Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature (55)

| CTC AB |
|---------|
| Ljungby |



| Model(s): | CTC EcoAir 622M + 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: | 187 | % | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | |
| Heat nump combination beater: | No | | | | | | |

 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 | 13 | kW | Seasonal space heating energy efficiency | η _s | 183 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | na | kW | T j = – 7 °C | COPd | na | - 1 |
| T j = + 2 °C | Pdh | 14,0 | kW | T j = +2 °C | COPd | 2,15 | - 1 |
| T j = + 7 °C | Pdh | 8,6 | kW | T j = +7 °C | COPd | 4,13 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,07 | - |
| T j = bivalent temperature | Pdh | 14,0 | kW | T j = bivalent temperature | COPd | 2,15 | - |
| T j = operation limit temperature | Pdh | 14,0 | kW | T j = operation limit temperature | COPd | 2,15 | - |
| 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 | other than active | mode | _ | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 3746 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | | 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: | | The packaging m end of the produ great importance Disposing of the | ust be deposited a ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese 's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ller offering a sei ctronic equipmen | t waste manager vice of that type nt are properly di | nent. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Liungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622 | CTC EcoAir 622M + CTC EcoLogic | | | | | | |
|---------------------------------------|----------------|--------------------------------|-----|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | | - | | | | |
| Water-to-water heat pump: | Νο | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 249 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | | |
| Heat pump combination heater: | No | | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------------|---|---|---|--|---|---|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 245 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | ince or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | na | kW | T j = – 7 °C | COPd | na | 1 - |
| T j = + 2 °C | Pdh | 12,9 | kW | T j = +2 °C | COPd | 3,16 | - 1 |
| T j = + 7 °C | Pdh | 8,3 | kW | T j = +7 °C | COPd | 5,88 | - 1 |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,61 | - |
| T j = bivalent temperature | Pdh | 12,9 | kW | T j = bivalent temperature | COPd | 3,16 | - |
| T j = operation limit temperature | Pdh | 12,9 | kW | T j = operation limit temperature | COPd | 3,16 | - |
| 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 | other than active | mode | _ | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 2804 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | | 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: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele hold waste is not permitted. | gineer for correc ller offering a ser ctronic equipmer | t waste manager vice of that type nt are properly d | ment. At the It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | -46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature (55)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M | CTC EcoAir 622M + CTC EcoLogic | | | | | | |
|---------------------------------------|-----------------|--------------------------------|------|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A++ | - | | | | |
| Water-to-water heat pump: | Νο | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | Νο | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 152 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | A+++ | - | | | | |
| Heat pump combination heater: | No | | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|--|--|---|--|---|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 148 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at ir | idoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | ince or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 7,5 | kW | T j = – 7 °C | COPd | 2,41 |] - |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 3,81 |] - |
| T j = + 7 °C | Pdh | 4,7 | kW | T j = +7 °C | COPd | 4,76 | - [|
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,15 | - |
| T j = bivalent temperature | Pdh | 8,7 | kW | T j = bivalent temperature | COPd | 1,99 | - |
| T j = operation limit temperature | Pdh | 8,7 | kW | T j = operation limit temperature | COPd | 1,99 | - |
| 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} | -10 | °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 | other than active | mode | _ | Supplementary heater | | | _ |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 4656 | kWh | flow rate, outdoor heat exchanger | | | - |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | | 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: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it n that the produc product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele shold waste is not permitted. | gineer for correc ller offering a sei ctronic equipme | t waste manager rvice of that type nt are properly d | ment. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | -46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature (35)**

