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Indoor unit E*PX-****D
Outdoor unit PUZ-WM50VHA(-BS)



55 °C

35 °C



A++

A+++

40 dB

61 dB

■ 03	■ 04
■ 05	■ 05
■ 05	■ 05
kW	kW

2019

811/2013

BH79V004H49

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	129	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.4	kW	T _j = - 7 °C	COP _d	2.04	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	2.7	kW	T _j = + 2 °C	COP _d	3.29	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.7	kW	T _j = + 7 °C	COP _d	4.47	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.67	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	4.4	kW	T _j = bivalent temperature	COP _d	2.04	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature	COP _d	1.75	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)				
Annual energy consumption	Q _{HE}	3014	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	183	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.4	kW	T _j = - 7 °C	COP _d	3.17	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	2.7	kW	T _j = + 2 °C	COP _d	4.58	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = + 7 °C	P _{dh}	1.9	kW	T _j = + 7 °C	COP _d	6.55	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	8.57	-
Degradation co-efficient (**)	C _{dh}	0.92	-				
T _j = bivalent temperature	P _{dh}	4.4	kW	T _j = bivalent temperature	COP _d	3.17	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature	COP _d	1.75	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)				
Annual energy consumption	Q _{HE}	2113	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	3.1	kW	Seasonal space heating energy efficiency	η_s	107	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.5	kW	T _j = - 7 °C	COP _d	2.36	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	3.42	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = + 7 °C	P _{dh}	1.5	kW	T _j = + 7 °C	COP _d	4.41	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.92	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	2.5	kW	T _j = bivalent temperature	COP _d	1.93	-
T _j = operation limit temperature	P _{dh}	2.5	kW	T _j = operation limit temperature	COP _d	1.50	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-15	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	3.1	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)				
Annual energy consumption	Q _{HE}	2760	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.2	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.7	kW	T _j = - 7 °C	COP _d	3.25	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	4.24	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = + 7 °C	P _{dh}	1.6	kW	T _j = + 7 °C	COP _d	5.71	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = +12 °C	P _{dh}	1.9	kW	T _j = +12 °C	COP _d	8.26	-
Degradation co-efficient (**)	C _{dh}	0.93	-				
T _j = bivalent temperature	P _{dh}	4.0	kW	T _j = bivalent temperature	COP _d	2.27	-
T _j = operation limit temperature	P _{dh}	4.0	kW	T _j = operation limit temperature	COP _d	2.27	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-20	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	4.2	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)				
Annual energy consumption	Q _{HE}	2713	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	5.0	kW	Tj = + 2 °C	COPd	1.98	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.2	kW	Tj = + 7 °C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	1.8	kW	Tj = +12 °C	COPd	5.81	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.98	-
Tj = operation limit temperature	Pdh	3.5	kW	Tj = operation limit temperature	COPd	1.66	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)
Annual energy consumption	Q _{HE}	1616	kWh
Rated air flow rate, outdoors		2140	m ³ /h

For heat pump combination heater:			
Declared load profile		-	
Daily electricity consumption	Q _{elec}	-	kW/h
Annual electricity consumption	AEC	-	kW/h
Water heating energy efficiency	η_{wh}	-	%

