

Outdoor unit QUHZ-W40VA
 Indoor unit EHPT20Q-VM2EA

For medium-temperature application.

Medium-temperature application																															
	Seasonal space heating energy efficiency class	Water heating energy efficiency class		Rated heat output under average climate conditions		For space heating, annual energy consumption under average climate conditions		For water heating, annual energy consumption under average climate conditions		Seasonal space heating efficiency under average climate conditions		Water heating energy efficiency under average climate conditions		Sound power level L _{WA} indoor		Work only during off-peak hours		Rated heat output under colder climate conditions		Rated heat output under warmer climate conditions		For space heating, annual energy consumption under colder climate conditions		For water heating, annual energy consumption under warmer climate conditions		Seasonal space heating efficiency under warmer climate conditions		Water heating energy efficiency under warmer climate conditions		Sound power level L _{WA} outdoor	
✓	A+	A+	A+	kW	kWh	kWh	kWh	kWh	kWh	%	%	%	%	dB	dB	-	hours	3.5	5.4	4473	1920	1068	754	71	146	102	146	53			
✓	A+	A+	A+	2.8	1523	855	146	129	40	-	2.8	2.8	2.8	3041	1059	1068	754	87	136	102	146	53	Sound power level L _{WA} indoor	Sound power level L _{WA} outdoor	Work only during off-peak hours	Work only during off-peak hours	Sound power level L _{WA} indoor	Sound power level L _{WA} outdoor			

For low-temperature application.

Low-temperature application																																					
	Seasonal space heating energy efficiency class	Water heating energy efficiency class		Rated heat output under colder climate conditions		Rated heat output under warmer climate conditions		For space heating, annual energy consumption under warmer climate conditions		For water heating, annual energy consumption under warmer climate conditions		Seasonal space heating efficiency under warmer climate conditions		Water heating energy efficiency under warmer climate conditions		Water heating energy efficiency under warmer climate conditions		Sound power level L _{WA} indoor		Sound power level L _{WA} outdoor		Work only during off-peak hours		Rated heat output under colder climate conditions		Rated heat output under warmer climate conditions		For space heating, annual energy consumption under warmer climate conditions		For water heating, annual energy consumption under warmer climate conditions		Seasonal space heating efficiency under warmer climate conditions		Water heating energy efficiency under warmer climate conditions		Sound power level L _{WA} indoor	
✓	A+	A+	A+	kW	kWh	kWh	kWh	kWh	kWh	%	%	%	%	dB	dB	-	hours	2.8	2.8	3041	1059	1068	754	87	136	102	146	53									
✓	A+	A+	A+	2.8	1523	855	146	129	40	-	2.8	2.8	2.8	3041	1059	1068	754	87	136	102	146	53	Sound power level L _{WA} indoor	Sound power level L _{WA} outdoor	Work only during off-peak hours	Work only during off-peak hours	Sound power level L _{WA} indoor	Sound power level L _{WA} outdoor									

Model(s):	Outdoor unit:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	medium-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.5	kW	Seasonal space heating energy efficiency	ηs	117	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj							
Tj= - 7 °C							
Tj= - 7 °C	Pdh	4.2	kW	Tj= - 7 °C	COPd	1.67	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 2 °C	COPd	3.01	-
Tj= + 2 °C	Pdh	2.5	kW	Tj= + 2 °C	COPd	4.53	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 7 °C	COPd	7.01	-
Tj= + 7 °C	Pdh	2.8	kW	Tj= +12 °C	COPd	1.67	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= bivalent temperature	COPd	1.00	-
Tj= +12 °C	Pdh	3.4	kW	Tj= operation limit temperature	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= - 15 °C (if TOL < - 20 °C)	COPd	-15	°C
Tj= bivalent temperature	Pdh	4.2	kW	Operation limit temperature	TOL	60	°C
Tj= operation limit temperature	Pdh	3.1	kW	Heating water operating limit temperature	WTOL		
Tj= - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.7	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	3056	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	129
Daily electricity consumption	Qelec	3.885	kWh			%
Annual electricity consumption	AEC	855	kWh			

Contact details

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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:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	low-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	2.8	kW	Seasonal space heating energy efficiency	ηs	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj							
Tj= - 7 °C							
Tj= - 7 °C	Pdh	2.9	kW	Tj= - 7 °C	COPd	2.16	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 2 °C	COPd	4.23	-
Tj= + 2 °C	Pdh	2.5	kW	Tj= + 2 °C	COPd	5.91	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 7 °C	COPd	7.89	-
Tj= + 7 °C	Pdh	2.9	kW	Tj= +12 °C	COPd	2.16	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= bivalent temperature	COPd	1.00	-
Tj= +12 °C	Pdh	2.9	kW	Tj= operation limit temperature	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= - 15 °C (if TOL < - 20 °C)	COPd	-15	°C
Tj= bivalent temperature	Pdh	2.9	kW	Operation limit temperature	TOL	60	°C
Tj= operation limit temperature	Pdh	2.0	kW	Heating water operating limit temperature	WTOL		
Tj= - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.2	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	1523	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	129
Daily electricity consumption	Qelec	3.885	kWh			%
Annual electricity consumption	AEC	855	kWh			

