

# TriaAir<sup>®</sup>

Ventilationsanlæg

## Tekniske data

J Prime 25\_45, 1RH og ROTOR



Varenr.: QC04500250  
Med 1RH og ROTOR  
(1RH varmefflade maks. 57,63 kW)

Standardfarve: RAL 9002 glans 30 (hvid)



TECHNICAL DATA			
Date	21.08.2020	Rev. Date	22.09.2020
Project ID	4157	Tracking Number	4126
Project Name	Item no. QC04500250		
AHU Name	J Prime_25_45_1RH		
AHU Model	JUPITER 8 X 16		



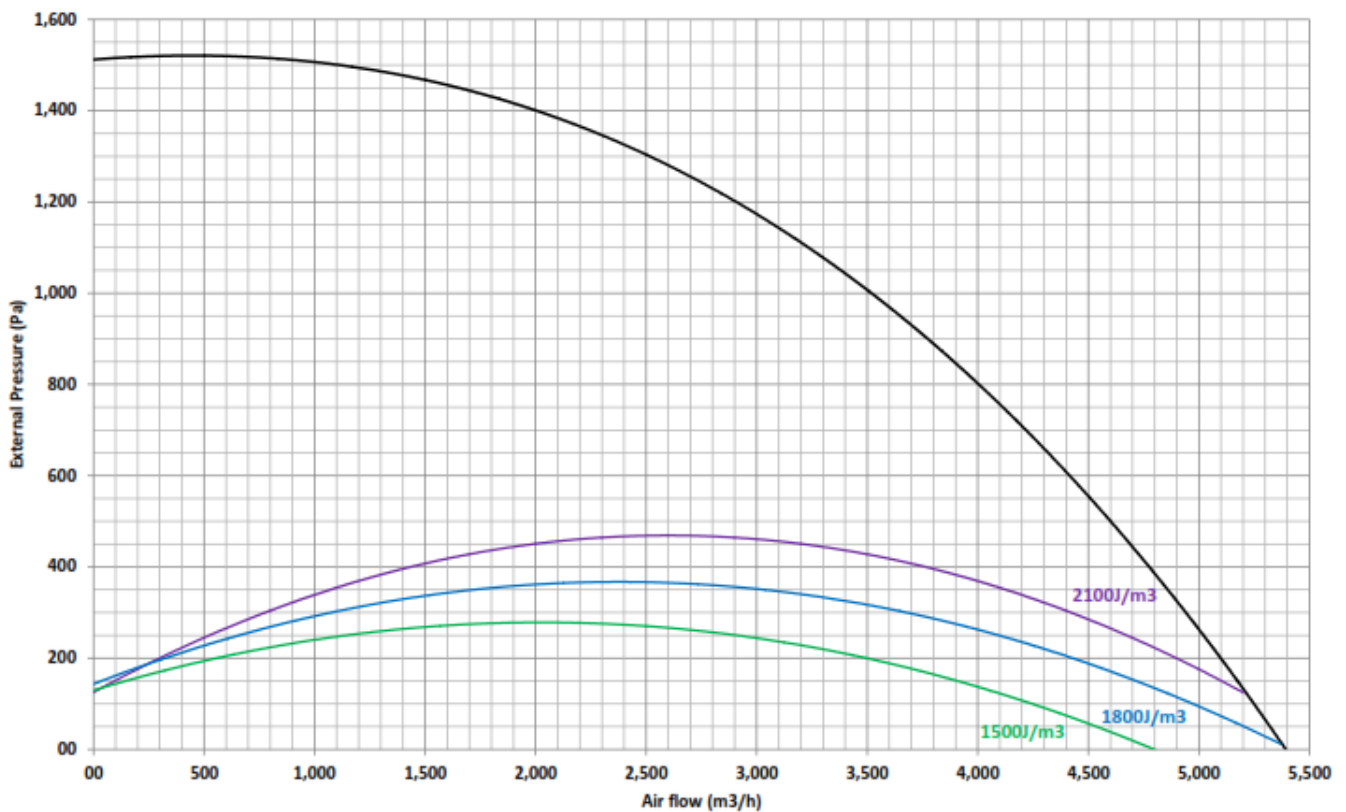
## Ecodesign Requirements Table

		Value		2018
	Product	JUPITER 25		
	Erp	2018		
A	Manufacturer	BSK Havalandırma Ekipmanları A.Ş.		
B	Model Identifier	JUPITER 8 X 16		
C	ErP Code	NRVU - BVU		
D	Type Of Drive	Variable Speed Drive (VSD)In	Variable Speed Drive (VSD)Out	Required
E	Type Of HRS	Rotary		
	HRS Damper	Exists		Exists Required
F	Thermal Efficiency of HRS	74,95 %		74,95 % >= 73 %
G	Nominal Flow Rate	1,19 m³/s	1,19 m³/s	
H	Effective Electrical Power Input	1,39 kW	1,39 kW	2,78 kW
I	SFPInt	490 W/(m³/s)	452 W/(m³/s)	942W/(m³/s) <= 979
J	Face Velocity	1,45 m/s	1,40 m/s	
K	Nominal External Drop Δps, Ext	250 Pa		250 Pa
L	Internal Pressure Drop Δps, Int Supply Air	305 Pa		305 Pa
	Internal Pressure Drop Δps, Int. Exhaust Air	307 Pa		307 Pa
M	Additional Pressure Drop Δps, Add	91 Pa	91 Pa	
