



Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

| | | | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Model | AIM08EMX + DHW KIT | | |
| Type of heat pump | <input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump | | |
| Low-temperature heat pump | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Equipped with a supplementary heater | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Heat pump combination heater | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Climate | <input checked="" type="checkbox"/> Average <input type="checkbox"/> Colder <input type="checkbox"/> Warmer | | |
| Temperature application | <input type="checkbox"/> Medium (55°C) <input checked="" type="checkbox"/> Low (35°C) | | |
| Applied standards | EN14825 / EN16147 | | |

| Item | Symbol | Value | Unit |
|----------------------------------------------------------------------------------------------------|---------------|----------|-----------|
| Rated heat output | Prated | 7 | kW |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7°C | Pdh | 5.8 | kW |
| Tj = + 2°C | Pdh | 3.5 | kW |
| Tj = + 7°C | Pdh | 2.3 | kW |
| Tj = + 12°C | Pdh | 1.5 | kW |
| Tj = bivalent temperature | Pdh | 5.8 | kW |
| Tj = operation limit temperature | Pdh | 5.4 | kW |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | - | kW |
| Bivalent temperature | Tbiv | -7 | °C |
| Cycling interval capacity for heating | Pcyc | - | kW |
| Degradation co-efficient | Cdh | 0.9 | - |

| Item | Symbol | Value | Unit |
|----------------------------------------------------------------------------------------------------------------------------------|-----------|------------|----------|
| Seasonal space heating energy efficiency | ηs | 159 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7°C | COPd | 2.83 | - |
| Tj = + 2°C | COPd | 3.82 | - |
| Tj = + 7°C | COPd | 5.29 | - |
| Tj = + 12°C | COPd | 6.45 | - |
| Tj = bivalent temperature | COPd | 2.83 | - |
| Tj = operation limit temperature | COPd | 2.61 | - |
| Tj = - 15 °C (if TOL < - 20 °C) | COPd | - | kW |
| Operation limit temperature | TOL | -10 | °C |
| Cycling interval efficiency | COPcyc | - | - |
| Heating water operating limit temperature | WTOL | 58 | °C |

| | | | | | | | |
|----------------------------------------------------------|------------------|-------|----|-----------------------------|------------------|-----|----|
| Power consumption in modes other than active mode | | | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0.005 | kW | Rated heat output | P _{sup} | 1.1 | kW |
| Thermostat-off mode | P _{SB} | 0.008 | kW | Type of energy input | - | | |
| Standby mode | P _{TO} | 0.005 | kW | | | | |
| Crankcase heater mode | P _{CK} | 0.035 | kW | | | | |

| | | | |
|--------------------------------------------------------|-----------------|--------|-------------------|
| Other items | | | |
| Capacity control | variable | | |
| Sound power level, indoor / outdoor | L _{WA} | - / 69 | dB |
| Annual energy consumption | Q _{HE} | 3326 | kWh |
| Rated air flow rate, outdoor | - | 2900 | m ³ /h |
| Rated brine or water flow rate, outdoor heat exchanger | - | - | m ³ /h |

| | | | |
|-----------------------------------------|-----------------------|-----------|----------|
| For heat pump combination heater | | | |
| Declared load profile | XL | | |
| Daily electricity consumption | Q _{elec} | 8.437 | kWh |
| Annual electricity consumption | AEC | 1788 | kWh |
| Water heating energy efficiency | η_{wh} | 94 | % |
| Daily fuel consumption | Q _{fuel} | - | kWh |
| Annual fuel consumption | AFC | - | GJ |

| | |
|------------------------|----------------------------------------------------------------------------------------------------|
| Contact details | ARGOCLIMA S.p.A. Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy www.argoclima.com |
|------------------------|----------------------------------------------------------------------------------------------------|



Technical parameters for heat pump space heaters and heat pump combination heaters

As by **ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013** implementing **Directive 2009/125/EC of the European Parliament and of the Council** with regard to ecodesign requirements for space heaters and combination heaters and by **ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013** supplementing **Directive 2010/30/EU of the European Parliament and of the Council** with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

| | | | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Model | AIM08EMX + DHW KIT | | |
| Type of heat pump | <input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump | | |
| Low-temperature heat pump | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Equipped with a supplementary heater | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Heat pump combination heater | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Climate | <input checked="" type="checkbox"/> Average <input type="checkbox"/> Colder <input type="checkbox"/> Warmer | | |
| Temperature application | <input checked="" type="checkbox"/> Medium (55°C) <input type="checkbox"/> Low (35°C) | | |
| Applied standards | EN14825 / EN16147 | | |

| Item | Symbol | Value | Unit |
|----------------------------------------------------------------------------------------------------|---------------|----------|-----------|
| Rated heat output | Prated | 6 | kW |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7°C | Pdh | 4.9 | kW |
| Tj = + 2°C | Pdh | 3.0 | kW |
| Tj = + 7°C | Pdh | 1.9 | kW |
| Tj = + 12°C | Pdh | 1.5 | kW |
| Tj = bivalent temperature | Pdh | 4.9 | kW |
| Tj = operation limit temperature | Pdh | 4.0 | kW |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | - | kW |
| Bivalent temperature | Tbiv | -7 | °C |
| Cycling interval capacity for heating | Pcyc | - | kW |
| Degradation co-efficient | Cdh | 0.9 | - |

