

## Subtype TERRA 18 HPLA

Certificate Holder	Ochsner Wärmepumpen GmbH
Address	Krackowizerstraße 4
ZIP	4020
City	Linz
Country	AT
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	TERRA 18 HPLA
Registration number	011-1W0422
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.35 kg
Certification Date	30.09.2020
Testing basis	HP KEYMARK certification scheme rules rev. 7

## Model TERRA 18 HPLA, average climate

Model name	TERRA 18 HPLA, average climate
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	3x400V 50Hz
Off-peak product	No

## Brine/Water

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	
Starting and operating test	passed

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	53 dB(A)
Sound power level outdoor	0 dB(A)	0 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	189 %	134 %
Prated	17.00 kW	16.00 kW
SCOP	4.93	3.54
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh Tj = -7°C	17.00 kW	15.90 kW
COP Tj = -7°C	4.59	3.01
Pdh Tj = +2°C	17.20 kW	16.30 kW
COP Tj = +2°C	4.88	3.49
Pdh Tj = +7°C	17.30 kW	16.60 kW
COP Tj = +7°C	5.16	3.85
Pdh Tj = 12°C	17.40 kW	16.90 kW
COP Tj = 12°C	5.48	4.27
Pdh Tj = Tbiv	17.00 kW	15.80 kW
COP Tj = Tbiv	4.54	2.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.00 kW	15.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.54	2.89

Rated airflow rate	0 m <sup>3</sup> /h	0 m <sup>3</sup> /h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	139 W	139 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7128 kWh	9198 kWh

## Model TERRA 18 HPLA, low temperature, all climates

Model name	TERRA 18 HPLA, low temperature, all climates
Application	Heating (low temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	3x400V 50Hz
Off-peak product	No

## Brine/Water

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	
Starting and operating test	passed

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	
Sound power level outdoor	0 dB(A)	

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	189 %	
Prated	17.00 kW	
SCOP	4.93	
Tbiv	-10 °C	
TOL	-20 °C	
Pdh Tj = -7°C	17.00 kW	
COP Tj = -7°C	4.59	
Pdh Tj = +2°C	17.20 kW	
COP Tj = +2°C	4.88	
Pdh Tj = +7°C	17.30 kW	
COP Tj = +7°C	5.16	
Pdh Tj = 12°C	17.40 kW	
COP Tj = 12°C	5.48	
Pdh Tj = Tbiv	17.00 kW	
COP Tj = Tbiv	4.54	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.00 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.54	

Rated airflow rate	0 m <sup>3</sup> /h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
WTOL	65 °C
Poff	0 W
PTO	139 W
PSB	9 W
PCK	0 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	7128 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	
Sound power level outdoor	0 dB(A)	

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	194 %	
Prated	21.00 kW	
SCOP	5.06	
Tbiv	-15 °C	
TOL	-22 °C	
Pdh Tj = -7°C	17.30 kW	
COP Tj = -7°C	5.02	
Pdh Tj = +2°C	17.30 kW	
COP Tj = +2°C	5.24	
Pdh Tj = +7°C	17.40 kW	
COP Tj = +7°C	5.43	
Pdh Tj = 12°C	17.40 kW	
COP Tj = 12°C	5.46	
Pdh Tj = Tbiv	17.20 kW	
COP Tj = Tbiv	4.92	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.20 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.92	
Rated airflow rate	0 m <sup>3</sup> /h	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	
WTOL	65 °C	
Poff	0 W	
PTO	139 W	
PSB	9 W	
PCK	0 W	

Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	4.07 kW
Annual energy consumption Q <sub>he</sub>	10274 kWh

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	
Sound power level outdoor	0 dB(A)	

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	
Prated	17.00 kW	
SCOP	4.91	
T <sub>biv</sub>	2 °C	
TOL	2 °C	
P <sub>dh</sub> T <sub>j</sub> = -7°C	0.00 kW	
COP T <sub>j</sub> = -7°C	0.00	
P <sub>dh</sub> T <sub>j</sub> = +2°C	17.00 kW	
COP T <sub>j</sub> = +2°C	4.54	
P <sub>dh</sub> T <sub>j</sub> = +7°C	17.20 kW	
COP T <sub>j</sub> = +7°C	4.81	
P <sub>dh</sub> T <sub>j</sub> = 12°C	17.40 kW	
COP T <sub>j</sub> = 12°C	5.26	
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	17.00 kW	
COP T <sub>j</sub> = T <sub>biv</sub>	4.54	
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	17.00 kW	
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.54	
Rated airflow rate	0 m <sup>3</sup> /h	
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	
WTOL	65 °C	
P <sub>off</sub>	0 W	
PTO	139 W	
PSB	9 W	
PCK	0 W	
Supplementary Heater: Type of energy input	Electricity	
Supplementary Heater: PSUP	0.00 kW	
Annual energy consumption Q <sub>he</sub>	4635 kWh	