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + | CTC EcoAir 622M + CTC EcoLogic | | | | | | |
|---------------------------------------|-------------------|--------------------------------|------|---|--|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A+++ | - | | | | |
| Water-to-water heat pump: | Νο | Controller class: | VI | - | | | | |
| Brine-to-water heat pump: | Νο | Controller contribution: | 4 | % | | | | |
| Low-temperature heat pump: | No | Package efficiency: | 198 | % | | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | A+++ | - | | | | |
| Heat pump combination heater: | No | | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|---|--|---|---|---|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 194 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 7,8 | kW | T j = − 7 °C | COPd | 3,53 | I - |
| T j = + 2 °C | Pdh | 4,5 | kW | T j = +2 °C | COPd | 4,97 | - |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,94 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,35 | - |
| T j = bivalent temperature | Pdh | 8,8 | kW | T j = bivalent temperature | COPd | 3,04 | - |
| T j = operation limit temperature | Pdh | 8,8 | kW | T j = operation limit temperature | COPd | 3,04 | - |
| 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} | -10 | °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 | other than active | mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | · · | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 3567 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | | 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: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ller offering a sei ctronic equipme | t waste manager rvice of that type nt are properly di | nent. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature (55)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + 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: | 140 | % | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | |
| Heat pump combination heater: | No | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|---|---|--|---|--|
| Rated heat output (*) | Prated | 12 | kW | Seasonal space heating energy efficiency | η _s | 136 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | 7,3 | kW | T j = - 7 °C | COPd | 2,91 | - 1 |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 4,53 | - |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,28 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,44 | - |
| T j = bivalent temperature | Pdh | 10,9 | kW | T j = bivalent temperature | COPd | 1,46 | - |
| T j = operation limit temperature | Pdh | 4,6 | kW | T j = operation limit temperature | COPd | 1,51 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 9,6 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,81 | - |
| Bivalent temperature | T _{biv} | -18 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | mode | | Supplementary heater | | | _ |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 11,5 | kW |
| Thermostat-off mode | P _{TO} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | 1 | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 8159 | kWh | flow rate, outdoor heat exchanger | | | - |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | | 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: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel 's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a sei tronic equipmen | t waste manager rvice of that type nt are properly di | nent. At the . It is of sposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + 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: | 172 | % | | | |
| Equipped with a supplementary heater: | No | Package efficiency class: | | - | | | |
| Heat pump combination heater: | No | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|---|--|---|--|---|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 168 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | 7,6 | kW | T j = − 7 °C | COPd | 3,67 | 1 - |
| T j = + 2 °C | Pdh | 4,7 | kW | T j = +2 °C | COPd | 5,49 | - |
| T j = + 7 °C | Pdh | 4,9 | kW | T j = +7 °C | COPd | 6,70 | - 1 |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,77 | - |
| T j = bivalent temperature | Pdh | 11,4 | kW | T j = bivalent temperature | COPd | 1,99 | - |
| T j = operation limit temperature | Pdh | 4,9 | kW | T j = operation limit temperature | COPd | 1,99 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 10,3 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 2,36 | - |
| Bivalent temperature | T _{biv} | -17 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 12,5 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 7225 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | | na | | Water heating energy efficiency | η_{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: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel c's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correcter offering a sent sent sent sent sent sent sent sent | t waste manager vice of that type nt are properly di | nent. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

| Information for heat pump space heaters and heat pump combination heater | S |
|--|---|
| Warm climate and Medium temperature (55) | |

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | |
|---------------------------------------|--|---------------------------|-----|---|--|--|
| 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: | 187 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | |
| Heat pump combination heater: | Yes | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------------|---|---|--|---|--|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 183 | % |
| Declared capacity for heating f and outdoor temperature T j | for part load at ir | idoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | na | kW | T j = – 7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 14,0 | kW | T j = +2 °C | COPd | 2,15 | - 1 |
| T j = + 7 °C | Pdh | 8,6 | kW | T j = +7 °C | COPd | 4,13 | - 1 |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,07 | - |
| T j = bivalent temperature | Pdh | 14,0 | kW | T j = bivalent temperature | COPd | 2,15 | - |
| T j = operation limit temperature | Pdh | 14,0 | kW | T j = operation limit temperature | COPd | 2,15 | - |
| 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 | other than active | mode | _ | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Рск | 0.000 | kW | | | | |
| Other items | | , | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 3746 | kWh | exchanger | | | |
| For heat pump combination he | eater: | - | - | | | - | |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | η_{wh} | 112 | % |
| Daily electricity consumption | Qelec | 6,835 | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | 1504 | kWh | Annual fuel consumption | AFC | na | GJ |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted. | gineer for correc ler offering a ser ctronic equipmer | t waste manager vice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | -46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---------------------------------------|--|---------------------------|-----|---|--|--|--|
| 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: | 249 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|--|--|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 245 | % |
| Declared capacity for heating f and outdoor temperature T j | or part load at ir | ndoor temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | ince or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | na | kW | T j = – 7 °C | COPd | na | 1 - |
| T j = + 2 °C | Pdh | 12,9 | kW | T j = +2 °C | COPd | 3,16 | - |
| T j = + 7 °C | Pdh | 8,3 | kW | T j = +7 °C | COPd | 5,88 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,61 | - |
| T j = bivalent temperature | Pdh | 12,9 | kW | T j = bivalent temperature | COPd | 3,16 | - |
| T j = operation limit temperature | Pdh | 12,9 | kW | T j = operation limit temperature | COPd | 3,16 | - |
| 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 | other than active | e mode | | Supplementary heater | | | - |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Ρ _{ΤΟ} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 2804 | kWh | flow rate, outdoor heat exchanger | | | - |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | η_{wh} | 112 | % |
| Daily electricity consumption | Qelec | 6,835 | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | 1504 | kWh | Annual fuel consumption | AFC | na | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it n that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele shold waste is not permitted. | gineer for correc ller offering a sei ctronic equipmei | t waste manager rvice of that type nt are properly d | nent. At the . It is of sposed of. |
| Contact details | CICAB, Nasväge | en 8, SE-341 34 | Ljungby Tel + | -46 372 88000 www.ctc.se | | | 231218 |

