

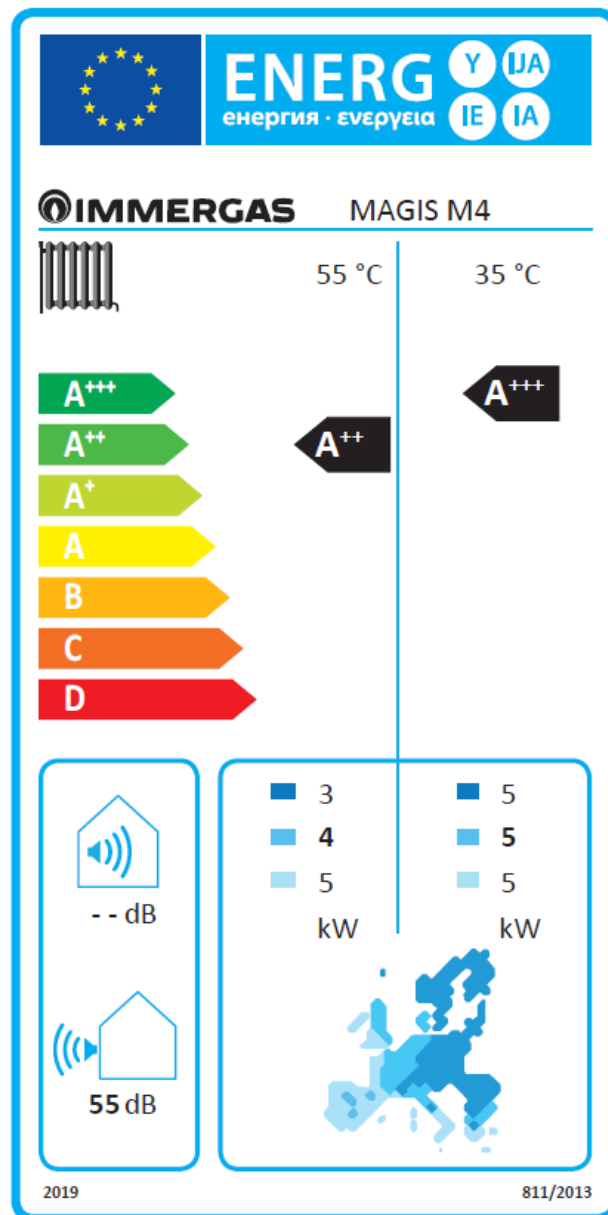
MAGIS M4 – Product fiches

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MAGIS M4

Magis M4 - Energetic labels



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Magis M4 - Low temperature table (30/35) average zones

Low temperature table (30/35) average zones

Model: Magis M4			
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			
The parameters are declared for average climatic conditions			
Element	Symbol	Value	Unit
Rated heat output	<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>	4.9	kW
Tj = + 2 °C	<i>Pdh</i>	3.1	kW
Tj = + 7 °C	<i>Pdh</i>	1.9	kW
Tj = + 12 °C	<i>Pdh</i>	1.5	kW
Tj = bivalent temperature	<i>Pdh</i>	4.9	kW
Tj = operation limit temperature	<i>Pdh</i>	4.4	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
Degradation co-efficient	<i>Cdh</i>	0.9	—
Power consumption in modes other than active mode			
OFF mode	<i>Poff</i>	0.014	kW
Thermostat-off mode	<i>Pto</i>	0.024	kW
Standby mode	<i>Psb</i>	0.014	kW
Crankcase heater mode	<i>Pck</i>	0.000	kW
Other items			
Capacity control	Variable		
Sound power level, indoors/outdoors	<i>Lwa</i>	-/55	dB
Annual energy consumption	<i>Qhe</i>	2351	kWh or GJ
For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	<i>Qelec</i>	-	kWh
Annual electricity consumption	<i>AEC</i>	-	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>	191	%
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>	3.19	—
Tj = + 2 °C	<i>COPd</i>	4.78	—
Tj = + 7 °C	<i>COPd</i>	6.13	—
Tj = + 12 °C	<i>COPd</i>	8.05	—
Tj = bivalent temperature	<i>COPd</i>	3.19	—
Tj = temperature operating limit	<i>COPd</i>	2.86	—
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>	65	°C
Supplementary heater			
Rated heat output	<i>Psup</i>	1.11	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
		2770	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>	-	%
Daily fuel consumption	<i>Qfuel</i>	-	kWh
Annual fuel consumption	<i>AFC</i>	-	GJ

