Information for heat pump space heaters and heat pump combination heaters **Average climate and Medium temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610N | | | |
|---------------------------------------|-----------------|---------------------------|-----|---|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A++ | - |
| Water-to-water heat pump: | No | Controller class: | VI | - |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % |
| Low-temperature heat pump: | No | Package efficiency: | 147 | % |
| Equipped with a supplementary heater: | No | Package efficiency class: | A++ | - |
| 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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|---|-------------------|------------------|-----------|---|-----------------|----------|---------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 143 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performal part load at indoor temperature 2 | - | | |
| Tj=-7°C | Pdh | 5,9 | kW | T j = - 7 °C | COPd | 2,03 | - |
| T j = + 2 °C | Pdh | 3,6 | kW | T j = +2 °C | COPd | 3,81 | - |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 4,86 | - |
| T j = + 12 °C | Pdh | 2,8 | kW | T j = +12 °C | COPd | 5,90 | - |
| T j = bivalent temperature | Pdh | 5,9 | kW | T j = bivalent temperature | COPd | 2,03 | - |
| T j = operation limit temperature | Pdh | 5,3 | kW | T j = operation limit temperature | COPd | 1,77 | - |
| For air-to-water heat pumps: $T j = -15 ^{\circ}\text{C}$ (if $TOL < -20 ^{\circ}\text{C}$) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -7 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -10 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | e mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 1,3 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | - | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3743 | kWh | flow rate, outdoor heat exchanger | | IIu | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | na | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | na | % |
| Daily electricity consumption | Qelec | na | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610 | CTC EcoAir 610M 400V+ CTC EcoLogic | | | | | | |
|---------------------------------------|----------------|------------------------------------|------|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A+++ | - | | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 193 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | A+++ | - | | | | |
| 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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|---|-----------------|----------|---------|
| Rated heat output (*) | Prated | 6 | kW | Seasonal space heating energy efficiency | η_{s} | 189 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performal part load at indoor temperature 2 | - | | |
| T j = -7 °C | Pdh | 5,6 | kW | T j = -7 °C | COPd | 3,03 | - |
| T j = + 2 °C | Pdh | 3,5 | kW | T j = +2 °C | COPd | 5,14 | - |
| T j = + 7 °C | Pdh | 2,5 | kW | T j = +7 °C | COPd | 5,83 | - |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,27 | - |
| T j = bivalent temperature | Pdh | 5,9 | kW | T j = bivalent temperature | COPd | 2,66 | - |
| T j = operation limit temperature | Pdh | 5,7 | kW | T j = operation limit temperature | COPd | 2,59 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -9 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -10 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | e mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,3 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P_{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | , | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 2579 | kWh | flow rate, outdoor heat exchanger | | IIu | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | na | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | na | % |
| Daily electricity consumption | Qelec | na | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | na | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Medium temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M 400V+ CTC EcoLogic | | | | | | | |
|---------------------------------------|------------------------------------|---------------------------|-----|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 128 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | | |
| 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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 124 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 4,0 | kW | T j = - 7 °C | COPd | 2,66 |] - |
| T j = + 2 °C | Pdh | 2,3 | kW | T j = +2 °C | COPd | 4,11 | _ |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 5,08 | |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 6,08 | - |
| T j = bivalent temperature | Pdh | 5,0 | kW | T j = bivalent temperature | COPd | 1,75 | - |
| T j = operation limit | Pdh | 3,6 | kW | T j = operation limit | COPd | 1,25 | |
| temperature | run | 3,0 | KVV | temperature | COPU | 1,25 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 4,7 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 1,75 | - |
| Bivalent temperature | T _{biv} | -13 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | _ |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,9 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | • | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 5052 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | na | Efficiency class | na | Water heating energy efficiency | η_{wh} | na | % |
| Daily electricity consumption | Qelec | na | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | na | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Low temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M 400V+ CTC EcoLogic | | | | | | | |
|---------------------------------------|------------------------------------|---------------------------|-----|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 164 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | | |
| 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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|---------------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 160 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 4,3 | kW | T j = - 7 °C | COPd | 3,61 | - |
| T j = + 2 °C | Pdh | 2,4 | kW | T j = +2 °C | COPd | 5,08 | - |
| T j = + 7 °C | Pdh | 2,5 | kW | T j = +7 °C | COPd | 6,00 | - |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,13 | - |
| T j = bivalent temperature | Pdh | 5,2 | kW | T j = bivalent temperature | COPd | 2,52 | - |
| T j = operation limit | Pdh | 4,0 | kW | T j = operation limit | COPd | 1,91 | |
| temperature | Pull | 4,0 | KVV | temperature | СОРИ | 1,91 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 5,0 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 2,44 | - |
| Bivalent temperature | T _{biv} | -14 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,6 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | <u> </u> | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3932 | kWh | flow rate, outdoor heat exchanger | _ | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | na | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | na | % |
| Daily electricity consumption | Q_{elec} | na | kWh | Daily fuel consumption | \mathbf{Q}_{fuel} | NA | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:



