (temperature operating limit)		PERd	%	282.8			
			COPd		2.88			
			Pdh	kW	12.1			
PERd			%	115.2				
Tbiv (bivalent temperature)		TOL	°C	-10				
		WTOL	°C	35				
		COPd		2.97				
		Pdh	kW	10.7				
Rated heat output supplementary capacity		PERd	%	118.8				
		Tbiv	°C	-7				
		Psup (at Tdesign -10°C)	kW	0.4				

## 2 Specifications

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Technical specifications				ETBX16E9W + EPRA14DW1	ETBX16E9W + EPRA16DW1	ETBX16E9W + EPRA18DW1
Space heating 	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/-11°CWB)	CdH (Degradation heating)		1.0
				COPd		5.07
				Pdh	kW	4.9
				PERd	%	202.8
			C Condition (7°CDB/-11°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			
Rated heat output supplementary capacity	Tbiv	°C	-15			
	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/-11°CWB)	CdH (Degradation heating)		1.0	
			COPd		3.51	
			Pdh	kW	10.0	
			PERd	%	140.4	
		C Condition (7°CDB/-11°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			
Space heating 	Warm climate water outlet 35°C	B Condition (2°CDB/-11°CWB)	COPd		3.51	
			Pdh	kW	10.0	
			PERd	%	140.4	
			CdH (Degradation heating)		1.0	
			COPd		5.67	
			Pdh	kW	8.3	
			PERd	%	226.8	
			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			



## 2 Specifications

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

Technical specifications				ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1	
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 20-125 CHBL RT								
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.9 (2)		25.8 (2)			
		General			Supplier/ Name and address Manu- Name or trademark facturer details Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Product description Air-to-water heat pump Brine-to-water heat pump Heat pump combination heater Low-temperature heat pump Supplementary heater integrated Water-to-water heat pump LW(A) Sound power level (according to EN14825) Indoor dB(A) 45.6					
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	Air to water unit	Rated airflow (outdoor)	m <sup>3</sup> /h	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	
		Function to fix water heating during off peak hours		No						
	Average climate	AEC (Annual electricity consumption)	kWh	829	1,344	829	1,344	829	1,344	
		COPdhw		2.85	2.99	2.85	2.99	2.85	2.99	
		Heat up time		1h 25min	1h 44min	1h 25min	1h 44min	1h 25min	1h 44min	
		Mixed water at 40°C	l	193.0	245.0	193.0	245.0	193.0	245.0	
		$\eta_{wh}$ (water heating efficiency)	%	124	125	124	125	124	125	
		Qelec (Daily electricity consumption)	kWh	4.095	6.377	4.095	6.377	4.095	6.377	
		Reference hot water temperature	°C	47.0	44.4	47.0	44.4	47.0	44.4	
		Stand-by power input	W	57.7	46.5	57.7	46.5	57.7	46.5	

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Technical specifications			ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1	
Domestic hot water heating 	Average climate	Water heating energy efficiency class	A+						
	Cold climate	AEC (Annual electricity consumption)	kWh	1,156	1,577	1,156	1,577	1,156	1,577
		COPdhw		2.08	2.56	2.08	2.56	2.08	2.56
		Heat up time		1h 22min	1h 45min	1h 22min	1h 45min	1h 22min	1h 45min
		Mixed water at 40°C	l	159.0	243.0	159.0	243.0	159.0	243.0
		η <sub>wh</sub> (water heating efficiency)	%	89	106	89	106	89	106
		Qelec (Daily electricity consumption)	kWh	5.621	7.452	5.621	7.452	5.621	7.452
		Reference hot water temperature	°C	45.4	44.3	45.4	44.3	45.4	44.3
	Stand-by power input	W	64.3	48.9	64.3	48.9	64.3	48.9	
	Warm climate	AEC (Annual electricity consumption)	kWh	699	1,161	699	1,161	699	1,161
		COPdhw		3.35	3.44	3.35	3.44	3.35	3.44
		Heat up time		1h 40min	2h 02min	1h 40min	2h 02min	1h 40min	2h 02min
		Mixed water at 40°C	l	191.0	240.0	191.0	240.0	191.0	240.0
		η <sub>wh</sub> (water heating efficiency)	%	147	144	147	144	147	144
		Qelec (Daily electricity consumption)	kWh	3.484	5.542	3.484	5.542	3.484	5.542
		Reference hot water temperature	°C	46.9	44.3	46.9	44.3	46.9	44.3
	Stand-by power input	W	54.8	46.2	54.8	46.2	54.8	46.2	
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236				
		η <sub>s</sub> (Seasonal space heating efficiency)	%	140					
		Prated at -10°C	kW	12.5					
		Q <sub>he</sub> 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-11°CWB)	Cdh (Degradation heating)		1.0				
			COPd		3.52				
			Pdh	kW	6.7				
			PERd	%	140.8				
		C Condition (7°CDB-11°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						

## 2 Specifications

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Technical specifications				ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1	
Space heating 	Average climate	D Condition (12°CDB/11°CWB)	Pdh	kW			5.2			
			PERd	%			238.8			
	water outlet 55°C	Tol (temperature operating limit)	COPd				2.12			
			Pdh	kW			12.5			
		PERd	%			84.8				
		TOL	°C			-10				
		WTOL	°C			55				
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW			0.0			
	Cold climate water outlet 55°C	General	Annual energy consumption		kWh			9,658		
			ηs (Seasonal space heating efficiency)		%			125		
		Prated at -22°C		kW			12.5			
		Qhe Annual energy consumption (GCV)		Gj			35			
		A Condition (7°CDB/-8°CWB)	Cdh (Degradation heating)	COPd				1.0		
				Pdh	kW			7.5		
PERd	%					109.6				
B Condition (2°CDB/-1°CWB)	Cdh (Degradation heating)			COPd				1.0		
		Pdh	kW			3.67				
		PERd	%			5.8				
C Condition (7°CDB/-6°CWB)	Cdh (Degradation heating)	COPd				1.0				
		Pdh	kW			4.69				
		PERd	%			5.6				
D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	COPd				1.0				
		Pdh	kW			4.69				
		PERd	%			5.6				
Tol (temperature operating limit)	COPd					6.12				
		Pdh	kW			6.2				
	PERd	%			244.8					
	TOL		°C			-22				
		WTOL	°C			55				
	G Condition (-15°CDB/- )	COPd					2.17			

## 2 Specifications


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Technical specifications					ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1	
Space heating	Cold climate water outlet 55°C	G Condition (-15°CDB/-)	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 supplementary capacity	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					12.5	
	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		
	C Condition (7°CDB/6°CWB)		PERd	%					104.8		
			Cdh (Degradation heating)						1.0		
			COPd						3.65		
	D Condition (12°CDB/11°CWB)	Pdh	kW					8.2			
		PERd	%					146.0			
		Cdh (Degradation heating)						1.0			
Tbiv (bivalent temperature)	COPd						5.37				
	Pdh	kW					6.1				
	PERd	%					214.8				
	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					12.5			
		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			

## 2 Specifications

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Technical specifications				ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1
Space heating 	Average climate water outlet 35°C	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			
	Tol (temperature operating limit)	COPd				282.8			
			Pdh	kW		12.1			
		PERd	%		115.2				
		TOL	°C		-10				
	Tbiv (bivalent temperature)	COPd				35			
			Pdh	kW		2.97			
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)				0.4			
			Pdh	kW		10.7			
			PERd	%		118.8			
Cold climate water outlet 35°C	General	Annual energy consumption				7,425			
			ηs (Seasonal space heating efficiency)	%		163			
		Prated at -22°C	kW		13				
		Qhe Annual energy consumption (GCV)	Gj		26.7				
	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			
	C Condition (7°CDB/6°CWB)	PERd				202.8			
			Cdh (Degradation heating)			1.0			
			COPd			6.10			
	Pdh					5.3			
PERd		%		244.0					

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### 1 - 1 EPRA014-018DW

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Technical specifications				ETSH16P30E + EPRA14DW1	ETSH16P50E + EPRA14DW1	ETSH16P30E + EPRA16DW1	ETSH16P50E + EPRA16DW1	ETSH16P30E + EPRA18DW1	ETSH16P50E + EPRA18DW1	
Space heating	Cold climate water outlet 35°C	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			
			°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 supplementary capacity	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				12.5			
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					
	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 |



Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical specifications				ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1
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 20-125 CHBL RT			
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.9 (2)			25.8 (2)	

## 2 Specifications

### 1 - 1 EPRA014-018DW

Technical specifications			ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1	
General	Supplier/Manufacturer details	Name and address	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium						
		Name or trademark	Daikin Europe N.V.						
	Product description	Air-to-water heat pump		Yes					
		Brine-to-water heat pump		No					
		Heat pump combination heater		Yes					
		Low-temperature heat pump		No					
		Supplementary heater integrated		No					
		Water-to-water heat pump		No					
	LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	45.6					
	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	Air to water unit	Rated airflow (outdoor)	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	
		Function to fix water heating during off peak hours	No						
	Average climate	AEC (Annual electricity consumption)	kWh	829	1,344	829	1,344	829	1,344
		COPdhw		2.85	2.99	2.85	2.99	2.85	2.99
		Heat up time		1h 25min	1h 44min	1h 25min	1h 44min	1h 25min	1h 44min
		Mixed water at 40°C	l	193.0	245.0	193.0	245.0	193.0	245.0
		η <sub>wh</sub> (water heating efficiency)	%	124	125	124	125	124	125
		Qelec (Daily electricity consumption)	kWh	4.095	6.377	4.095	6.377	4.095	6.377
		Reference hot water temperature	°C	47.0	44.4	47.0	44.4	47.0	44.4
		Stand-by power input	W	57.7	46.5	57.7	46.5	57.7	46.5
Domestic hot water heating 	Average climate	Water heating energy efficiency class	A+						
	Cold climate	AEC (Annual electricity consumption)	kWh	1,156	1,577	1,156	1,577	1,156	1,577
		COPdhw		2.08	2.56	2.08	2.56	2.08	2.56
		Heat up time		1h 22min	1h 45min	1h 22min	1h 45min	1h 22min	1h 45min
		Mixed water at 40°C	l	159.0	243.0	159.0	243.0	159.0	243.0
		η <sub>wh</sub> (water heating efficiency)	%	89	106	89	106	89	106
		Qelec (Daily electricity consumption)	kWh	5.621	7.452	5.621	7.452	5.621	7.452
		Reference hot water temperature	°C	45.4	44.3	45.4	44.3	45.4	44.3
		Stand-by power input	W	64.3	48.9	64.3	48.9	64.3	48.9
	Warm climate	AEC (Annual electricity consumption)	kWh	699	1,161	699	1,161	699	1,161
		COPdhw		3.35	3.44	3.35	3.44	3.35	3.44
		Heat up time		1h 40min	2h 02min	1h 40min	2h 02min	1h 40min	2h 02min
		Mixed water at 40°C	l	191.0	240.0	191.0	240.0	191.0	240.0
		η <sub>wh</sub> (water heating efficiency)	%	147	144	147	144	147	144
		Qelec (Daily electricity consumption)	kWh	3.484	5.542	3.484	5.542	3.484	5.542
		Reference hot water temperature	°C	46.9	44.3	46.9	44.3	46.9	44.3
		Stand-by power input	W	54.8	46.2	54.8	46.2	54.8	46.2

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Technical specifications				ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1	
Space heating	Average climate water outlet 55°C	General	Annual energy consumption						7,236	
			$\eta_s$ (Seasonal space heating efficiency)	%						140
			Prated at -10°C	kW						12.5
			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 Con- dition (2°CDB- B/1°CWB)	Cdh (Degradation heating)						1.0
				COPd						3.52
				Pdh	kW					6.7
				PERd	%					140.8
			C Con- dition (7°CDB- B/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



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Technical specifications				ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1	
Space heating 	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Pdh	kW			5.2			
			PERd	%			238.8			
		Tol (temperature operating limit)	COPd				2.12			
			Pdh	kW			12.5			
			PERd	%			84.8			
	Cold climate water outlet 55°C	Rated heat output supplementary capacity		TOL	°C			-10		
				WTOL	°C			55		
				Psup (at Tdesign -10°C)	kW			0.0		
			Tbiv (bivalent temperature)	COPd				2.12		
				Pdh	kW			12.5		
		General		PERd	%			84.8		
				Tbiv	°C			-10		
			Annual energy consumption		kWh			9,658		
			ηs (Seasonal space heating efficiency)		%			125		
			Prated at -22°C		kW			12.5		
A Condition (7°CDB/-8°CWB)	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				
G Condition (-15°CDB/-)		PERd	%			66.0				
		TOL	°C			-22				
		WTOL	°C			55				
		COPd				2.17				

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Technical specifications					ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1								
Space heating	Cold climate water outlet 55°C	G Condition (-15°CDB/-)	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 supplementary capacity	Psup (at Tdesign -22°C)	kWh					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			Qhe Annual energy consumption (GCV)	Gj				15									
	B Condition (2°CDB/1°CWB)		CdH (Degradation heating)	COPd	kWh				1.0									
												Pdh				11.4		
												PERd	%			104.8		
	C Condition (7°CDB/6°CWB)		CdH (Degradation heating)	COPd	kWh				1.0									
												Pdh				8.2		
												PERd	%			146.0		
	D Condition (12°CDB/11°CWB)		CdH (Degradation heating)	COPd	kWh				1.0									
												Pdh				6.1		
PERd												%			214.8			
Tbiv												°C			4			
Tbiv (bivalent temperature)	COPd		kWh					3.18										
											Pdh				11.0			
Tbiv (bivalent temperature)	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	Qhe Annual energy consumption (GCV)	Gj				20										
	SCOP	Seasonal space heating eff. class						4.71		A+++								
	A Condition (-7°CDB/-8°CWB)	COPd	kWh					2.97										
											Pdh				10.7			
PERd											%			118.8				

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Technical specifications				ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1	
Space heating 	Average climate water outlet 35°C	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	
	Tol (temperature operating limit)	PERd	%						282.8	
		COPd							2.88	
		Pdh	kW						12.1	
		PERd	%						115.2	
	Tbiv (bivalent temperature)	TOL	°C						-10	
		WTOL	°C						35	
		COPd							2.97	
	Rated heat output supplementary capacity	Pdh	kW						10.7	
		PERd	%						118.8	
Tbiv		°C						-7		
Cold climate water outlet 35°C	General	Annual energy consumption	Psup (at Tdesign -10°C)	kW					0.4	
			ηs (Seasonal space heating efficiency)	%					7,425	
		Prated at -22°C	kW						163	
		Qhe Annual energy consumption (GCV)	Gj						13	
									26.7	
	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		

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Technical specifications				ETSHB16P30E + EPRA14DW1	ETSHB16P50E + EPRA14DW1	ETSHB16P30E + EPRA16DW1	ETSHB16P50E + EPRA16DW1	ETSHB16P30E + EPRA18DW1	ETSHB16P50E + EPRA18DW1	
Space heating	Cold climate water outlet 35°C	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
		G Condition (-15°CDB/-)	WTOL	°C						35
			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 supplementary capacity	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						12.5
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		
	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 |



Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

Technical specifications				ETSX16P30E + EPRA14DW1	ETSX16P50E + EPRA14DW1	ETSX16P30E + EPRA16DW1	ETSX16P50E + EPRA16DW1	ETSX16P30E + EPRA18DW1	ETSX16P50E + EPRA18DW1
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 20-125 CHBL RT					
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	16.9 (2)			25.8 (2)	

