# Steady

Steady precision air conditioner for demanding applications









Steady precision air conditioner is suitable for applications which require precise control of temperature and humidity. Typical applications include archives, laboratories, museums and wine cellars.

#### **New Design**

New design 2019 as shown

#### **Archives**

In archive spaces low humidity is required in order to preserve the documents in pristine condition. Steady precision air conditioner is suitable for archive conditions:

Paper archives +16...+20 °C, 40-50 %-RH Microfilms +12...+16 °C, 30-40 %-RH

#### Laboratories

In laboratories, precise control of room temperature and humidity is often required. With Steady precision of  $\pm\,0.5\,^{\circ}\text{C}$  and  $\pm\,1\,\%$  RH can be achieved. The unit reacts quickly to changes in the heat and humidity loads of the room.

### Other spaces

Steady is also suitable for other demanding spaces that require conditions in the range of +12...+16 °C and 20...80 %-RH.

#### Steady climate conditions

Steady maintains the required temperature and humidity conditions precisely. The continuously variable compressor control and discharge gas control valve guarantee capacity control range of 0-100%. These combined with variable speed EC fan guarantee precise control of dehumidification.

#### Reliable choice

The unit is simple to install – on site only liquid pipes and power need to be connected. The unit is delivered refrigerant charged, and the functionalities are factory tested. Steady is ready to be connected to ServiceNext for monitoring and fine-tuning of the system. The continuously variable compressor control technology prolongs the lifetime of the compressor, as stable speed saves the compressor from wear and tear. In addition, the sound level of the unit is remains low and steady.

Units are water condensed and always equipped with condensing pressure controlled water valve. The unit can be condensed to a liquid cooler, district cooling network or a cool water pond.

## **Energy efficient**

The continuously variable compressor technology generates precisely and efficiently the cooling capacity needed. Traditionally, the needed reheating in dehumidification is generated with electrical heater – Steady reheats with discharge gas, which saves valuable electricity.



### **Technical details**

		Steady 20	Steady 50
Airflow, nominal	m3/h	1500	2200
Cooling capacity (18 °C / 40 %-RH)	kW	6,0	10,7
Dehumidification capacity (18 °C / 40 %-RH)	kg/h	1,3	2
Cooling capacity (14 °C / 30 %-RH)	kW	5,6	9,5
Dehumidification capacity (14 °C / 30 %-RH)	kg/h	0,5	1
Humidifier, standard			
Production	kg/h	6	6
Electrical power	kW	4,7	4,7
Electrical heater, power	kW	2	2
Number of fans	pcs	1	1
Refrigerant		R410A	R410A
Number of compressors	pcs	1	1
Electrical connections	V / Ph / Hz	400 / 3 / 50	400 / 3 / 50
Back-up fuse size recommendation		3 x 25 A	3 x 25 A
Total electrical power, max	kW	8,3	10,9
External air side pressure drop, max	Pa	150	150
Filter class, standard		EU4	EU4
Condensing capacity	kW	11	21
Liquid temperature, dimensioning	°C	34 / 44	34 / 44
Liquid flow	l/s	0,3	0,6
Liquid side pressure drop	kPa	50	50
Dry cooler (optional)			
Heat rejection capacity (34 / 44 °C)	kW	11	21
Number of fans	pcs	1 x EC	1 x EC
Length	mm	968	968
Width	mm	968	968
Height	mm	739	739
Sound level, measured 10 m away	dB(A)	45	45

### Standard features

Variable speed compressor

Variable speed fan

Discharge gas reheater (variable capacity)

Electrical expansion valve

Water valve (pressure driven)

Electrical heater

Resistor humidifier (6 kg/h)

Exhaust on top, suction from front or rear

Duct connections or free flow

## **Accessories**

Dry cooler

Liquid pump "P3"

Variable control for electrical heater

Filter class EU7

Filter guard (pressure differense measurement)

Condense water pump

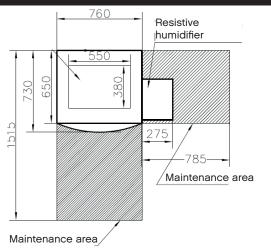
External (standard or precision) room temperature and humidity

sensor

Water leak detector

ServiceNext remote monitoring and control

## **Dimensions**



Steady precision air conditioner is available in Option selection program.

Height of the precision air conditioner 1920 mm without plenum (+500 mm)