| Information for heat pump s Warm climate and Medium | - | and heat pum | p combinati | on heaters | CTC AB Ljungby | | CTC |
|--|-------------------|------------------|--------------|---|-------------------|--------------|--------|
| Model(s): | | CTC EcoAir 63 | 10M 400V + 0 | CTC EcoZenith i350/i360, CTC EcoVe | ent i350F/i360 | F | |
| Air-to-water heat pump: | | Yes | | Energy efficiency class: | | - | |
| Water-to-water heat pump: | | No | | Controller class: | VI | - | |
| Brine-to-water heat pump: | | No | | Controller contribution: | 4 | % | |
| Low-temperature heat pump: | | No | | Package efficiency: | 177 | % | |
| Equipped with a supplementar | y heater: | Yes | | Package efficiency class: | | - | |
| Heat pump combination heater | r: | Yes | | | | | |
| | | | | t for low-temperature heat pumps. | For low- temp | erature heat | pumps, |
| parameters shall be declared for | or low-temperat | ture application | | | | | |
| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η _s | 173 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at i | ndoor tempera | ture 20 °C | Declared coefficient of perform | • | | |
| T j = -7 °C | Pdh | na | kW | T j = - 7 °C | COPd | na |] - |
| T j = + 2 °C | Pdh | 7,3 | kW | T j = +2 °C | COPd | 2,36 |] - |
| T j = + 7 °C | Pdh | 4,6 | kW | T j = +7 °C | COPd | 4,06 |] - |
| T j = + 12 °C | Pdh | 2,8 | kW | T j = +12 °C | COPd | 5,68 | _ |
| T j = bivalent temperature | Pdh | 7,3 | kW | T j = bivalent temperature | COPd | 2,36 | - |
| T j = operation limit temperature | Pdh | 7,3 | kW | T j = operation limit temperature | COPd | 2,36 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: $T j = -15 ^{\circ}C \text{ (if TOL } < -20 ^{\circ}C \text{)}$ | COPd | na | - |
| Bivalent temperature | T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| Cycling interval capacity for heating | P cych | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,99 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | e mode | _ | Supplementary heater | | | _ |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | - | | • | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water hea pumps: Rated brine or water | t - | na | m3/h |

For heat pump combination heater:

Annual energy consumption

Q_{HE}

| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | 122 | % |
|--------------------------------|-------|------------------|-----|---------------------------------|-----------------|-----|-----|
| Daily electricity consumption | Qelec | 6,232 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1371 | kWh | Annual fuel consumption | AFC | NA | GJ |

kWh

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.