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Technical specifications			ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E		
			+	+	+	+	+	+		
			EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	EPRA18DW1		
General	Supplier/	Name and address	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
	Manu- facturer details	Name or trademark	Daikin Europe N.V.							
	Product descrip- tion	Air-to-water heat pump		Yes						
		Brine-to-water heat pump		No						
		Heat pump combination heater		Yes						
		Low-temperature heat pump		No						
		Supplementary heater integrated		No						
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	45.6							
	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	Air to water unit	Rated airflow (outdoor)	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		
		Function to fix water heating during off peak hours	No							
	Average climate	AEC (Annual electricity consumption)	kWh	829	1,344	829	1,344	829	1,344	
		COPdhw		2.85	2.99	2.85	2.99	2.85	2.99	
		Heat up time		1h 25min	1h 44min	1h 25min	1h 44min	1h 25min	1h 44min	
		Mixed water at 40°C	l	193.0	245.0	193.0	245.0	193.0	245.0	
		η <sub>wh</sub> (water heating efficiency)	%	124	125	124	125	124	125	
	Domestic hot water heating 	Average climate	Qelec (Daily electricity consumption)	kWh	4.095	6.377	4.095	6.377	4.095	6.377
			Reference hot water temperature	°C	47.0	44.4	47.0	44.4	47.0	44.4
			Stand-by power input	W	57.7	46.5	57.7	46.5	57.7	46.5
Water heating energy efficiency class				A+						
Cold climate		AEC (Annual electricity consumption)	kWh	1,156	1,577	1,156	1,577	1,156	1,577	
		COPdhw		2.08	2.56	2.08	2.56	2.08	2.56	
		Heat up time		1h 22min	1h 45min	1h 22min	1h 45min	1h 22min	1h 45min	
		Mixed water at 40°C	l	159.0	243.0	159.0	243.0	159.0	243.0	
		η <sub>wh</sub> (water heating efficiency)	%	89	106	89	106	89	106	
		Qelec (Daily electricity consumption)	kWh	5.621	7.452	5.621	7.452	5.621	7.452	
	Reference hot water temperature	°C	45.4	44.3	45.4	44.3	45.4	44.3		
Warm climate	Stand-by power input	W	64.3	48.9	64.3	48.9	64.3	48.9		
	AEC (Annual electricity consumption)	kWh	699	1,161	699	1,161	699	1,161		
	COPdhw		3.35	3.44	3.35	3.44	3.35	3.44		
	Heat up time		1h 40min	2h 02min	1h 40min	2h 02min	1h 40min	2h 02min		
	Mixed water at 40°C	l	191.0	240.0	191.0	240.0	191.0	240.0		
	η <sub>wh</sub> (water heating efficiency)	%	147	144	147	144	147	144		
	Qelec (Daily electricity consumption)	kWh	3.484	5.542	3.484	5.542	3.484	5.542		
	Reference hot water temperature	°C	46.9	44.3	46.9	44.3	46.9	44.3		
Stand-by power input	W	54.8	46.2	54.8	46.2	54.8	46.2			

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Technical specifications				ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E						
				+	+	+	+	+	+						
				EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	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	Qhe Annual energy consumption (GCV)	kW			12.5						
						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	
								B Condition (2°CDB/-1°CWB)	CdH (Degradation heating)				1.0		
										COPd			3.52		
										PdH	kW			6.7	
								C Condition (7°CDB/6°CWB)	CdH (Degradation heating)				1.0		
										COPd			4.54		
										PdH	kW			6.5	

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Technical specifications				ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E																									
				+	+	+	+	+	+																									
				EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	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																										
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW				0.0																										
					Tbiv	COPd			2.12																									
					Pdh	kW			12.5																									
					PERd	%			84.8																									
		Cold climate water outlet 55°C	General	Annual energy consumption	ηs (Seasonal space heating efficiency)	%		126																										
Prated at -22°C	kW												12.5																					
																	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		
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)															1.0																		
																			COPd					3.67										
																											Pdh	kW				5.8		
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)					1.0																												
									COPd					4.69																				
																	Pdh	kW				5.6												
D Condition (12°CDB/11°CWB)	COPd																																	
									Pdh	kW				6.12																				
																	PERd	%				244.8												
Tol (temperature operating limit)	COPd																																	
									Pdh	kW				1.65																				
																	PERd	%				10.6												

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Technical specifications				ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	
				+	+	+	+	+	+	
				EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	EPRA18DW1	
Space heating 	Cold climate water outlet 55°C	Tol (temperature operating limit)	TOL °C				-22			
			WTOL °C				55			
	Warm climate water outlet 55°C	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 supplementary capacity	Psup (at Tdesign -22°C)	kW				1.9			
	Water outlet 45°C	General	Annual energy consumption	kWh				3,926		
			ηs (Seasonal space heating efficiency)	%				167		
			Prated at 2°C	kW				12.5		
Qhe Annual energy consumption (GCV)			Gj				14			
B Condition (2°CDB/1°CWB)		Cdh (Degradation heating)					1.0			
		COPd					2.62			
PERd		kW					11.4			
		%					104.8			
C Condition (7°CDB/6°CWB)		Cdh (Degradation heating)					1.0			
		COPd					3.65			
PERd		kW					8.2			
		%					146.0			
D Condition (12°CDB/11°CWB)		Cdh (Degradation heating)					1.0			
		COPd					5.37			
PERd	kW					6.1				
	%					214.8				
Tbiv (bivalent temperature)	COPd					3.18				
	Pdh	kW				11.0				
PERd	%					127.2				
	Tbiv	°C				4				
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				12.5			
		Qhe Annual energy consumption (GCV)	Gj				19			
	SCOP					4.81				
	Seasonal space heating eff. class					A+++				



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Technical specifications				ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	
				+	+	+	+	+	+	
				EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	EPRA18DW1	
Space heating Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB) B Condition (2°CDB/-1°CWB) C Condition (7°CDB/-6°CWB) D Condition (12°CDB/11°CWB) Tol (temperature operating limit) Tбив (bivalent temperature) Rated heat output supplementary capacity	COPd					2.97			
		Pdh	kW					10.7		
		PERd	%					118.8		
		Cdh (Degradation heating)						1.0		
		COPd						4.94		
		Pdh	kW					6.9		
		PERd	%					197.6		
		Cdh (Degradation heating)						1.0		
		COPd						5.95		
		Pdh	kW					6.2		
		PERd	%					238.0		
		Cdh (Degradation heating)						1.0		
		COPd						7.07		
		Pdh	kW					5.6		
		PERd	%					282.8		
		COPd						2.88		
		Pdh	kW					12.1		
		PERd	%					115.2		
		TOL	°C					-10		
		WTOL	°C					35		
		COPd						2.97		
		Pdh	kW					10.7		
		PERd	%					118.8		
		Tбив	°C					-7		
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					26.5		
		COPd						3.50		
		Pdh	kW					8.0		
		PERd	%					140.0		
		Cdh (Degradation heating)						1.0		
		COPd						5.07		
		Pdh	kW					4.9		
		PERd	%					202.8		
		Cdh (Degradation heating)						1.0		

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Technical specifications				ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	ETSX16P30E	ETSX16P50E	
				+	+	+	+	+	+	
				EPRA14DW1	EPRA14DW1	EPRA16DW1	EPRA16DW1	EPRA18DW1	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)	Cd <sub>h</sub> (Degradation heating)							1.0
			COPd							7.03
			Pdh	kW						5.7
		Tol (temperature operating limit)	COPd	Pdh	kW					10.1
				PERd	%					86.4
				TOL	°C					-22
				WTOL	°C					35
	G Condition (-15°CDB/-)	COPd	Pdh	kW					2.62	
			PERd	%					10.7	
									104.8	
	Tbiv (bivalent temperature)	COPd	Pdh	kW					2.62	
			PERd	%					10.7	
			Tbiv	°C					104.8	
									-15	
	Rated heat output supplementary capacity	P <sub>sup</sub> (at T <sub>design</sub> -22°C)		kW					2.4	
	Warm climate water outlet 35°C	General	Annual energy consumption		kWh					2,855
η <sub>s</sub> (Seasonal space heating efficiency)			%					231		
Prated at 2°C			kW					12.5		
Q <sub>he</sub> Annual energy consumption (GCV)			Gj					10		
B Condition (2°CDB/1°CWB)			Cd <sub>h</sub> (Degradation heating)							1.0
		COPd							3.51	
		Pdh	kW						10.0	
C Condition (7°CDB/6°CWB)		Cd <sub>h</sub> (Degradation heating)							140.4	
		COPd							1.0	
		Pdh	kW						5.67	
Tbiv (bivalent temperature)	COPd	Pdh	kW					8.3		
		PERd	%					226.8		
		Tbiv	°C					4.96		
								9.8		
D Condition (12°CDB/11°CWB)	COPd	Pdh	kW					198.4		
		PERd	%					5		
		Tbiv	°C					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/MB 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

Technical specifications				ETSXB16P30E + EPRA14DW1	ETSXB16P50E + EPRA14DW1	ETSXB16P30E + EPRA16DW1	ETSXB16P50E + EPRA16DW1	ETSXB16P30E + EPRA18DW1	ETSXB16P50E + EPRA18DW1
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)	

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Technical specifications				ETSXB16P30E + EPRA14DW1	ETSXB16P50E + EPRA14DW1	ETSXB16P30E + EPRA16DW1	ETSXB16P50E + EPRA16DW1	ETSXB16P30E + EPRA18DW1	ETSXB16P50E + EPRA18DW1	
Pump	Type	Grundfos UPMXL 20-125 CHBL RT								
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	16.9 (2)			25.8 (2)			
General	Supplier/Manufacturer details	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium								
	Name or trademark	Daikin Europe N.V.								
Product description	Air-to-water heat pump	Yes								
	Brine-to-water heat pump	No								
	Heat pump combination heater	Yes								
	Low-temperature heat pump	No								
	Supplementary heater integrated	No								
	Water-to-water heat pump	No								
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	45.6							
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	Air to water unit	Rated airflow (outdoor)	m <sup>3</sup> /h	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	
		Function to fix water heating during off peak hours	No							
	Average climate	AEC (Annual electricity consumption)	kWh	829	1,344	829	1,344	829	1,344	
		COPdhw		2.85	2.99	2.85	2.99	2.85	2.99	
		Heat up time		1h 25min	1h 44min	1h 25min	1h 44min	1h 25min	1h 44min	
		Mixed water at 40°C	l	193.0	245.0	193.0	245.0	193.0	245.0	
		ηwh (water heating efficiency)	%	124	125	124	125	124	125	
	Domestic hot water heating 	Average climate	Qelec (Daily electricity consumption)	kWh	4.095	6.377	4.095	6.377	4.095	6.377
			Reference hot water temperature	°C	47.0	44.4	47.0	44.4	47.0	44.4
			Stand-by power input	W	57.7	46.5	57.7	46.5	57.7	46.5
Water heating energy efficiency class			A+							
Cold climate		AEC (Annual electricity consumption)	kWh	1,156	1,577	1,156	1,577	1,156	1,577	
		COPdhw		2.08	2.56	2.08	2.56	2.08	2.56	
		Heat up time		1h 22min	1h 45min	1h 22min	1h 45min	1h 22min	1h 45min	
		Mixed water at 40°C	l	159.0	243.0	159.0	243.0	159.0	243.0	
		ηwh (water heating efficiency)	%	89	106	89	106	89	106	
		Qelec (Daily electricity consumption)	kWh	5.621	7.452	5.621	7.452	5.621	7.452	
Warm climate	Reference hot water temperature	°C	45.4	44.3	45.4	44.3	45.4	44.3		
	Stand-by power input	W	64.3	48.9	64.3	48.9	64.3	48.9		
	AEC (Annual electricity consumption)	kWh	699	1,161	699	1,161	699	1,161		
	COPdhw		3.35	3.44	3.35	3.44	3.35	3.44		
	Heat up time		1h 40min	2h 02min	1h 40min	2h 02min	1h 40min	2h 02min		
	Mixed water at 40°C	l	191.0	240.0	191.0	240.0	191.0	240.0		
	ηwh (water heating efficiency)	%	147	144	147	144	147	144		
	Qelec (Daily electricity consumption)	kWh	3.484	5.542	3.484	5.542	3.484	5.542		
Reference hot water temperature	°C	46.9	44.3	46.9	44.3	46.9	44.3			
	Stand-by power input	W	54.8	46.2	54.8	46.2	54.8	46.2		

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Technical specifications				ETSB16P30E + EPRA14DW1	ETSB16P50E + EPRA14DW1	ETSB16P30E + EPRA16DW1	ETSB16P50E + EPRA16DW1	ETSB16P30E + EPRA18DW1	ETSB16P50E + EPRA18DW1	
Space heating	Average climate water outlet 55°C	General	Annual energy consumption						7,122	
			$\eta_s$ (Seasonal space heating efficiency)	%						142
			Prated at -10°C	kW						12.5
			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
				COPd						4.54
				Pdh	kW					6.5

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Technical specifications				ETSXB16P30E + EPRA14DW1	ETSXB16P50E + EPRA14DW1	ETSXB16P30E + EPRA16DW1	ETSXB16P50E + EPRA16DW1	ETSXB16P30E + EPRA18DW1	ETSXB16P50E + EPRA18DW1		
Space heating 	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	PERd	%					181.6		
		D Condition (12°CDB/11°CWB)	Cd <sub>h</sub> (Degradation heating)					1.0			
			COP <sub>d</sub>					5.97			
			Pd <sub>h</sub>		kW			5.2			
			PER <sub>d</sub>		%			238.8			
		Tol (temperature operating limit)	COP <sub>d</sub>					2.12			
			Pd <sub>h</sub>		kW			12.5			
			PER <sub>d</sub>		%			84.8			
			TOL		°C			-10			
		Rated heat output supplementary capacity	P <sub>sup</sub> (at T <sub>design</sub> -10°C)		kW			0.0			
			T <sub>biv</sub> (bivalent temperature)	COP <sub>d</sub>					2.12		
				Pd <sub>h</sub>		kW			12.5		
				PER <sub>d</sub>		%			84.8		
		T <sub>biv</sub>		°C			-10				
		Cold climate water outlet 55°C	General	Annual energy consumption		kWh					9,589
				η <sub>s</sub> (Seasonal space heating efficiency)		%			126		
Prated at -22°C				kW			12.5				
Q <sub>he</sub> Annual energy consumption (GCV)				Gj			35				
A Condition (-7°CDB/-8°CWB)	Cd <sub>h</sub> (Degradation heating)					1.0					
	COP <sub>d</sub>					2.74					
	Pd <sub>h</sub>		kW			7.5					
	PER <sub>d</sub>		%			109.6					
B Condition (2°CDB/1°CWB)	Cd <sub>h</sub> (Degradation heating)					1.0					
	COP <sub>d</sub>					3.67					
	Pd <sub>h</sub>		kW			5.8					
C Condition (7°CDB/6°CWB)	Cd <sub>h</sub> (Degradation heating)					1.0					
	COP <sub>d</sub>					4.69					
	Pd <sub>h</sub>		kW			5.6					
D Condition (12°CDB/11°CWB)	Cd <sub>h</sub> (Degradation heating)					1.0					
	COP <sub>d</sub>					6.12					
	Pd <sub>h</sub>		kW			6.2					
Tol (temperature operating limit)	COP <sub>d</sub>					1.65					
	Pd <sub>h</sub>		kW			10.6					
	PER <sub>d</sub>		%			66.0					

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Technical specifications				ETSXB16P30E + EPRA14DW1	ETSXB16P50E + EPRA14DW1	ETSXB16P30E + EPRA16DW1	ETSXB16P50E + EPRA16DW1	ETSXB16P30E + EPRA18DW1	ETSXB16P50E + 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			
	Tbiv (bivalent temperature)	PERd	%				86.8			
		COPd					1.90			
	Rated heat output supplementary capacity	Pdh	kW				11.0			
		PERd	%				76.0			
	Warm climate water outlet 55°C	General	Tbiv	°C			-18			
			Psup (at Tdesign -22°C)	kW			1.9			
Annual energy consumption			kWh				3,926			
ηs (Seasonal space heating efficiency)			%				167			
B Condition (2°CDB/1°CWB)		Prated at 2°C	kW				12.5			
		Qhe Annual energy consumption (GCV)	Gj				14			
C Condition (7°CDB/6°CWB)		Cdh (Degradation heating)					1.0			
		COPd					2.62			
D Condition (12°CDB/11°CWB)		Pdh	kW				11.4			
		PERd	%				104.8			
Tbiv (bivalent temperature)	Cdh (Degradation heating)					1.0				
	COPd					3.65				
Water outlet 45°C	H Condition (-2°C / -)	Pdh	kW			8.2				
		PERd	%			146.0				
Average climate water outlet 35°C	Tbiv (bivalent temperature)	Cdh (Degradation heating)				1.0				
		COPd				5.37				
	Water outlet 45°C	H Condition (-2°C / -)	Pdh	kW			6.1			
			PERd	%			214.8			
	Average climate water outlet 35°C	General	Tbiv	°C			4			
			COPd				3.18			
	Water outlet 45°C	H Condition (-2°C / -)	Pdh	kW			11.0			
			PERd	%			127.2			
	Average climate water outlet 35°C	General	Tbiv	°C			4			
			COPd				3.18			
Water outlet 45°C	H Condition (-2°C / -)	Pdh	kW	11.1			11.8			
		PERd	%							
Average climate water outlet 35°C	General	Annual energy consumption	kWh				5,366			
		ηs (Seasonal space heating efficiency)	%				190			
Average climate water outlet 35°C	General	Prated at -10°C	kW				12.5			
		Qhe Annual energy consumption (GCV)	Gj				19			
Average climate water outlet 35°C	General	SCOP				4.81				
		Seasonal space heating eff. class				A+++				

