

<b>Manufacturer:</b> AWE WÄRMEPUMPEN
<b>Model:</b> ELW 52
<b>Air - to-water heat pump</b>
Low-temperature heat pump: yes
Equipped with a supplementary heater: no
Heat pump combination heater: no
Application: medium
Climate: average

Item	Symbol	Value	Unit
<b>Rated heat output *</b>	<i>Prated</i>	51	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$			
$T_j = -7$ °C	<i>Pdh</i>	39,0	kW
$T_j = +2$ °C	<i>Pdh</i>	46,4	kW
$T_j = +7$ °C	<i>Pdh</i>	50,9	kW
$T_j = +12$ °C	<i>Pdh</i>	54,7	kW
$T_j =$ bivalent temperature	<i>Pdh</i>	41,5	kW
$T_j =$ operation limit	<i>Pdh</i>	35,5	kW
For air-to-water heat pumps: $T_j = -15$ °C (if $TOL < -20$ °C)	<i>Pdh</i>	30,0	kW
Bivalent temperature	$T_{biv}$	-5	°C
Power input "compressor off"		0	W
Power consumption in modes other than active mode			
Off mode	$P_{OFF}$	0	W
Thermostat-off mode	$P_{TO}$	0	W
Standby mode	$P_{SB}$	0	W
Crankcase heater mode	$P_{CK}$	0	W
Other items			
Capacity control		fixed	
Sound power level, indoors/outdoors	$L_{WA}$	40	dB
		34	
Annual energy consumption	$Q_{HE}$	49823	kWh

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	$\eta_S$	82	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$			
$T_j = -7$ °C	<i>COPd</i>	2,61	
$T_j = +2$ °C	<i>COPd</i>	2,47	
$T_j = +7$ °C	<i>COPd</i>	2,30	
$T_j = +12$ °C	<i>COPd</i>	2,17	
$T_j =$ bivalent temperature	<i>COPd</i>	2,86	
$T_j =$ operation limit	<i>COPd</i>	2,30	
For air-to-water heat pumps: $T_j = -15$ °C (if $TOL < -20$ °C)	<i>COPd</i>	1,86	
For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	-10	°C
Heating water operating limit temperature	<i>WTOL</i>	55	°C
Supplementary heater			
Rated heat output *	$P_{sup}$	15,96	kW
Type of energy input	electricity		
For air-to-water heat pumps: Rated air flow rate, outdoors			
	-	6500	m <sup>3</sup> /h
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
	-		l/h

Contact details: AWE WÄRMEPUMPEN,
* For heat pump space heaters and heat pump combination heaters, the rated heat output <i>Prated</i> is equal to the design load for heating $P_{designh}$ , and the rated heat output of a supplementary heater $P_{sup}$ is equal to the supplementary capacity for heating $sup(T_j)$ .

The calculation tool was made by Bundesverband Wärmepumpe BWP e.V.