

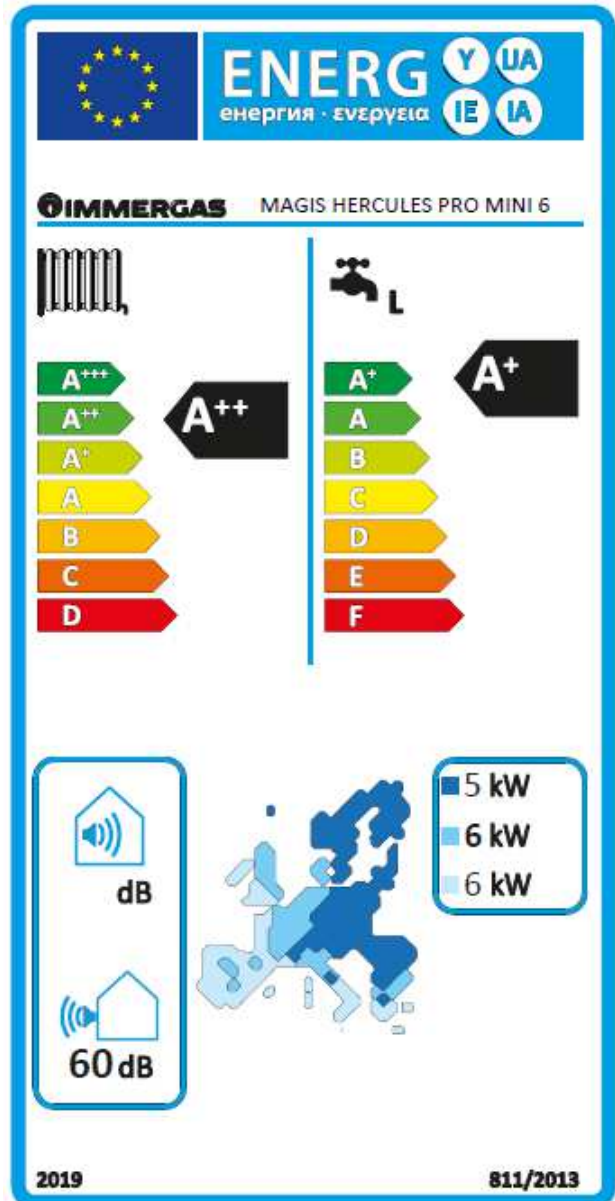
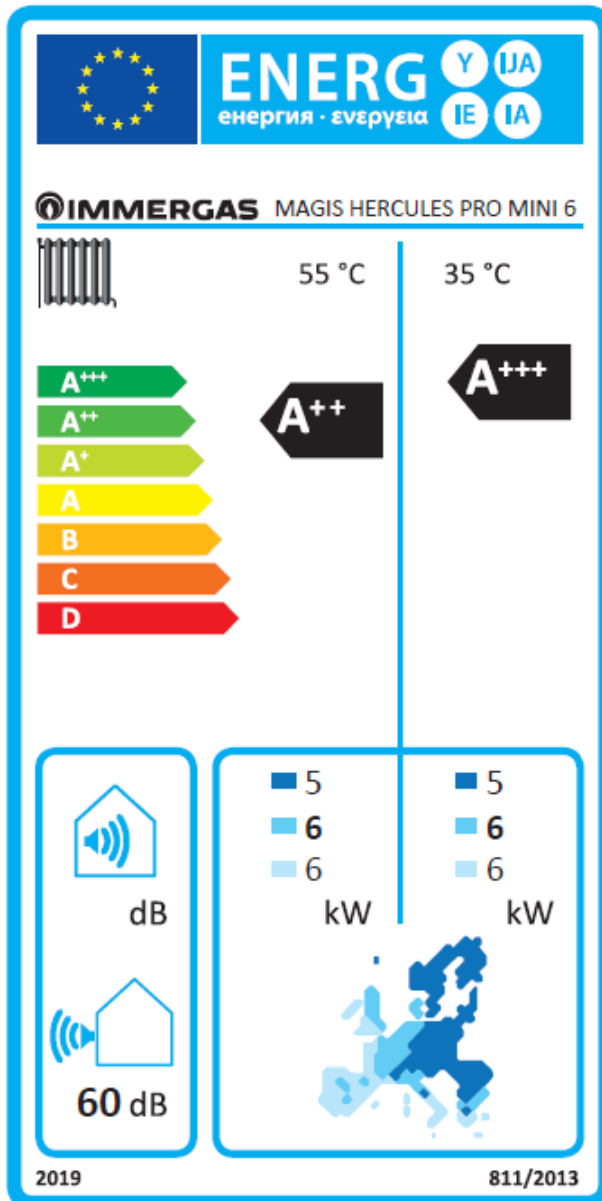
MAGIS HERCULES PRO MINI 6-9 – Product fiches

