



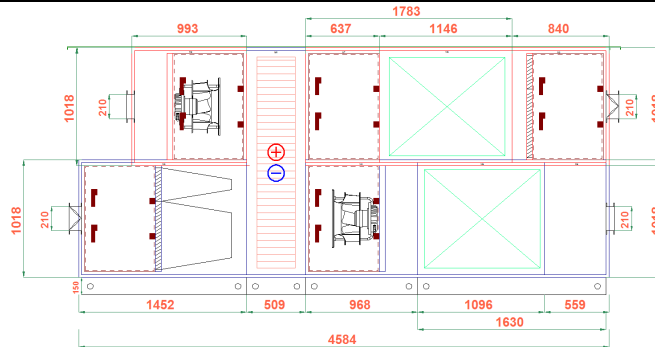
**TECHNICAL DATA**

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-1		
AHU Model	JUPITER 12 X 24		

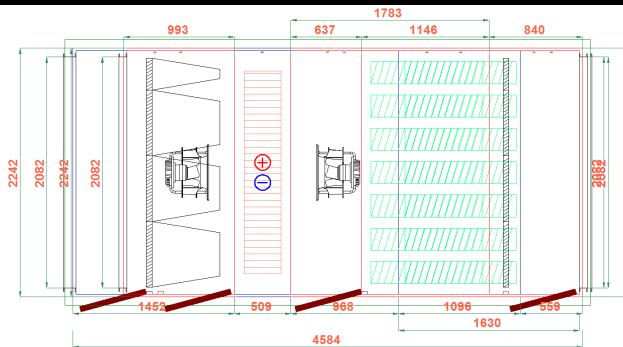


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BSK	1/5

**RIGHT VIEW**



**TOP VIEW**



**GENERAL SPECIFICATIONS**

Supply Air Flow	Return Air Flow	Frame	Dimensions (mm)
6,000 m³/h	6,000 m³/h	25 steel profile	A2608 x H2723 x L4789
Supply Air Velocity	Return Air Velocity	Insulation Material	Total Weight
0.85 m/s	0.85 m/s	Rockwool 70 kg/m³	2,966 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	3.41 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
0.32 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	51.8	53.0	52.4	50.9	50.6	44.4	32.0	55.6	dB(A)
Supply Air Outlet Induct Sound Power Level	62.8	57.6	61.3	62.1	59.7	62.8	59.0	67.3	dB(A)
Supply Air Inlet Induct Sound Power Level	53.0	63.7	62.7	60.8	65.4	63.0	59.9	68.9	dB(A)
Return Air Outlet Induct Sound Power Level	70.2	80.2	82.5	86.3	83.9	80.9	75.9	89.3	dB(A)
Return Air Inlet Induct Sound Power Level	50.6	44.6	46.5	40.9	44.6	49.8	46.9	53.3	dB(A)

**ACCESSORIES**

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

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BSK	2/5	AHU Model	JUPITER 12 X 24	



**FRESH AIR CONNECTION**

Connection Type	Automation	Pressure Drop
Gear Damper	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
6,000 m³/h	A 2082 mm x H 210 mm	3.81 m/s

**SUPPLY CONNECTION**

Connection Type	Automation	Pressure Drop
Flange	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
6,000 m³/h	A 2082 mm x H 210 mm	3.81 m/s


**RETURN CONNECTION**

Connection Type	Automation	Pressure Drop
Gear Damper	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
6,000 m³/h	A 2082 mm x H 210 mm	3.81 m/s

**EXHAUST CONNECTION**

Connection Type	Automation	Pressure Drop
Flange	Automatic	10 Pa
Airflow	Dimensions	Air Velocity
6,000 m³/h	A 2082 mm x H 210 mm	3.81 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	16 Pa / 160 Pa / 88 Pa	0.96 m/s	592x592x50/3/NA	592x287x50/4/NA		508 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Spare Filter
F-7 Bag	25 Pa / 360 Pa / 192 Pa	0.96 m/s	592x592x610/3/D	592x287x610/4/B		

\* Filter Energy Performance; preferably energy classification

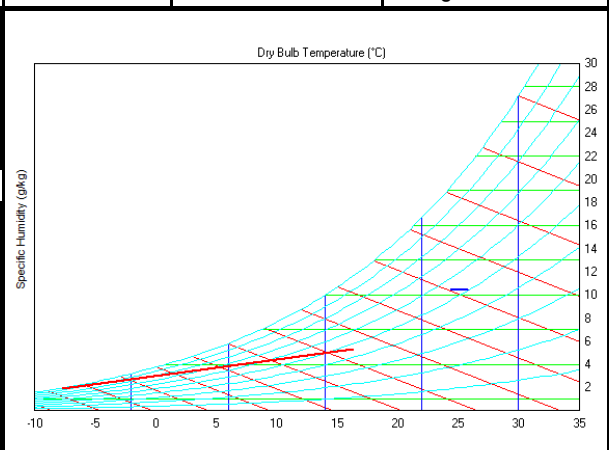
**ACCESSORIES**

Manometer Pressure Gauge	
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**ROTARY HEAT RECOVERY (M1)**

Model	Rpm	Quantity	Section Weight
RRU-P-E20-1825/1825-1700	15	1	428 kg

	Fresh Air		Exhaust		Capacity	Summer		Winter	
	Airflow	6,000 m³/h	6,000 m³/h			-2.94 kW	66.19 kW		
Air Vel.	1.33 m/s		1.48 m/s		P.D (Pa)	Fresh	Exhaus	Fresh	Exhau
	Summer	Winter	58	57		47	56		
Effect.	Ratio(*)	Effect.	Ratio(*)	1.2kg/m³	56	56	56	56	
	80.32	80.32	80.82	80.82					



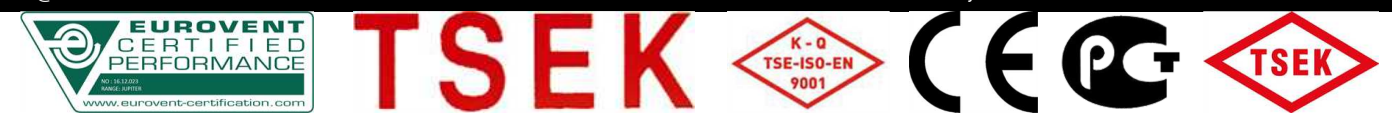
Air Inlet / Outlet	Summer				Winter			
	Fresh Air		Exhaust		Fresh Air		Exhaust	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
	DT	25.80	24.35	24.00	25.45	-7.70	16.30	22.00
WT	18.54	18.06	17.06	17.56	-8.08	10.24	15.42	0.15
RH	50.00	54.50	50.00	45.86	90.00	45.98	50.00	95.00



Condensation Pan	OACF	EATR (%)
	0.85	19.78

\* Efficiency at balanced flow

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

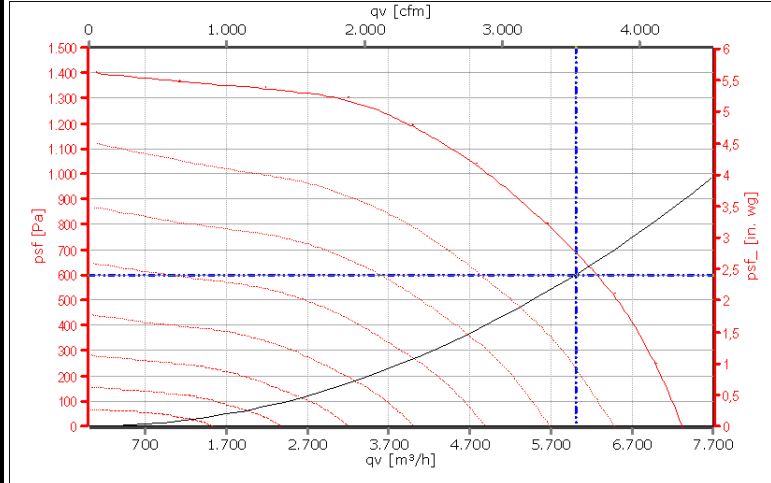
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BSK	3/5	AHU Model	JUPITER 12 X 24		

<b>ACCESSORIES</b>				

**SUPPLY FAN (M4)**

<b>Airflow</b>	6,000 m³/h	<b>Fan Model</b>	EBM Papst-K3G355BC9202	<b>Quantity</b>	1	<b>Section Weight</b>	420 kg		
<b>Internal Static Pressure</b>	350 Pa	<b>Motor P./Volt./Pha./Freq.</b>	3P/400V/50-60Hz						
<b>External Static Pressure</b>	250 Pa								
<b>Total Static Pressure</b>	600 Pa								
<b>Total Pressure</b>	701 Pa								
<b>Total / Static Efficiency</b>	62.39 / 53.39 %								
<b>Shaft / Absorbed Power</b>	1.87 / 1.87 kW	<b>Absorbed Pow.With VFD</b>	1.87 kW						
<b>Fan Speed</b>	2736 rpm(Max.2800 rpm)			<b>Sound Power Level (dB)</b>				<b>LwA-tot</b>	
	Hz	125	250	500	1000	2000	4000	8000	
	<b>SPLa - Inlet Side</b>	69.0	79.7	78.7	76.8	77.4	75.0	71.9	83.4 dBA
	<b>SPLm - Outlet Side</b>	70.4	80.6	82.8	86.6	84.2	80.7	76.1	90.4 dBA
<b>Specific Fan Power(SFPe int)</b>	0.07 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>				

**SILENCER (M8)**

<b>Airflow</b>	6,000 m³/h	<b>Sound Absorption (250 Hz)</b>	22 dB	<b>Pressure Drop</b>	3 Pa	<b>Silencer Thickness</b>	200 mm	<b>Silencer Material</b>	Rockwool ( 52 kg/m³ ) 50 m	<b>Section Weight</b>	302 kg
<b>Silencer Code</b>	200d 100s 7n 1000L 850H 2127A										

<b>ACCESSORIES</b>				

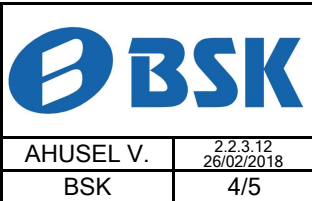
**EMPTY SECTION (M9)**

<b>Airflow</b>	6,000 m³/h	<b>Pressure Drop</b>	0 Pa	<b>Section Weight</b>	153 kg
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<b>ACCESSORIES</b>				

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AHU Model	JUPITER 12 X 24		



**EXHAUST FAN (M5)**

Airflow	6,000 m³/h	Fan Model	EBM Papst-K3G355BC9202	Quantity	1	Section Weight	465 kg				
Internal Static Pressure	167 Pa	Motor P./Volt./Pha./Freq.	3P/400V/50-60Hz								
External Static Pressure	250 Pa										
Total Static Pressure	417 Pa										
Total Pressure	518 Pa										
Total / Static Efficiency	56.28 / 45.30 %										
Shaft / Absorbed Power	1.53 / 1.53 kW	Absorbed Pow.With VFD	1.53 kW								
Fan Speed	2594 rpm(Max.2800 rpm)										
		Sound Power Level (dB)				LwA-tot					
		Hz	125	250	500	1000	2000	4000	8000		
		SPLa - Inlet Side	69.2	78.6	79.0	76.4	77.1	75.7	72.0	83.4	dBa
		SPLm - Outlet Side	70.2	80.2	82.5	86.3	83.9	80.9	75.9	90.2	dBa
Specific Fan Power(SFPe int)	0.03 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	

EMPTY SECTION (M7)			
Airflow	6,000 m³/h	Pressure Drop	0 Pa
		Section Weight	155 kg

ACCESSORIES	

SILENCER (M6)					
Airflow	6,000 m³/h	Sound Absorption (250 Hz)	22 dB	Pressure Drop	3 Pa
		Silencer Thickness	200 mm	Silencer Material	Rockwool ( 52 kg/m³ ) 50 m
		Section Weight	281 kg		
Silencer Code	200d 100s 7n 1000L 850H 2127A				


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	16 Pa / 160 Pa / 88 Pa	0.96 m/s	592x592x50/3/NA	592x287x50/4/NA		254 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Spare Filter
						□

\* Filter Energy Performance; preferably energy classification

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BSK	5/5	AHU Model	JUPITER 12 X 24		



ACCESSORIES	
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 12 X 24		
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	80.82 %		>= 67 %
G	Nominal Flow Rate	1.67 m³/s	1.67 m³/s	
H	Effective Electrical Power Input	1.87 kW	1.53 kW	
I	SPFInt	578 W/(m³/s)	612 W/(m³/s)	<= 1204
J	Face Velocity	0.85 m/s	0.85 m/s	
K	Nominal External Drop Δps, Ext	250 Pa	250 Pa	
L	Internal Pressure Drop Δps, Int	350 Pa	167 Pa	
M	Additional Pressure Drop Δps, Add	101 Pa	101 Pa	
N	Static Fan Efficiency EC327/2011	53.39 %	45.30 %	
O	Declared Maximum Ext./Int. Leakage Rate	0.85 %		
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)	90.4 dB	90.2 dB	
S	Internet Address Of Instructions	www.bskhavalandirma.com.tr		