



# ENERG

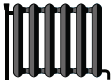
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Outdoor unit

PUHZ-W85VAA (-BS)



55 °C

35 °C



**A++**

**A++**



**40** dB



**58** dB

■ 05  
■ **09**  
■ 09  
kW

■ 05  
■ **09**  
■ 09  
kW



2015

811/2013

BH79J466H22

For medium-temperature application.																					
1	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Outdoor unit	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 electricity consumption under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L <sub>WA</sub> 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 space heating, annual energy consumption under warmer climate conditions	For water heating, annual energy consumption under colder climate conditions	For water heating, annual energy consumption under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under colder climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L <sub>WA</sub> outdoor
				kW	kWh	kWh	%	%	dB		kW	kW	kWh	kWh	kWh	kWh	%	%	%	%	dB
PUHZ-W85VAA	✓	A++	-	8.5	4882	-	137	-	40	-	5.3	8.5	4579	2587	-	-	106	169	-	-	58
PUHZ-W85YAA	✓	A++	-	8.5	4889	-	136	-	40	-	5.3	8.5	4618	2590	-	-	104	167	-	-	58
PUHZ-W112VAA	✓	A++	-	10.0	5955	-	133	-	40	-	7.3	10.0	6246	3017	-	-	108	171	-	-	60
PUHZ-W112YAA	✓	A++	-	10.0	5968	-	132	-	40	-	7.3	10.0	6207	3023	-	-	108	169	-	-	60

For low-temperature application.																					
1	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Outdoor unit	Low-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 electricity consumption under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L <sub>WA</sub> 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 space heating, annual energy consumption under warmer climate conditions	For water heating, annual energy consumption under colder climate conditions	For water heating, annual energy consumption under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under colder climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L <sub>WA</sub> outdoor
				kW	kWh	kWh	%	%	dB		kW	kW	kWh	kWh	kWh	kWh	%	%	%	%	dB
PUHZ-W85VAA	✓	A++	-	8.5	3903	-	171	-	40	-	5.3	8.5	3465	1777	-	-	139	245	-	-	58
PUHZ-W85YAA	✓	A++	-	8.5	3911	-	169	-	40	-	5.3	8.5	3491	1781	-	-	136	241	-	-	58
PUHZ-W112VAA	✓	A++	-	10.0	4636	-	170	-	40	-	7.3	10.0	4532	2153	-	-	148	239	-	-	60
PUHZ-W112YAA	✓	A++	-	10.0	4644	-	169	-	40	-	7.3	10.0	4553	2160	-	-	146	235	-	-	60

Model(s): Outdoor unit: PUHZ-W85VAA

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	8.5	kW	Seasonal space heating energy efficiency	$\eta_s$	137	%
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	7.5	kW	Tj = - 7 °C	COPd	1.96	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.6	kW	Tj = + 2 °C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	2.9	kW	Tj = + 7 °C	COPd	4.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	2.9	kW	Tj = +12 °C	COPd	6.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	7.5	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	1.37	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	1.9	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4882	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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: PUHZ-W85VAA

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	8.5	kW	Seasonal space heating energy efficiency	$\eta_s$	171	%
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	7.5	kW	Tj = - 7 °C	COPd	2.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.6	kW	Tj = + 2 °C	COPd	4.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.4	kW	Tj = + 7 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	8.48	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	7.5	kW	Tj = bivalent temperature	COPd	2.21	-
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	1.30	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	1.9	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3903	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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: PUHZ-W85VAA

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	5.3	kW	Seasonal space heating energy efficiency	$\eta_s$	106	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.10	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.59	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.75	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.61	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.30	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.0	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-	Operation limit temperature	TOL	-20	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	4.7	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	3.8	kW	Supplementary heater			
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	Rated heat output (*)	P <sub>sup</sub>	5.3	kW
Bivalent temperature	T <sub>biv</sub>	-18	°C	Type of energy input			
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4579	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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: PUHZ-W85VAA

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	5.3	kW	Seasonal space heating energy efficiency	$\eta_s$	139	%
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	3.2	kW	Tj = - 7 °C	COPd	2.81	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.2	kW	Tj = + 2 °C	COPd	4.64	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	6.38	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.83	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	4.7	kW	Tj = bivalent temperature	COPd	2.15	-
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	2.04	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-18	°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 <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	5.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3465	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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: PUHZ-W85VAA

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	8.5	kW	Seasonal space heating energy efficiency	$\eta_s$	169	%
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	8.5	kW	Tj = + 2 °C	COPd	2.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.5	kW	Tj = + 7 °C	COPd	3.52	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	2.9	kW	Tj = +12 °C	COPd	6.10	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	7.5	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	1.37	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2587	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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: PUHZ-W85VAA

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	8.5	kW	Seasonal space heating energy efficiency	$\eta_s$	245	%
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	8.5	kW	Tj = + 2 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.5	kW	Tj = + 7 °C	COPd	5.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	8.15	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	7.5	kW	Tj = bivalent temperature	COPd	2.33	-
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	1.37	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2660	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40/58	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	1777	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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.