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Technical specifications				ETSXB16P30E + EPRA14DW1	ETSXB16P50E + EPRA14DW1	ETSXB16P30E + EPRA16DW1	ETSXB16P50E + EPRA16DW1	ETSXB16P30E + EPRA18DW1	ETSXB16P50E + EPRA18DW1	
Space heating Average climate water outlet 35°C  Cold climate water outlet 35°C	A Condition (7°CDB/-8°CWB)  B Condition (2°CDB/-B/1°CWB)  C Condition (7°CDB/-B/6°CWB)  D Condition (12°CDB/11°CWB)  Tol (temperature operating limit)  Tbiv (bivalent temperature)  Rated heat output supplementary capacity  General  A Condition (7°CDB/-8°CWB)  B Condition (2°CDB/-B/1°CWB)  C Condition (7°CDB/-B/6°CWB)	COPd					2.97			
		Pdh	kW					10.7		
		PERd	%					118.8		
		Cdh (Degradation heating)						1.0		
		COPd						4.94		
		Pdh	kW					6.9		
		PERd	%					197.6		
		Cdh (Degradation heating)						1.0		
		COPd						5.95		
		Pdh	kW					6.2		
		PERd	%					238.0		
		Cdh (Degradation heating)						1.0		
		COPd						7.07		
		Pdh	kW					5.6		
		PERd	%					282.8		
		COPd						2.88		
		Pdh	kW					12.1		
		PERd	%					115.2		
		TOL	°C					-10		
		WTOL	°C					35		
		COPd						2.97		
		Pdh	kW					10.7		
		PERd	%					118.8		
		Tbiv	°C					-7		
		Psup (at Tdesign -10°C)	kW					0.4		
		Annual energy consumption	kWh					7,356		
		ηs (Seasonal space heating efficiency)	%					165		
		Prated at -22°C	kW					13		
		Qhe Annual energy consumption (GCV)	Gj					26.5		
		COPd						3.50		
Pdh	kW					8.0				
PERd	%					140.0				
Cdh (Degradation heating)						1.0				
COPd						5.07				
Pdh	kW					4.9				
PERd	%					202.8				
Cdh (Degradation heating)						1.0				

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Technical specifications				ETSB16P30E + EPRA14DW1	ETSB16P50E + EPRA14DW1	ETSB16P30E + EPRA16DW1	ETSB16P50E + EPRA16DW1	ETSB16P30E + EPRA18DW1	ETSB16P50E + EPRA18DW1	
Space heating Cold climate water outlet 35°C	C Condition (7°CDB- B/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			
	Rated heat output supplementary capacity	Tbiv	°C				-15			
		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				12.5		
			Qhe Annual energy consumption (GCV)	Gj				10		
B Condition (2°CDB- B/1°CWB)		CdH (Degradation heating)					1.0			
		COPd					3.51			
		Pdh	kW				10.0			
		PERd	%				140.4			
		C Condition (7°CDB- B/6°CWB)	CdH (Degradation heating)					1.0		
COPd							5.67			
Pdh			kW				8.3			
Tbiv (bivalent temperature)		PERd	%				226.8			
	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	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) 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

Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + 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 to 50°C	Nom.		kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)



## 2 Specifications

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Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1	
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 Heating ESP unit	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 (according to EN14825)	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 <sup>3</sup> /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	
		Heat up time		1h 06min	1h 19min	1h 06min	1h 19min	1h 06min	1h 19min	

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Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1	
Domestic hot water heating	Average climate	η <sub>wh</sub> (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	
		COP <sub>dhw</sub>		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	
		η <sub>wh</sub> (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		
	COP <sub>dhw</sub>		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		
	η <sub>wh</sub> (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				
η <sub>s</sub> (Seasonal space heating efficiency)				%	140					
			Prated at -10°C	kW	13					
			Q <sub>he</sub> Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
			Seasonal space heating eff. class		A++					
A Condition (7°CDB/-8°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		2.43					
			P <sub>d</sub>	kW	11.1					
			PER <sub>d</sub>	%	97.2					
B Condition (2°CDB/-1°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		3.52					
			P <sub>d</sub>	kW	6.7					
			PER <sub>d</sub>	%	140.8					
C Condition (7°CDB/-6°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		4.54					
			P <sub>d</sub>	kW	6.5					
	PER <sub>d</sub>	%	181.6							

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### 1 - 1 EPRA014-018DW

Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1			
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)	Tol (temperature operating limit)	COPd	COPd						2.12	
					Pdh kW						12.5	
					PERd %						84.8	
					TOL °C						-10	
					WTOL °C						55	
		Rated heat output supplementary capacity	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	Psup (at Tdesign -10°C)	kW					0.0	
					Tbiv (bivalent temperature)	COPd	COPd					2.12
							Pdh kW					12.5
							PERd %					84.8
							Tbiv °C					-10
		Cold climate water outlet 55°C	General	Annual energy consumption	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)				COPd	Cdh (Degradation heating)						1.0
						COPd						2.74
						Pdh kW						7.5
		PERd %							109.6			
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)	COPd	Cdh (Degradation heating)						1.0			
			COPd						3.67			
			Pdh kW						5.8			
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)	COPd	Cdh (Degradation heating)						1.0			
			COPd						4.69			
			Pdh kW						5.6			
D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	COPd	Cdh (Degradation heating)						1.0			
			COPd						6.12			
			Pdh kW						6.2			
Tol (temperature operating limit)	Tol (temperature operating limit)	COPd	COPd						1.65			
			Pdh kW						10.6			
			PERd %						66.0			
		TOL °C						-22				

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Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1	
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					
		Rated heat output supplementary capacity	Tbiv	°C	-18					
			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						
C Condition (7°CDB/6°CWB)	PERd		%	104.8						
	Cdh (Degradation heating)			1.0						
	COPd			3.65						
D Condition (12°CDB/11°CWB)	Pdh		kW	8.2						
	PERd		%	146.0						
	Cdh (Degradation heating)			1.0						
Tbiv (bivalent temperature)	COPd			5.37						
	Pdh		kW	6.1						
	PERd		%	214.8						
Water outlet 45°C	H Condition (-2°C / -)	Max.	kW	11.1		11.8				
		Tbiv	°C	4						
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					

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Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1		
Space heating 	Average climate	A Condition	Pdh	kW					10.7		
		(7°CDB/-8°CWB)	PERd	%					118.8		
	water outlet	B Condition	CdH (Degradation heating)							1.0	
			COPd							4.94	
	35°C	(2°CDB- B/1°CWB)	Pdh	kW						6.9	
			PERd	%						197.6	
		C Condition	CdH (Degradation heating)							1.0	
			COPd							5.95	
		(7°CDB- B/6°CWB)	Pdh	kW						6.2	
			PERd	%						238.0	
		D Condition	CdH (Degradation heating)							1.0	
			COPd							7.07	
			Pdh	kW						5.6	
		Tol (tem- perature operat- ing limit)	(12°CDB/11°CWB)	PERd	%					282.8	
				COPd						2.88	
				Pdh	kW						12.1
		Tbiv		PERd	%					115.2	
				TOL	°C					-10	
				WTOL	°C						35
		(bivalent tempera- ture)		COPd						2.97	
				Pdh	kW						10.7
				PERd	%						118.8
		Rated heat output supple- mentary capacity		Tbiv	°C					-7	
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 ener- gy consumption (GCV)	Gj							27	
		A Condition	COPd							3.50	
	(7°CDB/-8°CWB)	Pdh	kW							8.0	
		PERd	%							140.0	
		CdH (Degradation heating)								1.0	
	B Con- dition	COPd								5.07	
		(2°CDB- B/1°CWB)	Pdh	kW						4.9	
			PERd	%						202.8	
			C Condition	CdH (Degradation heating)							1.0
		(7°CDB/6°CWB)	COPd							6.10	

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Technical specifications				ETVH16S18E6V + EPRA14DW1	ETVH16S23E6V + EPRA14DAW1	ETVH16S18E6V + EPRA16DW1	ETVH16S23E6V + EPRA16DAW1	ETVH16S18E6V + EPRA18DW1	ETVH16S23E6V + EPRA18DAW1	
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/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								35	
		G Condition (-15°CDB/- )							2.62	
	COPd								2.62	
	Pdh		kW						10.7	
	PERd		%						104.8	
	Tbiv (bivalent temperature)		Tbiv	°C					-15	
	Rated heat output supplementary capacity		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- B/1°CWB)		CdH (Degradation heating)							1.0	
		COPd							3.51	
		Pdh	kW						10.0	
PERd		%					140.4			
C Condition (7°CDB- B/6°CWB)		CdH (Degradation heating)							1.0	
		COPd							5.67	
		Pdh	kW						8.3	
PERd		%					226.8			
Tbiv (bivalent temperature)		Tbiv	°C					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		
	PERd		%					281.6		
Space heating 	Warm climate water	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				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DAW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DAW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + 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 to 50°C	Nom.		kWh	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)

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Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + 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 UPMXL GEO 25-125 130 PWM								
	Nominal Heating ESP unit	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 (according to EN14825)	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	Inte-grated 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	
		ηwh (water heating efficiency) %		106	107	106	107	106	107	

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Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1	
Domestic hot water heating	Average climate	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	
		η <sub>wh</sub> (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						
	Warm climate	Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7	
		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	
η <sub>wh</sub> (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						
		η <sub>s</sub> (Seasonal space heating efficiency)	%	140						
		Prated at -10°C	kW	13						
		Q <sub>he</sub> 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- B/1°CWB)	Cdh (Degradation heating)		1.0						
		COPd		3.52						
		Pdh	kW	6.7						
		PERd	%	140.8						
	C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)		1.0						
		COPd		4.54						
		Pdh	kW	6.5						
	D Condition (12°CDB/11°CWB)	PERd	%	181.6						
		Cdh (Degradation heating)		1.0						



## 2 Specifications

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Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1		
Space heating 	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	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
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)		kW						0.0	
	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
B Condition (2°CDB/1°CWB)	CdH (Degradation heating)								109.6		
		COPd							1.0		
		Pdh	kW						3.67		
C Condition (7°CDB/6°CWB)	CdH (Degradation heating)								5.8		
		COPd							146.8		
		Pdh	kW						1.0		
D Condition (12°CDB/11°CWB)	CdH (Degradation heating)								4.69		
		COPd							5.6		
		Pdh	kW						187.6		
Tol (temperature operating limit)	D Condition (12°CDB/11°CWB)	COPd		kW					6.12		
									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			

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Technical specifications				ETVH16S18E9W + EPRA14DW1	ETVH16S23E9W + EPRA14DW1	ETVH16S18E9W + EPRA16DW1	ETVH16S23E9W + EPRA16DW1	ETVH16S18E9W + EPRA18DW1	ETVH16S23E9W + EPRA18DW1	
Space heating	Cold climate water outlet 55°C	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 supplementary capacity	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
		C Condition (7°CDB/6°CWB)	PERd	%						104.8
			Cdh (Degradation heating)							1.0
			COPd							3.65
		D Condition (12°CDB/11°CWB)	Pdh	kW						8.2
			PERd	%						146.0
Cdh (Degradation heating)									1.0	
Tbiv (bivalent temperature)	COPd							5.37		
	Pdh	kW						6.1		
	PERd	%						214.8		
	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		

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### 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)	PERd	%					118.8	
		B Condition (2°CDB/-8°CWB)	Cdh (Degradation heating)				1.0			
			COPd				4.94			
			Pdh	kW			6.9			
		C Condition (7°CDB/-8°CWB)	PERd	%			197.6			
			Cdh (Degradation heating)				1.0			
			COPd				5.95			
		D Condition (12°CDB/11°CWB)	Pdh	kW			6.2			
			PERd	%			238.0			
			Cdh (Degradation heating)				1.0			
		Tol (temperature operating limit)	COPd				7.07			
			Pdh	kW			5.6			
			PERd	%			282.8			
			COPd				2.88			
		Tbiv (bivalent temperature)	Pdh	kW			12.1			
			PERd	%			115.2			
			TOL	°C			-10			
			WTOL	°C			35			
		Rated heat output supplementary capacity	COPd				2.97			
			Pdh	kW			10.7			
PERd	%				118.8					
Tbiv	°C				-7					
Cold climate water outlet 35°C	General	Psup (at Tdesign -10°C)	kW						0.4	
		Annual energy consumption	kWh						7,425	
		ηs (Seasonal space heating efficiency)	%						163	
		Prated at -22°C	kW						13	
	A Condition (7°CDB/-8°CWB)	Qhe Annual energy consumption (GCV)	Gj						27	
		COPd				3.50				
		Pdh	kW			8.0				
	B Condition (2°CDB/-8°CWB)	PERd	%			140.0				
		Cdh (Degradation heating)				1.0				
		COPd				5.07				
	C Condition (7°CDB/16°CWB)	Pdh	kW			4.9				
		PERd	%			202.8				
		Cdh (Degradation heating)				1.0				
	COPd				6.10					
	Pdh	kW			5.3					

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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- B/6°CWB)	PERd	%	244.0						
			D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		1.0					
				COPd		7.03					
		Pdh		kW	5.7						
		Tol (temperature operating limit)	PERd	%	281.2						
			COPd		2.16						
			Pdh	kW	10.1						
		G Condition (-15°CDB/- )	PERd	%	86.4						
			TOL	°C	-22						
			WTOL	°C	35						
		Tbiv (bivalent temperature)	COPd		2.62						
			Pdh	kW	10.7						
			PERd	%	104.8						
		Rated heat output supplementary capacity	Tbiv	°C	-15						
			Psup (at Tdesign -22°C)	kW	2.4						
	General		Annual energy consumption	kWh	2,992						
	Warm climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	220						
			Prated at 2°C	kW	13						
			Qhe Annual energy consumption (GCV)	Gj	11						
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)		1.0						
			COPd		3.51						
			Pdh	kW	10.0						
		C Condition (7°CDB- B/6°CWB)	PERd	%	140.4						
			Cdh (Degradation heating)		1.0						
			COPd		5.67						
		Tbiv (bivalent temperature)	Pdh	kW	8.3						
			PERd	%	226.8						
			Tbiv	°C	4.96						
		D Condition (12°CDB/11°CWB)	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								
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB/11°CWB)	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 + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1
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)		

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Technical specifications				ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + 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 to 50°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 (according to EN14825)	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	

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Technical specifications			ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1			
Domestic hot water heating	Average climate	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			
		η <sub>wh</sub> (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	Average 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	
				η <sub>wh</sub> (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	Average 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			
		η <sub>wh</sub> (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						
η <sub>s</sub> (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)			COPd	2.43						
				Pdh kW	11.1						
				PERd %	97.2						
				B Condition (2°CDB/-1°CWB)	Cdh (Degradation heating)	COPd	3.52				
Pdh kW	6.7										
PERd %	140.8										
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			COPd	4.54						

## 2 Specifications

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Technical specifications					ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1
Space heating 	Average climate water outlet 55°C	C Condition (7°CDB/6°CWB)	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						
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)		kW	0.0					
		Tbiv (bivalent temperature)		°C	-10					
		COPd			2.12					
	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				
			CdH (Degradation heating)			1.0				
COPd				2.74						
A Condition (-7°CDB/-8°CWB)		Pdh		kW	7.5					
		PERd		%	109.6					
		CdH (Degradation heating)			1.0					
		COPd			3.67					
B Condition (2°CDB/1°CWB)		Pdh		kW	5.8					
		PERd		%	146.8					
		CdH (Degradation heating)			1.0					
C Condition (7°CDB/6°CWB)		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						

