

A I R

I N N O V A T I O N



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Unlike the plate type HRV's, AZURE Wheel units offer the humidity transfer at a high rate for both heating and cooling season thanks to the special 3Å Zeolite coating of the rotary wheels.

The AZURE Wheel range is specially designed for projects where the height of the suspended ceiling is low and where moisture transfer is required. Two parallel rotors are used for high heat recovery and moisture transfer, EC fans reach high static pressure values with low energy consumption. To meet the requirements of air flow between 1000 m<sup>3</sup> / h and 5500 m<sup>3</sup> / h, units are designed in 4 models. The rotary wheel is driven by a special drive system and the rotation speed is adjusted to provide the optimum supply temperature according to temperature differences.

With high efficiency and unique design features, AZURE Wheel devices with ECODESIGN 2018 label have a built-in, advanced web-interface control system as standard. To ensure Plug and Play concept the units are shipped to site with all connections already made and mounted. User friendly interface that helps ease of operation which can be controlled online (**aeracloud.com**), has building automation systems connection (ModBUS, BacNET) and control over network (ModBUS TCP / IP) as standard.

- Compact Design for Ceiling Installations.
- Sorption Rotor ( $\eta > 80\%$ ) allows high sensible and latent heat transfer.
- EC Plug Fan.
- Low sound levels with 50mm insulated casing.
- Automatic rotor control with stepper motor.
- ECODESIGN 2018 Approval.
- ModBus and BacNET compatible.
- Plug and Play Controls with integrated Web interface.
- Heating/Cooling Coil Option.



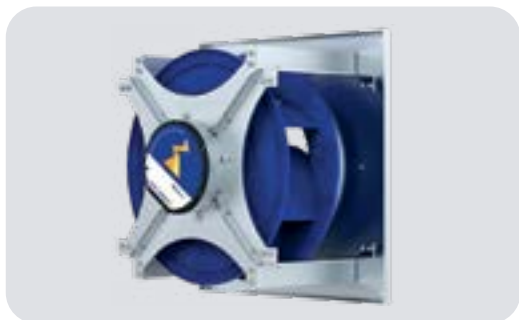
# AZURE WHEEL

ROTORED CEILING TYPE  
ENERGY RECOVERY DEVICE,





units are designed in accordance with VDI6022. Inside of the unit is easily cleanable. The used seals are closed cell and prevent germ reproduction. All components that require service, have their own service doors. This way the unit does not have to be disconnected from ducting system for servicing.



## CASING

By using advanced technology components, Azure Wheel units achieve efficiency levels of today's and tomorrow's standards. The casing, which is developed using the latest engineering methods, also shows superior performance in terms of aerodynamics. The internal turbulence or dead zone losses are reduced to the minimum with the analysis.

In addition to achieving a high-strength design with patented fan support bracket design, the total efficiency is improved by avoiding dead zones and reverse flows which may occur behind the fan body.

AZURE Wheel units are designed with low air velocities, low filter and coil pressure drops are achieved despite its compact design. The fact that the electric preheater and the water type after heater can be placed inside the body contributes to the compact structure, preventing difficulties in wiring and automation. Water heating battery's piping has a specially designed connection, it provides high sealing and easy connection out of the casing. AZURE Wheel

## FAN

AZURE wheel units are equipped with EC Plug fans, which offer high aerodynamic efficiency with their engineered impeller design and electrical efficiency (min. IE4) with their unmatched electrical and electronical components. All the fans meet with the ECODSIGN directive and are approved for ERP2015.

With its unique control system AZURE Wheel units are delivered as standard for CAV applications and are also applicable for demand driven systems like VOD (Ventilation on Demand) or VAV (Constant Pressure). For VOD applications one or several room sensors or a return duct sensor can be used, the control decides the air flow accordingly.