flow rate, outdoor heat

exchanger

2121

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature

CTC AB Liungby



| Air-to-water heat pump: Water-to-water heat pump: No Controller class: VI - Brine-to-water heat pump: No Controller contribution: 4 % Low-temperature heat pump: No Package efficiency: 238 Equipped with a supplementary heater: Yes Package efficiency class: - | | | | | | | |
|---|-------------|--------------|--------------|--|----------------|--------------|--------|
| Model(s): | | CTC EcoAir 6 | 10M 400V + 0 | CTC EcoZenith i350/i360, CTC EcoVer | nt i350F/i360I | | |
| Air-to-water heat pump: | | Yes | | Energy efficiency class: | | - | |
| Water-to-water heat pump: | | No | | Controller class: | VI | - | |
| Brine-to-water heat pump: | | No | | Controller contribution: | 4 | % | |
| Low-temperature heat pump |): | No | | Package efficiency: | 238 | % | |
| Equipped with a supplement | ary heater: | Yes | | Package efficiency class: | | - | |
| Heat pump combination hear | ter: | Yes | | | | | |
| Parameters shall be declared parameters shall be declared | • | | | for low-temperature heat pumps. F | or low- tempe | erature heat | oumps, |
| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 234 | % |

| Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--------------------|--|--|---|--|--|------------|
| Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 234 | % |
| or part load at in | door tempera | ture 20 °C | | | | |
| Pdh | na | kW | T j = -7 °C | COPd | na | - |
| Pdh | 6,5 | kW | T j = +2 °C | COPd | 3,47 | - |
| Pdh | 4,4 | kW | T j = +7 °C | COPd | 6,02 | - |
| Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,13 | - |
| Pdh | 6,5 | kW | T j = bivalent temperature | COPd | 3,47 | - |
| Pdh | 6,5 | kW | T j = operation limit temperature | COPd | 3,47 | - |
| Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| P cych | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| other than active | mode | | Supplementary heater | | | |
| P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| P TO | 0,014 | kW | | | | |
| P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| P _{CK} | 0,000 | kW | | | | |
| | | | | | | |
| | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Q_{HE} | 1469 | kWh | flow rate, outdoor heat exchanger | | | |
| ater: | | | | | | |
| XL | Efficiency class | na | Water heating energy efficiency | η_{wh} | 122 | % |
| Qelec | 6,232 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| AEC | 1371 | kWh | Annual fuel consumption | AFC | NA | GJ |
| | Prated or part load at in Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh | Prated 7 or part load at indoor temperal Pdh na Pdh 6,5 Pdh 4,4 Pdh 6,5 Pdh 6,5 Pdh na T biv 2 P cych na Cdh 0,98 other than active mode P OFF P OFF 0,014 P SB 0,014 P CK 0,000 Variable L WA na/53 Q HE 1469 eater: Efficiency class Qelec 6,232 AEC 1371 | Prated 7 kW For part load at indoor temperature 20 °C Pdh | Prated 7 kW Or part load at indoor temperature 20 °C Path na kW T j = -7 °C Path 6,5 kW T j = +7 °C Path 6,5 kW T j = +7 °C Path 6,5 kW T j = +12 °C Path 6,5 kW T j = bivalent temperature Path 6,5 kW T j = -15 °C (if TOL < - 20 °C) Path 6,5 kW T j = -15 °C (if TOL < - 20 °C) Path 6,5 kW T j = -15 °C (if TOL < - 20 °C) Path 6,5 kW T j = -15 °C (if TOL < - 20 °C) Path 6,5 kW T j = -15 °C (if TOL < - 20 °C) Path 6,5 kW T j = operation limit temperature Path 7 biv 2 °C For air-to-water heat pumps: Operation limit temperature Path 7 biv 2 °C For air-to-water heat pumps: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input Variable Variable Variable For air-to-water heat pumps: Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Path 6,5 kW T j = +2 °C T j = +2 | Prated 7 kW Seasonal space heating energy efficiency Π _S or part load at indoor temperature 20 °C Declared coefficient of performance or prima part load at indoor temperature 20 °C and out part loa | Prated 7 |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Average climate and Medium temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M 400V + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---------------------------------------|---|---------------------------|------|---|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A++ | = | | | |
| Water-to-water heat pump: | No | Controller class: | VI | = | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | |
| Low-temperature heat pump: | No | Package efficiency: | 150 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A+++ | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 146 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 5,9 | kW | T j = -7 °C | COPd | 2,03 |] - |
| T j = + 2 °C | Pdh | 4,1 | kW | T j = +2 °C | COPd | 3,94 |] - |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 4,93 | _ |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 5,98 | - |
| T j = bivalent temperature | Pdh | 5,9 | kW | T j = bivalent temperature | COPd | 2,03 | - |
| T j = operation limit | Pdh | F 2 | kW | T j = operation limit | COPd | 1 77 | 1 |
| temperature | Pull | 5,3 | KVV | temperature | СОРИ | 1,77 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -7 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -10 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,99 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 1,7 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P_{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3883 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 97 | % |
| Daily electricity consumption | Qelec | 7,880 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1734 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M 400V + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---------------------------------------|---|---------------------------|------|---|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A+++ | - | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | |
| Low-temperature heat pump: | No | Package efficiency: | 193 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A+++ | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|---------------|----------|
| Rated heat output (*) | Prated | 6 | kW | Seasonal space heating energy efficiency | η_{s} | 189 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 5,6 | kW | T j = -7 °C | COPd | 3,03 |] - |
| T j = + 2 °C | Pdh | 3,5 | kW | T j = +2 °C | COPd | 5,14 | _ |
| T j = + 7 °C | Pdh | 2,5 | kW | T j = +7 °C | COPd | 5,83 | _ |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,27 | - |
| T j = bivalent temperature | Pdh | 5,9 | kW | T j = bivalent temperature | COPd | 2,66 | - |
| T j = operation limit | Pdh | F 7 | kW | T j = operation limit | COPd | 2 50 | 1 |
| temperature | Pun | 5,7 | KVV | temperature | СОРИ | 2,59 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -9 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -10 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,3 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | <u> </u> | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 2579 | kWh | flow rate, outdoor heat exchanger | _ | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 97 | % |
| Daily electricity consumption | Qelec | 7,880 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1734 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters $% \left(1\right) =\left(1\right) \left(1\right)$