Summary

MAGIS HERCULES PRO MINI 6.....	2
Magis Hercules Pro Mini 6 - Energetic labels	2
Magis Hercules Pro Mini 6 - Low temperature table (30/35) average zones	3
Magis Hercules Pro Mini 6 - Medium temperature table (47/55) average zones	4
Additional DHW data	5
MAGIS HERCULES PRO MINI 9.....	6
Magis Hercules Pro Mini 9 - Energetic labels	6
Magis Hercules Pro Mini 9 - Low temperature table (30/35) average zones	7
Magis Hercules Pro Mini 9 - Medium temperature table (47/55) average zones	8
Additional DHW data	9

MAGIS HERCULES PRO MINI 6

Magis Hercules Pro Mini 6 - Energetic labels



Magis Hercules Pro Mini 6 - Low temperature table (30/35) average zones

Low temperature table (30/35) average zones

Model: Magis Hercules Pro Mini 6				
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: yes				
The parameters are declared for average climatic conditions				
Element	Symbol	Value	Unit	
<u>Rated heat output</u>	<i>Prated</i>	6	kW	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>Pdh</i>	5.3	kW	
Tj = + 2 °C	<i>Pdh</i>	3.2	kW	
Tj = + 7 °C	<i>Pdh</i>	2.1	kW	
Tj = + 12 °C	<i>Pdh</i>	2.0	kW	
Tj = bivalent temperature	<i>Pdh</i>	5.3	kW	
Tj = operation limit temperature	<i>Pdh</i>	5.2	kW	
for air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>Pdh</i>	-	kW	
Bivalent temperature	<i>Tbiv</i>	-7	°C	
Cycling interval capacity for heating	<i>Pcych</i>	-	kW	
<u>Degradation co-efficient</u>	<i>Cdh</i>	0.9	—	
Power consumption in modes other than active mode				
OFF mode	<i>Poff</i>	0.004	kW	
Thermostat-off mode	<i>Pto</i>	0.012	kW	
Standby mode	<i>Psb</i>	0.012	kW	
Crankcase heater mode	<i>Pck</i>	0.000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoors/outdoors	<i>Lwa</i>	- /60	dB	
Annual energy consumption	<i>Qhe</i>	2739	kWh or GJ	
For heat pump combination heater:				
Declared load profile	L			
Daily electricity consumption	<i>Qelec</i>	4.18	kWh	
Annual electricity consumption	<i>AEC</i>	884	kWh	
Contact information	IMMERGAS S.p.A via Cisa Ligure n.95 - 42041 Brescello (RE) Italy			
Element	Symbol	Value	Unit	
Seasonal space heating energy efficiency	<i>ηs</i>	178	%	
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>COPd</i>	2.75	—	
Tj = + 2 °C	<i>COPd</i>	4.50	—	
Tj = + 7 °C	<i>COPd</i>	6.25	—	
Tj = + 12 °C	<i>COPd</i>	7.57	—	
Tj = bivalent temperature	<i>COPd</i>	2.75	—	
Tj = temperature operating limit	<i>COPd</i>	2.55	—	
For air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>COPd</i>	-	—	
For air/water heat pumps: temperature operating limit	<i>TOL</i>	-10	°C	
Cycling interval efficiency	<i>COPcyc or PERcyc</i>	-	—	
Heating water operating limit temperature	<i>WTOL</i>	35	°C	
Supplementary heater				
<u>Rated heat output</u>	<i>Psup</i>	-	kW	
Type of energy input	Electrical			
For air-to-water heat pumps: Rated air flow rate, outdoors				
	—	2580	m³/h	
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger				
	—	-	m³/h	
Water heating energy efficiency	<i>ηwh</i>	116	%	
Daily fuel consumption	<i>Qfuel</i>	-	kWh	
Annual fuel consumption	<i>AFC</i>	-	GJ	