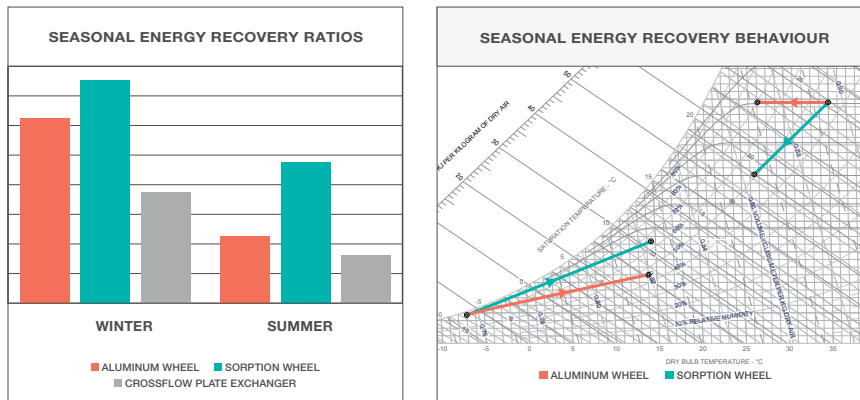
## FILTER

AZURE Wheel devices, at the fresh air side ePM1 55% (F7) class, at the exhaust air side ePM10 50% (M5) class filters are comprised as a standard. By these high efficient filters as they are catching 90% of dust particles which have up to 0,4  $\mu\text{m}$  radius, room air quality is increased. Filters have low starting pressure drop values because of having both their high efficiencies and increased surface area. In order to observe filter pollution differential pressure transmitters are applied at fresh air and exhaust air filters. Thus, as the filter's pressure drop is followed instantly, the used is acknowledged. For different flow rates, as different pressure drops are defined, the dynamic filter alarm can be created by SENSO+.

## SORPTION WHEEL

AZURE Wheel units present the state of art rotary wheels with high heat and humidity transfer rates. Twin rotary wheels are designed to decrease the height, enabling ceiling installations. Rotary wheel drive consists service free high torque step motor, stepless control drive and polyester chain belt system.

Rotary wheel is coated with 3Å Zeolite material for high humidity efficiency in both winter and summer season, that allows the transfer of water molecules only between air streams. In cooling season, AZURE wheel units promise 115% more energy transfer than a traditional Aluminum wheel and 195% more than a static Aluminum Plate.



## SENSO+

The advanced control system SENSO PLUS in AZURE Wheel Units, provides the most efficient control of all components which can be installed internally and as external accessories, ensuring the desired airflow conditions.

## DX COIL

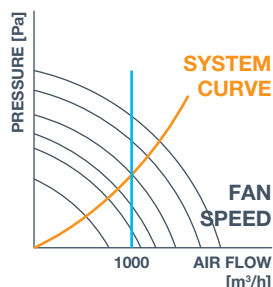
Externally mounted duct type DX batteries are used for purposes such as lowering the supply air temperature, dehumidifying process and bringing the blown air to the desired temperature after dehumidification. It can be step controlled with on / off method, maximum 8 step setting is available.

## HUMIDITY CONTROL EQUIPMENT

Humidity control equipments are used to raise or lower the humidity of the supply air. With the SENSO PLUS control, the humidifier / dehumidifiers can be controlled to bring the supply air to the desired humidity value.

The SENSO PLUS control also provides system control besides equipment control, which means that the devices can be operated with the Yearly Timer Function according to the working periods: Daily, Weekly, Monthly or Yearly. In the Timer Function, values such as weekly working days, vacation times, daylight savings time can be defined and reported retrospectively.

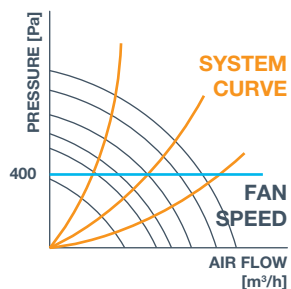
Besides, the Support Function which is used to prevent the undesired conditions from occurring indoors even when the device is not working. The indoor temperature from falling below or exceeding a certain value even during non-working hours is ensured.



### Constant Air Volume

To meet the desired constant airflow requirement in the AZURE Handling Units, the SENSO PLUS control measures the air pressure drop in the suction ports of the fans and compares the air flow with the set value to produce a working signal that will change the EC fan fan speed.

Contamination of the filters can be controlled by static flow control within the fan operating curve, to the static pressure requirements of the unit which result in higher or lower than the project values.



### Constant Air Pressure

In AZURE Units, constant pressure control is used to meet the variable airflow requirement of the air duct system. The SENSO PLUS control generates a working signal that will change the EC fan speed by continuously measuring the static pressure created in the supply air duct and comparing it with the value defined in the system. When a VAV damper opens or closes, higher or lower external static pressure needs can be met with constant pressure control within the fans operating curve. This way extreme noise in the ducts, unbalanced airflow distribution in different volumes is prevented.

## COOLING COIL

Externally mounted duct-type water cooling coils are used for such purposes as lowering the blowing temperature and dehumidifying the air in the units. It can be driven either proportionally or by on / off method.

## Heating Coil

Heating coils are used for increasing the supply air temperature and for bringing the supply air to the desired temperature after dehumidifying process. Hot water coils can be driven by proportional control via 2 or 3 way valves. With the SENSO PLUS control, frost protection mechanism is available as standard to prevent the temperature of the supply water from reaching freezing conditions in extreme cold climates. If the return water temperature falls below a certain value set on the control, the heating valve is switched to the 100% open position and a run signal is sent to the heating water circulation pump. If the temperature still does not rise to the desired value, the device is stopped and the user is given a freeze alarm.

