Haier

AW042MUGHA

	55 °C	35 °C
	A⁺⁺⁺	A⁺⁺⁺

A⁺⁺⁺
A⁺⁺
A⁺
A
B
C
D

dB

63 dB

55 °C	35 °C
■ 4.00	■ 4.50
■ 4.00	■ 4.50
■ 4.00	■ 4.50
kW	kW

2019   811/2013

Haier

Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Low-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Average climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4.5	kW	Seasonal space heating energy efficiency	η_s	201	%
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}	3.96	kW	$T_j = -7$ °C	COP_d or PER_d	3.48	– or%
$T_j = +2$ °C	P_{dh}	2.43	kW	$T_j = +2$ °C	COP_d or PER_d	4.89	– or%
$T_j = +7$ °C	P_{dh}	1.58	kW	$T_j = +7$ °C	COP_d or PER_d	6.73	– or%
$T_j = +12$ °C	P_{dh}	1.91	kW	$T_j = +12$ °C	COP_d or PER_d	8.87	– or%
T_j = bivalent temperature	P_{dh}	3.96	kW	T_j = bivalent temperature	COP_d or PER_d	3.48	– or%
T_j = operation limit temperature	P_{dh}	4.50	kW	T_j = operation limit temperature	COP_d or PER_d	2.30	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	P_{dh}	N/A	kW	For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	COP_d or PER_d	N/A	– or%
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	WTOL	80	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	0.00	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	—	3028	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/55	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.688	m³/h
Annual energy consumption	Q_{HE}	1826	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	Qingdao Haier Air Conditioner Electric Co., Ltd. Haier industrial Park,No.236,Qianwangang Road ,Qingdao Eco-tech Development Zone ,Qingdao , 266555,China						
(*) 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 P_{sup} is equal to the supplementary capacity for heating sup(T_j). (**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.							

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Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Medium-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Average climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4	kW	Seasonal space heating energy efficiency	η_s	151	%
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}	3.25	kW	$T_j = -7$ °C	COP_d or PER_d	2.35	– or%
$T_j = +2$ °C	P_{dh}	2.16	kW	$T_j = +2$ °C	COP_d or PER_d	3.73	– or%
$T_j = +7$ °C	P_{dh}	1.40	kW	$T_j = +7$ °C	COP_d or PER_d	5.50	– or%
$T_j = +12$ °C	P_{dh}	2.05	kW	$T_j = +12$ °C	COP_d or PER_d	6.70	– or%
T_j = bivalent temperature	P_{dh}	3.25	kW	T_j = bivalent temperature	COP_d or PER_d	2.35	– or%
T_j = operation limit temperature	P_{dh}	3.60	kW	T_j = operation limit temperature	COP_d or PER_d	1.85	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	P_{dh}	N/A	kW	For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	COP_d or PER_d	N/A	– or%
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	WTOL	80	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	0.40	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	—	3429	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/63	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.430	m³/h
Annual energy consumption	Q_{HE}	1985	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
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Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Low-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Cold climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4.5	kW	Seasonal space heating energy efficiency	η_s	154	%
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}	2.87	kW	$T_j = -7$ °C	COP_d or PER_d	3.50	– or%
$T_j = +2$ °C	P_{dh}	1.75	kW	$T_j = +2$ °C	COP_d or PER_d	4.20	– or%
$T_j = +7$ °C	P_{dh}	1.88	kW	$T_j = +7$ °C	COP_d or PER_d	7.00	– or%
$T_j = +12$ °C	P_{dh}	2.17	kW	$T_j = +12$ °C	COP_d or PER_d	9.00	– or%
T_j = bivalent temperature	P_{dh}	3.72	kW	T_j = bivalent temperature	COP_d or PER_d	2.83	– or%
T_j = operation limit temperature	P_{dh}	2.93	kW	T_j = operation limit temperature	COP_d or PER_d	2.26	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	P_{dh}	3.72	kW	For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	COP_d or PER_d	2.83	– or%
Bivalent temperature	T_{biv}	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	1.57	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	—	3028	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/55	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.688	m³/h
Annual energy consumption	Q_{HE}	1848	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
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Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Medium-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Cold climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4	kW	Seasonal space heating energy efficiency	η_s	138	%
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}	2.50	kW	$T_j = -7$ °C	COP_d or PER_d	2.70	– or%
$T_j = +2$ °C	P_{dh}	1.62	kW	$T_j = +2$ °C	COP_d or PER_d	3.63	– or%
$T_j = +7$ °C	P_{dh}	1.85	kW	$T_j = +7$ °C	COP_d or PER_d	5.48	– or%
$T_j = +12$ °C	P_{dh}	2.21	kW	$T_j = +12$ °C	COP_d or PER_d	7.14	– or%
T_j = bivalent temperature	P_{dh}	3.32	kW	T_j = bivalent temperature	COP_d or PER_d	2.12	– or%
T_j = operation limit temperature	P_{dh}	3.22	kW	T_j = operation limit temperature	COP_d or PER_d	1.69	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	P_{dh}	3.3	kW	For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	COP_d or PER_d	2.1	– or%
Bivalent temperature	T_{biv}	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	0.78	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	—	3429	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/63	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.430	m³/h
Annual energy consumption	Q_{HE}	2643	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
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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 P_{sup} is equal to the supplementary capacity for heating sup(T_j). (**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.							

Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Low-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Warm climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4.5	kW	Seasonal space heating energy efficiency	η_s	248	%
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 or PER_d	/	– or%
$T_j = +2$ °C	P_{dh}	4.50	kW	$T_j = +2$ °C	COP_d or PER_d	4.64	– or%
$T_j = +7$ °C	P_{dh}	2.94	kW	$T_j = +7$ °C	COP_d or PER_d	6.02	– or%
$T_j = +12$ °C	P_{dh}	2.15	kW	$T_j = +12$ °C	COP_d or PER_d	8.25	– or%
T_j = bivalent temperature	P_{dh}	4.50	kW	T_j = bivalent temperature	COP_d or PER_d	4.64	– or%
T_j = operation limit temperature	P_{dh}	4.50	kW	T_j = operation limit temperature	COP_d or PER_d	4.64	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < − 20 °C)	P_{dh}	N/A	kW	For air-to-water heat pumps: T_j = − 15 °C (if TOL < − 20 °C)	COP_d or PER_d	N/A	– or%
Bivalent temperature	T_{biv}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	TOL	80	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	-	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	—	3028	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/55	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.688	m³/h
Annual energy consumption	Q_{HE}	810	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
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Model(s): [information identifying the model(s) to which the information relates]				AW042MUGHA			
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 shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.				Medium-temperature application			
Parameters shall be declared for average, colder and warmer climate conditions.				Warm climate conditions			
Item	symbol	Value	Unit	Item	symbol	Value	Unit
Rated heat output (*)	P_{rated}	4	kW	Seasonal space heating energy efficiency	η_s	175	%
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 or PER_d	/	– or%
$T_j = +2$ °C	P_{dh}	4.03	kW	$T_j = +2$ °C	COP_d or PER_d	2.84	– or%
$T_j = +7$ °C	P_{dh}	2.64	kW	$T_j = +7$ °C	COP_d or PER_d	4.12	– or%
$T_j = +12$ °C	P_{dh}	2.23	kW	$T_j = +12$ °C	COP_d or PER_d	6.13	– or%
T_j = bivalent temperature	P_{dh}	4.03	kW	T_j = bivalent temperature	COP_d or PER_d	2.84	– or%
T_j = operation limit temperature	P_{dh}	4.03	kW	T_j = operation limit temperature	COP_d or PER_d	2.84	– or%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < – 20 °C)	P_{dh}	N/A	kW	For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	COP_d or PER_d	N/A	– or%
Bivalent temperature	T_{biv}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-25	°C
Cycling interval capacity for heating	P_{cych}	N/A	kW	Cycling interval efficiency	COP_d or PER_d	0.9	– or%
Degradation co- efficient (**)	C_{dh}	0.9	—	Heating water operating limit temperature	WTOL	80	°C
Power consumption in modes other than active mode				Supplementary heater: N/A			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	P_{sup}	-	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input		-	
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	—	3429	m³/h
Sound power level, indoors/ outdoors	L_{WA}	-/63	dB(A)	For water- or brine-to- water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	N/A	0.430	m³/h
Annual energy consumption	Q_{HE}	1022	kWhor GJ				
For heat pump combination heater: N/A							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	Qingdao Haier Air Conditioner Electric Co., Ltd. Haier industrial Park,No.236,Qianwangang Road ,Qingdao Eco-tech Development Zone ,Qingdao , 266555,China						
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