Magis Hercules Pro Mini 6 - Medium temperature table (47/55) average zones

Medium temperature table (47/55) average zones

Model: Magis Hercules Pro Mini 6				
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: yes				
The parameters are declared for average climatic conditions				
Element	Symbol	Value	Unit	
<u>Rated heat output</u>	<i>Prated</i>	6	kW	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>Pdh</i>	5.3	kW	
Tj = + 2 °C	<i>Pdh</i>	3.2	kW	
Tj = + 7 °C	<i>Pdh</i>	2.1	kW	
Tj = + 12 °C	<i>Pdh</i>	1.9	kW	
Tj = bivalent temperature	<i>Pdh</i>	5.3	kW	
Tj = operation limit temperature	<i>Pdh</i>	5.0	kW	
for air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>Pdh</i>	-	kW	
Bivalent temperature	<i>Tbiv</i>	-7	°C	
Cycling interval capacity for heating	<i>Pcych</i>	-	kW	
<u>Degradation co-efficient</u>	<i>Cdh</i>	0.9	—	
Power consumption in modes other than active mode				
OFF mode	<i>Poff</i>	0.004	kW	
Thermostat-off mode	<i>Pto</i>	0.012	kW	
Standby mode	<i>Psb</i>	0.012	kW	
Crankcase heater mode	<i>Pck</i>	0.000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoors/outdoors	<i>Lwa</i>	- /60	dB	
Annual energy consumption	<i>Qhe</i>	3775	kWh or GJ	
For heat pump combination heater:				
Declared load profile	L			
Daily electricity consumption	<i>Qelec</i>	4.18	kWh	
Annual electricity consumption	<i>AEC</i>	884	kWh	
Contact information	IMMERGAS S.p.A via Cisa Ligure n.95 - 42041 Brescello (RE) Italy			