## Indoor Air Quality Control

The air quality sensor or the CO<sub>2</sub> sensor, which is placed in the critical volume or return channel in the interior, continuously measures the air quality. This value generates a signal that will change the EC fan fan speed by comparing it to the set point on the controller. If the indoor air quality is lower than the desired value, the fan speed and thus the fresh air amount is increased; if the indoor air quality is higher than the desired indoor air quality, the fan speed and fresh air speed are decreased; Energy saving is achieved in considerable amounts in heating or cooling loads caused by fresh air.

## CONTROL OF ROTARY HEAT RECOVERY EXCHANGER

For AZURE WHEEL devices, rotary HR with SENSO+, are produced with a varyingspeed rotor driver. As supply heat is checked, according to needed heat recovery, the rotor speed is adjusted automatically, when the outside air conditions are suitable, as the rotor is stopped, Free Cooling is provided. In the situations that rotor is not operated because of any malfunction, by a sensor integrated in the device an alarm signal is sent and the user is noticed. At the Free Cooling mode if the rotor is not operated for 30 minutes, for cleaning a command is sent to turn 25 times for 20 seconds.

## USER INTERFACE

With SENSO+ EVO ECO control panel which has buttons or EVO TOUCH 7" touch screen control panel is presented. Also there is a web server for observing or controlling the device which is integrated in the card. On the server the settings can be done, also both of the instanteneous operating values and history of operating values are able to be followed.



The web server on SENSO+, as connecting to web, via a computer/tablet or a mobile phone at anywhere in the world, operating situation can be viewed and the access for changing the settings is provided. Without needing a complex web settings, this feature can be activated with a simple web connected cable.

The devices in the different projects, with cumulating all of the devices in the same display, as it is synchronized, operating values, active alarms etc. values as followed and the settings can be changed if it is desired. Especially in the projects within the multiple devices or for servicing the multiple devices in different places this system is provided optionally together with SENSO+ .

## COMMUNICATION OPTIONS

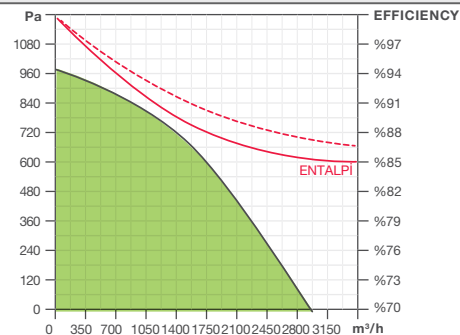
SENSO PLUS control supports all of the universal communication protocols and interacts with other air handling units as well as with other building automation systems.ModBUS, BACnet and EXOline protocols are open as standard and there is also possibility to connect with LONWORKS protocol as an option.



## ■ AZURE WHEEL 25



## ■ FAN PERFORMANCE CURVES



## UNIT INFORMATION

	AZURE WHEEL 25
Exchanger Type	Adsorption Wheel
Fan Type	EC Plug Fan
ERP Compatibility	ERP 2018
Installation	Inside
Installation Position	Horizontal
Service Location	From side and under
Case structure	50 mm Insulated Double Walled

## TECHNICAL INFORMATIONS

Minimum Flow Rate (m³/h)	350
Nominal Flow Rate (m³/h)	3070
Efficiency (EN 308)	82%
Efficiency (-5°C OA, 22°C 50%RH RA)	86%
Efficiency Humidity Transfer Efficiency	89%
Weight (kg)	260
According to EN 1886 Case Features	D1/L1/TB3/T3
Fresh Air Filter	ePM1 55% (F7)
Exhaust Filter	ePM10 50% (M5)
Operating Temperature (1) (°C)	-20/+50
Protecting Class	IP 31

