SE-AH … S SERIES · DOMESTIC SPLIT

**www.sunnivaencon.com**
+91 93213 65103
sales@sunnivaencon.com

# SE-AH-4|150S

Split heat pump water heater: the compressor and fan stand outdoors, the 150 L enamel-lined cylinder indoors, and only refrigerant passes between them. Hot water to 55 °C on the heat pump, 75 °C with the heater. R134a, single-phase.

HEATING CAPACITY
**3.3** kW
Rated, heat pump

COP
**4.10**
Rated

STORAGE
**150** L
Enamelled steel cylinder

HOT WATER OUTPUT
**71** L/h
15 → 55 °C, heat pump alone

## Performance
Rated figures, and what they mean in litres

| **Rated duty** heat pump mode | |
|---|---|
| Heating capacity | **3,300** W |
| Input power | **800** W |
| COP | **4.10** |

| **Hot water** derived | |
|---|---|
| Output, 15 → 55 °C | **71** L/h |
| Full tank, 15 → 55 °C | **≈ 2.1** h |
| Temperature rise | **40** K |

| **Maximum** for the electrician | |
|---|---|
| Max input power | **1,190** W |
| Max current | **5.49** A |
| Back-up heater | **1.5** kW |

## Technical specifications
SE-AH-4|150S

| OUTDOOR UNIT | | |
|---|---|---|
| Heating capacity | W | **3,300** |
| Rated input power | W | **800** |
| COP | | **4.10** |
| Maximum input power | W | **1,190** |
| Maximum current | A | **5.49** |
| Power supply | | **220 V / 1 Ph / 50 Hz** |
| Refrigerant | | **R134a** |
| Compressor | | **Highly, rotary** |
| Noise level | dB(A) | **52** |
| Ingress protection | | **IPX4** |
| Ambient operating range | °C | **−5 to 43** |
| Dimensions (L × W × H) | mm | **765 × 260 × 530** |
| Weight | kg | **28** |

| CYLINDER | | |
|---|---|---|
| Storage volume | L | **150** |
| Shell | mm | **2 enamelling-grade steel** |
| Lining | | **Glass enamel, 0.3–0.5 mm** |
| Heat exchanger | | **Micro-channel, outside the tank** |
| Electric back-up heater | kW | **1.5** |
| Rated working pressure | MPa | **0.7** |
| Inlet / outlet / drain | | **DN 15** |
| Insulation (polyurethane) | mm | **42** |
| Standing loss, 24 h | K | **< 8** |
| Size (ø × H) | mm | **500 × 1330** |
| Weight, empty | kg | **55** |
| Fittings | | **Mg anode, relief valve** |
| Water temperature | °C | **55 HP · 75 heater** |

### RATED FIGURES

Heating capacity, input power and COP are the manufacturer's rated figures; the source does not name the ambient they were measured at, so they are published as **rated values**. Ask us before sizing to a cold-weather duty.

**Derived:** hot water output is for a 40 K rise (15 → 55 °C) — heating capacity × 0.86 ÷ output gives exactly 40 K. Full-tank time = volume ÷ output.

### INSTALLATION REQUIREMENT

Dedicated single-phase supply on its own MCB, sized by a licensed electrician for the **5.49 A** maximum current, plus the **1.5 kW** heater if it is wired to the same circuit.
**3 m copper interconnecting pipe** is supplied; tell us before ordering if the run or the height difference is longer.
Fit the **pressure relief valve** supplied and pipe its discharge to a drain.

SUNNIVA ENCON LLP
Manufacturer & exporter of heat pumps since 2012

OFFICE
C-443, Oshiwara Industrial Centre Premises CHS, New Link Road, Goregaon West, Mumbai

FACTORY
Tirupati Industrial Complex, Plot No. 41, Sambhaji Nagar, Asangaon, Maharashtra 421601

