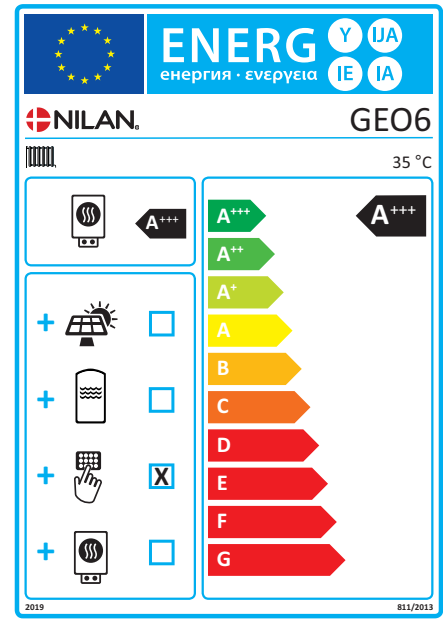


# GEO 6

## Heating pump system for space heating



Model	GEO 6
Air-to-water heat pump	No
Water-to-water heat pump	No
Brine-to-water heat pump	Yes
Low-temperature heat pump	Yes
Equipped with a supplementary heater	Yes
Heat pump combination heater	No
<b>Temperature control:</b>	
Model	CTS602
Class	2
Contribution to seasonal space heating energy efficiency	2%

Item	Symbol	Value	Unit
------	--------	-------	------

Rated heat output	$P_{rated}$	6,01	kW
-------------------	-------------	------	----

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature of  $T_j$

$T_j = -7\text{ °C}$	$P_{dh}$	5,29	kW
$T_j = +2\text{ °C}$	$P_{dh}$	3,32	kW
$T_j = +7\text{ °C}$	$P_{dh}$	2,09	kW
$T_j = +12\text{ °C}$	$P_{dh}$	1,30	kW
$T_j = \text{bivalent temperature}$	$P_{dh}$	6,01	kW
$T_j = \text{operation limit temperature}$	$P_{dh}$	0	kW
For air-water-heating pumps $T_j = -15\text{ °C}$ (if TOL < -20 °C)	$P_{dh}$		kW
Bivalent temperature	$T_{biv}$	-10	°C
Cycling interval capacity for heating	$P_{cyc}$		kW
Degradation co-efficient	$C_{dh}$	0,99 - 1	

Power consumption in modes other than active mode

Off mode	$P_{OFF}$	0,002	kW
Thermostat off-mode	$P_{TD}$	0,024	kW
Standby mode	$P_{SB}$	0,002	kW
Crankcase heater mode	$P_{CK}$	0,000	kW

Other items

Capacity control:	Variable compressor Variable indoor temperature adjustment		
	Fixed indoor water flow Fixed outdoor water flow		
Sound power level, indoors	$L_{WA}$	51	dB
Emissions of nitrogen oxides	$Q_{HE}$	2386	kWh

Item	Symbol	Value	Unit
------	--------	-------	------

Seasonal space heating energy efficiency	$\eta_s$	208	%
--	----------	-----	---

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature  $T_j$

$T_j = -7\text{ °C}$	$COP_d$	4,48	
$T_j = +2\text{ °C}$	$COP_d$	5,22	
$T_j = +7\text{ °C}$	$COP_d$	5,69	
$T_j = +12\text{ °C}$	$COP_d$	5,30	
$T_j = \text{bivalent temperature}$	$COP_d$	4,27	
$T_j = \text{operation limit temperature}$	$COP_d$	0	
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if TOL < -20 °C)	$COP_d$		
For air-to-water heat pumps: Operation limit temperature	TOL		°C
Cycling interval efficiency	$COP_{cyc}$		
Heating water operating limit temperature	WTOL		°C

Supplementary heater

Rated heat output	$P_{sup}$	2	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors			m <sup>3</sup> /h
For water-/ brine-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		1,041	m <sup>3</sup> /h