N	Static Fan Efficiency EC327/2011	51,81 %	51,87 %	
O	Declared Maximum Ext./Int. Leakage Rate	1,00 %		1,00 %
	Leakage Classifications by Eurovent	L1		L1
P	Energy Performance Of Filters	E	E	
Q	Description Of Visual Filter Warning	Manometer Pressure Gauge	Manometer Pressure Gauge	Required
R	Casing Sound Power Level (Lwa)	57,8 dBA		57,8 dBA
S	Internet Address Of Instructions	<a href="http://www.Termicplus.dk">www.Termicplus.dk</a>		
	Total Dimension mm	W 1320 x H 1675 x L 2160		
	Supply Airflow	4.300 m³/h		4.300 m³/h
	Return Airflow	4.300 m³/h		4.300 m³/h
	Design Outdoor Temp. Summer	(+25,8°C) (Hum. 60%)		(+25,8°C)
	Design Outdoor Temp. Winter	(-12 °C) (Hum. 90%)		(-12 °C)
	FRESH AIR CONNECTION Air Velocity	2,10 m/s		2,10 m/s
	SUPPLY CONNECTION Air Velocity	2,10 m/s		2,10 m/s
	RETURN CONNECTION Air Velocity	2,10 m/s		2,10 m/s
	EXHAUST CONNECTION Air Velocity	2,10 m/s		2,10 m/s
	Total Heating Capacity	22,96		22,96 kW
	Fluid Kind for Heating	Water		Water
	Fluid Temp. In / Out (Heating)	70/50 °C		70/50 °C
	Total Cooling Capacity			
	Fluid Kind for Cooling			
	Fluid Temp. In / Out (Cooling)			
	Filter Type supply Air	F7 Panel		F7 Panel
	Filter Type Return Air	M6 Panel		M6 Panel
	Total Weight	776 kg		776 kg