## Electrical Informations

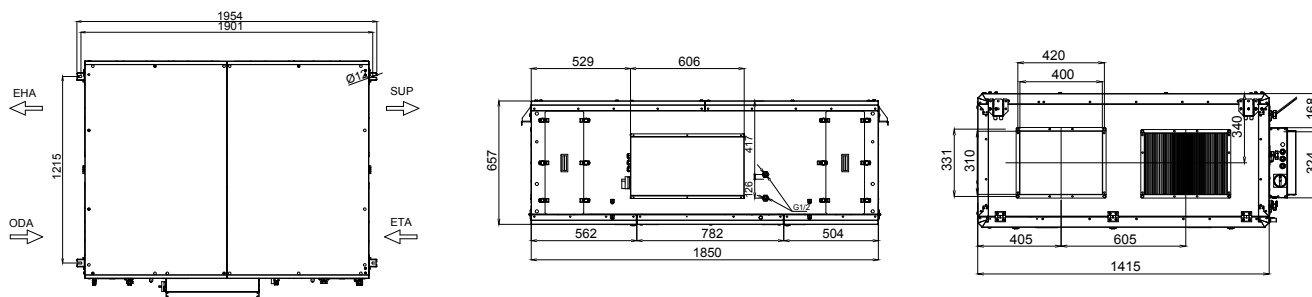
Communicating Informations	BACnet, Modbus TCP/IP
Supply Voltage	400V, 3~, 50 Hz
Total Power (1) (kW)	2,1
Maksimum Current (A)	5,4

## Sound Information (2)

Surrounding Sound 3m. Distance (dBA)	43
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## ■ DIMENSIONS [mm]



## ACCESSORIES

Electric Pre Heater	Optional	Internal of device	Page 46
Electric After Heater	Optional	Internal of device	Page 46
Water After Heater	Optional	Internal of device	Page 46
Water Cooler	Optional	External of device	Page 47
Duct Connection Damper	Optional		Page 47
Outside Protection Sheet	-	-	
Fresh Air Spigot	-	-	
Exhaust Spigot	-	-	
Drainage Pump	Optional		Page 50
Bulk Siphon	Optional		Page 49
Room Control Panel Type1	EVO ECO		Page 47
Room Control Panel Type2	EVO TOUCH		Page 49
Room Control Panel Type3	-	-	
Cloud Connections Right	Optional		Page 48
VOD Sensor CO2	Optional		Page 49
VOD Sensor RH%	Optional		Page 49
VOD Sensor VOC	Optional		Page 49
Signal Converter	Optional		Page 48
Constant Pressure Kit	Optional		Page 50

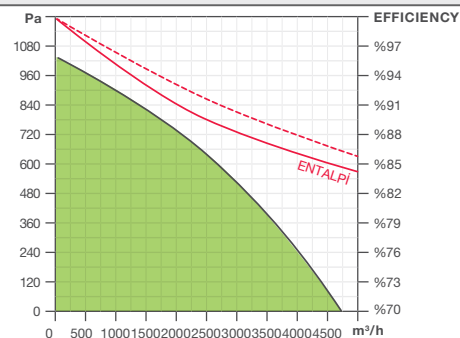
Exhaust Filter Coarse	-	
Exhaust Filter ePM10 50%	Standard	
Fresh Air Filter Coarse	-	
Fresh Air Filter ePM10 50%	Optional	Page 48
Fresh Air Filter ePM1 55%	Standard	
Fresh Air Filter ePM1 80%	Optional	Page 48

- (1) Together with Electrical Preheater
- (2) As a result of the measurement according to ISO 5136
- (3) Outside Kit is used
- (4) Bidirectional installation is provided via service covers located at front and back
- (5) Humidity transfer is possible with the selection of Adsorption Rotor

## ■ AZURE WHEEL 35



## ■ FAN PERFORMANCE CURVES



## UNIT INFORMATION

	AZURE WHEEL 35
Exchanger Type	Adsorption Wheel
Fan Type	EC Plug Fan
ERP Compatibility	ERP 2018
Installation	Inside
Installation Position	Horizontal
Service Location	From side and under
Case structure	50 mm Insulated Double Walled

## TECHNICAL INFORMATIONS

Minimum Flow Rate (m³/h)	540
Nominal Flow Rate (m³/h)	4670
Efficiency (EN 308)	82%
Efficiency (-5°C OA, 22°C 50%RH RA)	86%
Efficiency Humidity Transfer Efficiency	88%
Weight (kg)	305
According to EN 1886 Case Features	D1/L1/TB3/T3
Fresh Air Filter	ePM1 55% (F7)
Exhaust Filter	ePM10 50% (M5)
Operating Temperature (1) (°C)	-20/+50
Protecting Class	IP 31

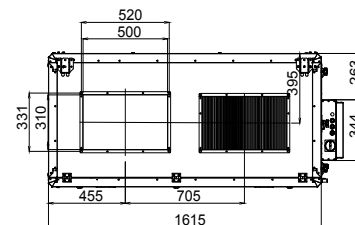
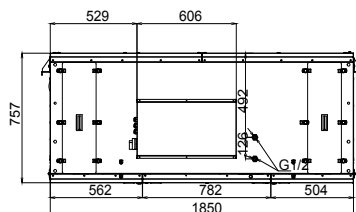
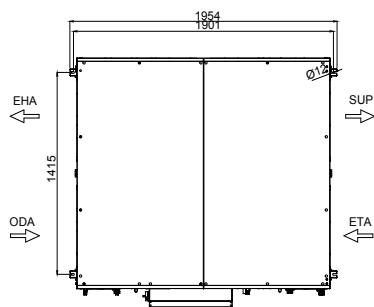
## Electrical Informations