Cold climate and Medium temperature

CTC AB Ljungby



| Model(s): | | CTC EcoAir 63 | LOM 400V + (| CTC EcoZenith i350/i360, CTC EcoVer | nt i350F/i360 | F | |
|--|-------------------|------------------|------------------|--|--------------------|-----------------|------------|
| Air-to-water heat pump: | | Yes | | Energy efficiency class: | | - | |
| Water-to-water heat pump: | | No | | Controller class: | VI | - | |
| Brine-to-water heat pump: | | No | | Controller contribution: | 4 | % | |
| Low-temperature heat pump: | | No | | Package efficiency: | 128 | % | |
| Equipped with a supplementar | y heater: | Yes | | Package efficiency class: | | - | |
| Heat pump combination heater | | Yes | | | | | |
| | | | | for low-temperature heat pumps. For | or low- tempe | erature heat | oumps, |
| parameters shall be declared for Item | Symbol | Value | unit | Item | Symbol | Value | Unit |
| | <u> </u> | | | Seasonal space heating energy | Зуппоот | | |
| Rated heat output (*) | Prated | 7 | kW | efficiency | η _s | 124 | % |
| Declared capacity for heating for | or part load at i | ndoor tempera | ture 20 °C | Declared coefficient of performa | ance or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature | 20 °C and ou | tdoor tempe | rature T j |
| Tj=-7°C | Pdh | 4,0 | kW | T j = - 7 °C | COPd | 2,66 | - |
| T j = + 2 °C | Pdh | 2,3 | kW | T j = +2 °C | COPd | 4,11 | - |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 5,08 | - |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 6,08 | - |
| T j = bivalent temperature | Pdh | 5,0 | kW | T j = bivalent temperature | COPd | 1,75 | - |
| T j = operation limit temperature | Pdh | 3,6 | kW | T j = operation limit temperature | COPd | 1,25 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 4,7 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 1,75 | - |
| Bivalent temperature | T _{biv} | -13 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | e mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,9 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | | I. | | • | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | | | 2/4 |
| Annual energy consumption | Q _{HE} | 5052 | kWh | flow rate, outdoor heat exchanger | - | na | m3/h |
| For heat pump combination he | ater: | • | • | | | • | • |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | 82 | % |
| Daily electricity consumption | Qelec | 9,257 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 2037 | kWh | Annual fuel consumption | AFC | NA | GJ |
| • | | The nackaging m | ust he denosited | at a recycling station or with the installation er | aginger for correc | t waste manager | nont Attho |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Low temperature**