| Information for heat pump space heaters and heat pump combination heaters |
|---|
| Average climate and Medium temperature (55) |

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + 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: | 152 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A+++ | - | | |
| Heat pump combination heater: | Yes | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|---|--|---|--|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 148 | % |
| Declared capacity for heating f | or part load at in | door tempera | ture 20 °C | Declared coefficient of performa | nce or prima | iry energy rat | io for |
| and outdoor temperature T j | | | | part load at indoor temperature | 20 °C and ou | tdoor tempe | rature T j |
| T j = – 7 °C | Pdh | 7,5 | kW | T j = – 7 °C | COPd | 2,41 | - |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 3,81 | - |
| T j = + 7 °C | Pdh | 4,7 | kW | T j = +7 °C | COPd | 4,76 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,15 | - |
| T j = bivalent temperature | Pdh | 8,7 | kW | T j = bivalent temperature | COPd | 1,99 | - |
| T j = operation limit temperature | Pdh | 8,7 | kW | T j = operation limit temperature | COPd | 1,99 | - |
| 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} | -10 | °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 active | mode | - | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 4656 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 98 | % |
| Daily electricity consumption | Qelec | 7,816 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1720 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a sei tronic equipmen | t waste manager rvice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details | CICAB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

| Information for heat pump space heaters and heat pump combination heaters |
|---|
| Average climate and Low temperature (35) |

