Model: OMICRON Sky S4 R5 SLN 17.4 / EC
Option: -

COOLING

Performance data		
Cooling capacity (A2)	kW	163
Total input power (A2)	kW	48.5
Compressor input power	kW	46.0
Input current	A	88.8
Power factor	-	0.78
EER	W/W	3.36
SEER(B0)	W/W	4.46
$\eta_{s,c}$(B0)	%	175
Source		
Altitude	m	0.0
Dry bulb outdoor air	°C	35.0
Outdoor air Relative humidity	%	49.8
Air flow rate	m³/h	61590
Fan input power	kW	2.25
Fan input current	A	4.85
Fans available static pressure	Pa	0

User		
Fluid type		Water
Fouling fact.	m²K/kW	0.000
In/out fluid temperature	°C	12.0/6.0
Fluid flow rate	m³/h	23.39
Circuit pressure drops	kPa	22.1
Sound data		
Calculated sound power	dB(A)	79
Sound pressure(C0) [10.0 m]	dB(A)	47

HEATING[66]

Performance data		
Heating capacity	kW	115
Total input power (A2)	kW	48.7
Compressor input power	kW	43.2
Input current	A	90.1
Power factor	-	0.78
COP	W/W	2.36
SCOP LT(B2)/MT(B3)	W/W	3.76/-
$\eta_{s,h}$ LT(B2)/MT(B3)	%	147/-
Source		
Altitude	m	0.0
Dry bulb outdoor air	°C	-4.0
Outdoor air Relative humidity	%	86.9
Air flow rate	m³/h	82647
Fan input power	kW	5.38
Fan input current	A	10.5
Fans available static pressure	Pa	0

User		
Fluid type		Water
Fouling fact.	m²K/kW	0.000
In/out fluid temperature	°C	40.0/44.9
Fluid flow rate	m³/h	20.23
Circuit pressure drops	kPa	14.1
Sound data		
Calculated sound power	dB(A)	79
Sound pressure(C0) [10.0 m]	dB(A)	47

COOLING DURING HEATING

Performance data		
Cooling capacity (A2)	kW	156
Heating capacity	kW	200
Spare Capacity	-	0.0%
Total input power (A2)	kW	45.2
Compressor input power	kW	
Input current	A	80.3
Power factor	-	0.80
TER	W/W	7.88
Hot User		
Fluid type		Water
Fouling fact.	m²K/kW	0.000
In/out fluid temperature	°C	40.0/45.0
Fluid flow rate	m³/h	34.70
Circuit pressure drops	kPa	36.6

Cold User		
Fluid type		Water
Fouling fact.	m²K/kW	0.000
In/out fluid temperature	°C	12.0/6.0
Fluid flow rate	m³/h	22.31
Circuit pressure drops	kPa	21.6
Sound data		
Calculated sound power	dB(A)	79
Sound pressure(C0) [10.0 m]	dB(A)	47

DESIGN AND SIZING DATA

GENERAL DATA		
Compressor type		Scroll
Number of compressors		4
Number of circuits		2
Capacity steps		4
Minimum capacity step	%	25.0
Refrigerant type		R454B
GWP		466.0
Total refrigerant charge (R1)	kg	43.6
CO2 equivalent charge	kg	20318
Total oil charge	kg	28.8

DIMENSIONS		
Length	mm	2297
Width	mm	2256
Height	mm	2443
Shipping weight	kg	2149
Net weight	kg	2149

FANS		
Fan type		Axial
Fan motor		EC
Number of fans		4
Maximum input power (P1)	kW	5.82
Maximum input current	A	11.2

ELECTRICAL DATA		
Nominal voltage supply	Ph/V/Hz	3/400/50.0
Maximum voltage supply	V	440
Minimum voltage supply	V	360
Maximum input power (P1)	kW	74.4
Maximum input current	A	128
Maximum peak current	A	296
Input power in stand-by mode	kW	0.236
Power factor		0.84

Sound data		
63	dB	82
125	dB	72
250	dB	71
500	dB	73
1000	dB	74
2000	dB	74
4000	dB	70
8000	dB	65
Calculated sound power	dB(A)	79
Sound pressure(C0) [10.0 m]	dB(A)	47

(A0) Technical data shown are not binding. The Company shall have the right to introduce at any time whatever modifications necessary to the improvement of the product.
(A1) Dimensional data shown are not binding.
(A2) According to standard: EN 14511-2018
(B0) Calculated according to Commision Regulation (EU) 2016/2281: Average/-/Fan coil/Variable outlet/Constant user flow rate/-
(B2) Calculated according to Commision Regulation (EU) 2013/813: Average/Outdoor air/Low temperature/Variable outlet/Constant user flow rate/-
(C0) Noise pressure is calculated according to the following sound propagation method: Hemispherical ISO EN 3744 source

Values obtained from the sound power level, related to a distance indicated between brackets [] from the unit in free field with directivity factor Q=2.
None of the sound pressure values are binding.

(C0) Calculated sound power cooling mode: unit operating at nominal operating capacity, without any accesories, with external air temperature of 35°C and user-side heat exchanger water inlet-outlet temperature of 12-7°C. Values obtained from measures taken according to standard ISO 3744 and to the Eurovent certification programme

where applicable. Calculated sound power is the only binding value.

(H1) Sound pressure: values obtained from the sound power level, related to a distance indicated between brackets [] from the unit in free field with directivity factor Q=2.
None of the sound pressure values are binding.

(H0) Calculated sound power heating mode: unit operating at nominal operating capacity, without any accesories, with external air temperature of 7°C and user-side heat exchanger water inlet-outlet temperature of 40-45°C. Values obtained from measures taken according to standard ISO 3744 and to the Eurovent certification programme where applicable. Calculated sound power is the only binding value.

The acoustic data relates to the standard conditions described above, in referable and reproducible operating modes.

All data except Calculated sound are given for the mere purpose of example and can not be used for predictive purposes or for the verification of enforced limits.

With specific reference to the acoustic emissions, the Manufacturer commits to their conformity limited to the declared "Calculated sound power" value.

Any liability of the Manufacturer is excluded concerning the impact of such emissions with reference to the location of the plant and to other conditions related to the installation of the unit.

The environment and the installation's characteristics, besides the operating modes, may alter the acoustic emissions.

The overall acoustic evaluation, with regard to site conditions, remains the responsibility of the installer.

(R1) The indicated refrigerant charge is calculated. The refrigerant charge can vary according to different versions/accessories and product updates.

(P1) Mains power supply to allow unit operation. Sum of components' full power absorption.

66: In cases where the unit is used for extended periods in similar conditions, evaluate the use of the appropriate accessories for use in situations with low outside air temperatures (if available) : IDRO _VASC_RAV_RAM_ KTC.