

ESTIA SPLIT 4.5 - 16kW Performance data - ESTIA S5 (1-PHASE)

ESTIA S5 (3-PHASE)

ESTIA S5 POWERFULL (1- PHASE)

| Outdoor unit | HWS- | 455H-E | 805H-E | 1105H-E | 1405H-E | 1105H8(R)-E | 1405H8(R)-E | 1605H8(R)-E | P805HR-E | P1105HR-E |
|---|------|------------|-----------|------------|------------|-------------|-------------|-------------|------------|-------------|
| Hydro unit combination | HWS- | 455XWHM3-E | 805XWH**E | 1405XWH**E | 1405XWH**E | 1405XWH**E | 1405XWH**E | 1405XWH**E | P805XWH**E | P1105XWH**E |
| Seasonal space heating energy efficiency low temperature | | | | | | | | | | |
| Energy efficiency class - Low temperature | | A++ | A++ | A++ | A++ | A++ | A++ | A++ | A++ | A++ |
| Seasonal space heating energy efficiency (η _s) | | 167% | 161% | 163% | 159% | 161% | 157% | 159% | 157% | 175% |
| SCOP | | 4.25 | 4.10 | 4.15 | 4.05 | 4.10 | 4.00 | 4.05 | 4.00 | 4.45 |
| Under floor heating Air +7°C Water 35°C | | | | | | | | | | |
| Max heating capacity | kW | 6.83 | 8.52 | 14.63 | 14.73 | 16.74 | 15.77 | 16.76 | 16.92 | 18.05 |
| Nominal heating capacity | kW | 4.5 | 8 | 11.2 | 14 | 11.2 | 14 | 16 | 8.00 | 11.20 |
| COP | | 4.9 | 4.46 | 4.88 | 4.5 | 4.8 | 4.44 | 4.3 | 4.76 | 4.88 |
| Under floor heating Air -7°C Water 35°C | | | | | | | | | | |
| Max heating capacity | kW | 4.48 | 5.74 | 9.67 | 10.79 | 9.50 | 10.64 | 11.25 | 11.92 | 12.79 |
| Heating capacity ⁽¹⁾ | kW | 4.18 | 5.00 | 8.04 | 8.63 | 8.04 | 8.64 | 9.05 | 9.38 | 9.74 |
| COP | | 3.01 | 2.7 | 2.78 | 2.62 | 2.79 | 2.76 | 2.67 | 2.67 | 2.64 |
| Under floor heating Air -15°C Water 35°C | | | | | | | | | | |
| Max heating capacity | kW | 3.61 | 4.47 | 7.52 | 8.34 | 7.29 | 8.16 | 8.63 | 9.37 | 11.23 |
| Heating capacity ⁽¹⁾ | kW | 3.14 | 4.28 | 6.57 | 7.31 | 6.79 | 7.3 | 7.65 | 7.26 | 8.06 |
| COP | | 2.45 | 2.68 | 2.5 | 2.47 | 2.63 | 2.6 | 2.52 | 2.18 | 2.18 |
| Radiators heating Air +7°C Water 45°C | | | | | | | | | | |
| Max heating capacity | | 6.42 | 8.13 | 13.62 | 13.93 | 14.26 | 15.07 | 15.77 | 14.00 | 14.74 |
| Radiators heating Air -7°C Water 45°C | | | | | | | | | | |
| Max heating capacity | | 4.37 | 5.55 | 9.16 | 9.17 | 9.59 | 10.12 | 10.64 | 10.16 | 10.61 |
| Radiators heating Air -15°C Water 45°C | | | | | | | | | | |
| Max heating capacity | | 2.84 | 4.31 | 7.12 | 7.37 | 7.03 | 7.75 | 8.15 | 8.04 | 8.13 |
| Radiators heating Air -20°C Water 45°C | | | | | | | | | | |
| Max heating capacity | kW | - | - | - | - | - | - | - | 6.72 | 7.64 |
| Seasonal space heating energy efficiency mid temperature | | | | | | | | | | |
| Energy efficiency class - Medium temperature | | A++ | A++ | A++ | A++ | A++ | A++ | A++ | A++ | A++ |
| Seasonal space heating energy efficiency (η _s) | | 125% | 127% | 130% | 129% | 130% | 129% | 130% | 125% | 131% |
| SCOP | | 3.20 | 3.25 | 3.33 | 3.30 | 3.33 | 3.30 | 3.33 | 3.20 | 3.35 |
| Radiators heating Air +7°C Water 55°C | | | | | | | | | | |
| Max heating capacity | kW | 6.25 | 7.93 | 10.98 | 12.56 | 11.67 | 13.64 | 14.12 | 11.08 | 11.43 |
| Radiators heating Air -7°C Water 55°C | | | | | | | | | | |
| Max heating capacity | kW | 4.29 | 5.29 | 8.83 | 8.92 | 8.93 | 9.76 | 10.22 | 8.40 | 8.42 |
| Nominal cooling capacity Air +35°C Water 7°C | kW | 4.5 | 6 | 10 | 11 | 10 | 11 | 13 | 6.0 | 10.0 |
| EER | W/W | 3.08 | 3.10 | 3.07 | 2.89 | 3.07 | 2.89 | 2.71 | 3.66 | 3.00 |

Max heating capacities are shown at peak value during operation, at max compressor operating range in accordance with EN14511.

Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511.

⁽¹⁾ Heating capacity at -7°C shown at max compressor operating frequency in accordance with EN14511.

Energy efficiencies class & seasonal space heating energy efficiency (η_s) are provided for average climate conditions in accordance with EN14825.

ESTIA SPLIT 4.5 - 16kW Physical data outdoor - ESTIA S5 (1-PHASE)

ESTIA S5 (3-PHASE)

ESTIA S5 POWERFULL (1-PHASE)

| Outdoor unit | HWS- | 455H-E | 805H-E | 1105H-E | 1405H-E | 1105H8-E | 1405H8-E | 1605H8-E | P805HR-E | P1105HR-E |
|------------------------------------|---------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Dimensions (HxWxD) | mm | 630x800x300 | 890x900x320 | 1340x900x320 | 1340x900x320 | 1340x900x320 | 1340x900x320 | 1340x900x320 | 1340x900x320 | 1340x900x320 |
| Weight | kg | 42 | 63 | 92 | 92 | 93 | 93 | 93 | 92 | 92 |
| Sound pressure level (max) | dB(A) | 48 | 49 | 49 | 51 | 49 | 51 | 52 | 49 | 49 |
| Sound power level (max) | dB(A) | 65 | 64 | 66 | 68 | 66 | 68 | 69 | 66 | 66 |
| Compressor type | | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary | DC Twin rotary |
| Refrigerant | | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A |
| Refrigerant charge ⁽¹⁾ | kg | 1.15 | 1.80 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| Flare connections (gas-liquid) | | 4/8" - 2/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" | 5/8" - 3/8" |
| Minimum pipe length | m | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Maximum pipe length | m | 15 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Maximum height difference | m | 10 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Chargeless pipe length | m | 15 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Operating range in space heating* | °C | -20-25 | -20-25 | -20-25 | -20-25 | -20-25 | -20-25 | -20-25 | -25-25 | -25-25 |
| Operating range domestic hot water | °C | -20-43 | -20-43 | -20-43 | -20-43 | -20-43 | -20-43 | -20-43 | -25-43 | -25-43 |
| Operating range in cooling | °C | 10-43 | 10-43 | 10-43 | 10-43 | 10-43 | 10-43 | 10-43 | 10-43 | 10-43 |
| Bottom tape heater power | W | - | - | - | - | 75 | 75 | 75 | 75 | 75 |
| Power supply | V-ph-Hz | 220/230-1-50 | 220/230-1-50 | 220/230-1-50 | 220-230-1-50 | 380/400-3N-50 | 380/400-3N-50 | 380/400-3N-50 | 220/230-1-50 | 220/230-1-50 |

* Depending on the conditions only back-up heater operates. ⁽¹⁾ Values are guidelines only. Refer to the unit nameplate.

ESTIA SPLIT 4.5 - 16kW Physical data hydro unit - ESTIA S5

ESTIA S5 POWERFULL

| Hydro unit | HWS- | 455XWHM3-E | 805XWHM3-E | 805XWHT6-E 805XWHT9-E | 1405XWHM3-E | 1405XWHT6-E 1405XWHT9-E | P805XWHM3-E | P805XWHT6-E P805XWHT9-E | P1105XWHM3-E | P1105XWHT6-E P1105XWHT9-E |
|-----------------------------------|---------|--------------|--------------|--------------------------|--------------|----------------------------|--------------|----------------------------|--------------|------------------------------|
| To be used with size | | 45 | 80 | 80 | 110-140-160 | 110-140-160 | 80 | 80 | 110 | 110 |
| Leaving water temperature heating | °C | 20 ~ 55°C | 20 ~ 55°C | 20 ~ 55°C | 20 ~ 55°C | 20 ~ 55°C | 20 ~ 60°C | 20 ~ 60°C | 20 ~ 60°C | 20 ~ 60°C |
| Leaving water temperature cooling | °C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C | 7 ~ 25°C |
| Dimensions (HxWxD) | mm | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 | 925x525x355 |
| Weight | kg | 49 | 49 | 49 | 52 | 52 | 49 | 49 | 52 | 52 |
| Sound pressure level | dB(A) | 27 | 27 | 27 | 29 | 29 | 27 | 27 | 29 | 29 |
| Electric back up heater capacity | kW | 3 | 03/06/09 | 6 | 3 | 6 | 3 | 6 | 3 | 6 |
| Electric back up heater supply | V-ph-Hz | 220-230-1-50 | 220-230-1-50 | 380-400-3N-50 | 220-230-1-50 | 380-400-3N-50 | 220-230-1-50 | 380-400-3N-50 | 220-230-1-50 | 380-400-3N-50 |
| Maximum current | A | 13 | 13 | 13x2 / 13x3 | 13 | 13x2 / 13x3 | 13 | 13x2 / 13x3 | 13 | 13x2 / 13x3 |