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---------------------------------------|--|---------------------------|------|---|--|--|--|
| Air-to-water heat pump: | Yes | Energy efficiency class: | A+++ | - | | | |
| Water-to-water heat pump: | Νο | Controller class: | VI | - | | | |
| Brine-to-water heat pump: | No | Controller contribution: | 4 | % | | | |
| Low-temperature heat pump: | No | Package efficiency: | 198 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A+++ | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit | | |
|--|---------------------|--|---|--|--|---|--|--|--|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 194 | % | | |
| Declared capacity for heating f and outdoor temperature T j | for part load at in | ndoor tempera | ture 20 °C | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j | | | | | |
| T j = − 7 °C | Pdh | 7,8 | kW | T j = − 7 °C | COPd | 3,53 | - | | |
| T j = + 2 °C | Pdh | 4,5 | kW | T j = +2 °C | COPd | 4,97 | - | | |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,94 | - | | |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,35 | - | | |
| T j = bivalent temperature | Pdh | 8,8 | kW | T j = bivalent temperature | COPd | 3,04 | - | | |
| T j = operation limit temperature | Pdh | 8,8 | kW | T j = operation limit temperature | COPd | 3,04 | - | | |
| 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} | -10 | °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 | other than activ | e mode | | Supplementary heater | | | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 0,0 | kW | | |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | | | |
| Crankcase heater mode | Р _{ск} | 0,000 | kW | | | | | | |
| Other items | | | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h | | |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h | | |
| Annual energy consumption | Q _{HE} | 3567 | kWh | flow rate, outdoor heat exchanger | | | | | |
| For heat pump combination he | eater: | | - | | | | - | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 98 | % | | |
| Daily electricity consumption | Qelec | 7,816 | kWh | Daily fuel consumption | Qfuel | na | kWh | | |
| Annual electricity consumption | AEC | 1720 | kWh | Annual fuel consumption | AFC | na | GJ | | |
| Specific precautions and end of life information: | | The packaging mu end of the produ great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a ser tronic equipmen | t waste manager rvice of that type nt are properly di | nent. At the It is of sposed of. | | |
| Contact details | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 | | |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature (55)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | |
|---------------------------------------|--|---------------------------|-----|---|--|--|
| 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: | Yes | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|--|---|--|--|--|
| Rated heat output (*) | Prated | 12 | kW | Seasonal space heating energy efficiency | η _s | 136 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at ir | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 7,3 | kW | T j = − 7 °C | COPd | 2,91 | - |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 4,53 | - |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,28 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,44 | - |
| T j = bivalent temperature | Pdh | 10,9 | kW | T j = bivalent temperature | COPd | 1,46 | - |
| T j = operation limit temperature | Pdh | 4,6 | kW | T j = operation limit temperature | COPd | 1,51 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 9,6 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,81 | - |
| Bivalent temperature | T _{biv} | -18 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | e mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 11,5 | kW |
| Thermostat-off mode | Р _{то} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 8159 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | η_{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 |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it n that the produc product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/elec shold waste is not permitted. | gineer for correc ller offering a ser ctronic equipmer | t waste manager vice of that type nt are properly di | nent. At the . It is of sposed of. |
| Contact details | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | -46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i350/i360, CTC EcoVent i350F/i360F | | | | | | |
|---------------------------------------|--|---------------------------|-----|---|--|--|--|
| 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: | 172 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|---|---|--|---|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 168 | % |
| Declared capacity for heating and outdoor temperature T j | for part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ary energy rat itdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 7,6 | kW | T j = − 7 °C | COPd | 3,67 | - |
| T j = + 2 °C | Pdh | 4,7 | kW | T j = +2 °C | COPd | 5,49 | - |
| T j = + 7 °C | Pdh | 4,9 | kW | T j = +7 °C | COPd | 6,70 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 7,77 | - |
| T j = bivalent temperature | Pdh | 11,4 | kW | T j = bivalent temperature | COPd | 1,99 | - |
| T j = operation limit temperature | Pdh | 4,9 | kW | T j = operation limit temperature | COPd | 1,99 | - |
| For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) | Pdh | 10,3 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 2,36 | - |
| Bivalent temperature | T _{biv} | -17 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | mode | _ | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,012 | kW | Rated heat output (*) | Psup | 12,5 | kW |
| Thermostat-off mode | P _{TO} | 0,012 | kW | | | | |
| Standby mode | P _{SB} | 0,012 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{ск} | 0,000 | kW | | | | |
| Other items | | , | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 7225 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | na | Water heating energy efficiency | η_{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: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a sei tronic equipmen | t waste manager rvice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details | CICAB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature (55)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC 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: | 146 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|--|---|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 142 | % |
| Declared capacity for heating fraction and outdoor temperature T j | or part load at ir | idoor temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ary energy rat itdoor tempe | io for rature T j |
| Tj=−7°C | Pdh | na | kW | T j = − 7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 12,5 | kW | T j = +2 °C | COPd | 1,56 | - |
| T j = + 7 °C | Pdh | 8,0 | kW | T j = +7 °C | COPd | 3,15 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 4,89 | - |
| T j = bivalent temperature | Pdh | 12,5 | kW | T j = bivalent temperature | COPd | 1,56 | - |
| T j = operation limit temperature | Pdh | 12,5 | kW | T j = operation limit temperature | COPd | 1,56 | - |
| 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 | other than active | e mode | _ | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{ск} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 4792 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 66 | % |
| Daily electricity consumption | Qelec | 7,118 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1566 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correct ler offering a seu tronic equipme | t waste manager rvice of that type nt are properly di | nent. At the . It is of sposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC 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: | 200 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|---|---|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 196 | % |
| Declared capacity for heating f and outdoor temperature T j | or part load at ir | ndoor temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ary energy rat itdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | na | kW | T j = − 7 °C | COPd | na | - 1 |
| T j = + 2 °C | Pdh | 12,6 | kW | T j = +2 °C | COPd | 2,51 | - |
| T j = + 7 °C | Pdh | 8,2 | kW | T j = +7 °C | COPd | 4,70 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,12 | - |
| T j = bivalent temperature | Pdh | 12,6 | kW | T j = bivalent temperature | COPd | 2,51 | - |
| T j = operation limit temperature | Pdh | 12,6 | kW | T j = operation limit temperature | COPd | 2,51 | - |
| 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 | other than active | e mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 3483 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 66 | % |
| Daily electricity consumption | Qelec | 7,118 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1566 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correct ler offering a sei stronic equipme | t waste manager rvice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details | CICAB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Average climate and Medium temperature (55)**