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Technical specifications					ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1			
Space heating	Cold climate water outlet 55°C	Tol (temperature operating limit)	PERd	%						66.0			
			TOL	°C							-22		
			WTOL	°C								55	
		G Condition (-15°CDB/-)	COPd									2.17	
				Pdh	kW							10.3	
			PERd		%								86.8
				COPd									1.90
					Pdh	kW							
			PERd		%								76.0
				Tbiv	°C								-18
		Rated heat output supplementary capacity	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)		COPd								1.0		
			Pdh	kW							2.62		
			PERd	%								11.4	
C Condition (7°CDB/6°CWB)	CdH (Degradation heating)		COPd								104.8		
			Pdh	kW							1.0		
			PERd	%								3.65	
D Condition (12°CDB/11°CWB)	CdH (Degradation heating)		COPd								8.2		
			Pdh	kW							146.0		
			PERd	%								1.0	
Tbiv (bivalent temperature)	COPd										5.37		
		Pdh	kW							6.1			
		PERd	%								214.8		
											3.18		
PERd		%								11.0			
	Tbiv	°C								127.2			
Water outlet 45°C	H Condition (-2°C / -)	Max.	kW		11.1				11.8				
											4		
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		



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Technical specifications				ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1
Space heating Average climate water outlet 35°C Cold climate water outlet 35°C	General	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 supplementary capacity	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					

## 2 Specifications

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Technical specifications				ETVX16S18E6V + EPRA14DAW1	ETVX16S23E6V + EPRA14DW1	ETVX16S18E6V + EPRA16DAW1	ETVX16S23E6V + EPRA16DW1	ETVX16S18E6V + EPRA18DAW1	ETVX16S23E6V + EPRA18DW1	
Space heating 	Cold climate water outlet 35°C	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 supplementary capacity		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 temperature)	COPd							4.96		
	Pdh kW							9.8		
	PERd %							198.4		
		Tbiv °C						5		
Space heating 	Warm climate water outlet	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
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 to 50°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					
LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.0						
	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	Inte-grated 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

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Technical specifications			ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1				
Domestic hot water heating	Average climate	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				
		η <sub>wh</sub> (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	Average 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		
				η <sub>wh</sub> (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	Average 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				
		η <sub>wh</sub> (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							
η <sub>s</sub> (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)			COPd	2.43							
				Pdh kW	11.1							
				PERd %	97.2							
				B Condition (2°CDB/-1°CWB)	Cdh (Degradation heating)	COPd	3.52					
Pdh kW	6.7											
PERd %	140.8											
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			COPd	4.54							

## 2 Specifications

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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)	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						
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)		kW					0.0		
			Tbiv (bivalent temperature)		°C							
			COPd			2.12						
			Pdh		kW		12.5					
		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							
C Condition (7°CDB/6°CWB)	PERd		%					146.8				
	CdH (Degradation heating)			1.0								
D Condition (12°CDB/11°CWB)	COPd			4.69								
	Pdh		kW		5.6							
	PERd		%		187.6							
Tol (temperature operating limit)	COPd			6.12								
	Pdh		kW		6.2							
	PERd		%		244.8							
	COPd			1.65								
	Pdh	kW		10.6								

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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)	PERd TOL WTOL	% °C °C							66.0 -22 55		
	G Condition (-15°CDB/-)	COPd									2.17	
		Pdh		kW							10.3	
		PERd		%							86.8	
		Tbiv (bivalent temperature)	COPd Pdh PERd Tbiv		kW °C						1.90 11.0 76.0 -18	
	Rated heat output supplementary capacity	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
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)									104.8
COPd											1.0	
Pdh				kW							3.65	
D Condition (12°CDB/11°CWB)		Cdh (Degradation heating)									8.2	
		COPd									146.0	
		Pdh		kW							1.0	
Tbiv (bivalent temperature)		COPd									5.37	
	Pdh		kW							6.1		
	PERd		%							214.8		
Water outlet 45°C	H Condition (-2°C / -)	Max.		kW						4		
					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	

## 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	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 supplementary capacity	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						

## 2 Specifications

### 1 - 1 EPRA014-018DW

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Technical specifications				ETVX16S18E9W + EPRA14DW1	ETVX16S23E9W + EPRA14DW1	ETVX16S18E9W + EPRA16DW1	ETVX16S23E9W + EPRA16DW1	ETVX16S18E9W + EPRA18DW1	ETVX16S23E9W + EPRA18DW1		
Space heating	Cold climate water outlet 35°C	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 supplementary capacity	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 temperature)		COPd							4.96		
		Pdh kW							9.8		
		PERd %							198.4		
Tbiv °C								5			
Space heating	Warm climate water outlet	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
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 to 50°C	Nom.	kWh		2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)



## 2 Specifications

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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 Heating ESP unit	kPa	97.6 (5)			84.1 (5)						
Pump Main Zone	Nominal Heating ESP unit	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 (according to EN14825)	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				

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Technical specifications				ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1			
Domestic hot water heating	Average climate	η <sub>wh</sub> (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)	AEC (Annual electricity consumption)	kWh	1,124	1,839	1,124	1,839	1,124	1,839		
			COP <sub>dhw</sub>		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		
			η <sub>wh</sub> (water heating efficiency)	%	91							
			Qelec (Daily electricity consumption)	kWh	5.370	8.720	5.370	8.720	5.370	8.720		
Warm climate		Reference hot water temperature	Reference hot water temperature	°C	52.5							
			Stand-by power input	W	45.0	63.7	45.0	63.7	45.0	63.7		
			AEC (Annual electricity consumption)	kWh	876	1,413	876	1,413	876	1,413		
			COP <sub>dhw</sub>		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		
	Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,236						
				η <sub>s</sub> (Seasonal space heating efficiency)	%	140						
			Prated at -10°C	Q <sub>he</sub> Annual energy consumption (GCV)	Gj	26						
				SCOP		3.57						
			Seasonal space heating eff. class	Seasonal space heating eff. class		A++						
A Condition (7°CDB/-8°CWB)				C <sub>dh</sub> (Degradation heating)		1.0						
			COP <sub>d</sub>		2.43							
			P <sub>d</sub>	kW	11.1							
			PER <sub>d</sub>	%	97.2							
B Condition (2°CDB/-1°CWB)			C <sub>dh</sub> (Degradation heating)		1.0							
	COP <sub>d</sub>		3.52									
	P <sub>d</sub>	kW	6.7									
	PER <sub>d</sub>	%	140.8									
C Condition (7°CDB/6°CWB)	C <sub>dh</sub> (Degradation heating)		1.0									
	COP <sub>d</sub>		4.54									
	P <sub>d</sub>	kW	6.5									
	PER <sub>d</sub>	%	181.6									

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Technical specifications				ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1	
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)	55°C	COPd						2.12
					Pdh kW					12.5
					PERd %					84.8
					TOL °C					-10
		Rated heat output supplementary capacity	55°C	Psup (at Tdesign -10°C)	kW					0.0
					Tbiv COPd					2.12
					Pdh kW					12.5
					PERd %					84.8
		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		
C Condition (7°CDB/6°CWB)		Cdh (Degradation heating)						1.0		
			COPd					4.69		
D Condition (12°CDB/11°CWB)		Cdh (Degradation heating)						1.0		
			COPd					6.12		
			Pdh kW					6.2		
Tol (temperature operating limit)	55°C	COPd						1.65		
			Pdh kW					10.6		
			PERd %					66.0		
			TOL °C					-22		

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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)	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					
		Rated heat output supplementary capacity	Tbiv	°C	-18					
			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						
	C Condition (7°CDB/6°CWB)	PERd	%	104.8						
		Cdh (Degradation heating)		1.0						
		COPd		3.65						
	D Condition (12°CDB/11°CWB)	Pdh	kW	8.2						
		PERd	%	146.0						
		Cdh (Degradation heating)		1.0						
	Tbiv (bivalent temperature)	COPd		5.37						
		Pdh	kW	6.1						
		PERd	%	214.8						
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					

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Technical specifications				ETVZ16S18E6V + EPRA14DW1	ETVZ16S23E6V + EPRA14DW1	ETVZ16S18E6V + EPRA16DW1	ETVZ16S23E6V + EPRA16DW1	ETVZ16S18E6V + EPRA18DW1	ETVZ16S23E6V + EPRA18DW1
Space heating 	Average climate	A Condition	Pdh	kW					10.7
		(7°CDB/-8°CWB)	PERd	%					118.8
	water outlet	B Condition	CdH (Degradation heating)						1.0
			COPd						4.94
	35°C	(2°CDB- B/1°CWB)	Pdh	kW					6.9
			PERd	%					197.6
	C Condition	CdH (Degradation heating)							1.0
		COPd							5.95
	(7°CDB- B/6°CWB)	Pdh	kW						6.2
		PERd	%						238.0
	D Condition	CdH (Degradation heating)							1.0
		COPd							7.07
			Pdh	kW					5.6
			PERd	%					282.8
	Tol (tem- perature operat- ing limit)	COPd							2.88
		Pdh	kW						12.1
			PERd	%					115.2
			TOL	°C					-10
	Tbiv	COPd							2.97
		Pdh	kW						10.7
	(bivalent tempera- ture)		PERd	%					118.8
			Tbiv	°C					-7
	Rated heat output supple- mentary capacity	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 ener- gy consumption (GCV)		Gj					27
	A Condition (7°CDB/-8°CWB)	COPd							3.50
		Pdh	kW						8.0
		PERd	%						140.0
	B Con- dition (2°CDB- B/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		

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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- B/6°CWB)	Pdh	kW				5.3		
			PERd	%				244.0		
		D Condition (12°CDB/11°CWB)	Cd <sub>h</sub> (Degradation heating)			1.0				
			COP <sub>d</sub>			7.03				
			Pdh	kW		5.7				
			PERd	%		281.2				
		Tol (temperature operating limit)	COP <sub>d</sub>			2.16				
			Pdh	kW		10.1				
			PERd	%		86.4				
			TOL	°C		-22				
	G Condition (-15°CDB/- )	COP <sub>d</sub>			2.62					
		Pdh	kW		10.7					
	Tbiv (bivalent temperature)	PERd			104.8					
		Tbiv	°C		-15					
	Rated heat output supplementary capacity	P <sub>sup</sub> (at T <sub>design</sub> -22°C)		kW				2.4		
	Warm climate water outlet 35°C	General	Annual energy consumption		kWh			2,992		
			η <sub>s</sub> (Seasonal space heating efficiency)		%			220		
			Prated at 2°C		kW		13			
			Q <sub>he</sub> Annual energy consumption (GCV)		Gj		11			
B Condition (2°CDB- B/1°CWB)		Cd <sub>h</sub> (Degradation heating)			1.0					
		COP <sub>d</sub>			3.51					
		Pdh	kW		10.0					
C Condition (7°CDB- B/6°CWB)		PERd		%	140.4					
		Cd <sub>h</sub> (Degradation heating)			1.0					
Tbiv (bivalent temperature)		COP <sub>d</sub>			5.67					
		Pdh	kW		8.3					
D Condition (12°CDB/11°CWB)		PERd		%	226.8					
		COP <sub>d</sub>			4.96					
Space heating 		Warm climate water	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				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1
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 to 50°C	Nom.	kWh		2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)	2.57 (4)	2.85 (4)

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Technical specifications				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + 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 Heating ESP unit	kPa	97.6 (5)			84.1 (5)				
Pump Main Zone	Nominal Heating ESP unit	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							
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	44.0							
			Outdoor	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		

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Technical specifications				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1	
Domestic hot water heating	Average climate	η <sub>wh</sub> (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	
		COP <sub>dhw</sub>		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	
		η <sub>wh</sub> (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		
	COP <sub>dhw</sub>		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		
	η <sub>wh</sub> (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				
η <sub>s</sub> (Seasonal space heating efficiency)				%	140					
Prated at -10°C			Q <sub>he</sub> Annual energy consumption (GCV)	Gj	26					
			SCOP		3.57					
Seasonal space heating eff. class				A++						
A Condition (7°CDB/-8°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		2.43					
			P <sub>d</sub>	kW	11.1					
			PER <sub>d</sub>	%	97.2					
B Condition (2°CDB/-1°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		3.52					
			P <sub>d</sub>	kW	6.7					
			PER <sub>d</sub>	%	140.8					
C Condition (7°CDB/6°CWB)			C <sub>dh</sub> (Degradation heating)		1.0					
			COP <sub>d</sub>		4.54					
			P <sub>d</sub>	kW	6.5					
			PER <sub>d</sub>	%	181.6					



## 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	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)	Tol (temperature operating limit)	COPd							2.12	
					Pdh kW						12.5	
					PERd %						84.8	
				TOL °C							-10	
				WTOL °C								55
		Rated heat output supplementary capacity	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW						0.0	
					Tbiv COPd							2.12
					Pdh kW							12.5
		(bivalent temperature)	(bivalent temperature)	PERd %							84.8	
					Tbiv °C							-10
					Annual energy consumption kWh							9,658
Cold climate water outlet 55°C	General		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)	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)	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)							1.0			
			COPd							3.67		
			Pdh kW							5.8		
C Condition (7°CDB/6°CWB)	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)							146.8			
			COPd							1.0		
			Pdh kW							4.69		
D Condition (12°CDB/11°CWB)	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)							5.6			
			COPd							187.6		
			Pdh kW							6.12		
Tol (temperature operating limit)	Tol (temperature operating limit)	PERd %							6.2			
			TOL °C							244.8		
			COPd							1.65		
		Pdh kW							10.6			
		PERd %							66.0			
		TOL °C							-22			

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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)	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					
		Rated heat output supplementary capacity	Tbiv	°C	-18					
			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						
	C Condition (7°CDB/6°CWB)	PERd	%	104.8						
		Cdh (Degradation heating)		1.0						
		COPd		3.65						
	D Condition (12°CDB/11°CWB)	Pdh	kW	8.2						
		PERd	%	146.0						
		Cdh (Degradation heating)		1.0						
	Tbiv (bivalent temperature)	COPd		5.37						
		Pdh	kW	6.1						
		PERd	%	214.8						
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				ETVZ16S18E9W + EPRA14DW1	ETVZ16S23E9W + EPRA14DW1	ETVZ16S18E9W + EPRA16DW1	ETVZ16S23E9W + EPRA16DW1	ETVZ16S18E9W + EPRA18DW1	ETVZ16S23E9W + EPRA18DW1		
Space heating Average climate water outlet 35°C	A Condition	Pdh	kW				10.7				
	(7°CDB/-8°CWB)	PERd	%				118.8				
	B Condition	Cd <sub>h</sub> (Degradation heating)					1.0				
		COP <sub>d</sub>					4.94				
	(2°CDB/-8°CWB)	Pdh	kW				6.9				
		PERd	%				197.6				
	C Condition	Cd <sub>h</sub> (Degradation heating)					1.0				
		COP <sub>d</sub>					5.95				
	(7°CDB/-8°CWB)	Pdh	kW				6.2				
		PERd	%				238.0				
	D Condition	Cd <sub>h</sub> (Degradation heating)					1.0				
		COP <sub>d</sub>					7.07				
		Pdh	kW				5.6				
	Tol (temperature operating limit)	PERd		%			282.8				
		COP <sub>d</sub>					2.88				
		Pdh	kW				12.1				
	Tbiv (bivalent temperature)	PERd		%			115.2				
		TOL		°C			-10				
	Rated heat output supplementary capacity	WTOL		°C			35				
		COP <sub>d</sub>					2.97				
	Cold climate water outlet 35°C	General	Psup (at Tdesign -10°C)		kW			0.4			
			Annual energy consumption		kWh			7,425			
			η <sub>s</sub> (Seasonal space heating efficiency)		%				163		
			Prated at -22°C		kW				13		
A Condition		Q <sub>he</sub> Annual energy consumption (GCV)		Gj			27				
		COP <sub>d</sub>					3.50				
(7°CDB/-8°CWB)		Pdh		kW			8.0				
		PERd		%			140.0				
		Cd <sub>h</sub> (Degradation heating)					1.0				
B Condition		COP <sub>d</sub>					5.07				
		Pdh		kW			4.9				
(2°CDB/-8°CWB)		PERd		%			202.8				
		Cd <sub>h</sub> (Degradation heating)					1.0				
C Condition		COP <sub>d</sub>					6.10				
		Pdh		kW							