Communicating Informations	BACnet, Modbus TCP/IP
Supply Voltage	400V, 3~, 50 Hz
Total Power (1) (kW)	3,8
Maksimum Current (A)	6,2

## Sound Information (2)

Surrounding Sound 3m. Distance (dBA)	54
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## ■ DIMENSIONS [mm]



## ACCESSORIES

Electric Pre Heater	Optional	Internal of device	Page 46
Electric After Heater	Optional	Internal of device	Page 46
Water After Heater	Optional	Internal of device	Page 46
Water Cooler	Optional	External of device	Page 47
Duct Connection Damper	Optional	Page 47	
Outside Protection Sheet	-	-	
Fresh Air Spigot	-	-	
Exhaust Spigot	-	-	
Drainage Pump	Optional	Page 50	
Bulk Siphon	Optional	Page 49	
Room Control Panel Type1	EVO ECO	Page 47	
Room Control Panel Type2	EVO TOUCH	Page 49	
Room Control Panel Type3	-	-	
Cloud Connections Right	Optional	Page 48	
VOD Sensor CO2	Optional	Page 49	
VOD Sensor RH%	Optional	Page 49	
VOD Sensor VOC	Optional	Page 49	
Signal Converter	Optional	Page 48	
Constant Pressure Kit	Optional	Page 50	

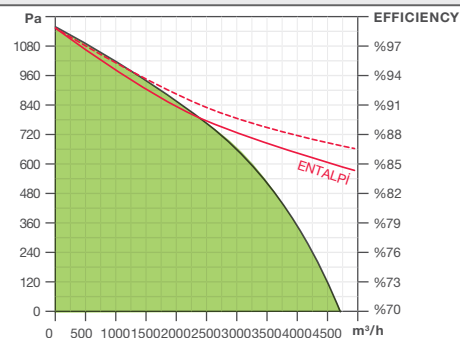
Exhaust Filter Coarse	-	
Exhaust Filter ePM10 50%	Standard	
Fresh Air Filter Coarse	-	
Fresh Air Filter ePM10 50%	Optional	Page 48
Fresh Air Filter ePM1 55%	Standard	
Fresh Air Filter ePM1 80%	Optional	Page 48

- (1) Together with Electrical Preheater
- (2) As a result of the measurement according to ISO 5136
- (3) Outside Kit is used
- (4) Bidirectional installation is provided via service covers located at front and back
- (5) Humidity transfer is possible with the selection of Adsorption Rotor

## ■ AZURE WHEEL 40



## ■ FAN PERFORMANCE CURVES



## UNIT INFORMATION

	AZURE WHEEL 40
Exchanger Type	Adsorption Wheel
Fan Type	EC Plug Fan
ERP Compatibility	ERP 2018
Installation	Inside
Installation Position	Horizontal
Service Location	From side and under
Case structure	50 mm Insulated Double Walled

## TECHNICAL INFORMATION

Minimum Flow Rate (m³/h)	710
Nominal Flow Rate (m³/h)	4780
Efficiency (EN 308)	81%
Efficiency (-5°C OA, 22°C 50%RH RA)	85%
Efficiency Humidity Transfer Efficiency	88%
Weight (kg)	390
According to EN 1886 Case Features	D1/L1/TB3/T3
Fresh Air Filter	ePM1 55% (F7)
Exhaust Filter	ePM10 50% (M5)
Operating Temperature (1) (°C)	-20/+50
Protecting Class	IP 31

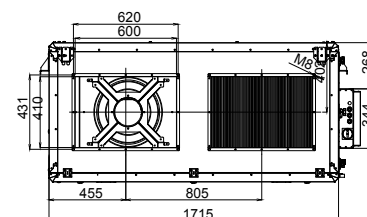
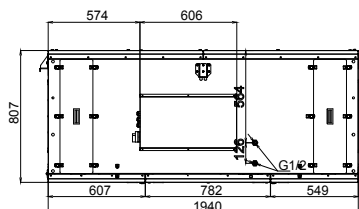
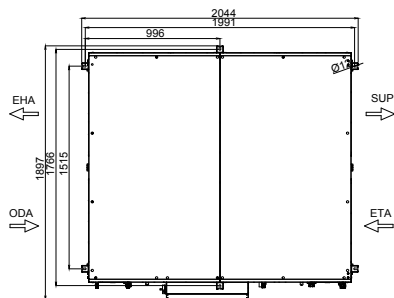
## Electrical Informations

Communicating Informations	BACnet, Modbus TCP/IP
Supply Voltage	400V, 3~, 50 Hz
Total Power (1) (kW)	5
Maksimum Current (A)	8,4

## Sound Information (2)

Surrounding Sound 3m. Distance (dBA)	52
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# ■ DIMENSIONS [mm]



## ACCESSORIES

Electric Pre Heater	Optional	Internal of device	Page 46
Electric After Heater	Optional	Internal of device	Page 46
Water After Heater	Optional	Internal of device	Page 46
Water Cooler	Optional	External of device	Page 47
Duct Connection Damper	Optional	Page 47	
Outside Protection Sheet	-	-	
Fresh Air Spigot	-	-	
Exhaust Spigot	-	-	
Drainage Pump	Optional	Page 50	
Bulk Siphon	Optional	Page 49	
Room Control Panel Type1	EVO ECO	Page 47	
Room Control Panel Type2	EVO TOUCH	Page 49	
Room Control Panel Type3	-	-	
Cloud Connections Right	Optional	Page 48	
VOD Sensor CO2	Optional	Page 49	
VOD Sensor RH%	Optional	Page 49	
VOD Sensor VOC	Optional	Page 49	
Signal Converter	Optional	Page 48	
Constant Pressure Kit	Optional	Page 50	

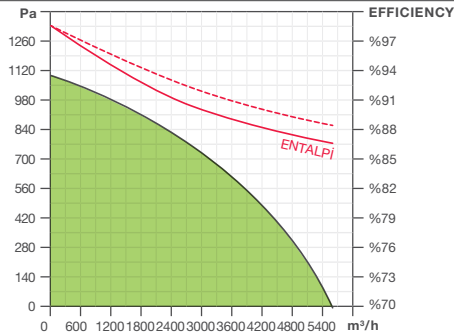
Exhaust Filter Coarse	-	
Exhaust Filter ePM10 50%	Standard	
Fresh Air Filter Coarse	-	
Fresh Air Filter ePM10 50%	Optional	Page 48
Fresh Air Filter ePM1 55%	Standard	
Fresh Air Filter ePM1 80%	Optional	Page 48

- (1) Together with Electrical Preheater
- (2) As a result of the measurement according to ISO 5136
- (3) Outside Kit is used
- (4) Bidirectional installation is provided via service covers located at front and back
- (5) Humidity transfer is possible with the selection of Adsorption Rotor

## ■ AZURE WHEEL 55



## ■ FAN PERFORMANCE CURVES



### UNIT INFORMATION

	AZURE WHEEL 55
Exchanger Type	Adsorption Wheel
Fan Type	EC Plug Fan
ERP Compatibility	ERP 2018
Installation	Inside
Installation Position	Horizontal
Service Location	From side and under
Case structure	50 mm Insulated Double Walled

### TECHNICAL INFORMATIONS

Minimum Flow Rate (m3/h)	940
Nominal Flow Rate (m3/h)	5860
Efficiency (EN 308)	81%
Efficiency (-5°C OA, 22°C 50%RH RA)	85%
Efficiency Humidity Transfer Efficiency	87%
Weight (kg)	455
According to EN 1886 Case Features	D1/L1/TB3/T3
Fresh Air Filter	ePM1 55% (F7)
Exhaust Filter	ePM10 50% (M5)
Operating Temperature (1) (°C)	-20/+50
Protecting Class	IP 31

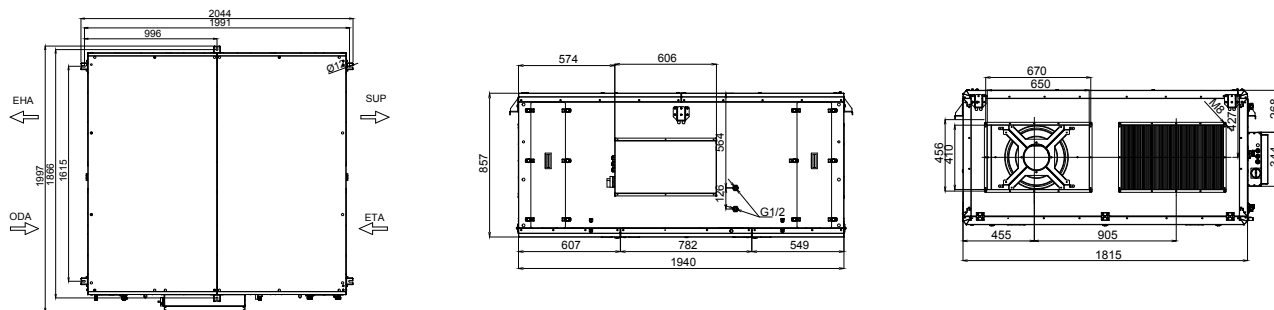
### Electrical Informations

Communicating Informations	BACnet, Modbus TCP/IP
Supply Voltage	400V, 3~, 50 Hz
Total Power (1) (kW)	5
Maksimum Current (A)	8,4

### Sound Information (2)

Surrounding Sound 3m. Distance (dBA)	51
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# ■ DIMENSIONS [mm]



## ACCESSORIES

Electric Pre Heater	Optional	Internal of device	Page 46
Electric After Heater	Optional	Internal of device	Page 46
Water After Heater	Optional	Internal of device	Page 46
Water Cooler	Optional	External of device	Page 47
Duct Connection Damper	Optional		Page 47
Outside Protection Sheet	-	-	
Fresh Air Spigot	-	-	
Exhaust Spigot	-	-	
Drainage Pump	Optional		Page 50
Bulk Siphon	Optional		Page 49
Room Control Panel Type1	EVO ECO		Page 47
Room Control Panel Type2	EVO TOUCH		Page 49
Room Control Panel Type3	-	-	
Cloud Connections Right	Optional		Page 48
VOD Sensor CO2	Optional		Page 49
VOD Sensor RH%	Optional		Page 49
VOD Sensor VOC	Optional		Page 49
Signal Converter	Optional		Page 48
Constant Pressure Kit	Optional		Page 50

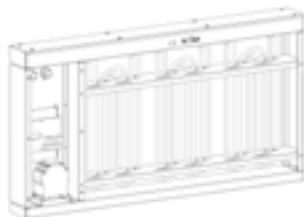
Exhaust Filter Coarse	-	
Exhaust Filter ePM10 50%	Standard	
Fresh Air Filter Coarse	-	
Fresh Air Filter ePM10 50%	Optional	Page 48
Fresh Air Filter ePM1 55%	Standard	
Fresh Air Filter ePM1 80%	Optional	Page 48

- (1) Together with Electrical Preheater
- (2) As a result of the measurement according to ISO 5136
- (3) Outside Kit is used
- (4) Bidirectional installation is provided via service covers located at front and back
- (5) Humidity transfer is possible with the selection of Adsorption Rotor

# ACCESSORIES

## ■ ELECTRICAL PREHEATER

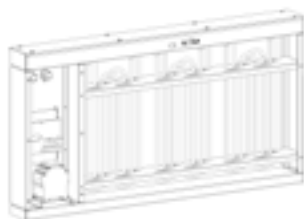
Used in order to prevent freezing at the exchanger in the situations which the outside air is very low. Controlled as a single step with SENSO control. Provides controllable energy efficiency with SENSO+ control via proportional signal.



Model	Heater Capacity (kW)	Current (A)	Control
AW-PREH 25	6	8,4	Oransal
AW-PREH 35	7,5	10,5	Oransal
AW-PREH 40	9	12,6	Oransal
AW-PREH 55	9	12,6	Oransal

## ■ ELECTRICAL AFTER HEATER

Used for increasing the supply air temperature. Operates automatically according to desired room temperature or desired supply temperature. Controlled as a single step with SENSO control. Provides controllable energy efficiency with SENSO+ control via proportional signal.



Model	Heater Capacity (kW)	Current (A)	Control
AW-POEH 25	6	8,4	Oransal
AW-POEH 35	7,5	10,5	Oransal
AW-POEH 40	9	12,6	Oransal
AW-POEH 55	9	12,6	Oransal

## ■ WATER AFTER HEATER

Used for increasing the supply air temperature. Operates automatically according to desired room temperature or desired supply temperature. Controlled as a single step with SENSO control. Provides controllable energy efficiency with SENSO+ control via proportional signal.



Model	Heater Capacity (kW)	Water Regime	Control
AW-POWH 25	6	80-60	Oransal
AW-POWH 35	7,5	80-60	Oransal
AW-POWH 40	9	80-60	Oransal
AW-POWH 55	9	80-60	Oransal



## ■ WATER COOLING

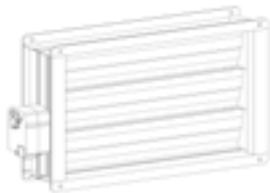
Used for cooling inside, water type cooling batteries are existed as accesories. With SENSO+ control, controlled proportionally according to desired supply temperature or desired room temperature.



Model	Heater Capacity (kW)	Water Regime	Control
AW-KR 25	6	7-12	Oransal
AW-KR 35	9	7-12	Oransal
AW-KR 40	9	7-12	Oransal
AW-KR 55	12	7-12	Oransal

## ■ Duct Connection Damper

The motor operated damper, as turned itself off when the devices is turned off, prevent the leakage can be occured via air duct. Has the Class 3 impermeability as a standard.



Model	Operation Time	Energy Supply
AW-DAMP 25	40...75 s	24C DC , yay geri dönüşlü
AW-DAMP 35	40...75 s	24C DC , yay geri dönüşlü
AW-DAMP 40	40...75 s	24C DC , yay geri dönüşlü
AW-DAMP 55	40...75 s	24C DC , yay geri dönüşlü

## ■ EVO-ECO

Is a user panel used as a user interface in the devices has the SENSO+ control card. Connected to control panel via 4x0.75 cable or RJ-12 Jack.



Model
EVO-ECO

# ACCESSORIES

## ■ FILTER

In the projects, it is designed as a standard for more sensitive than the present filter's filtering



Model	Code
Taze Hava filtresi ePM10 50%	AZW25FAEPM10-50
	AZW35FAEPM10-50
	AZW40FAEPM10-50
	AZW55FAEPM10-50
Taze Hava filtresi ePM1 80%	AZW25FAEPM1-80
	AZW35FAEPM1-80
	AZW40FAEPM1-80
	AZW55FAEPM1-80

## ■ CLOUD CONNECTION

The web server on SENSO+, as connecting to web, via a computer/tablet or a mobile phone at anywhere in the world, operating situation can be viewed and the access for changing the settings is provided. Without needing a complex web settings, this feature can be activated with a simple web connected cable.



Model
SENSO+ CLOUD

## ■ Signal Converter

SENSO+ devices as make an access that connect up to 3 VOD sensors, both measure gas and different volume gases, change the capacity according to these measurements of air conditioning plants. Via Signal Converter, in 3 different types, for each type up to 6 measurements or obtained values from 18 different measurement volumes are used for controlling air conditioning plant is provided.



Model
SENSO+ SK

## ■VOD

Located in inside of critical volume or return duct, the optional air quality sensor ( VOC or CO2 ) or relative humidity sensor (RH%) consistently measures the air quality or relative humidity. This value, as being compared with set value which is arranged on control, creates operating which changes EC fan's fan speed. If the air in room is lower than desired air quality or the relative humidity is higher than the desired value, the fan speed is increased so, fresh air amount increased, if the air in room is higher than desired air quality or the relative humidity is lower than the desired value, the fan speed is decreased so, fresh air amount decreased; Thus, a significant energy save is provided at the heating or cooling loads caused by the fresh air.



Model	Measurement	Installation Position
VOD-VOC-RM	VOC	Room
VOD-VOC-DUCT	VOC	Channel
VOD-CO2-DUCT	CO2	Room
VOD-CO2-RM	CO2	Channel
VOD-RH-DUCT	RH%	Room
VOD-RH-RM	RH%	Channel
PS-MW	-	-

## ■BULK SIPHON

Used for disposal of water In the heat recovery sections, the result of condensation at the exhaust air or the result of condensation at the cooking batteries. Can operate in both positive negative pressure.



Model
SIPH

## ■EVO-TOUCH

Is a 7" sized touch type user panel used as a user interface. Connected to control panel via 4x0.75 cable or RJ-12 Jack.



Model
EVO-TOUCH

# ACCESSORIES

## ■ Drainage Pump

Used when unloading the water occurred from condensation at the exchanger or battery cell in the device not possible via the present slope.



Model	Maximum Flow (l/h)	Max Head (m)	Max Suction Height (m)	Energy Supply
DP 01	13	10	1,5	230 V, 50/60 Hz
DP 02	40	10	2	230 V, 50/60 Hz

## ■ Constant Pressure Kit

Used for serving the purpose of ventilation system's varying flow rate. SENSO+, creates the signal which can change EC fan's fan speed as measuring static pressure value consistently, as comparing with defined value to the system. Turning up or down the VAV damper which are different volume in duct system, serve the purpose of static pressure out of device as a result of higher or lower values than projected values with constant pressure control. In the fan operating characteristic, extreme volume sound occurred in the ducts and flow rate in different volumes are prevented.



Model
SENSO-CAP

## NOTES



SEPTEMBER 2019  
THE MANUFACTURER RESERVES THE RIGHT TO CHANGE THE SPECIFICATION WITHOUT PRIOR NOTICE.

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