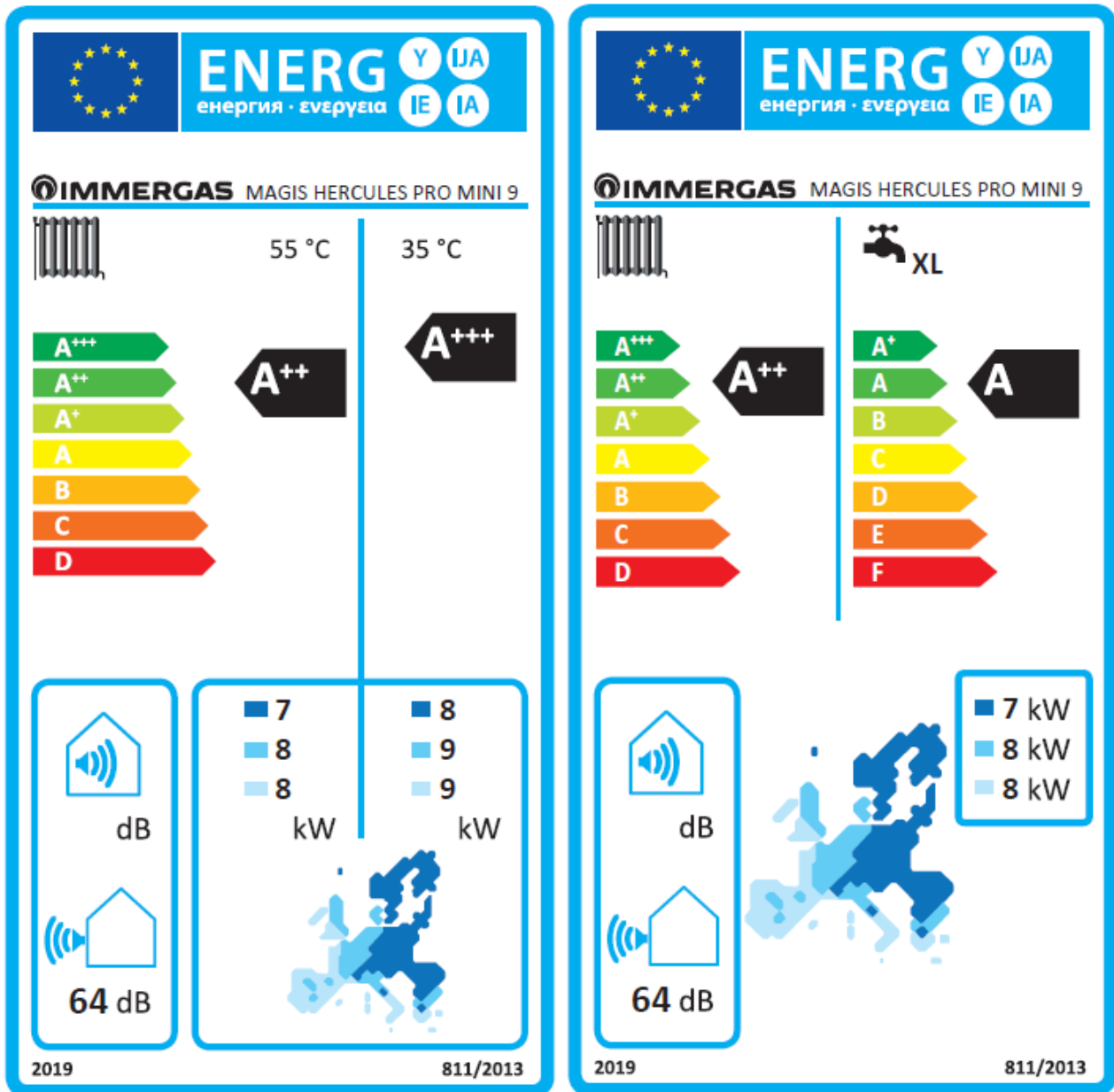
Element	Symbol	Value	Unit
Seasonal space heating energy efficiency	<i>ηs</i>	128	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = − 7 °C	<i>COPd</i>	2.00	—
Tj = + 2 °C	<i>COPd</i>	3.23	—
Tj = + 7 °C	<i>COPd</i>	4.47	—
Tj = + 12 °C	<i>COPd</i>	5.72	—
Tj = bivalent temperature	<i>COPd</i>	2.00	—
Tj = temperature operating limit	<i>COPd</i>	1.80	—
For air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>COPd</i>	-	—
For air/water heat pumps: temperature operating limit	<i>TOL</i>	-10	°C
Cycling interval efficiency	<i>COPcyc or PERcyc</i>	-	—
Heating water operating limit temperature	<i>WTOL</i>	55	°C
Supplementary heater			
<u>Rated heat output</u>	<i>Psup</i>	-	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
	—	2580	m³/h
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
	—	-	m³/h
Water heating energy efficiency	<i>ηwh</i>	116	%
Daily fuel consumption	<i>Qfuel</i>	-	kWh
Annual fuel consumption	<i>AFC</i>	-	GJ