CTC AB Ljungby



| CTC EcoAir 610M 400V + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---|---------------------------|--|---|--|--|--|
| Yes | Energy efficiency class: | | - | | | |
| No | Controller class: | VI | - | | | |
| No | Controller contribution: | 4 | % | | | |
| No | Package efficiency: | 164 | % | | | |
| Yes | Package efficiency class: | | - | | | |
| Yes | | | | | | |
| | Yes No No No Yes | Yes Energy efficiency class: No Controller class: No Controller contribution: No Package efficiency: Yes Package efficiency class: | Yes Energy efficiency class: No Controller class: VI No Controller contribution: 4 No Package efficiency: 164 Yes Package efficiency class: | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|---------------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 160 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 4,3 | kW | T j = -7 °C | COPd | 3,61 | - |
| T j = + 2 °C | Pdh | 2,4 | kW | T j = +2 °C | COPd | 5,08 |] - |
| T j = + 7 °C | Pdh | 2,5 | kW | T j = +7 °C | COPd | 6,00 | _ |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,13 | - |
| T j = bivalent temperature | Pdh | 5,2 | kW | T j = bivalent temperature | COPd | 2,52 | - |
| T j = operation limit | Pdh | 4.0 | kW | T j = operation limit | COPd | 1,91 | |
| temperature | Pun | 4,0 | KVV | temperature | СОРИ | 1,91 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 5,0 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 2,44 | - |
| Bivalent temperature | T _{biv} | -14 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P cych | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | e mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,6 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | • | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3932 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | $\eta_{\sf wh}$ | 82 | % |
| Daily electricity consumption | Q_{elec} | 9,257 | kWh | Daily fuel consumption | \mathbf{Q}_{fuel} | NA | kWh |
| Annual electricity consumption | AEC | 2037 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M | | | |
|---------------------------------------|-----------------|---------------------------|-----|---|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - |
| Water-to-water heat pump: | No | Controller class: | VI | - |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % |
| Low-temperature heat pump: | No | Package efficiency: | 177 | % |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - |
| Heat pump combination heater: | No | | | |

parameters shall be declared for low-temperature application.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|-------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 173 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | - | | |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | na | kW | T j = - 7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 7,3 | kW | T j = +2 °C | COPd | 2,36 |] - |
| T j = + 7 °C | Pdh | 4,6 | kW | T j = +7 °C | COPd | 4,06 | - |
| T j = + 12 °C | Pdh | 2,8 | kW | T j = +12 °C | COPd | 5,68 | - |
| T j = bivalent temperature | Pdh | 7,3 | kW | T j = bivalent temperature | COPd | 2,36 | - |
| T j = operation limit | Pdh | 7,3 | kW | T j = operation limit | COPd | 2,36 | 1 . |
| temperature | Full | 7,3 | KVV | temperature | COFU | 2,30 | ļ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,99 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 2121 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | na | Efficiency class | na | Water heating energy efficiency | η_{wh} | na | % |
| Daily electricity consumption | Qelec | na | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.

Information for heat pump space heaters and heat pump combination heaters **Warm climate and Low temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610N | /I 400V+ CTC EcoLogic | | |
|---------------------------------------|-----------------|---------------------------|-----|---|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - |
| Water-to-water heat pump: | No | Controller class: | VI | - |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % |
| Low-temperature heat pump: | No | Package efficiency: | 238 | % |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - |
| 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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 234 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | na | kW | T j = -7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 6,5 | kW | T j = +2 °C | COPd | 3,47 |] - |
| T j = + 7 °C | Pdh | 4,4 | kW | T j = +7 °C | COPd | 6,02 | _ |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 7,13 | - |
| T j = bivalent temperature | Pdh | 6,5 | kW | T j = bivalent temperature | COPd | 3,47 | - |
| T j = operation limit | Pdh | 6.5 | kW | T j = operation limit | COPd | 2 47 | |
| temperature | Pun | 6,5 | KVV | temperature | СОРИ | 3,47 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | • | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 1469 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | NA | Efficiency class | na | Water heating energy efficiency | η_{wh} | NA | % |
| Daily electricity consumption | Qelec | na | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | na | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

