



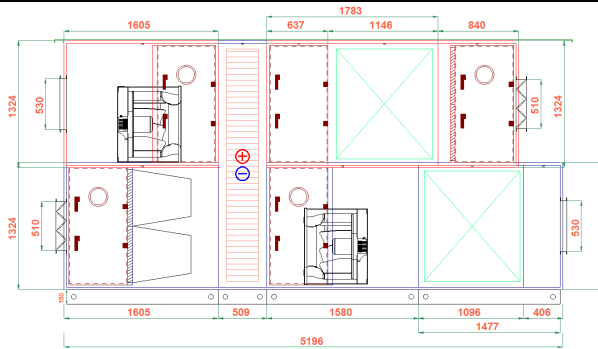
**TECHNICAL DATA**

Date	12/03/2018	Rev. Date	03/05/2018
Project No	2233	Proj.Trace No	32495
Project Name	HEAT ECOVERY UNIT-ECO		
AHU Name	AHU-5		
AHU Model	JUPITER 16 X 32		

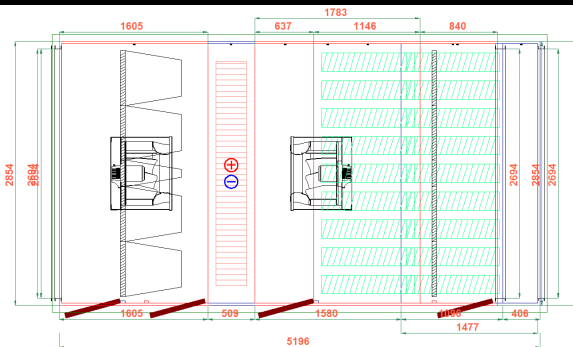


AHUSEL V.	2.2.3.12 26/02/2018
BSK	1/5

**RIGHT VIEW**



**TOP VIEW**



**GENERAL SPECIFICATIONS**

Supply Air Flow	Return Air Flow	Frame	Dimensions (mm)
20,000 m³/h	20,000 m³/h	25 steel profile	A2804 x H1274
Supply Air Velocity	Return Air Velocity	Insulation Material	Total Weight
1.65 m/s	1.65 m/s	Rockwool 70 kg/m³	0 kg
Coil Air Velocity	Air Density	Insulation Thickness	Base Height / Installation
	1.3255 kg/m³	50 mm	150 mm / Outside
Design Outdoor Temp.	Mixing Ratio	Outside Sheet Material	Absorbed Power
-7.7 °C / 25.8 °C(Odense)	% 0.00	0.9 mm Painted Galvanize	11.24 kW
Total Heating Capacity	Total Cooling Capacity	Inside Sheet Material	Motor Power(Vant/Asp)
		0.9 mm Galvanize	
Specific Fan Power(SFP Total)	ErP Compliance	ErP Code	Real Unit CAL Class -400 Pa
0.58 kW/(m³/s)	2016 & 2018	NRVU - BVU	L3
			Real Unit CAL Class +400 Pa
			L3

**NOISE LEVEL**

**SOUND POWER LEVEL (dB)**

**LwA-tot**

Frequency Hz	125	250	500	1000	2000	4000	8000		
Airborne Sound Power Level	67.0	56.0	55.8	49.6	49.4	50.0	38.4	58.3	dB(A)
Supply Air Outlet Induct Sound Power Level	79.2	60.9	65.2	61.2	59.0	69.5	64.3	72.0	dB(A)
Supply Air Inlet Induct Sound Power Level	67.4	67.4	63.4	63.6	67.7	74.3	69.2	76.8	dB(A)
Return Air Outlet Induct Sound Power Level	85.4	83.2	85.9	85.0	82.7	86.5	82.3	91.0	dB(A)
Return Air Inlet Induct Sound Power Level	64.5	49.0	46.0	43.6	46.5	60.0	57.9	62.5	dB(A)

**ACCESSORIES**

Lightening, Observation Glass, U-Manometer, Manometer Pressure Gauge


Model	CS Class	CAL Class -400 Pa	CAL Class +400 Pa	FBL Class	TT Class	TBF Class	Casing accoustical insulation at 125 Hz [dB]	Casing accoustical insulation at 250 Hz [dB]	Casing accoustical insulation at 500 Hz [dB]	Casing accoustical insulation at 1000 Hz [dB]	Casing accoustical insulation at 2000 Hz [dB]	Casing accoustical insulation at 4000 Hz [dB]	Casing accoustical insulation at 8000 Hz [dB]
JUPITER	D2	L1	L1	F9	T2	TB2	18.4	27.2	30.1	35.4	33.3	36.5	43.9

www.bskhavalandirma.com.tr  
info@bskhavalandirma.com.tr

Office Tel: +90 216 669 09 70  
Office Fax: +90 216 669 09 72

Factory Tel: +90 216 669 09 70  
Factory Fax: +90 216 669 09 72



	<b>TECHNICAL DATA</b>			
	Date	12/03/2018	Rev. Date	03/05/2018
	Project No	2233	Proj.Trace No	32495
	Project Name	HEAT ECOVERY UNIT-ECO		
AHUSEL V.	2.2.3.12 26/02/2018	AHU Name	AHU-5	
BSK	2/5	AHU Model	JUPITER 16 X 32	