Additional DHW data

Model: Magis Hercules Pro Mini 6						
Heat pump with storage tank						
Declared Load Profile	L			Water heating energy efficiency	η_{wh}	116 %
Daily electrical energy consumption	Q_{elec}	4.18	kWh	COP (at 7°C)	COP	2.79
Annual electrical energy consumption	AEC	884	kWh	Reference hot water temperature	θ'_{WH}	49.37 °C
Standby Heat Loss	P_{stby}	1.68	kWh /day	Volume of mixed water at 40°C	V_{40}	194.4 L
Storage volume	V_m	171	L			
Test data as per EN16147:2017						
Contact information	Immergas S.p.A via Cisa Ligure n.95					

MAGIS HERCULES PRO MINI 9

Magis Hercules Pro Mini 9 - Energetic labels



Magis Hercules Pro Mini 9 - Low temperature table (30/35) average zones

Low temperature table (30/35) average zones

Model: Magis Hercules Pro Mini 9				
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: yes				
The parameters are declared for average climatic conditions				
Element	Symbol	Value	Unit	
<u>Rated heat output</u>	<i>Prated</i>	8	kW	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>Pdh</i>	7.5	kW	
Tj = + 2 °C	<i>Pdh</i>	4.6	kW	
Tj = + 7 °C	<i>Pdh</i>	2.9	kW	
Tj = + 12 °C	<i>Pdh</i>	2.7	kW	
Tj = bivalent temperature	<i>Pdh</i>	7.5	kW	
Tj = operation limit temperature	<i>Pdh</i>	6.7	kW	
for air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>Pdh</i>	-	kW	
Bivalent temperature	<i>Tbiv</i>	-7	°C	
Cycling interval capacity for heating	<i>Pcych</i>	-	kW	
<u>Degradation co-efficient</u>	<i>Cdh</i>	0.9	—	
Power consumption in modes other than active mode				
OFF mode	<i>Poff</i>	0.004	kW	
Thermostat-off mode	<i>Pto</i>	0.012	kW	
Standby mode	<i>Psb</i>	0.012	kW	
Crankcase heater mode	<i>Pck</i>	0.000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoors/outdoors	<i>Lwa</i>	- /64	dB	
Annual energy consumption	<i>Qhe</i>	3906	kWh or GJ	
For heat pump combination heater:				
Declared load profile	XL			
Daily electricity consumption	<i>Qelec</i>	7.46	kWh	
Annual electricity consumption	<i>AEC</i>	1595	kWh	
Contact information	IMMERGAS S.p.A via Cisa Ligure n.95 - 42041 Brescello (RE) Italy			
Element	Symbol	Value	Unit	
Seasonal space heating energy efficiency	<i>ηs</i>	175	%	
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>COPd</i>	2.64	—	
Tj = + 2 °C	<i>COPd</i>	4.17	—	
Tj = + 7 °C	<i>COPd</i>	6.53	—	
Tj = + 12 °C	<i>COPd</i>	8.87	—	
Tj = bivalent temperature	<i>COPd</i>	2.64	—	
Tj = temperature operating limit	<i>COPd</i>	2.32	—	
For air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>COPd</i>	-	—	
For air/water heat pumps: temperature operating limit	<i>TOL</i>	-10	°C	
Cycling interval efficiency	<i>COPcyc or PERcyc</i>	-	—	
Heating water operating limit temperature	<i>WTOL</i>	35	°C	
Supplementary heater				
<u>Rated heat output</u>	<i>Psup</i>	-	kW	
Type of energy input	Electrical			
For air-to-water heat pumps: Rated air flow rate, outdoors				
	—	3960	m³/h	
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger				
	—	-	m³/h	
Water heating energy efficiency	<i>ηwh</i>	105	%	
Daily fuel consumption	<i>Qfuel</i>	-	kWh	
Annual fuel consumption	<i>AFC</i>	-	GJ	

