



- WATER HEATED BY HEAT PUMP
- STORAGE TANK WITH ENAMEL COATING ON INSIDE
- HIGH COP
- SINGLE-COIL VERSION FOR SOLAR HEATING
- DUAL-COIL VERSION FOR SOLAR HEATING AND BOILER



SOLAR FRESH series storage heater with high efficiency heat pump for domestic hot water production, with inside enamel coating in accordance with DIN 4753-3 and injected rigid polyurethane foam insulation. The pre-installed heat pump features a high-efficiency compressor operating on R134a refrigerant, electronic expansion valve and supplementary electric heater managed by the built-in controller, so as to ensure domestic hot water all year round. SOLAR FRESH can be connected to the outside air or directly to the inside air, to increase overall system efficiency. Fitted with touch screen control panel for time settings, diagnostics and Legionella prevention cycles.

Versions:

- with one heat exchanger for solar heating
- with two heat exchangers for solar heating and boiler

Component	Description
STORAGE HEATER	St37-2 steel Enamel coating (DIN 4753-3)
INSULATION	44 mm thick high density rigid polyurethane foam moulded directly onto the tank, CFC and HCFC free
FAN	Polymeric material
WATER HEAT EXCHANGER	Stainless steel
TUBES	Copper
CONDENSER	Copper and aluminium

Dimensions

Description	SOLAR FRESH	
	300 1S	300 2S
Capacity (l)	278	273
Height with insulation (mm)	1890	1890
Max. vertical height (mm)	1980	1980
Width with insulation (mm)	644	644
Insulation thickness (mm)	44	44
Empty weight (kg)	137	155

Technical specifications

Description			STORAGE HEATERS WITH HEAT PUMP	
			SOLAR FRESH 300 1S	SOLAR FRESH 300 2S
Power supply		V/Ph/Hz	230/1/50	230/1/50
Heat pump compressor			Rotary	Rotary
Fan			Asynchronous, 80 W, 1250 RPM	Asynchronous, 80 W, 1250 RPM
Maximum domestic hot water temperature from heat pump		°C	60	60
Ambient temperature		°C	-10 - +43	-10 - +43
Power consumption at maximum domestic hot water temperature of 60°C		W	503	503
Heat output delivered		W	1870	1870
Electric heater power		W	1200	1200
Refrigerant			R134a	R134a
Refrigerant charge		g	920	920
Sound pressure at a distance of 1 m in a free field		db(A)	46	46
COP (ambient 20°C, water temperature 55°C)		W/W	3.7	3.7
Air flow-rate		m ³ /h	450	450
Maximum piping length		m	8	8
Minimum piping diameter		mm	160	160
Heat exchanger surface area	top	m ²	-	0.8
	bottom	m ²	1.5	1.5
Coil water capacity	top	l	-	5
	bottom	l	10	10
Heating capacity at 80/60 - 10/45°C (DIN 4708)	top	kW	-	20
	bottom	kW	37.5	37.5
Required flow-rate in coil	top	m ³ /h	-	0.80
	bottom	m ³ /h	1.60	1.60
Pressure drop	top	mbar	-	25
	bottom	mbar	17	17
Storage heater heat loss K		W/K	2.82	2.82
Heat exchanger max. operating pressure	top	bar	6	
	bottom	bar	6	
Max. operating pressure		bar	6	
Storage heater max. operating temperature		°C	95	