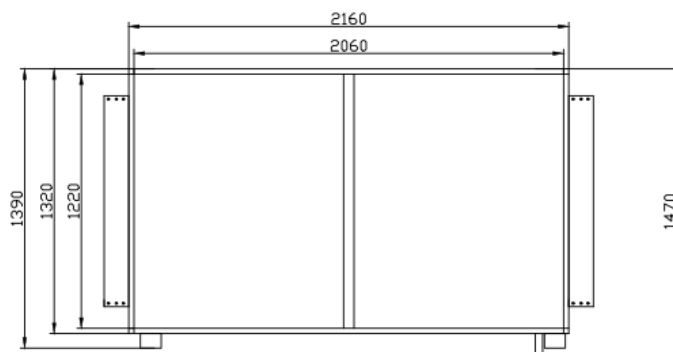
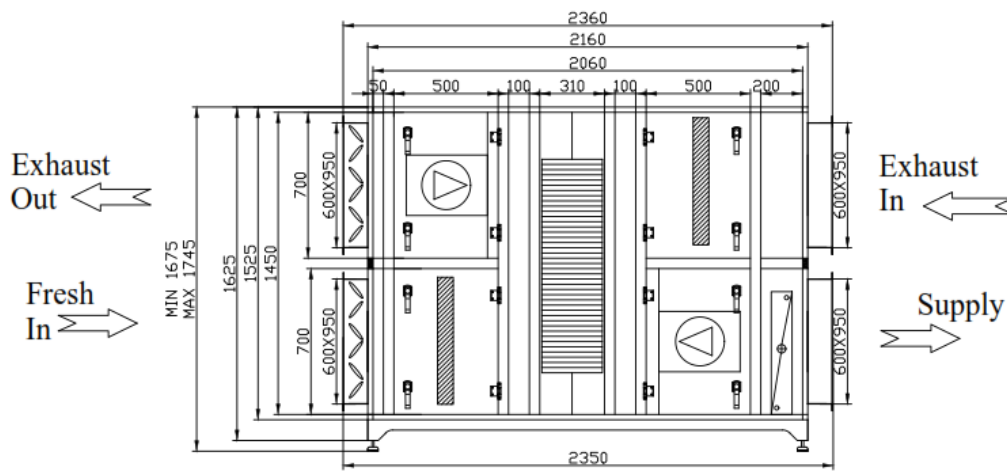
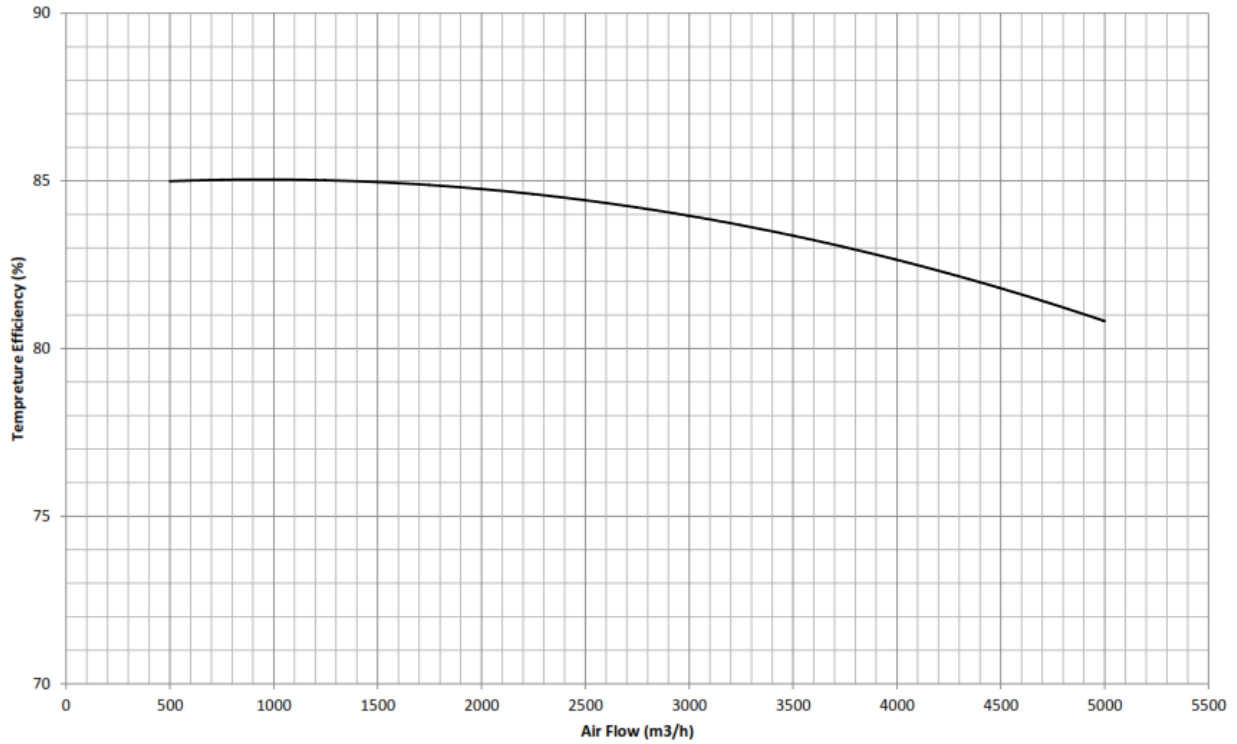
Accessories	Connection possible (Motherboard)	Included in the unit	Overall Total values
Co2 sensor	Yes	No	
Motion Sensor	Yes	No	
Heating Module	Yes	Yes	70/50 °C
Cooling Module	Yes	No	
Hood for supply air	Yes	No	
Hood for Exhaust air	Yes	No	
VAV	Yes	No	
Heating coil valve	Yes	No	
Cooling coil valve	Yes	No	
Electric Pre-heater	Yes	No	
Electric Heater	Yes	No	
Fire/smoke Automatic	Yes	No	
Steam Humidifier (M7)	Yes	No	
Prepared to fire	Yes	No	
Prepared to Smoke	Yes	No	
Motherboard/Display	Yes	Yes	
Kitchen Unit	Yes	No	
Unit Used as a smoke fan	Yes	No	

