|  |  |  |
| --- | --- | --- |
| **Room dimensions**  Length (inner): {roomLength} m  Width (inner): {roomWidth}m  Height (inner): {roomHeight} m | **Room conditions**  Temperature: {roomTemperature}C°  Relative humidity: {roomRH} % | **Specific parameters**  Net total refrigeration load: {qTotall} kW  Room area: {roomSquare} m2  Room volume: {roomVolume} m3  kW/ per 1 m2: {qPerArea} kW/m2  kW/ per 1 m3: {qPerVolume} kW/m3 |

TRANSMISSION LOAD

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Wall | Construction | Insulation | Temp. behind the wall, C° | Sun effect temp., C° | Heat load, kW |
| Front | {#FW\_constrName}{FW\_constrName}  {FW\_constrTransf} W/m·K {FW\_constrThickn} mm{/} | {#FW\_insulName}{FW\_insulName}  {FW\_insulTransf} W/m·K {FW\_insulThickn} mm{/} | {FW\_outerTemp} | {FW\_solarTemp} | {FW\_q} |
| Back | {#BW\_constrName}{BW\_constrName}  {BW\_constrTransf} W/m·K {BW\_constrThickn} mm{/} | {#BW\_insulName}{BW\_insulName}  {BW\_insulTransf} W/m·K {BW\_insulThickn} mm{/} | {BW\_outerTemp} | {BW\_solarTemp} | {BW\_q} |
| Left | {#LW\_constrName}{LW\_constrName}  {LW\_constrTransf} W/m·K {LW\_constrThickn} mm{/} | {#LW\_insulName}{LW\_insulName}  {LW\_insulTransf} W/m·K {LW\_insulThickn} mm{/} | {LW\_outerTemp} | {LW\_solarTemp} | {LW\_q} |
| Right | {#RW\_constrName}{RW\_constrName}  {RW\_constrTransf} W/m·K {RW\_constrThickn} mm{/} | {#RW\_insulName}{RW\_insulName}  {RW\_insulTransf} W/m·K {RW\_insulThickn} mm{/} | {RW\_outerTemp} | {RW\_solarTemp} | {RW\_q} |
| Ceiling | {#TW\_constrName}{TW\_constrName}  {TW\_constrTransf} W/m·K {TW\_constrThickn} mm{/} | {#TW\_insulName}{TW\_insulName}  {TW\_insulTransf} W/m·K {TW\_insulThickn} mm{/} | {TW\_outerTemp} | {TW\_solarTemp} | {TW\_q} |
| Floor | {#BTW\_constrName}{BTW\_constrName}  {BTW\_constrTransf} W/m·K {BTW\_constrThickn} mm{/} | {#BTW\_insulName}{BTW\_insulName}  {BTW\_insulTransf} W/m·K {BTW\_insulThickn} mm{/} | {BTW\_outerTemp} | {BTW\_solarTemp} | {BTW\_q} |
| TOTAL TRANSMISSION LOAD: {q1Totall} kW | | | | | | |

RODUCT LOAD

|  |  |
| --- | --- |
| Product: {foodItem}  Total mass in the room: {totalMass} ton  Quantity per day: {perDayMass} ton  Inlet product temperature: {inletProdTemp} C°  Packaging: {packName}  Packaging specific weight: {packWeight} kg/kg  Cooling time: {coolingTime} hour(s) | DAILY ENTERED PRODUCT LOAD: {q21} KW  DAILY ENTERED PACKAGING LOAD: {q21packaging} KW  ENTRY PRODUCT BREATHING LOAD: {q22new} KW  STORED PRODUCT BREATHING LOAD: {q22old} KW  TOTAL PRODUCT LOAD: {q2Totall} kW |

INFILTRATION

|  |  |
| --- | --- |
| DOORS  Inlet air: {airDoorTemp} °C  Relative humidity: {airDoorRH} %  Doors open time: {dorsOpenHours} h/day  Door width: {dorsWidth} m  Door height: {dorsHeight} m  Door infiltration protection: {dorsProtection}  DOOR INFILTRATION LOAD: {Q44dors} kW | VENTILATION  Ventilation air temperature: {ventAirTemp} °C  Ventilation air humidity: {ventilatedAirRH} %  Air exchange rate: {airExchange} times room volume per 24 hours  VENTILATION LOAD: {Q3vent} kW |

ADDITIONAL

|  |  |  |
| --- | --- | --- |
| Lights | Fans | People |
| Lights power total: {lightPower} kW  Lights time: {lightTime} h/day  LIGHTS HEAT LOAD: {lightQ} kW | Fans number: {fanNumber}  Power per fan: {fanPower} kW  Fans working time: {fanTime} h/day  FANS HEAT LOAD: {fanQ} kW | People number: {peopleNumber}  Time per worker: {peopleTime} h/day  PEOPLE HEAT LOAD: {peopleQ} kW |

|  |  |  |
| --- | --- | --- |
| Other motors or heaters | Defrost | TOTAL ADDITIONAL {q4Totall}kW |
| Other motor power: {otherPower} kW  Other working time: {otherTime} h/day  OTHER HEAT LOAD: {otherQ} kW | Power:{defrostPower} kW  Defrosts per day: {defrostNumber}  Defrosts time: {defrostTime} min  Defrosts type: {defrostType}  DEFROST HEAT LOAD: {defrostQ} kW |

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NET TOTAL REFREGIRATION LOAD: {qTotall} kW

SAFE TOTAL REFREGIRATION LOAD (+{safetyFactor} %): {qTotalSafe} kW

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losses in pipes {pipeLosses} %

compressor working time {operatingHours} h/day

EVAPORATOR CAPACITY: {evaporator} kW

COMRESSOR CAPACITY: { compressor} kW