Magis Hercules Pro Mini 9 - Medium temperature table (47/55) average zones

Medium temperature table (47/55) average zones

Model: Magis Hercules Pro Mini 9				
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: yes				
The parameters are declared for average climatic conditions				
Element	Symbol	Value	Unit	
<u>Rated heat output</u>	<i>Prated</i>	8	kW	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>Pdh</i>	7.1	kW	
Tj = + 2 °C	<i>Pdh</i>	4.3	kW	
Tj = + 7 °C	<i>Pdh</i>	2.8	kW	
Tj = + 12 °C	<i>Pdh</i>	2.6	kW	
Tj = bivalent temperature	<i>Pdh</i>	7.1	kW	
Tj = operation limit temperature	<i>Pdh</i>	4.9	kW	
for air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>Pdh</i>	-	kW	
Bivalent temperature	<i>Tbiv</i>	-7	°C	
Cycling interval capacity for heating	<i>Pcych</i>	-	kW	
<u>Degradation co-efficient</u>	<i>Cdh</i>	0.9	—	
Power consumption in modes other than active mode				
OFF mode	<i>Poff</i>	0.004	kW	
Thermostat-off mode	<i>Pto</i>	0.012	kW	
Standby mode	<i>Psb</i>	0.012	kW	
Crankcase heater mode	<i>Pck</i>	0.000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoors/outdoors	<i>Lwa</i>	- /64	dB	
Annual energy consumption	<i>Qhe</i>	5106	kWh or GJ	
For heat pump combination heater:				
Declared load profile	XL			
Daily electricity consumption	<i>Qelec</i>	7.46	kWh	
Annual electricity consumption	<i>AEC</i>	1595	kWh	
Contact information	IMMERGAS S.p.A via Cisa Ligure n.95 - 42041 Brescello (RE) Italy			
Element	Symbol	Value	Unit	
Seasonal space heating energy efficiency	<i>ηs</i>	126	%	
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj				
Tj = − 7 °C	<i>COPd</i>	1.76	—	
Tj = + 2 °C	<i>COPd</i>	3.23	—	
Tj = + 7 °C	<i>COPd</i>	4.62	—	
Tj = + 12 °C	<i>COPd</i>	5.88	—	
Tj = bivalent temperature	<i>COPd</i>	1.76	—	
Tj = temperature operating limit	<i>COPd</i>	1.35	—	
For air-to-water heat pumps: Tj = − 15 °C (if TOL < − 20 °C)	<i>COPd</i>	-	—	
For air/water heat pumps: temperature operating limit	<i>TOL</i>	-10	°C	
Cycling interval efficiency	<i>COPcyc or PERcyc</i>	-	—	
Heating water operating limit temperature	<i>WTOL</i>	55	°C	
Supplementary heater				
<u>Rated heat output</u>	<i>Psup</i>	-	kW	
Type of energy input	Electrical			
For air-to-water heat pumps: Rated air flow rate, outdoors				
	—	2580	m³/h	
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger				
	—	-	m³/h	
Water heating energy efficiency	<i>ηwh</i>	105	%	
Daily fuel consumption	<i>Qfuel</i>	-	kWh	
Annual fuel consumption	<i>AFC</i>	-	GJ	

Additional DHW data

Model: Magis Hercules Pro Mini 9						
Heat pump with storage tank						
Declared Load Profile	XL			Water heating energy efficiency	η_{wh}	105 %
Daily electrical energy consumption	Q_{elec}	7.46	kWh	COP (at 7°C)	COP	2.56
Annual electrical energy consumption	AEC	1595	kWh	Reference hot water temperature	θ'_{WH}	53.36 °C
Standby Heat Loss	P_{stby}	2.16	kWh /day	Volume of mixed water at 40°C	V_{40}	219.7 L
Storage volume	V_m	171	L			
Test data as per EN16147:2017						
Contact information	Immergas S.p.A via Cisa Ligure n.95					