Contact details

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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:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	medium-temperature application.	
Parameters for	colder climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	3.5	kW	Seasonal space heating energy efficiency	ηs	71	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj							
Tj= - 7 °C	Pdh	2.2	kW	Tj= - 7 °C	COPd	1.76	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 2 °C	COPd	2.00	-
Tj= + 2 °C	Pdh	1.7	kW	Tj= + 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= +12 °C	COPd	4.15	-
Tj= + 7 °C	Pdh	2.2	kW	Tj= bivalent temperature	COPd	1.76	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= operation limit temperature	COPd	1.40	-
Tj= +12 °C	Pdh	2.2	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90	-	Operation limit temperature	TOL	-15	°C
Tj= bivalent temperature	Pdh	2.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj= operation limit temperature	Pdh	2.4	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.9	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	4473	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	102
Daily electricity consumption	Qelec	4.856	kWh			%
Annual electricity consumption	AEC	1068	kWh			

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Model(s):	Outdoor unit:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	low-temperature application.	
Parameters for	colder climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	2.8	kW	Seasonal space heating energy efficiency	ηs	87	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj							
Tj= - 7 °C							
Tj= - 7 °C	Pdh	1.5	kW	Tj= - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 2 °C	COPd	2.47	-
Tj= + 2 °C	Pdh	1.0	kW	Tj= + 2 °C	COPd	3.52	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= + 7 °C	COPd	4.47	-
Tj= + 7 °C	Pdh	1.1	kW	Tj= +12 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= bivalent temperature	COPd	1.40	-
Tj= +12 °C	Pdh	1.1	kW	Tj= operation limit temperature	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90	-	Tj= - 15 °C (if TOL < - 20 °C)	COPd	-15	°C
Tj= bivalent temperature	Pdh	1.5	kW	Operation limit temperature	TOL	60	°C
Tj= operation limit temperature	Pdh	2.5	kW	Heating water operating limit temperature	WTOL		
Tj= - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.2	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	3041	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	102
Daily electricity consumption	Qelec	4.856	kWh			%
Annual electricity consumption	AEC	1068	kWh			

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Model(s):	Outdoor unit:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	medium-temperature application.	
Parameters for	warmer climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.4	kW	Seasonal space heating energy efficiency	ηs	146	%
Declared capacity for heating 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	COPd	2.02	-
Tj= + 2 °C	Pdh	4.5	kW	Tj= + 7 °C	COPd	3.01	-
Degradation co-efficient (**)	Cdh	0.90		Tj= +12 °C	COPd	5.13	-
Tj= + 7 °C	Pdh	3.3	kW	Tj= bivalent temperature	COPd	1.76	-
Degradation co-efficient (**)	Cdh	0.90		Tj= operation limit temperature	COPd	1.40	-
Tj= +12 °C	Pdh	1.7	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90		Operation limit temperature	TOL	-15	°C
Tj= bivalent temperature	Pdh	2.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj= operation limit temperature	Pdh	2.5	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.0	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	1920	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	146
Daily electricity consumption	Qelec	3.428	kWh			%
Annual electricity consumption	AEC	754	kWh			

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Model(s):	Outdoor unit:	QUHZ-W40VA
	Indoor unit:	EHPT20Q-VM2EA
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:	yes	
Parameters for	low-temperature application.	
Parameters for	warmer climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	2.8	kW	Seasonal space heating energy efficiency	ηs	136	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj							
Tj= - 7 °C							
Tj= - 7 °C	Pdh	-	kW	Tj= - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-		Tj= + 2 °C	COPd	2.82	-
Tj= + 2 °C	Pdh	2.8	kW	Tj= + 7 °C	COPd	3.35	-
Degradation co-efficient (**)	Cdh	0.90		Tj= +12 °C	COPd	3.90	-
Tj= + 7 °C	Pdh	1.8	kW	Tj= bivalent temperature	COPd	2.30	-
Degradation co-efficient (**)	Cdh	0.90		Tj= operation limit temperature	COPd	1.40	-
Tj= +12 °C	Pdh	1.0	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Degradation co-efficient (**)	Cdh	0.90		Operation limit temperature	TOL	-15	°C
Tj= bivalent temperature	Pdh	1.5	kW	Heating water operating limit temperature	WTOL	60	°C
Tj= operation limit temperature	Pdh	2.5	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.005	kW	Supplementary heater			
Thermostat-off mode	P _{TO}	0.005	kW	Rated heat output (*)	Psup	0.0	kW
Standby mode	P _{SB}	0.005	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	1746	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40/53	dBA				
Annual energy consumption	Q _{HE}	1059	kWh				

For heat pump combination heater:						
Declared load profile		L		Water heating energy efficiency	ηwh	146
Daily electricity consumption	Qelec	3.428	kWh			%
Annual electricity consumption	AEC	754	kWh			

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.