## 2 Specifications

### 1 - 1 EPRA014-018DW

2

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- B/6°CWB)	Pd <sub>h</sub>	PER <sub>d</sub>	kW					5.3						
				%						244.0					
				D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	COP <sub>d</sub>	Pd <sub>h</sub>	kW					1.0		
								%						7.03	
								kW						5.7	
								%						281.2	
				Tol (temperature operating limit)	COP <sub>d</sub>	Pd <sub>h</sub>	TOL	kW					2.16		
								%						10.1	
								°C						86.4	
								°C						-22	
				G Condition (-15°CDB/- )	COP <sub>d</sub>	Pd <sub>h</sub>	WTOL	kW					35		
								%						2.62	
								kW						10.7	
								%						104.8	
				Tbiv (bivalent temperature)	COP <sub>d</sub>	Pd <sub>h</sub>	Tbiv	kW					2.62		
								%						10.7	
								°C						104.8	
								°C						-15	
				Rated heat output supplementary capacity	Psup (at Tdesign -22°C)	kWh	kWh						2.4		
								%							
				Warm climate water outlet 35°C	General	Annual energy consumption	η <sub>s</sub> (Seasonal space heating efficiency)	kWh					2,992		
								%						220	
								Prated at 2°C	kW						13
								Q <sub>he</sub> Annual energy consumption (GCV)	Gj						11
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)	COP <sub>d</sub>	Pd <sub>h</sub>					kW					1.0		
								%						3.51	
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)	COP <sub>d</sub>	Pd <sub>h</sub>					kW					10.0		
								%						140.4	
Tbiv (bivalent temperature)	COP <sub>d</sub>	Pd <sub>h</sub>	Tbiv					kW					1.0		
								%						5.67	
D Condition (12°CDB/11°CWB)	COP <sub>d</sub>	Pd <sub>h</sub>	Tbiv					kW					8.3		
								%						226.8	
Space heating Warm climate water	D Condition (12°CDB/11°CWB)	Pd <sub>h</sub>	PER <sub>d</sub>	kW					5.7						
				%						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			

## 2 Specifications

1 - 1 EPRA014-018DW

Technical Specifications				EPRA14DW1	EPRA16DW1	EPRA18DW1
Packing	Material			Carton / Wood (pallet) / PE (Straps) / Plastic foil		
	Weight			kg	27	
Heat exchanger	Length			mm	1,200	
	Rows	Quantity			3	
	Fin pitch			mm	2.20	
	Passes	Quantity			10	
	Face area			m <sup>2</sup>	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 <sup>3</sup> /min	65.3	66.0
		Cooling	Nom.	m <sup>3</sup> /min	106	
	Discharge direction			Horizontal		
Fan motor	Quantity			1		
	Model			Brushless DC motor		
	Output			W		
	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		
		P <sub>s</sub> *V	Bar*I	213		
Piping connections	Water inlet heat exchanger diameter			inch		
	Water outlet heat exchanger diameter			inch		
Sound power level	Heating	Nom.	dB(A)	56.0 (1)		59.0 (1)
	Cooling	Nom.	dB(A)	56.0 (1)		59.0 (1)
Sound pressure level	Heating	Nom.	dB(A)	43.0 (2)		48.0 (2)
	Cooling	Nom.	dB(A)	43.0 (2)		48.0 (2)
	Night quiet mode	Heating	dB(A)	54.0 (2)		
Refrigerant	Type			R-32		
	GWP			675.0		
	Charge			TCO <sub>2</sub> Eq	2.84	
	Charge			kg	4.20	
	Control			Expansion valve		
	Circuits	Quantity		1		
Refrigerant oil	Type			FW68DE		
	Charged volume			l		
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 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

**2**

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

(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
  - 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
<b>Normal kWh rate power supply</b>							
Electrical meter type	1~	1	-	-	1	-	-
	3~ balanced	-	-	-	-	-	-
	3~ unbalanced	-	1	1	-	1	1
<b>Preferential kWh rate power supply</b>							
Electrical meter type	1~	2	1	1	2	1	1
	3~ balanced	-	-	-	-	-	-
	3~ unbalanced	-	1	1	-	1	1

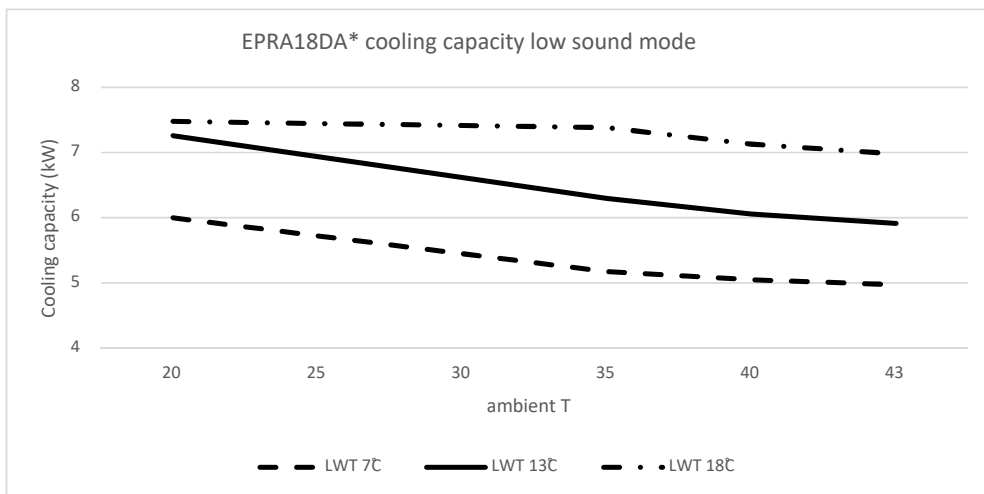
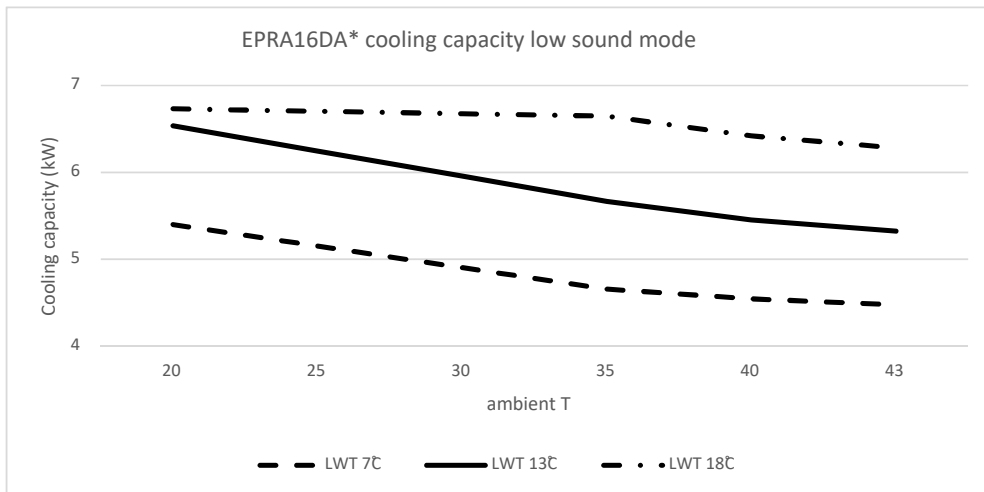
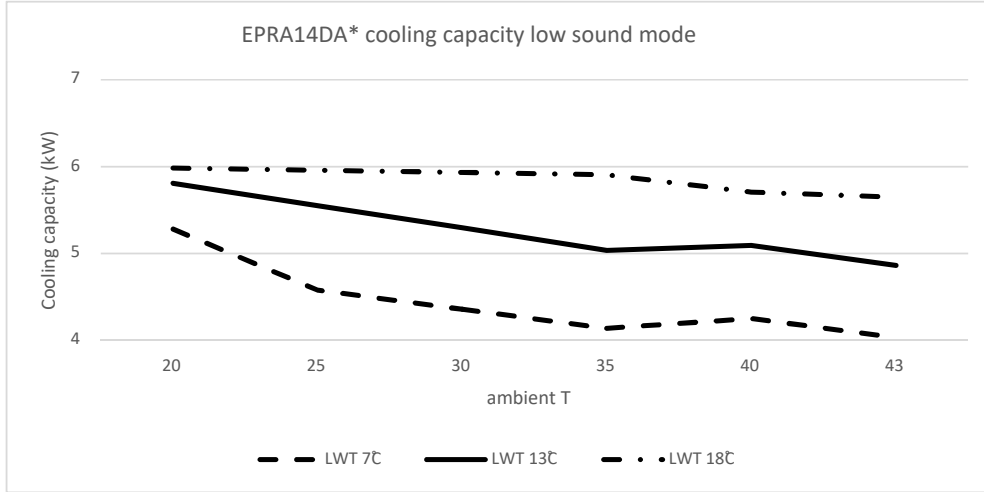
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# 4 Capacity graphs

## 4 - 1 Cooling Capacity Graphs

4

EPRA014-018DV  
EPRA014-018DW



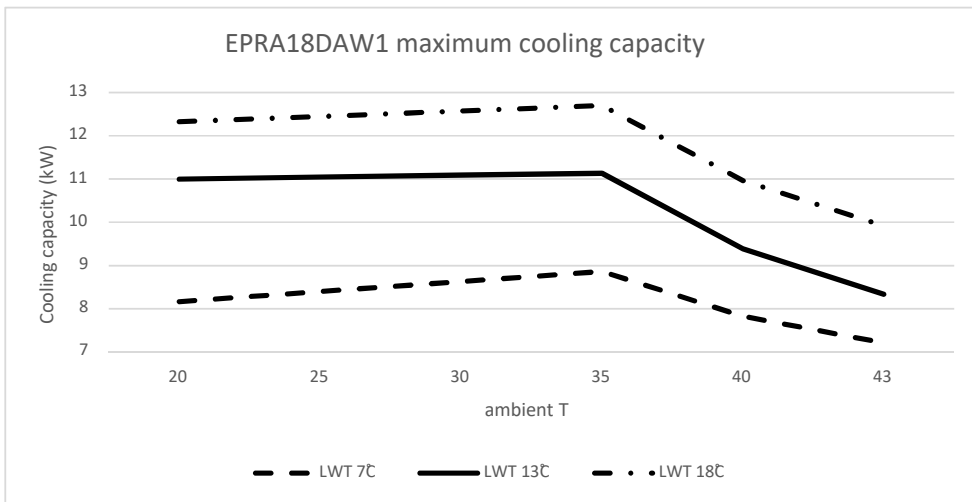
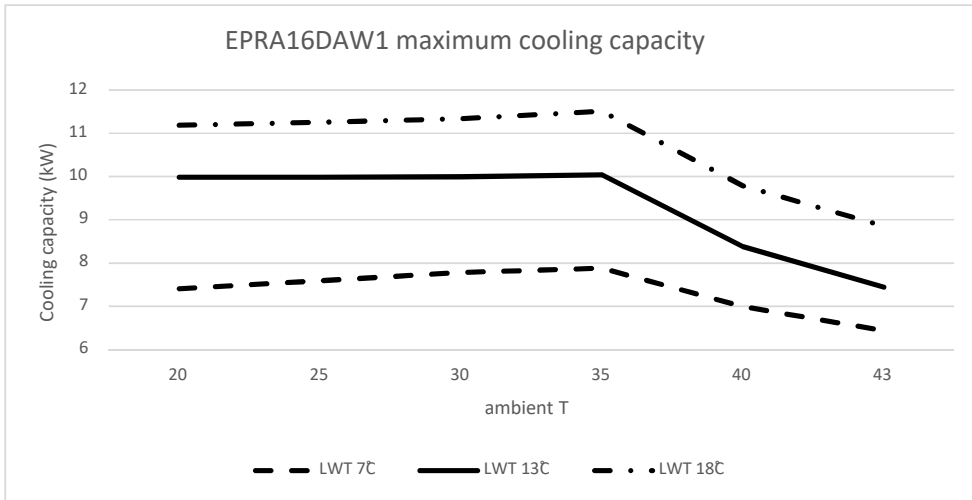
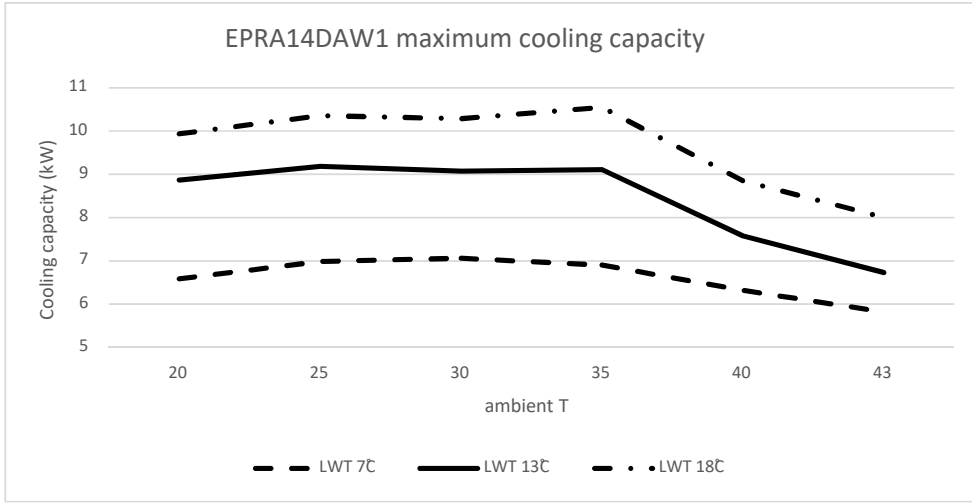
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# 4 Capacity graphs

## 4 - 1 Cooling Capacity Graphs

### EPRA014-018DW



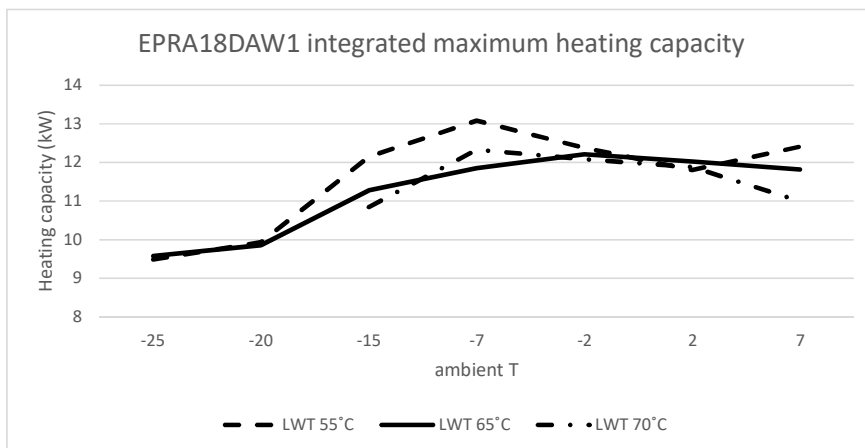
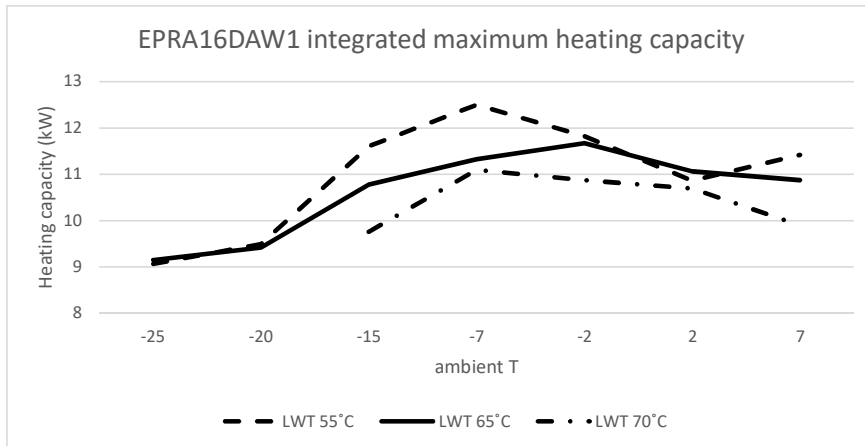
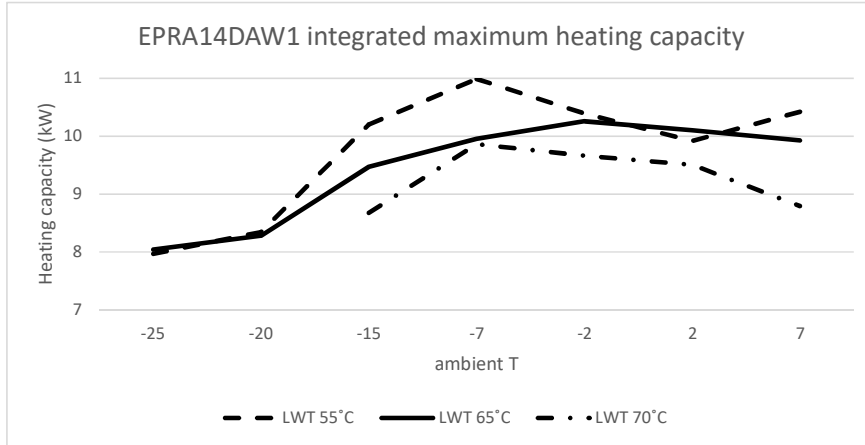
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# 4 Capacity graphs

## 4 - 2 Heating Capacity Graphs

4

EPRA014-018DW

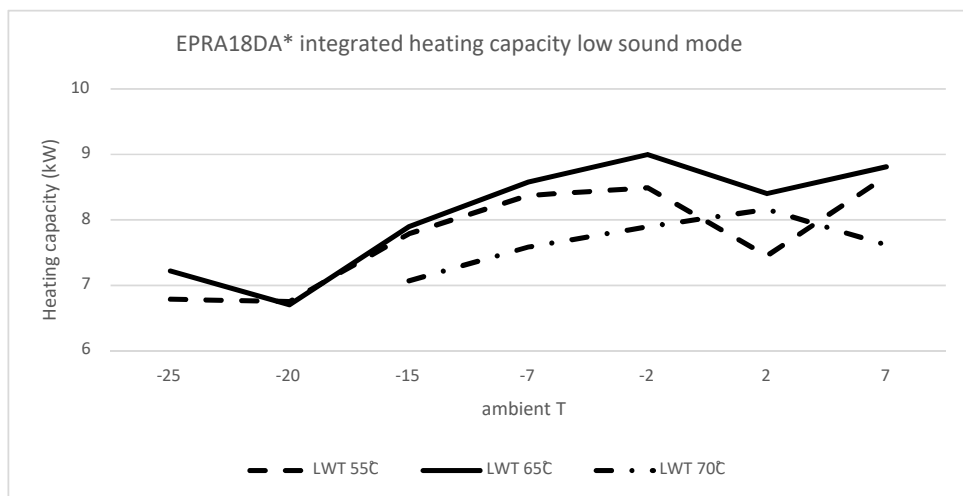
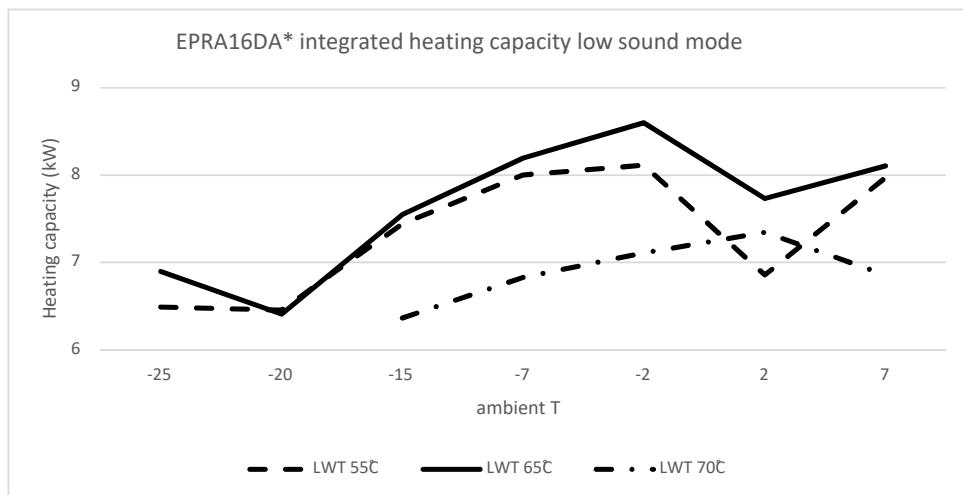
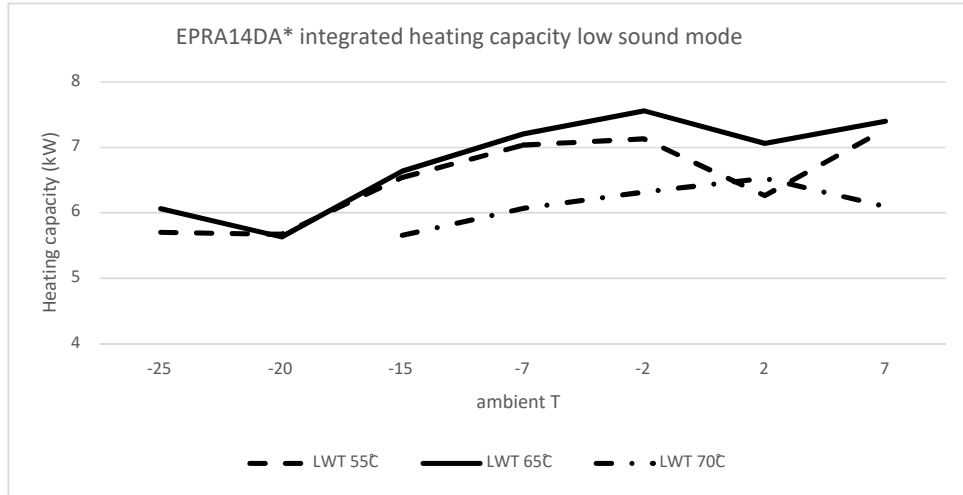


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# 4 Capacity graphs

## 4 - 2 Heating Capacity Graphs

EPRA014-018DV  
EPRA014-018DW



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# 5 Capacity tables

## 5 - 1 Certification Programs

5

### EPRA014-018DV EPRA014-018DW

Rated data for certification programmes - heating mode

Tamb [°C]	EWC [°C]	LWC [°C]	EPRA14DAV3		EPRA16DAV3		EPRA18DAV3		EPRA14DAW1		EPRA16DAW1		EPRA18DAW1		Used for:
			HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	
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 Database

Rated data for certification programmes - cooling mode

Tamb [°C]	EWE [°C]	LWE [°C]	EPRA14DAV3		EPRA16DAV3		EPRA18DAV3		EPRA14DAW1		EPRA16DAW1		EPRA18DAW1		Used for:
			CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	
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*		ETS(X/H)(B/-)16P30EF				ETS(X/H)(B/-)16P50EF				Used for:
	EPRA*DAV3	EPRA*DAW1	EPRA*DAV3	EPRA*DAW1	EPRA*DAW1		EPRA*DAV3		EPRA*DAW1		EPRA*DAV3		
Application	Average climate		Average climate		Average climate				Average climate				Keymark
Domestic hot water tank volume	180L		230L		294L				477L				
Tapping pattern	L		XL		L				XL				
Heat-up time (nh.mm:ss)	01:06:36		01:19:36		01:25:18				01:44:06				
Φ <sub>wh</sub> [°C]	52,5		52,5		47,0				44,4				
P <sub>st</sub> [W]	34,2	42,9	49,2	58,5	57,7		57,4		46,5		45,2		
V <sub>eq40</sub> [l]	240		298		193,0				245				
η <sub>wh</sub> [%]	109,5	105,7	108,3	106,6	124		124		125		125		
COP <sub>DHW</sub> [l]	2,62	2,51	2,61	2,55	2,85		2,86		2,99		3		

**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 condenser temperature [°C]

EWE Entering water evaporator temperature [°C]

LWE Leaving water evaporator temperature [°C]

Tamb Ambient temperature [°C DB/WB]

 Φ<sub>wh</sub> Reference Domestic hot water temperature [°C]

According to EN16147.

 P<sub>st</sub> Standby power input

According to EN16147.

 V<sub>eq40</sub> Equivalent domestic hot water volume [l]

According to EN16147.

 η<sub>wh</sub> Efficiency [%] Domestic hot water heating mode

According to EN16147.

 COP<sub>DHW</sub> Domestic hot water COP

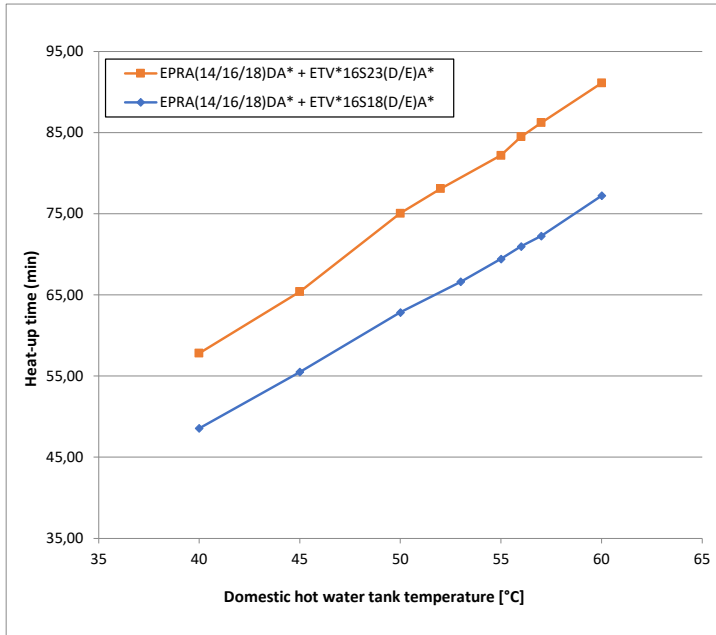
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# 5 Capacity tables

## 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.

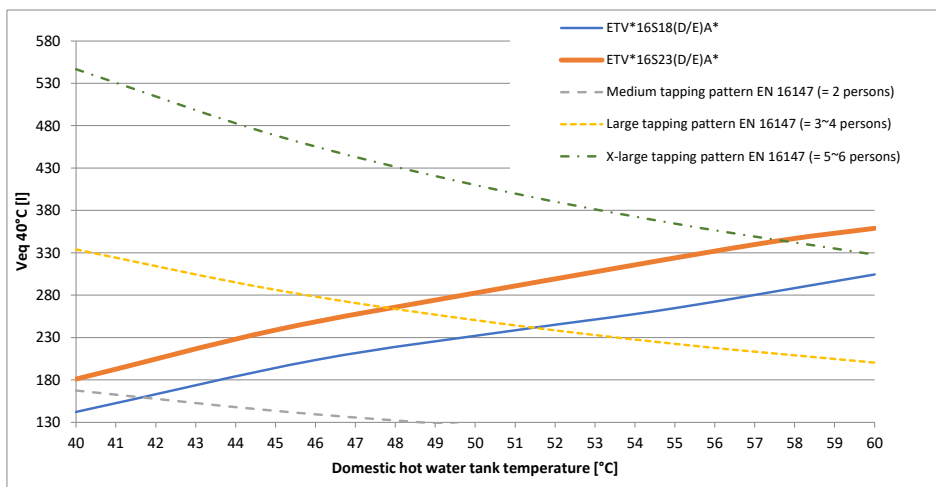
Notes

- 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)

Ve<sub>q</sub> 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 Ve<sub>q</sub> 40°C is required, then additional heat-up cycles are required within 24 hours.  
See the operation manual for more information.

Notes

- According to EN16147.

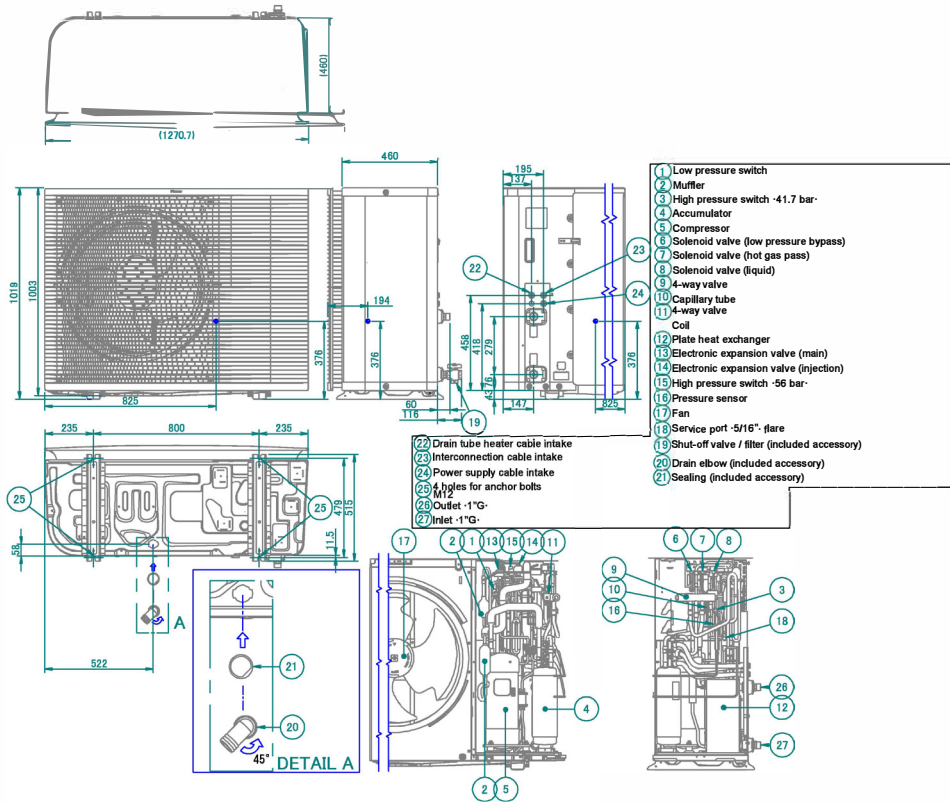
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# 6 Dimensional drawings

## 6 - 1 Dimensional Drawings

6

EPRA014-018DV  
EPRA014-018DW



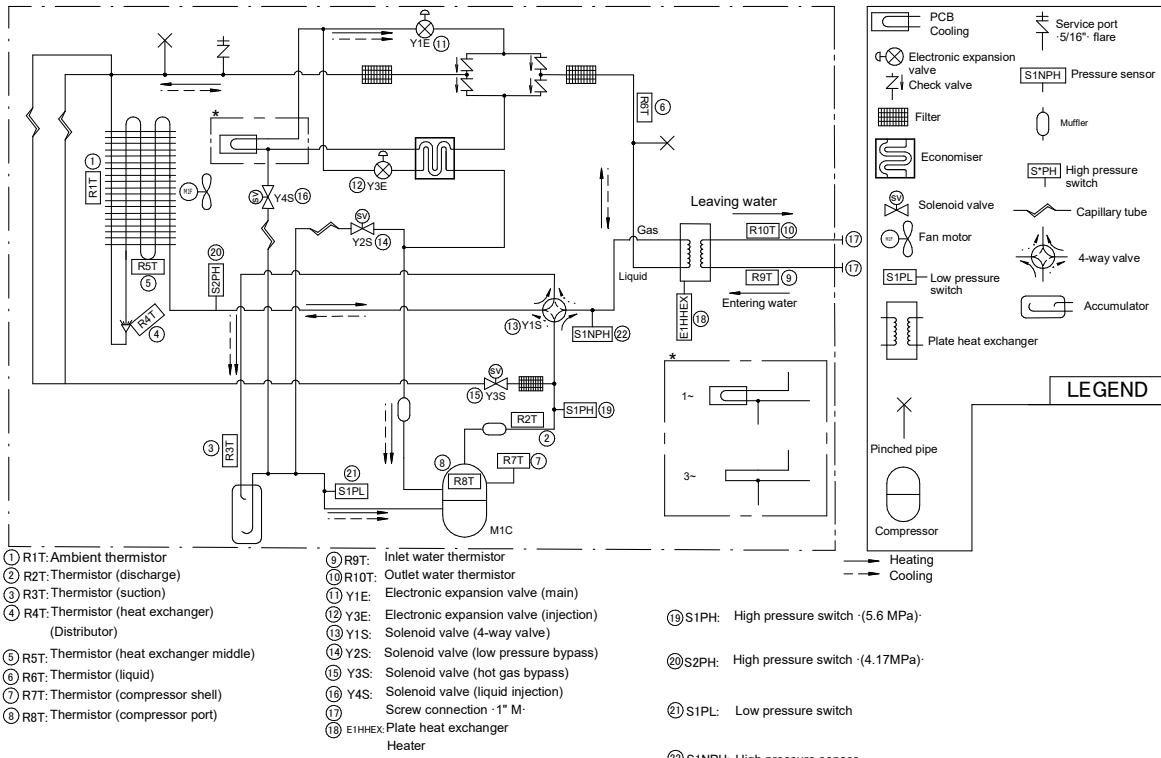
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# 7 Piping diagrams