| Information for heat pump sp Warm climate and Medium t | | and heat pump | o combinati | on neaters | CTC AB Ljungby | | C |
|---|------------------|----------------|--------------|--|-------------------|--------------|--------|
| Model(s): | <u> </u> | CTC EcoAir 61 | .0M 400V + E | coZenith i250/i255 | LJungoy | | |
| Air-to-water heat pump: | | Yes | | Energy efficiency class: | | - | |
| Water-to-water heat pump: | | No | | Controller class: | VI | - | |
| Brine-to-water heat pump: | | No | | Controller contribution: | 4 | % | |
| Low-temperature heat pump: | | No | | Package efficiency: | 140 | % | |
| Equipped with a supplementary | heater: | Yes | | Package efficiency class: | | - | |
| Heat pump combination heater: Parameters shall be declared for parameters shall be declared for | r medium-tem | | | for low-temperature heat pumps. | For low- temp | erature heat | pumps, |
| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 136 | % |
| Declared capacity for heating fo and outdoor temperature T j | r part load at i | ndoor temperat | ure 20 °C | Declared coefficient of perform part load at indoor temperatur | - | | |
| T j = -7 °C | Pdh | na | kW | T j = - 7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 6,6 | kW | T j = +2 °C | COPd | 1,71 |] - |
| T j = + 7 °C | Pdh | 4,3 | kW | T j = +7 °C | COPd | 3,10 | - |
| T j = + 12 °C | Pdh | 2,8 | kW | T j = +12 °C | COPd | 4,58 | - |
| T j = bivalent temperature | Pdh | 6,6 | kW | T j = bivalent temperature | COPd | 1,71 | - |
| T j = operation limit temperature | Pdh | 6,6 | kW | T j = operation limit temperature | COPd | 1,71 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| Cycling interval capacity for heating | P cych | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,99 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |

| · · | | - / | |
|----------------------------|-------------------|-------|----|
| Power consumption in modes | other than active | mode | |
| Off mode | P _{OFF} | 0,014 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW |
| Standby mode | P _{SB} | 0,014 | kW |
| Crankcase heater mode | P _{CK} | 0,000 | kW |
| Other items | | | |

For air-to-water heat pumps: Variable Rated air flow rate, outdoors For water-/brine-to-water heat na/53 dB L_{WA} pumps: Rated brine or water flow rate, outdoor heat Q_{HE} 2701 kWh exchanger

Type of energy input

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | $\eta_{\sf wh}$ | 67 | % |
|--------------------------------|-------|------------------|-----|---------------------------------|-----------------|----|-----|
| Daily electricity consumption | Qelec | 6,958 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1531 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.

Capacity control

outdoors

Electric

2350

na

m3/h

m3/h

Information for heat pump space heaters and heat pump combination heaters **Warm climate and Low temperature**