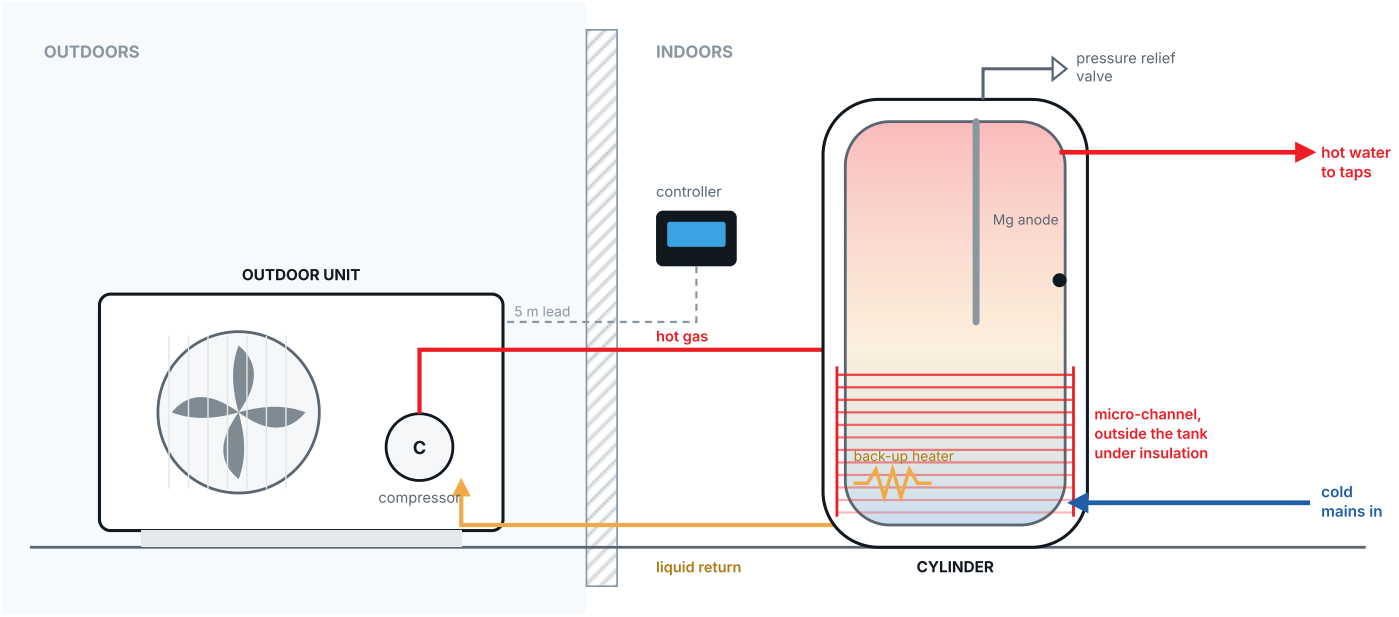
CONTACT
+91 93213 65103
sales@sunnivaencon.com
www.sunnivaencon.com



Specifications are subject to change without prior notice.

## Site installation schematic

Outdoor unit outside, cylinder inside — only refrigerant crosses the wall




Hot gas / hot water · Liquid refrigerant return · Cold mains water · Controller lead

**1 Outdoors, heat from the air**
The fan draws outdoor air over the coil; the refrigerant picks up its heat even on a cool morning.

**2 Compressed and sent in**
The compressor raises the refrigerant's temperature and sends it through the wall as hot gas.

**3 Heat into the water**
The micro-channel wrapped round the outside of the tank gives that heat to the water through the steel — refrigerant and water never meet.

**4 Back out, round again**
The cooled liquid returns to the outdoor unit. Nothing but two thin refrigerant lines crosses the wall.

Schematic — not to scale. Mount the outdoor unit where air moves freely; keep the cylinder close to the bathrooms it serves.

## Choosing a size

Size on the people and the draw-off, not on the heat pump

### THIS MODEL

Allow roughly **40–60 litres of hot water per person per day**. A 150 L cylinder suits about **2–3 people**.

From cold it heats the full tank in about **2.1 h** on the heat pump alone (15 → 55 °C), and keeps up with about **71 L/h** of draw-off after that.

Send us the occupancy and the fittings and we will confirm the size.

### WHY SPLIT

The cylinder can stand indoors, in a utility room or loft, while the outdoor unit sits on a balcony or terrace like an air conditioner.

No hot water runs through the wall, nothing that holds water stands in the weather, and a refrigerant leak cannot reach the potable water.

The 1.5 kW heater covers a cold morning or a full house and takes the tank to 75 °C when wanted.

## The range at a glance

SE-AH-4|150S is marked

| MODEL | TANK L | HEATING KW | COP | L/H* | FULL TANK H* | HEATER KW | OUTDOOR UNIT MM | CYLINDER Ø × H MM |
|---|---|---|---|---|---|---|---|---|
| **SE-AH-4\|150S** | **150** | **3.3** | **4.10** | **71** | **2.1** | **1.5** | **765 × 260 × 530** | **500 × 1330** |
| SE-AH-5\|200S | 200 | 5 | 4.17 | 107.5 | 1.9 | 1.5 | 765 × 260 × 530 | 500 × 1680 |
| SE-AH-5\|300S | 300 | 5 | 4.17 | 107.5 | 2.8 | 2 | 765 × 260 × 530 | 560 × 1805 |
| SE-AH-7\|400S | 400 | 7.2 | 4.11 | 154.8 | 2.6 | 2 | 800 × 300 × 540 | 700 × 1590 |
| SE-AH-7\|500S | 500 | 7.2 | 4.11 | 154.8 | 3.2 | 2 | 800 × 300 × 540 | 700 × 1940 |

* Derived: hot water output for a 15 → 55 °C rise, and the time to heat a full tank through that rise on the heat pump alone. A 100 L model (SE-AH-4|100S) also sells on the price list; no rated data has been issued for it yet.

SUNNIVA ENCON LLP
Manufacturer & exporter of heat pumps since 2012

OFFICE
C-443, Oshiwara Industrial Centre Premises CHS, New Link Road, Goregaon West, Mumbai

FACTORY
Tirupati Industrial Complex, Plot No. 41, Sambhaji Nagar, Asangaon, Maharashtra 421601

CONTACT
+91 93213 65103
sales@sunnivaencon.com
www.sunnivaencon.com



Specifications are subject to change without prior notice.

## Installation steps

Follow in order; fill the cylinder before switching on

1. **Place the cylinder** on a level floor that takes its filled weight, close to the bathrooms, with access to the anode and heater.
2. **Mount the outdoor unit** on a bracket or plinth with free air on the coil face and the fan side, where its noise will not disturb anyone.
3. **Refrigerant lines.** Run the copper pair through a sleeved hole in the wall, insulated, without kinks. 3 m is supplied as standard.
4. **Vacuum and open** the service valves as the installation manual describes; check the joints for leaks.
5. **Water.** Cold mains to the bottom inlet through an isolation valve and non-return valve; hot to the taps from the top outlet.
6. **Relief valve.** Fit the supplied valve and pipe its discharge to an open drain — never cap it.
7. **Electrical.** Dedicated single-phase supply and MCB; earth bonded; controller lead (5 m) between the cylinder and the unit.
8. **Commission.** Fill and vent the cylinder before switching on, set the water temperature, and check the unit runs and the tank heats.

## Site checklist

What has to be true before the unit arrives

| SITE | |
|---|---|
| Floor | **Level, and takes ≈ 205 kg filled (55 kg + 150 L)** |
| Cylinder space | **500 × 1330 mm, plus room to service the anode and heater** |
| Outdoor unit | **765 × 260 × 530 mm · 28 kg, on a bracket or plinth** |
| Distance | **3 m of refrigerant pipe standard — ask for longer** |
| Ambient | **−5 to 43 °C at the outdoor unit** |
| Supply | **220 V single-phase, 5.49 A max + heater** |
| Drain | **For the relief valve discharge and the cylinder drain** |

### PROTECTIONS BUILT IN

- High voltage protection
- Compressor over-heating protection
- Hot water over-heating protection
- Circuit failure protection
- Refrigerant high pressure protection
- Refrigerant low pressure protection

### CONTROLLER & WARRANTY

Intelligent wired controller: shows the water temperature and switches the electric heater. 5 m lead.

**2 years** on the heat pump · **5 years** on the cylinder.

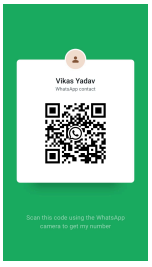
## Talk to Sunniva

Scan with a phone camera to open a WhatsApp chat

### TALK TO SUNNIVA

Sales and service desks

**Sales**
Enquiries & orders




**Service**
Breakdowns & spares

### FOR A QUOTATION

Tell us

- how many people
- bathrooms and kitchen points
- where the cylinder and the outdoor unit will go
- the distance between them
- your city

### SUNNIVA ENCON LLP

Manufacturer & exporter of heat pumps since 2012

+91 93213 65103
sales@sunnivaencon.com
www.sunnivaencon.com/domestic-split-heat-pump

**SUNNIVA ENCON LLP**
Manufacturer & exporter of heat pumps since 2012

**OFFICE**
C-443, Oshiwara Industrial Centre Premises CHS, New Link Road, Goregaon West, Mumbai

**FACTORY**
Tirupati Industrial Complex, Plot No. 41, Sambhaji Nagar, Asangaon, Maharashtra 421601

**CONTACT**
+91 93213 65103
sales@sunnivaencon.com
www.sunnivaencon.com



Specifications are subject to change without prior notice.