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC 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 | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|---|--|---|---|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 122 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at ir | ndoor temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | 6,2 | kW | T j = – 7 °C | COPd | 1,00 | - 1 |
| T j = + 2 °C | Pdh | 4,1 | kW | T j = +2 °C | COPd | 1,97 | - |
| T j = + 7 °C | Pdh | 4,4 | kW | T j = +7 °C | COPd | 3,35 | - 1 |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 4,40 | - |
| T j = bivalent temperature | Pdh | 7,0 | kW | T j = bivalent temperature | COPd | 6,01 | - |
| T j = operation limit temperature | Pdh | 7,0 | kW | T j = operation limit temperature | COPd | 1,59 | - |
| 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 | 1,59 | - |
| Bivalent temperature | T _{biv} | -10 | °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 active | e mode | _ | Supplementary heater | | | _ |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 1,5 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 5630 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | В | Water heating energy efficiency | η_{wh} | 53 | % |
| Daily electricity consumption | Qelec | 8,780 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1932 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produc great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele hold waste is not permitted. | gineer for correc ller offering a ser ctronic equipmer | t waste manager vice of that type nt are properly d | nent. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature (35)**

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC 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: | Νο | Controller contribution: | 4 | % | | |
| Low-temperature heat pump: | Νο | Package efficiency: | 169 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A++ | - | | |
| Heat pump combination heater: | Yes | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|--|---|---|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 165 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at ir | idoor temperat | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | 7,4 | kW | T j = – 7 °C | COPd | 2,95 |] - |
| T j = + 2 °C | Pdh | 4,4 | kW | T j = +2 °C | COPd | 4,23 | - 1 |
| T j = + 7 °C | Pdh | 4,7 | kW | T j = +7 °C | COPd | 5,10 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,34 | - |
| T j = bivalent temperature | Pdh | 8,3 | kW | T j = bivalent temperature | COPd | 2,52 | - |
| T j = operation limit temperature | Pdh | 8,3 | kW | T j = operation limit temperature | COPd | 2,52 | - |
| 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} | -10 | °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 active | e mode | | Supplementary heater | | | • |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 4185 | kWh | exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | В | Water heating energy efficiency | η_{wh} | 53 | % |
| Daily electricity consumption | Qelec | 8,780 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 1932 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ller offering a ser ctronic equipmer | t waste manager vice of that type nt are properly d | nent. At the . It is of isposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature (55)

CTC AB Ljungby сТс

| Model(s): | CTC EcoAir 622M + CTC 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: | 108 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|---|---|--|
| Rated heat output (*) | Prated | 12 | kW | Seasonal space heating energy efficiency | η _s | 104 | % |
| Declared capacity for heating f and outdoor temperature T j | or part load at in | door tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ary energy rat Itdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 6,1 | kW | T j = – 7 °C | COPd | 2,37 | - |
| T j = + 2 °C | Pdh | 4,1 | kW | T j = +2 °C | COPd | 3,98 | - |
| T j = + 7 °C | Pdh | 4,5 | kW | T j = +7 °C | COPd | 4,88 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,30 | - |
| T j = bivalent temperature | Pdh | 8,5 | kW | T j = bivalent temperature | COPd | 1,13 | - |
| T j = operation limit temperature | Pdh | 3,6 | kW | T j = operation limit temperature | COPd | 1,16 | - |
| For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | Pdh | 7,6 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,41 | - |
| Bivalent temperature | T _{biv} | -18 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | mode | - | Supplementary heater | | | - |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 11,5 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 10614 | kWh | exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 46 | % |
| Daily electricity consumption | Qelec | 10,113 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 2225 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correcter ler offering a sen stronic equipment | t waste manager rvice of that type nt are properly di | ient. At the It is of sposed of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC 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: | 145 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|--|---|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 141 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at ir | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| Ti=−7°C | Pdh | 7.3 | kW | T i = - 7 °C | COPd | 3.06 | - 1 |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 4,67 | - 1 |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,75 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,70 | - |
| T j = bivalent temperature | Pdh | 10,5 | kW | T j = bivalent temperature | COPd | 1,61 | - |
| T j = operation limit temperature | Pdh | 4,5 | kW | T j = operation limit temperature | COPd | 1,59 | - |
| For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | Pdh | 9,6 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,92 | - |
| Bivalent temperature | T _{biv} | -17 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 active | e mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 12,5 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 8538 | kWh | exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | L | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 46 | % |
| Daily electricity consumption | Q _{elec} | 10,113 | kWh | Daily fuel consumption | \mathbf{Q}_{fuel} | NA | kWh |
| Annual electricity consumption | AEC | 2225 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it n that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ller offering a ser ctronic equipmer | t waste manager vice of that type nt are properly d | nent. At the It is of sposed of. |
| Contact details 0 | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature (55)