CTC AB Ljungby



| Model(s): CTC EcoAir 610M 400V + EcoZenith i250/i255 | | | | | |
|--|-----|---------------------------|-----|---|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | |
| Water-to-water heat pump: | No | Controller class: | VI | - | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | |
| Low-temperature heat pump: | No | Package efficiency: | 193 | % | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | |
| Heat pump combination heater: | Yes | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|---------------------|-----------|--|--------------|-------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 189 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | - | | |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| Tj=-7°C | Pdh | na | kW | T j = - 7 °C | COPd | na |] - |
| T j = + 2 °C | Pdh | 6,3 | kW | T j = +2 °C | COPd | 2,76 | - |
| T j = + 7 °C | Pdh | 4,3 | kW | T j = +7 °C | COPd | 4,82 |] - |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 5,73 | - |
| T j = bivalent temperature | Pdh | 6,3 | kW | T j = bivalent temperature | COPd | 2,76 | - |
| T j = operation limit | Pdh | 6,3 | kW | T j = operation limit | COPd | 2,76 | <u> </u> |
| temperature | run | 0,3 | KVV | temperature | COPU | 2,70 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | 2 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 2 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na |] - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P_{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | · | | | 1 | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 1814 | kWh | flow rate, outdoor heat exchanger | | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 67 | % |
| Daily electricity consumption | Qelec | 6,958 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1531 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Average climate and Medium temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610N | CTC EcoAir 610M 400V + EcoZenith i250/i255 | | | | | | |
|---------------------------------------|-----------------|--|-----|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A+ | - | | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 126 | % | | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A++ | - | | | | |
| Heat pump combination heater: | Yes | | | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|------------------|------------------|--|-------------------|-----------------|--------------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 122 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at i | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | - | | |
| T j = -7 °C | Pdh | 5,3 | kW | T j = - 7 °C | COPd | 1,77 |] - |
| T j = + 2 °C | Pdh | 3,6 | kW | T j = +2 °C | COPd | 3,25 | - |
| T j = + 7 °C | Pdh | 2,3 | kW | T j = +7 °C | COPd | 4,15 | - |
| T j = + 12 °C | Pdh | 2,7 | kW | T j = +12 °C | COPd | 5,02 | - |
| T j = bivalent temperature | Pdh | 5,3 | kW | T j = bivalent temperature | COPd | 1,77 | - |
| T j = operation limit temperature | Pdh | 4,6 | kW | T j = operation limit temperature | COPd | 1,47 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -7 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -10 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,99 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes | other than activ | e mode | • | Supplementary heater | | • | • |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,0 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | • | • |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | 3,223 | l | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 4361 | kWh | flow rate, outdoor heat exchanger | | III | 1113/11 |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | L | Efficiency class | В | Water heating energy efficiency | η_{wh} | 53 | % |
| Daily electricity consumption | Qelec | 8,570 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1885 | kWh | Annual fuel consumption | AFC | NA | GJ |
| <u> </u> | | The packaging m | ust be deposited | at a recycling station or with the installation eng | gineer for correc | t waste manager | ment. At the |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature**

Ljungby



CTC AB

| Model(s): | CTC EcoAir 610M 400V + EcoZenith i250/i255 | | | | | |
|---------------------------------------|--|---------------------------|-----|---|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A++ | - | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | |
| Low-temperature heat pump: | No | Package efficiency: | 165 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A++ | - | | |
| Heat pump combination heater: | Yes | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|------------------|------------------|--|-------------------|-----------------|--------------|
| Rated heat output (*) | Prated | 6 | kW | Seasonal space heating energy efficiency | η_{s} | 161 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at i | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | | | |
| Tj=-7°C | Pdh | 5,4 | kW | T j = - 7 °C | COPd | 2,53 |] - |
| T j = + 2 °C | Pdh | 3,4 | kW | T j = +2 °C | COPd | 4,38 | - |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 5,00 |] - |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 6,27 | - |
| T j = bivalent temperature | Pdh | 5,6 | kW | T j = bivalent temperature | COPd | 2,21 | - |
| T j = operation limit temperature | Pdh | 5,4 | kW | T j = operation limit temperature | COPd | 2,14 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | na | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | na | - |
| Bivalent temperature | T _{biv} | -9 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | 0 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na | - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes | other than activ | e mode | • | Supplementary heater | | • | |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 0,6 | kW |
| Thermostat-off mode | P _{TO} | 0,014 | kW | | | • | • |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | , | | 1 | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3022 | kWh | flow rate, outdoor heat exchanger | | III | 1113/11 |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | L | Efficiency class | В | Water heating energy efficiency | η_{wh} | 53 | % |
| Daily electricity consumption | Qelec | 8,570 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1885 | kWh | Annual fuel consumption | AFC | NA | GJ |
| · | | The packaging m | ust be deposited | at a recycling station or with the installation eng | gineer for correc | t waste manager | ment. At the |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Medium temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610M 400V + EcoZenith i250/i255 | | | | | |
|---------------------------------------|--|---------------------------|----|---|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | | |
| Water-to-water heat pump: | No | Controller class: | VI | = | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | |
| Low-temperature heat pump: | No | Package efficiency: | 93 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | |
| Heat pump combination heater: | Yes | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|--------------|---------------|----------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_{s} | 89 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | nce or prima | ry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| T j = - 7 °C | Pdh | 3,4 | kW | T j = - 7 °C | COPd | 2,17 |] - |
| T j = + 2 °C | Pdh | 2,1 | kW | T j = +2 °C | COPd | 3,61 | - |
| T j = + 7 °C | Pdh | 2,3 | kW | T j = +7 °C | COPd | 4,70 | - |
| T j = + 12 °C | Pdh | 2,8 | kW | T j = +12 °C | COPd | 5,94 | - |
| T j = bivalent temperature | Pdh | 4,0 | kW | T j = bivalent temperature | COPd | 1,50 | - |
| T j = operation limit | Pdh | 2,8 | kW | T j = operation limit | COPd | 0,95 | - |
| temperature | run | 2,0 | KVV | temperature | COPU | 0,95 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 3,7 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 1,36 | - |
| Bivalent temperature | T _{biv} | -13 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na |] - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | ther than activ | re mode | | Supplementary heater | | | - |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 3,7 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P_{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/53 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 6980 | kWh | flow rate, outdoor heat exchanger | _ | IIa | 1113/11 |
| For heat pump combination hea | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 47 | % |
| Daily electricity consumption | Qelec | 9,856 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 2168 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information:

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Low temperature**

CTC AB Ljungby



| Model(s): | CTC EcoAir 610N | CTC EcoAir 610M 400V + EcoZenith i250/i255 | | | | | |
|---------------------------------------|-----------------|--|-----|---|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | | | |
| Water-to-water heat pump: | No | Controller class: | VI | - | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | |
| Low-temperature heat pump: | No | Package efficiency: | 138 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

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.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|------------------|-----------|--|---------------------|-------------|----------------|
| Rated heat output (*) | Prated | 7 | kW | Seasonal space heating energy efficiency | η_s | 134 | % |
| Declared capacity for heating for | or part load at i | ndoor temperat | ure 20 °C | Declared coefficient of performan | | | |
| and outdoor temperature T j | | | | part load at indoor temperature 2 | 20 °C and ou | tdoor tempe | rature T |
| Tj=-7°C | Pdh | 4,1 | kW | T j = - 7 °C | COPd | 3,01 |] - |
| T j = + 2 °C | Pdh | 2,3 | kW | T j = +2 °C | COPd | 4,33 | - |
| T j = + 7 °C | Pdh | 2,4 | kW | T j = +7 °C | COPd | 5,15 | |
| T j = + 12 °C | Pdh | 2,9 | kW | T j = +12 °C | COPd | 6,15 | - |
| T j = bivalent temperature | Pdh | 4,8 | kW | T j = bivalent temperature | COPd | 2,06 | - |
| T j = operation limit | Pdh | 3,6 | kW | T j = operation limit | COPd | 1,51 | † ₋ |
| temperature | i un | 3,0 | KVV | temperature | coru | 1,31 | _ |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 4,7 | kW | For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | COPd | 1,99 | - |
| Bivalent temperature | T _{biv} | -14 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -22 | °C |
| Cycling interval capacity for heating | P _{cych} | na | kW | Cycling interval efficiency | СОРсус | na |] - |
| Degradation co-efficient | Cdh | 0,98 | - | Heating water operating limit temperature | WTOL | 55 | °C |
| Power consumption in modes of | other than activ | re mode | | Supplementary heater | | | |
| Off mode | P OFF | 0,014 | kW | Rated heat output (*) | Psup | 2,9 | kW |
| Thermostat-off mode | P_{TO} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | P _{CK} | 0,000 | kW | | | | |
| Other items | | | | 1 | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 2350 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/5 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 4759 | kWh | flow rate, outdoor heat exchanger | _ | IIa | 1113/11 |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | $\eta_{\sf wh}$ | 47 | % |
| Daily electricity consumption | Q_{elec} | 9,856 | kWh | Daily fuel consumption | \mathbf{Q}_{fuel} | NA | kWh |
| Annual electricity consumption | AEC | 2168 | kWh | Annual fuel consumption | AFC | NA | GJ |

Specific precautions and end of life information: