



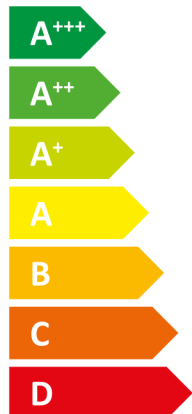
ENERG

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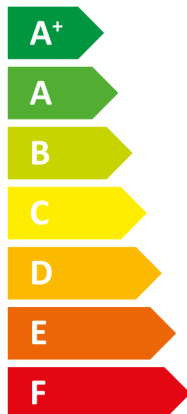


tecalor

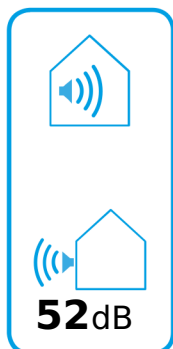
TTL 3.5 ACS TSBB
180 eco Set



A+



A



- 4 kW
- 4 kW
- 3 kW

2019

811/2013

Product datasheet: Combination heater to Regulation (EU) No 811/2013 (S.I. 2019 No. 539 / Programme 2)

| | | TTL 3.5 ACS TSBB 180 eco Set |
|--|-------|-------------------------------------|
| | | 190870 |
| Manufacturer | | tecalor |
| Load profile | | L |
| Space heating energy efficiency class under average climate conditions, medium-temperature applications | | A+ |
| Energy efficiency class, space heating under average climate conditions, low-temperature applications | | A++ |
| Energy efficiency class, DHW heating under average climate conditions | | A |
| Rated heating output under average climate conditions for medium-temperature applications (P rated) | kW | 4 |
| Rated heating output under average climate conditions for low-temperature applications (P rated) | kW | 4 |
| Annual energy consumption under average climate conditions for medium-temperature applications (QHE) | kWh/a | 2089 |
| Annual energy consumption under average climate conditions for low-temperature applications (QHE) | kWh/a | 1769 |
| Seasonal space heating energy efficiency under average climate conditions for medium-temperature applications (η_s) | % | 116 |
| Seasonal space heating energy efficiency under average climate conditions for low-temperature applications (η_s) | % | 166 |
| Option for operation only at off-peak times | | - |
| Rated heating output under colder climate conditions for medium-temperature applications (P rated) | kW | 4 |
| Rated heating output under colder climate conditions for low-temperature applications (P rated) | kW | 3 |
| Rated heating output under warmer climate conditions for medium-temperature applications (P rated) | kW | 3 |
| Rated heating output under warmer climate conditions for low-temperature applications (P rated) | kW | 3 |
| Annual energy consumption under colder climate conditions for medium-temperature applications (QHE) | kWh/a | 4016 |
| Annual energy consumption under colder climate conditions for low-temperature applications (QHE) | kWh/a | 2186 |
| Annual energy consumption under warmer climate conditions for medium-temperature applications (QHE) | kWh/a | 1187 |
| Annual energy consumption under warmer climate conditions for low-temperature applications (QHE) | kWh/a | 783 |
| Seasonal space heating energy efficiency under colder climate conditions for medium-temperature applications (η_s) | % | 102 |
| Seasonal space heating energy efficiency under colder climate conditions for low-temperature applications (η_s) | % | 148 |
| Seasonal space heating energy efficiency under warmer climate conditions for medium-temperature applications (η_s) | % | 137 |
| Seasonal space heating energy efficiency under warmer climate conditions for low-temperature applications (η_s) | % | 200 |
| Seasonal space heating energy efficiency under warmer climate conditions for low-temperature applications (η_s) | % | 200 |
| Sound power level, outdoor | dB(A) | 52 |



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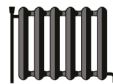
TTL 3.5 ACS TSBB 180 eco Set



A⁺



A



A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

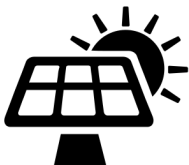
E

F

G

A⁺

+



+



+



+



A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

E

F

G

A

| | | |
|---|---|------------------------------|
| | | TTL 3.5 ACS TSBB 180 eco Set |
| | | 190870 |
| Manufacturer | | tecalor |
| Seasonal space heating energy efficiency under average climate conditions for medium-temperature applications (η_s) | % | 116 |
| Temperature control class | | VI |
| Contribution of temperature control to space heating energy efficiency | % | 4 |
| Space heating energy efficiency of package under average climate conditions | % | 120 |
| Space heating energy efficiency of package under colder climate conditions | % | 109 |
| Space heating energy efficiency of package under warmer climate conditions | % | 143 |
| Value of differential between space heating energy efficiency under average climate conditions and that under colder climate conditions | % | 8 |
| Value of differential between space heating energy efficiency under warmer climate conditions and that under average climate conditions | % | 26 |
| Space heating energy efficiency class under average climate conditions, medium-temperature applications | | A+ |
| Space heating energy efficiency class of package under average climate conditions | | A+ |
| Energy efficiency class, DHW heating under average climate conditions | | A |
| Load profile | | L |

| | | TTL 3.5 ACS TSBB 180 eco Set |
|--|----|------------------------------|
| | | 190870 |
| Manufacturer | | tecalor |
| Heat source | | Luft |
| Low temperature heat pump | | - |
| With auxiliary heater | | - |
| Combination heater with heat pump | | - |
| Rated heating output under colder climate conditions for medium-temperature applications (P rated) | kW | 4 |
| Rated heating output under average climate conditions for medium-temperature applications (P rated) | kW | 4 |
| Rated heating output under warmer climate conditions for medium-temperature applications (P rated) | kW | 3 |
| Tj = -7 °C heating output, partial load range under colder climate conditions (Pdh) | kW | 2,65 |
| Tj = -7 °C heating output, partial load range under average climate conditions (Pdh) | kW | 3,1 |
| Tj = 2 °C heating output, partial load range under colder climate conditions (Pdh) | kW | 1,6 |
| Tj = 2 °C heating output, partial load range under average climate conditions (Pdh) | kW | 1,6 |
| Tj = 2 °C heating output, partial load range under warmer climate conditions (Pdh) | kW | 3,1 |
| Tj = 7 °C heating output, partial load range under colder climate conditions (Pdh) | kW | 1,3 |
| Tj = 7 °C heating output, partial load range under average climate conditions (Pdh) | kW | 1,3 |
| Tj = 7 °C heating output, partial load range under warmer climate conditions (Pdh) | kW | 2,0 |
| Tj = 12 °C heating output, partial load range under colder climate conditions (Pdh) | kW | 1,5 |
| Tj = 12 °C heating output, partial load range under average climate conditions (Pdh) | kW | 1,5 |
| Tj = 12 °C heating output, partial load range under warmer climate conditions (Pdh) | kW | 1,5 |
| Tj = dual mode temperature under colder climate conditions (Pdh) | kW | 3,0 |
| Tj = dual mode temperature under average climate conditions (Pdh) | kW | 2,4 |
| Tj = dual mode temperature under warmer climate conditions (Pdh) | kW | 3,1 |
| Tj = operating temperature limit under colder climate conditions (Pdh) | kW | 2,6 |
| Tj = operating temperature limit under average climate conditions (Pdh) | kW | 3,1 |
| Tj = operating temperature limit under warmer climate conditions (Pdh) | kW | 3,1 |
| For air source heat pumps: Tj = -15 °C (if TOL< -20 °C) (Pdh) | kW | 0,0 |
| Dual mode temperature under colder climate conditions (Tbiv) | °C | -10 |
| Dual mode temperature under average climate conditions (Tbiv) | °C | -5 |
| Dual mode temperature under warmer climate conditions (Tbiv) | °C | 2 |
| Seasonal space heating energy efficiency under colder climate conditions for medium-temperature applications (ηs) | % | 102 |
| Seasonal space heating energy efficiency under average climate conditions for medium-temperature applications (ηs) | % | 116 |
| Seasonal space heating energy efficiency under warmer climate conditions for medium-temperature applications (ηs) | % | 137 |
| Tj = -7 °C COP, partial load range under colder climate conditions (COPd) | | 3,45 |
| Tj = -7 °C COP, partial load range under average climate conditions (COPd) | | 2,07 |
| Tj = 2 °C COP, partial load range under colder climate conditions (COPd) | | 3,45 |
| Tj = 2 °C COP, partial load range under average climate conditions (COPd) | | 2,93 |
| Tj = 2 °C COP, partial load range under warmer climate conditions (COPd) | | 2,19 |
| Tj = 7 °C COP, partial load range under colder climate conditions (COPd) | | 4,66 |
| Tj = 7 °C COP, partial load range under average climate conditions (COPd) | | 4,13 |
| Tj = 7 °C COP, partial load range under warmer climate conditions (COPd) | | 3,27 |
| Tj = 12 °C COP, partial load range under colder climate conditions (COPd) | | 6,65 |
| Tj = 12 °C COP, partial load range under average climate conditions (COPd) | | 5,97 |
| Tj = 12 °C COP, partial load range under warmer climate conditions (COPd) | | 5,15 |
| Tj = dual mode temperature under colder climate conditions (COPd) | | 2,09 |
| Tj = dual mode temperature under average climate conditions (COPd) | | 2,17 |
| Tj = dual mode temperature under warmer climate conditions (COPd) | | 2,19 |
| Tj = operating temperature limit under colder climate conditions (COPd) | | 2,30 |
| Tj = operating temperature limit under average climate conditions (COPd) | | 2,07 |
| Tj = operating temperature limit under warmer climate conditions (COPd) | | 2,19 |
| For air source heat pumps: Tj = -15 °C (if TOL< -20 °C) (COPd) | | 1,90 |
| Operating temperature limit under colder climate conditions (TOL) | °C | -15 |
| Operating temperature limit under average climate conditions (TOL) | °C | -5 |
| Operating temperature limit under warmer climate conditions (TOL) | °C | 2 |
| Operating temperature limit of heating water under colder climate conditions (WTOL) | °C | 60 |
| Operating temperature limit of heating water under average climate conditions (WTOL) | °C | 60 |

| | | |
|--|-------|--------------|
| Operating temperature limit of heating water under warmer climate conditions (WTOL) | °C | 60 |
| Power consumption, off-mode (Poff) | W | 17 |
| Power consumption, thermostat off-mode (PTO) | W | 30 |
| Power consumption, standby state (PSB) | W | 17 |
| Power consumption, operating state, with crankcase heating (PCK) | W | 5 |
| Rated heating output of auxiliary heater under average climate conditions (PSUP) | kW | 2,9 |
| Type of energy supply, auxiliary heater | | elektrisch |
| Output control | | veränderlich |
| Sound power level, outdoor | dB(A) | 52 |
| Annual energy consumption under colder climate conditions for medium-temperature applications (QHE) | kWh/a | 4016 |
| Annual energy consumption under average climate conditions for medium-temperature applications (QHE) | kWh/a | 2089 |
| Annual energy consumption under warmer climate conditions for medium-temperature applications (QHE) | kWh/a | 1187 |
| Flow rate on heat source side | m³/h | 1300 |
| Load profile | | L |
| Seasonal space heating energy efficiency under warmer climate conditions for low-temperature applications (ηs) | % | 200 |