**FRESH AIR CONNECTION**

Connection Type	Automation	Pressure Drop
Gear Damper	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
20,000 m³/h	A 2694 mm x H 510 mm	4.04 m/s

**SUPPLY CONNECTION**

Connection Type	Automation	Pressure Drop
Flange	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
20,000 m³/h	A 2694 mm x H 530 mm	3.89 m/s


**RETURN CONNECTION**

Connection Type	Automation	Pressure Drop
Gear Damper	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
20,000 m³/h	A 2694 mm x H 510 mm	4.04 m/s

**EXHAUST CONNECTION**

Connection Type	Automation	Pressure Drop
Flange	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
20,000 m³/h	A 2694 mm x H 530 mm	3.89 m/s

**FILTER (M3)**

Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Section Weight
G-4 Panel	47 Pa / 160 Pa / 103 Pa	1.77 m/s	592x592x50/8/NA	592x287x50/2/NA		0 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Spare Filter
F-7 Bag	49 Pa / 360 Pa / 204 Pa	1.77 m/s	592x592x610/8/E	592x287x610/2/B		

\* Filter Energy Performance; preferably energy classification

**ACCESSORIES**

Lightening, Observation Glass, U-Manometer, Manometer Pressure Gauge

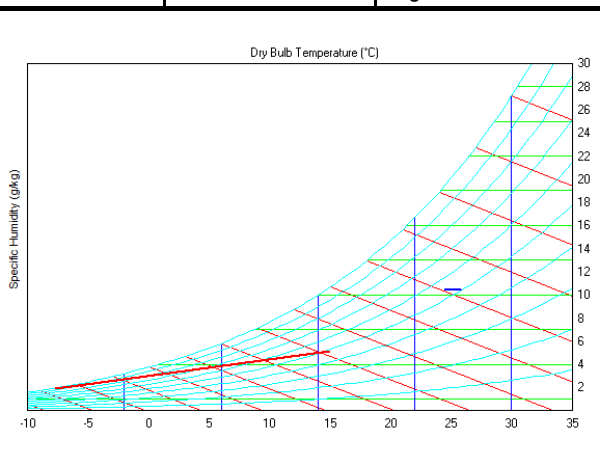


**ROTARY HEAT RECOVERY (M1)**

Model	Rpm	Quantity	Section Weight
RRU-P-E20-2425/2425-2300	15	1	0 kg

Airflow	Fresh Air	Exhaust	Capacity	Summer		Winter			
	20,000 m³/h	20,000 m³/h		-9.27 kW		208.43 kW			
Air Vel.	2.42 m/s	2.70 m/s	P.D (Pa)	Fresh	Exhaus	Fresh	Exhau		
	Summer			Winter		108	107	88	106
Effect.		Ratio(*)		1.2kg/m³		104	104	104	104
76.08		76.08		76.33		76.33			

Air Inlet / Outlet	Summer				Winter			
	Fresh Air		Exhaust		Fresh Air		Exhaust	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
	DT	25.80	24.43	24.00	25.37	-7.70	14.97	22.00
WT	18.54	18.09	17.06	17.53	-8.08	9.44	15.42	1.22
RH	50.00	54.25	50.00	46.07	90.00	48.31	50.00	95.00




Condensation Pan	OACF	EATR (%)
	0.00	0.00

\* Efficiency at balanced flow

\* OACF: Outdoor Air Correction Factor, EATR: Exhaust Air Transfer Ratio

www.bskhavalandirma.com.tr      Office Tel: +90 216 669 09 70      Factory Tel: +90 216 669 09 70  
 info@bskhavalandirma.com.tr      Office Fax: +90 216 669 09 72      Factory Fax: +90 216 669 09 72

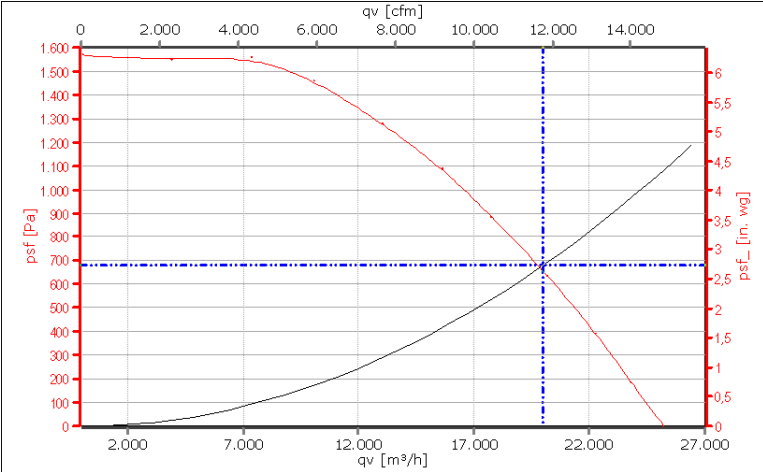


	<b>TECHNICAL DATA</b>			
	Date	12/03/2018	Rev. Date	03/05/2018
	Project No	2233	Proj.Trace No	32495
	Project Name	HEAT ECOVERY UNIT-ECO		
AHUSEL V.	2.2.3.12 26/02/2018	AHU Name	AHU-5	
BSK	3/5	AHU Model	JUPITER 16 X 32	



<b>ACCESSORIES</b>		

**SUPPLY FAN (M8)**

<b>Airflow</b>	20,000 m³/h	<b>Fan Model</b>	EBM Papst-K3G630PV0401	<b>Quantity</b>	1	<b>Section Weight</b>	0 kg				
<b>Internal Static Pressure</b>	431 Pa	<b>Motor P./Volt./Pha./Freq.</b>	3P/400V/50-60Hz								
<b>External Static Pressure</b>	250 Pa										
<b>Total Static Pressure</b>	681 Pa										
<b>Total Pressure</b>	790 Pa										
<b>Total / Static Efficiency</b>	70.04 / 60.30 %										
<b>Shaft / Absorbed Power</b>	6.27 / 6.27 kW	<b>Absorbed Pow.With VFD</b>	6.27 kW								
<b>Fan Speed</b>	1750 rpm(Max.1750 rpm)			<b>Sound Power Level (dB)</b>							
		Hz	125	250	500	1000	2000	4000	8000	<b>LwA-tot</b>	
		<b>SPLa - Inlet Side</b>	83.4	83.4	79.4	79.6	79.7	86.3	81.2	89.7	<b>dB(A)</b>
		<b>SPLm - Outlet Side</b>	86.8	83.9	86.7	85.7	83.5	87.4	81.4	92.4	<b>dB(A)</b>
<b>Specific Fan Power(SFPe int)</b>	0.14 kW/(m³/s)	<b>Air Density</b>	1.2000 kg/m³								
<b>Backup Fan</b>	0	<b>Backup Motor</b>	0								

\* The fan system effect is taken into account in the fan performance  
 \* The fan calculated for wet conditions  
 \* Sfp is calculated based on clean filter & dry coil conditions

<b>ACCESSORIES</b>		
Lightening, Observation Glass		

**SILENCER (M4)**

<b>Airflow</b>	20,000 m³/h	<b>Sound Absorbtion (250 Hz)</b>	22 dB	<b>Pressure Drop</b>	16 Pa	<b>Silencer Thickness</b>	200 mm	<b>Silencer Material</b>	Rockwool ( 52 kg/m³ ) 50 m	<b>Section Weight</b>	0 kg
<b>Silencer Code</b>	200d 100s 9n 1000L 1150H 2739A										

<b>ACCESSORIES</b>		

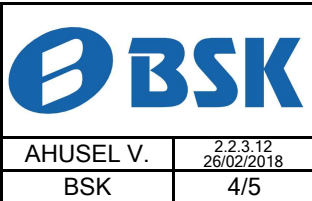
**EMPTY SECTION (M5)**

<b>Airflow</b>	20,000 m³/h	<b>Pressure Drop</b>	0 Pa	<b>Section Weight</b>	0 kg
----------------	-------------	----------------------	------	-----------------------	------

<b>ACCESSORIES</b>		

www.bskhavalandirma.com.tr      Office Tel: +90 216 669 09 70      Factory Tel: +90 216 669 09 70  
 info@bskhavalandirma.com.tr      Office Fax: +90 216 669 09 72      Factory Fax: +90 216 669 09 72





TECHNICAL DATA			
Date	12/03/2018	Rev. Date	03/05/2018
Project No	2233	Proj.Trace No	32495
Project Name	HEAT ECOVERY UNIT-ECO		
AHU Name	AHU-5		
AHU Model	JUPITER 16 X 32		



**EXHAUST FAN (M9)**

Airflow	20,000 m³/h	Fan Model	EBM Papst-K3G630PV0401	Quantity	1	Section Weight	0 kg				
Internal Static Pressure	245 Pa	Motor P./Volt./Pha./Freq.	3P/400V/50-60Hz								
External Static Pressure	250 Pa										
Total Static Pressure	495 Pa										
Total Pressure	604 Pa										
Total / Static Efficiency	67.63 / 55.34 %										
Shaft / Absorbed Power	4.97 / 4.97 kW	Absorbed Pow.With VFD	4.97 kW								
Fan Speed	1658 rpm(Max.1750 rpm)										
		Sound Power Level (dB)				LwA-tot					
		Hz	125	250	500	1000	2000	4000	8000		
		SPLa - Inlet Side	83.1	83.0	78.5	79.1	79.0	85.9	83.0	89.5	dBa
		SPLm - Outlet Side	85.4	83.2	85.9	85.0	82.7	86.5	82.3	91.7	dBa
Specific Fan Power(SFP <sub>e</sub> int)	0.07 kW/(m³/s)	Air Density	1.2000 kg/m³								
Backup Fan	0	Backup Motor	0								

\* The fan system effect is taken into account in the fan performance  
 \* The fan calculated for wet conditions  
 \* Sfp is calculated based on clean filter & dry coil conditions

ACCESSORIES	
Lightening, Observation Glass	

EMPTY SECTION (M7)			
Airflow	20,000 m³/h	Pressure Drop	0 Pa
		Section Weight	0 kg

ACCESSORIES	

SILENCER (M6)					
Airflow	20,000 m³/h	Sound Absorption (250 Hz)	22 dB	Pressure Drop	16 Pa
		Silencer Thickness	200 mm	Silencer Material	Rockwool ( 52 kg/m³ ) 50 m
Silencer Code	200d 100s 9n 1000L 1150H 2739A				


ACCESSORIES	

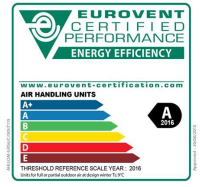
FILTER (M2)						
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Section Weight
G-4 Panel	47 Pa / 160 Pa / 103 Pa	1.77 m/s	592x592x50/8/NA	592x287x50/2/NA		0 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Spare Filter
						<input type="checkbox"/>

\* Filter Energy Performance; preferably energy classification

www.bskhavalandirma.com.tr Office Tel: +90 216 669 09 70 Factory Tel: +90 216 669 09 70  
 info@bskhavalandirma.com.tr Office Fax: +90 216 669 09 72 Factory Fax: +90 216 669 09 72



		TECHNICAL DATA			
		Date	12/03/2018	Rev. Date	03/05/2018
Project No	2233	Proj.Trace No	32495		
Project Name	HEAT ECOVERY UNIT-ECO				
AHUSEL V.	2.2.3.12 26/02/2018	AHU Name	AHU-5		
BSK	5/5	AHU Model	JUPITER 16 X 32		



ACCESSORIES	
Lightening, Observation Glass, U-Manometer, Manometer Pressure Gauge	



Ecodesign Requirements Table				
		Value	2016	2018
	Product	JUPITER 25		
	Erp	2016 & 2018		
A	Manufacturer	BSK Havalandırma Ekipmanları A.Ş.		
B	Model Identifier	JUPITER 16 X 32		
C	ErP Code	NRVU - BVU		
D	Type Of Drive	Variable Speed Drive (VSD)	Variable Speed Drive (VSD)	Required
E	Type Of HRS	Rotary		
	HRS Damper	Exists		Required
F	Thermal Efficiency of HRS	76.33 %		>= 67 %
G	Nominal Flow Rate	5.56 m³/s	5.56 m³/s	
H	Effective Electrical Power Input	6.27 kW	4.97 kW	
I	SPFInt	670 W/(m³/s)	648 W/(m³/s)	<= 1020
J	Face Velocity	1.65 m/s	1.65 m/s	
K	Nominal External Drop Δps, Ext	250 Pa	250 Pa	
L	Internal Pressure Drop Δps, Int	431 Pa	245 Pa	
M	Additional Pressure Drop Δps, Add	109 Pa	109 Pa	
N	Static Fan Efficiency EC327/2011	60.30 %	55.34 %	
O	Declared Maximum Ext./Int. Leakage Rate	0.00 %		
P	Energy Performance Of Filters	B	NA	
Q	Description Of Visual Filter Warning	Manometer Pressure Gauge	Manometer Pressure Gauge	Required
R	Casing Sound Power Level (Lwa)	92.4 dB	91.7 dB	
S	Internet Address Of Instructions	www.bskhavalandirma.com.tr		