Magis M4 - Medium temperature table (47/55) average zones

Medium temperature table (47/55) average zones

Model: Magis M4			
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			
The parameters are declared for average climatic conditions			
Element	Symbol	Value	Unit
Rated heat output	<i>Prated</i>	4	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = − 7 °C	<i>Pdh</i>	3.9	kW
Tj = + 2 °C	<i>Pdh</i>	2.4	kW
Tj = + 7 °C	<i>Pdh</i>	2.9	kW
Tj = + 12 °C	<i>Pdh</i>	1.3	kW
Tj = bivalent temperature	<i>Pdh</i>	3.9	kW
Tj = operation limit temperature	<i>Pdh</i>	3.4	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
Degradation co-efficient	<i>Cdh</i>	0.9	—
Power consumption in modes other than active mode			
OFF mode	<i>Poff</i>	0.014	kW
Thermostat-off mode	<i>Pto</i>	0.024	kW
Standby mode	<i>Psb</i>	0.014	kW
Crankcase heater mode	<i>Pck</i>	0.000	kW
Other items			
Capacity control	Variable		
Sound power level, indoors/outdoors	<i>Lwa</i>	-/55	dB
Annual energy consumption	<i>Qhe</i>	2744	kWh or GJ
For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	<i>Qelec</i>	-	kWh
Annual electricity consumption	<i>AEC</i>	-	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>	130	%
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>	2.17	—
Tj = + 2 °C	<i>COPd</i>	3.30	—
Tj = + 7 °C	<i>COPd</i>	4.41	—
Tj = + 12 °C	<i>COPd</i>	5.66	—
Tj = bivalent temperature	<i>COPd</i>	2.17	—
Tj = temperature operating limit	<i>COPd</i>	1.91	—
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>	65	°C
Supplementary heater			
Rated heat output	<i>Psup</i>	0.98	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
		2770	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>	-	%
Daily fuel consumption	<i>Qfuel</i>	-	kWh
Annual fuel consumption	<i>AFC</i>	-	GJ

Magis M4 + Omnistor 300 - Low temperature table (30/35) average zones

Low temperature table (30/35) average zones

Model: Magis M4 + Omnistor 300			
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
Rated heat output	<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>	4.9	kW
Tj = + 2 °C	<i>Pdh</i>	3.1	kW
Tj = + 7 °C	<i>Pdh</i>	1.9	kW
Tj = + 12 °C	<i>Pdh</i>	1.5	kW
Tj = bivalent temperature	<i>Pdh</i>	4.9	kW
Tj = operation limit temperature	<i>Pdh</i>	4.4	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
Degradation co-efficient	<i>Cdh</i>	0.9	—
Power consumption in modes other than active mode			
OFF mode	<i>P_{OFF}</i>	0.014	kW
Thermostat-off mode	<i>P_{TO}</i>	0.024	kW
Standby mode	<i>P_{SB}</i>	0.014	kW
Crankcase heater mode	<i>P_{CK}</i>	0.000	kW
Other items			
Capacity control	Variable		
Sound power level, indoors/outdoors	<i>L_{WA}</i>	-/55	dB
Annual energy consumption	<i>Q_{HE}</i>	2351	kWh or GJ

For heat pump combination heater:			
Declared load profile	XL		
Daily electricity consumption	<i>Q_{elec}</i>	7.463	kWh
Annual electricity consumption	<i>AEC</i>	1512	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>η_s</i>	191	%
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>	3.19	—
Tj = + 2 °C	<i>COPd</i>	4.78	—
Tj = + 7 °C	<i>COPd</i>	6.13	—
Tj = + 12 °C	<i>COPd</i>	8.05	—
Tj = bivalent temperature	<i>COPd</i>	3.19	—
Tj = temperature operating limit	<i>COPd</i>	2.86	—
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>COP_{cyc} or PER_{cyc}</i>	-	—
Heating water operating limit temperature	<i>WTOL</i>	65	°C
Supplementary heater			
Rated heat output	<i>P_{sup}</i>	1.11	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
		2770	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>η_{wh}</i>	111	%
Daily fuel consumption	<i>Q_{fuel}</i>	-	kWh
Annual fuel consumption	<i>AFC</i>	-	GJ

Magis M4 + Omnistor 300 - Medium temperature table (47/55) average zones

Medium temperature table (47/55) average zones

Model: Magis M4 + Omnistor 300			
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
Rated heat output	<i>Prated</i>	4	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = - 7 °C	<i>Pdh</i>	3.9	kW
Tj = + 2 °C	<i>Pdh</i>	2.4	kW
Tj = + 7 °C	<i>Pdh</i>	2.9	kW
Tj = + 12 °C	<i>Pdh</i>	1.3	kW
Tj = bivalent temperature	<i>Pdh</i>	3.9	kW
Tj = operation limit temperature	<i>Pdh</i>	3.4	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
Degradation co-efficient	<i>Cdh</i>	0.9	—
Power consumption in modes other than active mode			
OFF mode	<i>Poff</i>	0.014	kW
Thermostat-off mode	<i>Pto</i>	0.024	kW
Standby mode	<i>Psb</i>	0.014	kW
Crankcase heater mode	<i>Pck</i>	0.000	kW
Other items			
Capacity control	Variable		
Sound power level, indoors/outdoors	<i>Lwa</i>	-/55	dB
Annual energy consumption	<i>Qhe</i>	2744	kWh or GJ
For heat pump combination heater:			
Declared load profile	XL		
Daily electricity consumption	<i>Qelec</i>	7.463	kWh
Annual electricity consumption	<i>AEC</i>	1512	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>	130	%
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>	2.17	—
Tj = + 2 °C	<i>COPd</i>	3.30	—
Tj = + 7 °C	<i>COPd</i>	4.41	—
Tj = + 12 °C	<i>COPd</i>	5.66	—
Tj = bivalent temperature	<i>COPd</i>	2.17	—
Tj = temperature operating limit	<i>COPd</i>	1.91	—
For air-to-water heat pumps: Tj = - 15 °C (if TOL < - 20 °C)	<i>COPd</i>	-	—
For air/water heat pumps: tem- perature operating limit	<i>TOL</i>	-10	°C
Cycling interval efficiency	<i>COPcyc or PERcyc</i>	-	—
Heating water operating limit temperature	<i>WTOL</i>	65	°C
Supplementary heater			
Rated heat output	<i>Psup</i>	0.98	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
		2770	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>	111	%
Daily fuel consumption	<i>Qfuel</i>	-	kWh
Annual fuel consumption	<i>AFC</i>	-	GJ

Additional DHW data

Model: Magis M4 + Omnistor 300						
Heat pump with storage tank						
Declared Load Profile	XL			Water heating energy efficiency	η_{wh}	110.8 %
Daily electrical energy consumption	Q_{elec}	7.463	kWh	COP (at 7°C)	COP_{THW}	2.55
Annual electrical energy consumption	AEC	1512	kWh	Thermostat temperature	-	55 °C
Standby Heat Loss	P_{stby}	6.24	kWh /day	Reference hot water temperature	θ'_{WH}	54.66 °C
Storage volume	V_m	268.1	L	Volume of mixed water at 40°C	V_{40}	386 L
Test data as per EN 16147:2017						
Contact information	IMMERGAS S.p.A via Cisa Ligure n.95 - 42041 Brescello (RE) Italy					