| Item | Symbol | Value | Unit |
|----------------------------------------------------------------------------------------------------------------------------------|-----------|------------|----------|
| Seasonal space heating energy efficiency | ηs | 113 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7°C | COPd | 1.83 | - |
| Tj = + 2°C | COPd | 2.85 | - |
| Tj = + 7°C | COPd | 3.67 | - |
| Tj = + 12°C | COPd | 5.63 | - |
| Tj = bivalent temperature | COPd | 1.83 | - |
| Tj = operation limit temperature | COPd | 1.46 | - |
| Tj = - 15 °C (if TOL < - 20 °C) | COPd | - | kW |
| Operation limit temperature | TOL | -10 | °C |
| Cycling interval efficiency | COPcyc | - | - |
| Heating water operating limit temperature | WTOL | 58 | °C |

| | | | |
|----------------------------------------------------------|------------------|-------|----|
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.005 | kW |
| Thermostat-off mode | P _{SB} | 0.008 | kW |
| Standby mode | P _{TO} | 0.005 | kW |
| Crankcase heater mode | P _{CK} | 0.035 | kW |

| | | | |
|-----------------------------|------------------|-----|----|
| Supplementary heater | | | |
| Rated heat output | P _{sup} | 1.5 | kW |
| Type of energy input | - | | |

| | | | |
|--------------------------------------------------------|-----------------|--------|------|
| Other items | | | |
| Capacity control | variable | | |
| Sound power level, indoor / outdoor | L _{WA} | - / 69 | dB |
| Annual energy consumption | Q _{HE} | 3904 | kWh |
| Rated air flow rate, outdoor | - | 2900 | m³/h |
| Rated brine or water flow rate, outdoor heat exchanger | - | - | m³/h |

| | | | |
|-----------------------------------------|-----------------------|-----------|----------|
| For heat pump combination heater | | | |
| Declared load profile | XL | | |
| Daily electricity consumption | Q _{elec} | 8.437 | kWh |
| Annual electricity consumption | AEC | 1788 | kWh |
| Water heating energy efficiency | η_{wh} | 94 | % |
| Daily fuel consumption | Q _{fuel} | - | kWh |
| Annual fuel consumption | AFC | - | GJ |

| | |
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PRODUCT FICHE

As by ANNEX IV - POINT 1 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

MEDIUM TEMPERATURE HEAT PUMP - Low & Medium temperature application

MODEL : AIM08EMX + DHW KIT

| | |
|------------------------------------------------|----|
| SEASONAL SPACE HEATING ENERGY EFFICIENCY CLASS | A+ |
|------------------------------------------------|----|

| | | | | |
|------------------------------------------------|--------|------|------|----|
| | | 35°C | 55°C | |
| Rated heat output (average climate conditions) | Prated | 7 | 6 | kW |

| | |
|-----------------------|----|
| DECLARED LOAD PROFILE | XL |
|-----------------------|----|

| | |
|------------------------------------------------|---|
| SEASONAL WATER HEATING ENERGY EFFICIENCY CLASS | A |
|------------------------------------------------|---|

| | | | | |
|--------------------------------------------------------|-----------------|------|------|-----|
| | | 35°C | 55°C | |
| Annual energy consumption (average climate conditions) | Q _{HE} | 3326 | 3904 | kWh |

| | | | |
|-------------------------------------------------------------------------------|-----|------|-----|
| Annual electricity consumption for water heating (average climate conditions) | AEC | 1788 | kWh |
|-------------------------------------------------------------------------------|-----|------|-----|

| | | | | |
|-----------------------------------------------------------------------|----------------|------|------|---|
| | | 35°C | 55°C | |
| Seasonal space heating energy efficiency (average climate conditions) | η _s | 159 | 113 | % |

| | | | |
|--------------------------------------------------------------|-----------------|----|---|
| Water heating energy efficiency (average climate conditions) | η _{wh} | 94 | % |
|--------------------------------------------------------------|-----------------|----|---|

| | | | | |
|-----------------------------------------------|----------------------|------|------|----|
| | | 35°C | 55°C | |
| Rated heat output (colder climate conditions) | P _{nomiale} | 6 | 5 | kW |
| Rated heat output (warmer climate conditions) | P _{nomiale} | 6 | 5 | kW |

| | | | | |
|------------------------------------------------------------------------------|-----------------|------|------|-----|
| | | 35°C | 55°C | |
| Annual electricity consumption for space heating (colder climate conditions) | Q _{HE} | 4079 | 5274 | kWh |
| Annual electricity consumption for space heating (warmer climate conditions) | Q _{HE} | 1454 | 1608 | kWh |

| | | | |
|------------------------------------------------------------------------------|-----|------|-----|
| Annual electricity consumption for water heating (colder climate conditions) | AEC | 2302 | kWh |
| Annual electricity consumption for water heating (warmer climate conditions) | AEC | 1347 | kWh |

| | | | | |
|----------------------------------------------------------------------|----------------|------|------|---|
| | | 35°C | 55°C | |
| Seasonal space heating energy efficiency (colder climate conditions) | η _s | 131 | 97 | % |
| Seasonal space heating energy efficiency (warmer climate conditions) | η _s | 202 | 147 | % |

| | | | |
|-------------------------------------------------------------|-----------------|-----|---|
| Water heating energy efficiency (colder climate conditions) | η _{wh} | 73 | % |
| Water heating energy efficiency (warmer climate conditions) | η _{wh} | 124 | % |

| | | | | |
|-------------------|-----------------|--------|---------|----|
| | | Indoor | Outdoor | |
| Sound power level | L _{WA} | - | 69 | dB |