## 7 - 1 Piping Diagrams

EPRA014-018DV  
EPRA014-018DW

Outdoor unit

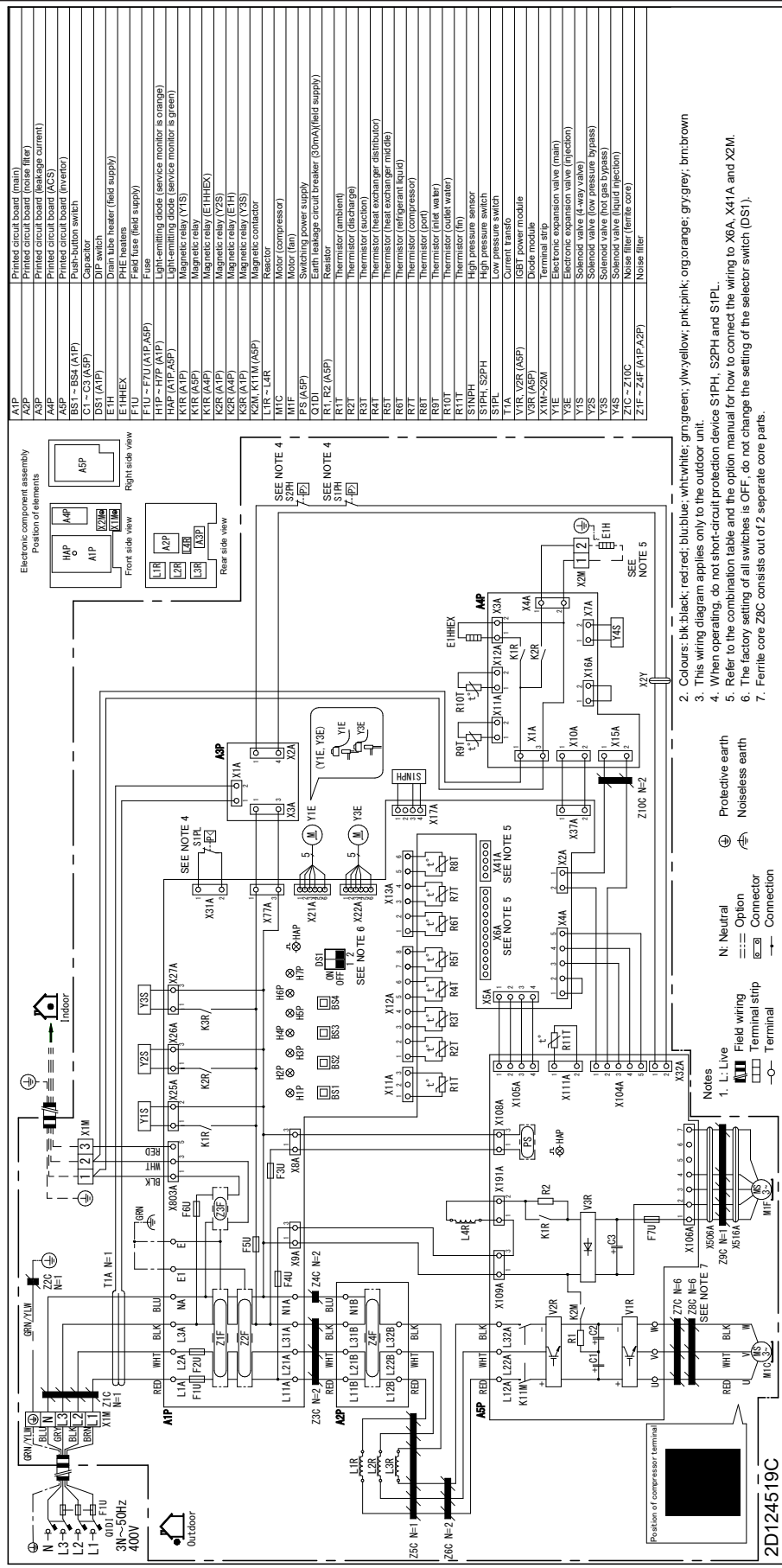


3D124079C

# 8 Wiring diagrams

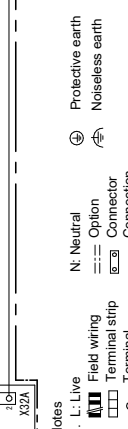
## 8 - 1 Wiring Diagrams - Three Phase

EPRA014-018DW



ASP	Printed circuit board (main)
ASP	Printed circuit board (noise filter)
ASP	Printed circuit board (leakage current)
ASP	Printed circuit board (ACS)
ASP	Printed circuit board (inverter)
ASP	Capacitor
B51 - BS4 (ASP)	DP switch
CS1 - CS4 (ASP)	Phase detector (field supply)
E1HHEX	PHE heater
FIU	Field fuse (field supply)
FIU - FIU (A1P,ASP)	Fuse
H1P - H1P (A1P)	Light-emitting diode (service monitor is orange)
H1P - H1P (ASP)	Light-emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K1R (ASP)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K2R (ASP)	Magnetic relay (Y2S)
K3R (A1P)	Magnetic relay (Y3S)
K3R (ASP)	Magnetic relay (Y3S)
K2M, K11M (ASP)	Magnetic contactor
L1R - L4R	Reactor
M1C	Motor (compressor)
M1F	Motor (fan)
M1P (ASP)	Switching power supply
CO10	Soft-start circuit breaker (30mA)(field supply)
R1, R2 (ASP)	Resistor
R11	Thermistor (ambient)
R21	Thermistor (discharge)
R31	Thermistor (suction)
R41	Thermistor (heat exchanger distributor)
R51	Thermistor (heat exchanger middle)
R61	Thermistor (refrigerant liquid)
R71	Thermistor (compressor)
R81	Thermistor (post)
R91	Thermistor (inlet water)
R101	Thermistor (outlet water)
R111	Thermistor (fin)
S1PH	High pressure sensor
S1PH, S2PH	High pressure switch
S1L	Low pressure switch
X1A	Diode
V1R, V2R (ASP)	IGBT power module
X1M - X2M	Terminal strip
Y1E	Electronic expansion valve (main)
Y2E	Electronic expansion valve (injection)
Y3E	Solenoid valve (4-way valve)
Y3S	Solenoid valve (low pressure bypass)
Y4S	Solenoid valve (high pressure bypass)
Y4S	Solenoid valve (liquid injection)
Z1C - Z10C	Noise filter (ferrite core)
Z1F - Z4F (A1P, A2P)	Noise filter

- Colours: blk:black; red:red; blk:blue; white:white; pink:pink; org:orange; gry:grey; brn:brown
- This wiring diagram applies only to the outdoor unit
- When operating, do not short-circuit protection device S1PH, S2PH and S1PL.
- Refer to the combination table and the option manual for how to connect the wiring to X6A, X41A and X2M.
- The factory setting of all switches is OFF, do not change the setting of the selector switch (DS1).
- Ferrite core Z8C consists out of 2 separate core parts.



Notes

- L: Live

Position of compressor terminal

2D124519C

2D124519C



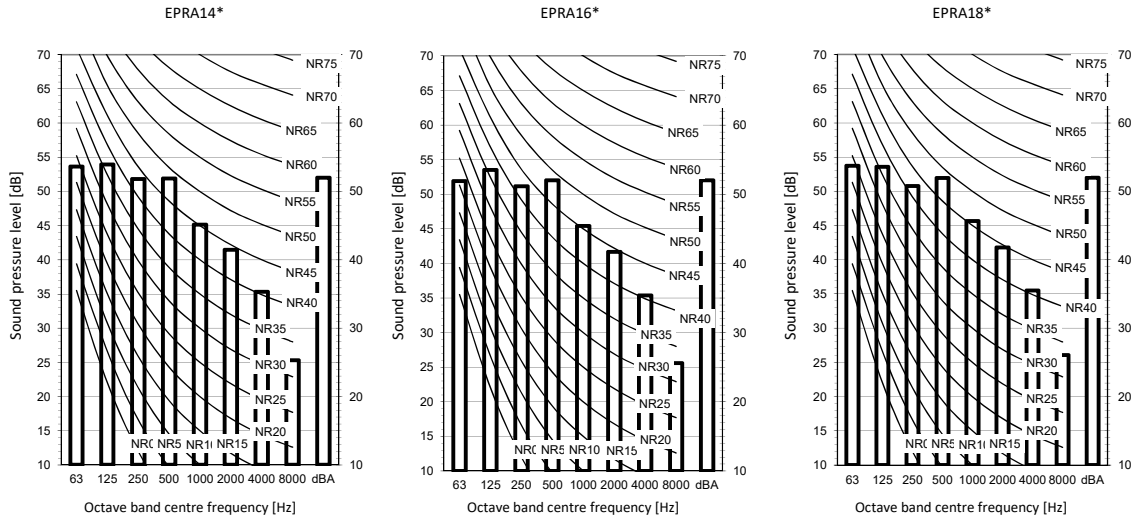
# 9 Sound data

## 9 - 1 Sound Pressure Spectrum - Cooling

EPRA014-018DV

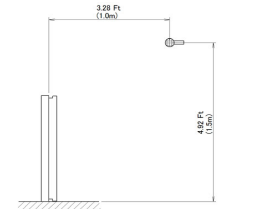
EPRA014-018DW

Cooling Sound



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

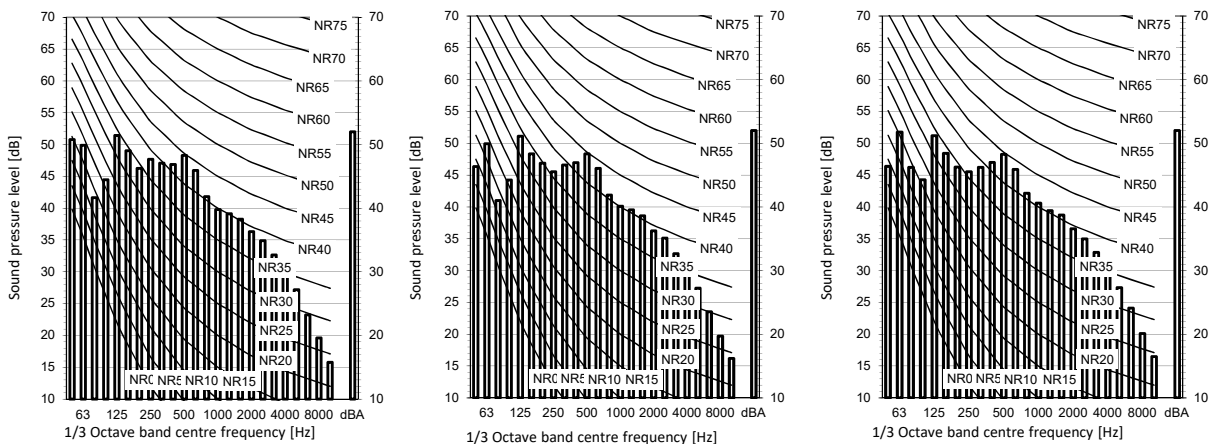
EPRA014-018DV

EPRA014-018DW

EPRA14\*

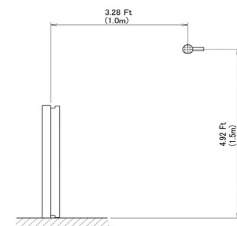
EPRA16\*

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

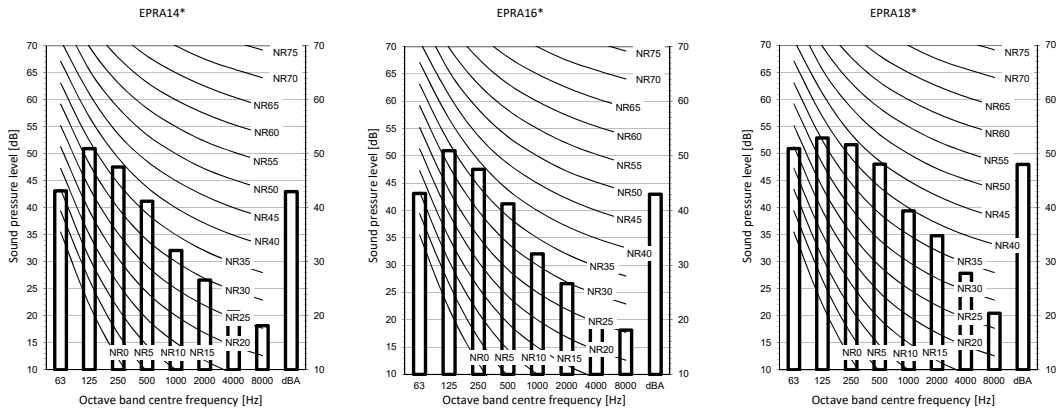
# 9 Sound data

## 9 - 2 Sound Pressure Spectrum - Heating

### EPRA014-018DV

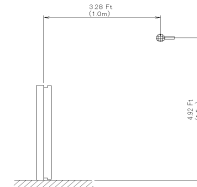
### EPRA014-018DW

#### Heating Sound



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)