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	EHPX-**D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	226	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	5.0	kW	T _j = + 2 °C	COP _d	3.68	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	3.2	kW	T _j = + 7 °C	COP _d	4.92	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	1.9	kW	T _j = +12 °C	COP _d	7.92	-
Degradation co-efficient (**)	C _{dh}	0.93	-				
T _j = bivalent temperature	P _{dh}	5.0	kW	T _j = bivalent temperature	COP _d	3.68	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature	COP _d	1.66	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-20	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	2140	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	40/61	dB(A)				
Annual energy consumption	Q _{HE}	1111	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	-	%
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	133	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.4	kW	T _j = - 7 °C	COP _d	2.04	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	2.7	kW	T _j = + 2 °C	COP _d	3.29	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.7	kW	T _j = + 7 °C	COP _d	4.47	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.67	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	4.4	kW	T _j = bivalent temperature	COP _d	2.04	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature (***)	COP _d	1.75	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	3014	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	190	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	4.4	kW	Tj = - 7 °C	COPd	3.17	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	2.7	kW	Tj = + 2 °C	COPd	4.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	1.9	kW	Tj = + 7 °C	COPd	6.55	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = +12 °C	Pdh	1.8	kW	Tj = +12 °C	COPd	8.57	-
Degradation co-efficient (**)	Cdh	0.93	-				
Tj = bivalent temperature	Pdh	4.4	kW	Tj = bivalent temperature	COPd	3.17	-
Tj = operation limit temperature	Pdh	3.5	kW	Tj = operation limit temperature (***)	COPd	1.75	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dB(A)				
Annual energy consumption	Q _{HE}	2113	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	3.1	kW	Seasonal space heating energy efficiency	η_s	111	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.5	kW	T _j = - 7 °C	COP _d	2.36	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	3.42	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.5	kW	T _j = + 7 °C	COP _d	4.41	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.92	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	2.5	kW	T _j = bivalent temperature	COP _d	1.93	-
T _j = operation limit temperature	P _{dh}	2.5	kW	T _j = operation limit temperature (***)	COP _d	1.50	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-15	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	3.1	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2760	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2760	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.2	kW	Seasonal space heating energy efficiency	η_s	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.7	kW	T _j = - 7 °C	COP _d	3.25	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	4.24	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.6	kW	T _j = + 7 °C	COP _d	5.71	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = +12 °C	P _{dh}	1.9	kW	T _j = +12 °C	COP _d	8.26	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	4.0	kW	T _j = bivalent temperature	COP _d	2.27	-
T _j = operation limit temperature	P _{dh}	4.0	kW	T _j = operation limit temperature (***)	COP _d	2.27	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-20	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	4.2	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2713	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	162	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	5	kW	T _j = + 2 °C	COP _d	1.98	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	3.2	kW	T _j = + 7 °C	COP _d	3.30	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	5.81	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = bivalent temperature	P _{dh}	5.0	kW	T _j = bivalent temperature	COP _d	1.98	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature (***)	COP _d	1.66	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	1616	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		-		η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	237	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	5	kW	Tj = + 2 °C	COPd	3.68	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.2	kW	Tj = + 7 °C	COPd	4.92	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	1.9	kW	Tj = +12 °C	COPd	7.92	-
Degradation co-efficient (**)	Cdh	0.94	-				
Tj = bivalent temperature	Pdh	5.0	kW	Tj = bivalent temperature	COPd	3.68	-
Tj = operation limit temperature	Pdh	3.5	kW	Tj = operation limit temperature (***)	COPd	1.66	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.6	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dB(A)				
Annual energy consumption	Q _{HE}	1616	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for	medium-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	133	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.4	kW	T _j = - 7 °C	COP _d	2.04	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	2.7	kW	T _j = + 2 °C	COP _d	3.29	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.7	kW	T _j = + 7 °C	COP _d	4.47	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.67	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	4.4	kW	T _j = bivalent temperature	COP _d	2.04	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature (***)	COP _d	1.75	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2140	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	3014	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	190	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	4.4	kW	Tj = - 7 °C	COPd	3.17	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	2.7	kW	Tj = + 2 °C	COPd	4.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	1.9	kW	Tj = + 7 °C	COPd	6.55	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = +12 °C	Pdh	1.8	kW	Tj = +12 °C	COPd	8.57	-
Degradation co-efficient (**)	Cdh	0.93	-				
Tj = bivalent temperature	Pdh	4.4	kW	Tj = bivalent temperature	COPd	3.17	-
Tj = operation limit temperature	Pdh	3.5	kW	Tj = operation limit temperature (***)	COPd	1.75	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.8	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dB(A)
Annual energy consumption	Q _{HE}	2113	kWh
Rated air flow rate, outdoors			
		2140	m ³ /h

For heat pump combination heater:			
Declared load profile		-	
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency			
	η_{wh}	-	%

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	3.1	kW	Seasonal space heating energy efficiency	η_s	111	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.5	kW	T _j = - 7 °C	COP _d	2.36	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	3.42	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.5	kW	T _j = + 7 °C	COP _d	4.41	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	6.92	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	2.5	kW	T _j = bivalent temperature	COP _d	1.93	-
T _j = operation limit temperature	P _{dh}	2.5	kW	T _j = operation limit temperature (***)	COP _d	1.50	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-15	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	3.1	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2760	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2760	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.2	kW	Seasonal space heating energy efficiency	η_s	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	2.7	kW	T _j = - 7 °C	COP _d	3.25	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	2.5	kW	T _j = + 2 °C	COP _d	4.24	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	1.6	kW	T _j = + 7 °C	COP _d	5.71	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = +12 °C	P _{dh}	1.9	kW	T _j = +12 °C	COP _d	8.26	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	4.0	kW	T _j = bivalent temperature	COP _d	2.27	-
T _j = operation limit temperature	P _{dh}	4.0	kW	T _j = operation limit temperature (***)	COP _d	2.27	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-20	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	4.2	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2713	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	2713	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	162	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	5	kW	T _j = + 2 °C	COP _d	1.98	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	3.2	kW	T _j = + 7 °C	COP _d	3.30	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	1.8	kW	T _j = +12 °C	COP _d	5.81	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = bivalent temperature	P _{dh}	5.0	kW	T _j = bivalent temperature	COP _d	1.98	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature (***)	COP _d	1.66	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dBA				
Annual energy consumption	Q _{HE}	1616	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		-		η_{wh}		-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

Model(s):	Outdoor unit:	PUZ-WM50VHA(-BS)
	Indoor unit:	ERPX-MD
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.0	kW	Seasonal space heating energy efficiency	η_s	237	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	5	kW	T _j = + 2 °C	COP _d	3.68	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	3.2	kW	T _j = + 7 °C	COP _d	4.92	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	1.9	kW	T _j = +12 °C	COP _d	7.92	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	5.0	kW	T _j = bivalent temperature	COP _d	3.68	-
T _j = operation limit temperature	P _{dh}	3.5	kW	T _j = operation limit temperature (***)	COP _d	1.66	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-20	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.6	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dB(A)				
Annual energy consumption	Q _{HE}	1616	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2140	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 61	dB(A)				
Annual energy consumption	Q _{HE}	1616	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-		%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.