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i555 230/400V | | | | | | |
|---------------------------------------|---|---------------------------|-----|---|--|--|--|
| 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: | 147 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|--|--|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 143 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at in | idoor temperat | ture 20 °C | Declared coefficient of performal part load at indoor temperature | nce or prima 20 °C and ou | ry energy rat tdoor tempe | io for rature T j |
| Tj=−7°C | Pdh | na | kW | T j = − 7 °C | COPd | na | - 1 |
| T j = + 2 °C | Pdh | 13,3 | kW | T j = +2 °C | COPd | 1,62 | - |
| T j = + 7 °C | Pdh | 8,3 | kW | T j = +7 °C | COPd | 3,20 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 4,83 | - |
| T j = bivalent temperature | Pdh | 13,3 | kW | T j = bivalent temperature | COPd | 1,62 | - |
| T j = operation limit temperature | Pdh | 13,3 | kW | T j = operation limit temperature | COPd | 1,62 | - |
| 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 | other than active | e mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 4770 | kWh | exchanger | | | |
| For heat pump combination he | ater: | - | - | | | - | - |
| Declared load profile | XL | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 112 | % |
| Daily electricity consumption | Qelec | 6,835 | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | 1504 | kWh | Annual fuel consumption | AFC | na | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produ- great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a ser tronic equipmen | t waste manager vice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details (| LICAB, Näsväge | n 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature (35)

| CTC AB |
|---------|
| Ljungby |



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i555 230/400V | | | | | | |
|---------------------------------------|---|---------------------------|-----|---|--|--|--|
| 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: | 199 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|--------------------|---|---|--|---|---|--|
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 195 | % |
| Declared capacity for heating for and outdoor temperature T j | or part load at in | door temperat | cure 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| Ti=−7°C | Pdh | na | kW | T i = - 7 °C | COPd | na | - |
| T j = + 2 °C | Pdh | 12,7 | kW | T j = +2 °C | COPd | 2,50 | - |
| T j = + 7 °C | Pdh | 8,2 | kW | T j = +7 °C | COPd | 4,67 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,06 | - |
| T j = bivalent temperature | Pdh | 12,7 | kW | T j = bivalent temperature | COPd | 2,50 | - |
| T j = operation limit temperature | Pdh | 12,7 | kW | T j = operation limit temperature | COPd | 2,50 | - |
| 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 | other than active | e mode | | Supplementary heater | | | - |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| L Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 3513 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | ater: | | | | | | |
| Declared load profile | XL | Efficiency class | NA | Water heating energy efficiency | η_{wh} | 112 | % |
| Daily electricity consumption | Qelec | 6,835 | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | 1504 | kWh | Annual fuel consumption | AFC | na | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produc great importance Disposing of the p | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or resel 's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a ser ctronic equipmen | t waste manager rvice of that type nt are properly di | nent. At the It is of sposed of. |
| Contact details | CICAB, Nasvage | 11 0, SE-341 34 | Ljungby Tel + | 40 37 2 88000 WWW.CTC.Se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Average climate and Medium temperature (55)**

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i555 230/400V | | | | | | |
|---------------------------------------|---|---------------------------|-----|---|--|--|--|
| 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: | 139 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A++ | - | | | |
| Heat pump combination heater: | Yes | | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------------|---|---|---|---|---|--|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 135 | % |
| Declared capacity for heating f and outdoor temperature T j | for part load at ir | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | iry energy rat tdoor tempe | io for rature T j |
| T j = − 7 °C | Pdh | 6,9 | kW | T j = – 7 °C | COPd | 2,13 | - |
| T j = + 2 °C | Pdh | 4,4 | kW | T j = +2 °C | COPd | 3,48 | - |
| T j = + 7 °C | Pdh | 4,6 | kW | T j = +7 °C | COPd | 4,45 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 5,92 | - |
| T j = bivalent temperature | Pdh | 7,9 | kW | T j = bivalent temperature | COPd | 1,74 | - |
| T j = operation limit temperature | Pdh | 7,9 | kW | T j = operation limit temperature | COPd | 1,74 | - |
| 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} | -10 | °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 active | e mode | _ | Supplementary heater | | | _ |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{ск} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | _ | na | m3/h |
| Annual energy consumption | Q _{HE} | 5079 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 81 | % |
| Daily electricity consumption | Qelec | 10,250 | kWh | Daily fuel consumption | Qfuel | NA | kWh |
| Annual electricity consumption | AEC | 2255 | kWh | Annual fuel consumption | AFC | NA | GJ |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ller offering a sei ctronic equipme | t waste manager rvice of that type nt are properly di | nent. At the . It is of sposed of. |
| Contact details | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Average climate and Low temperature (35)**

CTC AB Ljungby



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i555 230/400V | | | | | | |
|---------------------------------------|---|---------------------------|-----|---|--|--|--|
| 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: | 168 | % | | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | A++ | - | | | |
| | | | | | | | |

Heat pump combination heater: Yes

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|---|-------------------|--|--|--|---|--|--|
| Rated heat output (*) | Prated | 9 | kW | Seasonal space heating energy efficiency | η _s | 164 | % |
| Declared capacity for heating for part load at indoor temperature 20 $^\circ C$ and outdoor temperature T j | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j | | | | |
| T j = – 7 °C | Pdh | 7,6 | kW | T j = – 7 °C | COPd | 2,96 | - |
| T j = + 2 °C | Pdh | 4,4 | kW | T j = +2 °C | COPd | 4,21 | - |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,05 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,27 | - |
| T j = bivalent temperature | Pdh | 8,5 | kW | T j = bivalent temperature | COPd | 2,54 | - |
| T j = operation limit temperature | Pdh | 8,5 | kW | T j = operation limit temperature | COPd | 2,54 | - |
| 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} | -10 | °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 | other than active | mode | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 0,0 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | ÷ | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 4204 | kWh | flow rate, outdoor heat exchanger | | | |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | Α | Water heating energy efficiency | η_{wh} | 81 | % |
| Daily electricity consumption | Qelec | 10,250 | kWh | Daily fuel consumption | Qfuel | na | kWh |
| Annual electricity consumption | AEC | 2255 | kWh | Annual fuel consumption | AFC | na | GJ |
| Specific precautions and end of life information: | | The packaging mu end of the produc importance that t Disposing of the p | ust be deposited at a ct's life cycle, it mus the product's refrige product as househol | a recycling station or with the installation eng t be sent correctly to a waste station or resell rant, compressor oil and electrical/electronic Id waste is not permitted. | ineer for correct er offering a ser equipment are | waste managem vice of that type. properly disposed | ent. At the It is of great d of. |
| Contact details | CTC AB, Näsväge | n 8, SE-341 34 | Ljungby Tel +46 | 5 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Medium temperature (55)**

| CTC AB |
|---------|
| Ljungby |



| Model(s): | CTC EcoAir 622M + CTC EcoZenith i555 230/400V | | | | | |
|---------------------------------------|---|---------------------------|-----|---|--|--|
| 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: | Νο | Package efficiency: | 126 | % | | |
| Equipped with a supplementary heater: | Yes | Package efficiency class: | | - | | |
| Heat pump combination heater: | Yes | | | | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------------|---|---|--|---|---|--|
| Rated heat output (*) | Prated | 12 | kW | Seasonal space heating energy efficiency | η _s | 122 | % |
| Declared capacity for heating f and outdoor temperature T j | or part load at in | ndoor tempera | ture 20 °C | Declared coefficient of performa part load at indoor temperature | nce or prima 20 °C and ou | ary energy rat Itdoor tempe | io for rature T j |
| T j = – 7 °C | Pdh | 6,7 | kW | T j = – 7 °C | COPd | 2,57 | - |
| T j = + 2 °C | Pdh | 4,4 | kW | T j = +2 °C | COPd | 4,14 | - |
| T j = + 7 °C | Pdh | 4,6 | kW | T j = +7 °C | COPd | 4,94 | - |
| T j = + 12 °C | Pdh | 5,5 | kW | T j = +12 °C | COPd | 6,19 | - |
| T j = bivalent temperature | Pdh | 9,7 | kW | T j = bivalent temperature | COPd | 1,26 | - |
| T j = operation limit temperature | Pdh | 4,1 | kW | T j = operation limit temperature | COPd | 1,30 | - |
| For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | Pdh | 8,6 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,56 | - |
| Bivalent temperature | T _{biv} | -18 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 <u>mode</u> | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0,014 | kW | Rated heat output (*) | Psup | 11,5 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{ск} | 0,000 | kW | | | | |
| Other items | - | | | | | | |
| Capacity control | | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | - | na | m3/h |
| Annual energy consumption | Q _{HE} | 9055 | kWh | flow rate, outdoor heat exchanger | | | - |
| For heat pump combination he | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | NA | Water heating energy efficiency | η_{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 |
| Specific precautions and end of life information: | | The packaging m end of the produ great importance Disposing of the | ust be deposited ct's life cycle, it m that the product product as house | at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec hold waste is not permitted. | gineer for correc ler offering a sei tronic equipme | t waste manager rvice of that type nt are properly di | nent. At the . It is of sposed of. |
| Contact details | CTC AB, Näsväge | en 8, SE-341 34 | Ljungby Tel + | 46 372 88000 www.ctc.se | | | 231218 |

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature (35)

CTC AB Ljungby



| Model(s): | | CTC EcoAir 62 | 2M + CTC Ecoz | Zenith i555 230/400V | | | |
|---|-------------------|---|--|---|---|--|---|
| 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: | 146 | % | |
| Equipped with a supplementa | ry heater: | Yes | | Package efficiency class: | | - | |
| Heat pump combination heate | er: | Yes | | | | | |
| Parameters shall be declared | for medium-tem | perature applica | tion, except fo | or low-temperature heat pumps. Fo | or low- tempe | erature heat p | oumps, |
| parameters shall be declared | for low-temperat | ture application. | | | | | |
| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
| Rated heat output (*) | Prated | 13 | kW | Seasonal space heating energy efficiency | η _s | 142 | % |
| Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\text{C}$ and outdoor temperature T j | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j | | | | |
| T j = – 7 °C | Pdh | 7,4 | kW | T j = – 7 °C | COPd | 3,08 |] - |
| T j = + 2 °C | Pdh | 4,6 | kW | T j = +2 °C | COPd | 4,65 |] - |
| T j = + 7 °C | Pdh | 4,8 | kW | T j = +7 °C | COPd | 5,70 | - |
| T j = + 12 °C | Pdh | 5,6 | kW | T j = +12 °C | COPd | 6,62 | - |
| T j = bivalent temperature | Pdh | 10,9 | kW | T j = bivalent temperature | COPd | 1,64 | - |
| T j = operation limit temperature | Pdh | 4,7 | kW | T j = operation limit temperature | COPd | 1,63 | - |
| For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | Pdh | 10,0 | kW | For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C) | COPd | 1,96 | - |
| Bivalent temperature | T _{biv} | -17 | °C | For air-to-water heat pumps: Operation limit temperature | TOL | -20 | °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 | 12,5 | kW |
| Thermostat-off mode | Р _{то} | 0,014 | kW | | | | |
| Standby mode | P _{SB} | 0,014 | kW | Type of energy input | | Electric | |
| Crankcase heater mode | Р _{СК} | 0,000 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | Variable | | For air-to-water heat pumps: Rated air flow rate, outdoors | - | 4200 | m3/h | |
| Sound power level, indoors/ outdoors | L _{WA} | na/55 | dB | For water-/brine-to-water heat pumps: Rated brine or water | | | m 2 /L |
| Annual energy consumption | Q _{HE} | 8523 | kWh | flow rate, outdoor heat exchanger | - | na | m3/n |
| For heat pump combination h | eater: | | | | | | |
| Declared load profile | XL | Efficiency class | NA | Water heating energy efficiency | η_{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: | | The packaging must end of the product importance that th of the product as h | st be deposited at t's life cycle, it mus ne product's refrig nousehold waste is | a recycling station or with the installation en st be sent correctly to a waste station or rese erant, compressor oil and electrical/electron s not permitted. | gineer for correc eller offering a ser ic equipment are | t waste managem rvice of that type. properly dispose | nent. At the . It is of great d of. Disposing |
| Contact details | CTC AB. Näsväg | en 8. SE-341 34 I | iungby Tel +4 | 6 372 88000 www.ctc.se | | | 231218 |