3D125215A-1

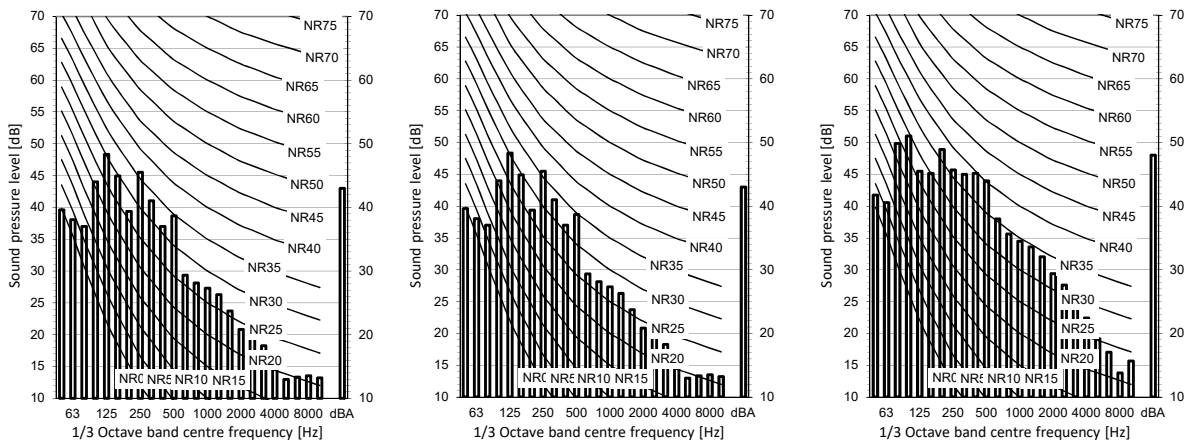
### EPRA014-018DV

### EPRA014-018DW

#### EPRA14\*

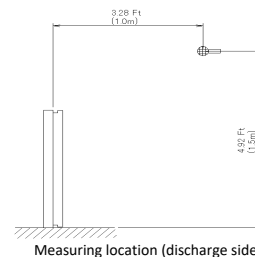
#### EPRA16\*

#### 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.



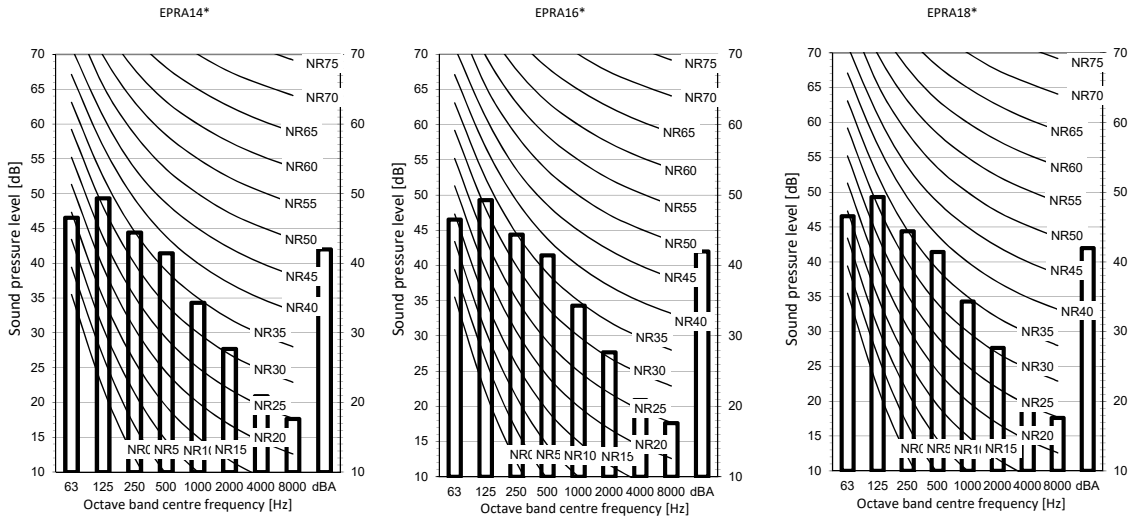
3D125215A-2

# 9 Sound data

## 9 - 3 Sound Pressure Spectrum Quiet Mode

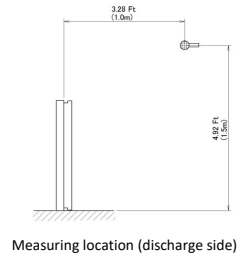
EPRA014-018DV  
EPRA014-018DW

Heating Low Sound Mode 2



**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.



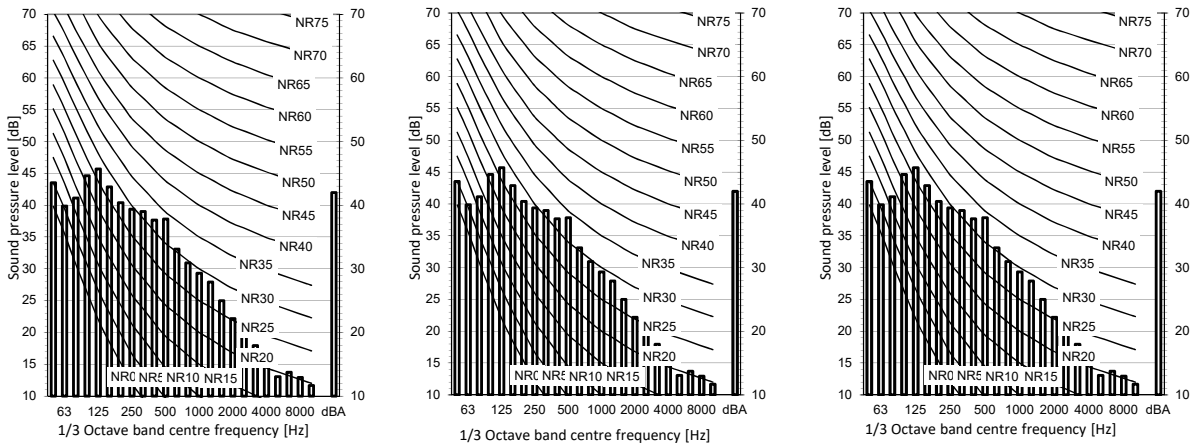
3D125214-1

EPRA014-018DV  
EPRA014-018DW

EPRA14\*

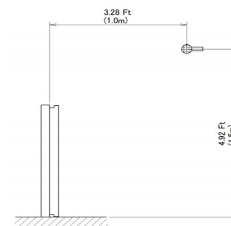
EPRA16\*

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.



3D125214-2

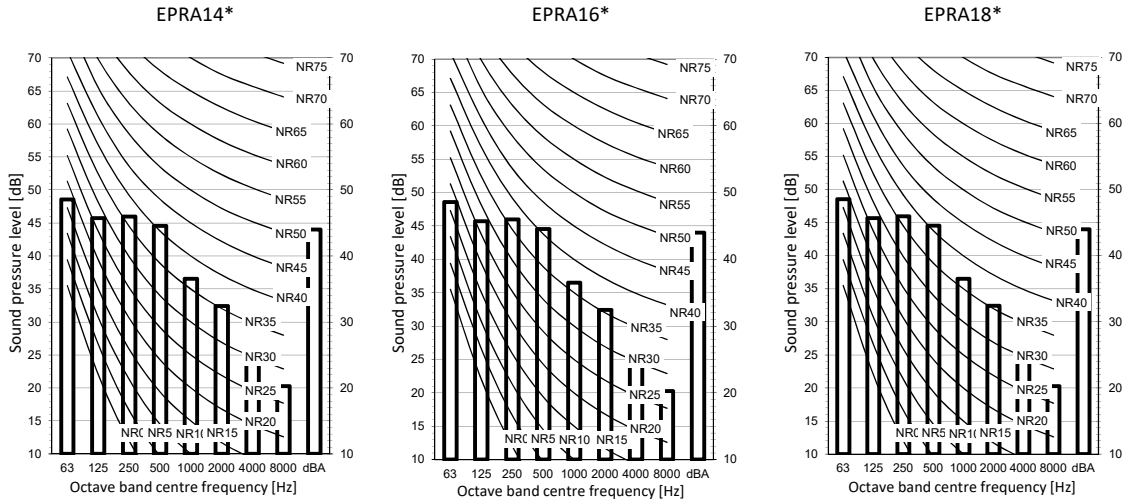
# 9 Sound data

## 9 - 3 Sound Pressure Spectrum Quiet Mode

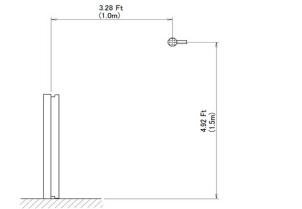
9

EPRA014-018DV

EPRA014-018DW Cooling: Low Sound Mode 2



- 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.

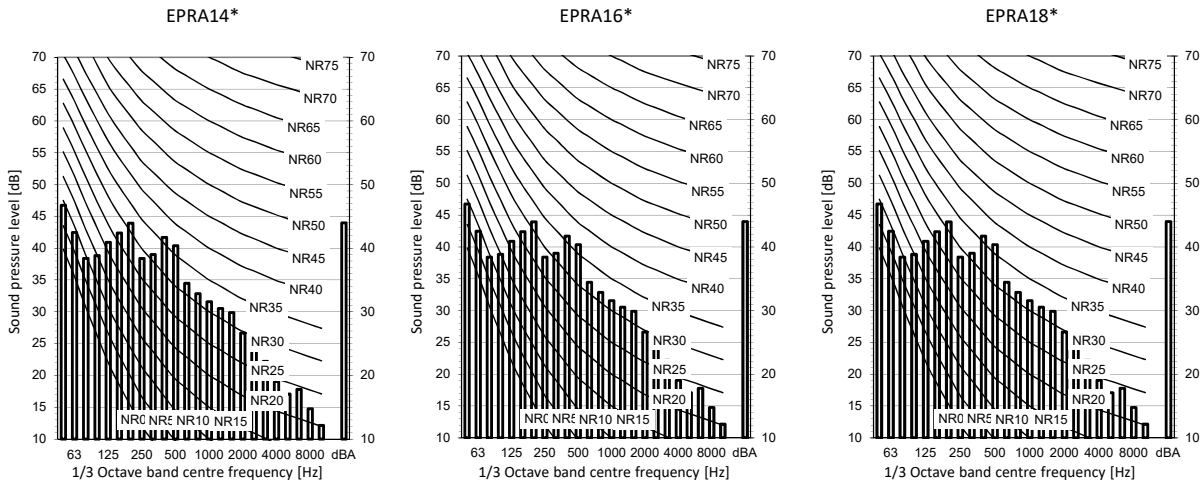


Measuring location (discharge side)

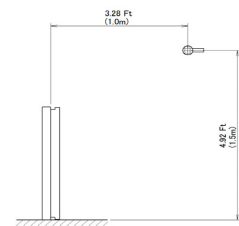
3D126757-1

EPRA014-018DV

EPRA014-018DW



- 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)

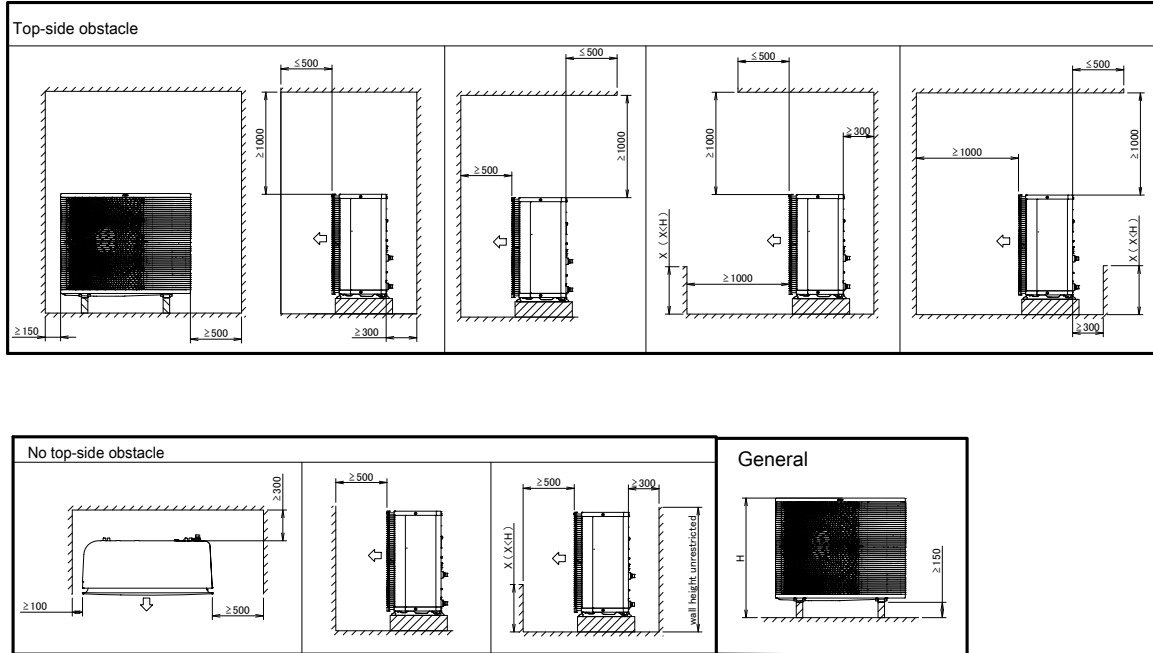
3D126757-2

# 10 Installation

## 10 - 1 Installation Method

EPRA014-018DV  
EPRA014-018DW

Minimum space for air passage



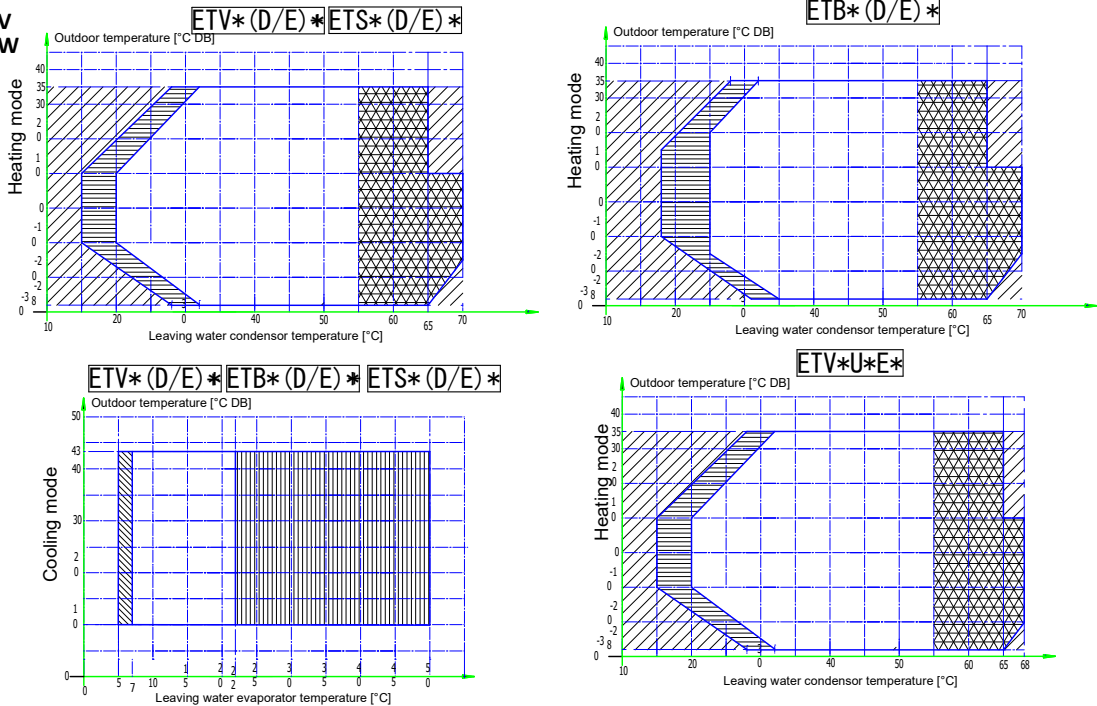
3D124412

# 11 Operation range

## 11 - 1 Operation Range

11

EPRA014-018DV  
EPRA014-018DW



**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.

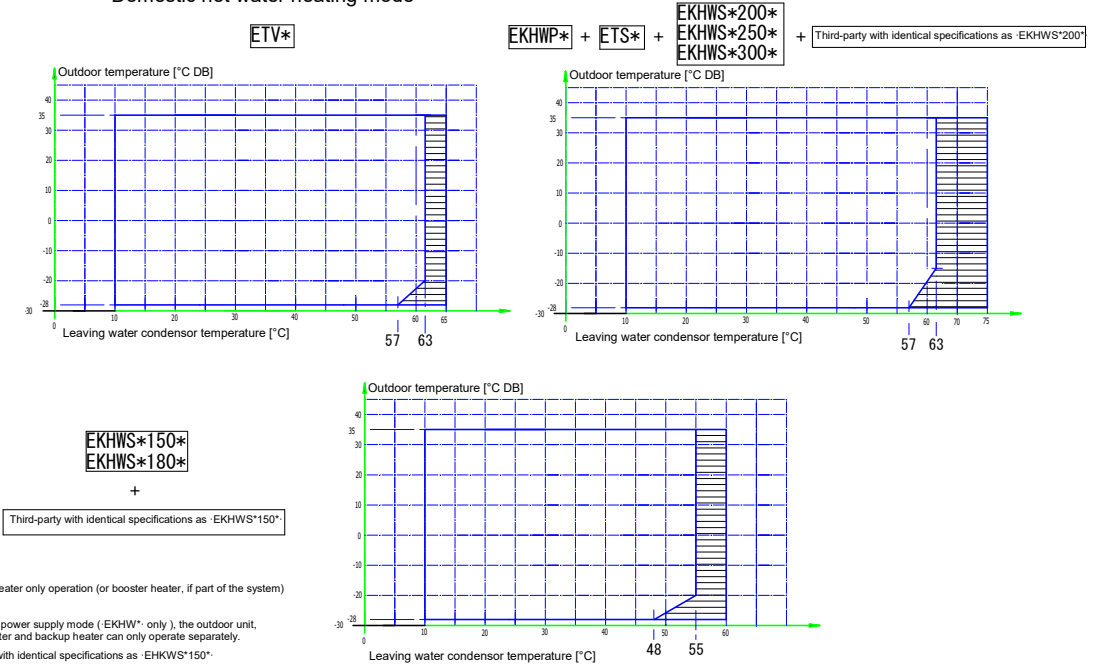
**Remark**

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

3D125788C

EPRA014-018DV  
EPRA014-018DW

**Domestic hot water heating mode**



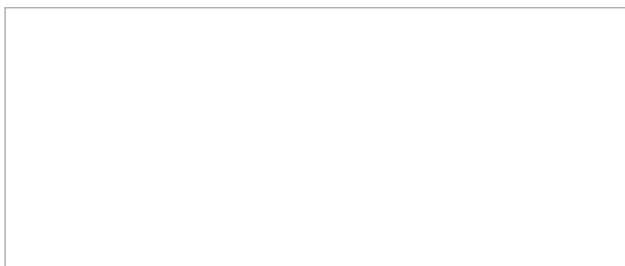
**Legend**

- 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 'EKHWS\*150\*':  
Coil surface > 1.05 m<sup>2</sup>  
Tank thermostat: top part of heat pump coil. Small overlap.
3. Third-party with identical specifications as 'EKHWS\*200\*':  
Coil surface > 1.8 m<sup>2</sup>  
Tank thermostat: top part of heat pump coil. Small overlap.

3D125789B



EEEDEN22

03/2022



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