## Air Flow

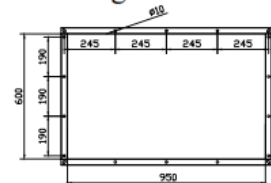
### J Prime 25\_45



## Efficiency Jprime 25\_45



### Flange Dimensions



NOTE: ALL DIMENSIONS ARE MM



# ATTESTATION OF CONFORMITY UYGUNLUK ONAYI

Sertifika Numarası / Certificate Number : M.2020.ST.1195.01

<b>Üretici</b> <i>Manufacturer</i>	: BSK Havalandırma Ekipmanları Anonim Şirketi
<b>Üretici Adresi</b> <i>Manufacturer adress</i>	: Mimar Sinan Mah. Basra Cad. No:59 Sultanbeyli İSTANBUL / TÜRKİYE
<b>Ürün Tanımı</b> <i>Product description</i>	: Klima Santrali Standart&Hygienic Air Handling Units
<b>Tip / Model</b> <i>Type / Model</i>	: BSK JUPITER Serisi: 500m <sup>3</sup> /h - 100.000m <sup>3</sup> /h
<b>İlgili Yönetmelikler</b> <i>Related Directives</i>	: 2006/42/AT Makina Emniyeti Yönetmeliği/EK VIII 2006/42/EC Machinery Directive/Annex VIII
<b>İlgili Standartlar</b> <i>Related Standards</i>	: EN ISO 12100,EN ISO 14120,EN ISO 13849-1, EN 60204-1
<b>Denetim Raporu</b> <i>Audit Report</i>	: ST.1195.01

UDEM Adriatic d.o.o. adı ve adresi yukarıda belirtilen firmanın sunduğu teknik dokümanları inceleyerek, belirlenen ürünün Makina Emniyeti Yönetmeliği 2006/42/AT Ek VIII kurallarına uygunluğunu onaylar. Yukarıda belirtilen tiplerdeki ürün üzerine CE işaretini, üreticinin kendi sorumluluğunda hazırlayacağı AT Uygunluk Beyanı ile iliştirebilir. İncelemesi yapılan ürüne ait olan bu belge tasarımın değişmesi halinde geçerliliğini yitirecektir. Bu belgenin geçerliliğini [www.udemadriatic.com](http://www.udemadriatic.com) internet sayfasından kontrol edebilirsiniz. Bu belge sadece yukarıda adı geçen ürün tip/modelleri için geçerlidir. Yukarıda adı geçen firma ve UDEM bu belgelerin bir kopyasını tescil tarihinden itibaren 15 yıl süreyle muhafaza etmelidir. Bu belgenin mülkiyet hakkı UDEM Adriatic d.o.o 'ya aittir ve istenildiğinde iade edilmelidir.

UDEM Adriatic d.o.o. confirms by examining technical documents presented on the part of company which stated title and address below that product is conformable to 2006/42/EC Annex VIII



Machinery Directive regulations, could attach marking on the product with EC Declaration of Conformity prepared by manufacturer in the charge of company. In case of changing this certificate design regarding to product examined, certificate will be expired. Please check validity of this certificate by website [www.udemadriatic.com](http://www.udemadriatic.com) This certificate is valid just for the product type/models stated below. UDEM and Company above mentioned must retain a copy of these certificates for 15 years since the day of registration. This certificate property belongs to UDEM Adriatic d.o.o and if required it must be returned.

**Yayın Tarihi / Issue Date** : 29.09.2020

**Geçerlilik Tarihi / Validity date** : 28.09.2021



Udem Adriatic d.o.o

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# EC DECLARATION OF CONFORMITY / AT UYGUNLUK BEYANI



We herewith declare / İş bu beyanname ile



## BSK HAVALANDIRMA EKİPMANLARI ANONİM ŞİRKETİ

**Address:** Mimar Sinan Mah. Basra Cad. No:59 Sultanbeyli İSTANBUL / TURKEY

**Product Name:** Standart&Hygienic Air Handling Units

**Model:** BSK JUPITER Serisi:500m3/h - 100.000m3/h

**Year of Manufacture/ Serial Number:** 2020/001

### Regulations Applied

We declare that we meet the following directive conditions for the Air Handling Unit that we have assembled and manufactured.

- 2006/42/EC Machinery Directive/Annex VIII

### Application Standard

- EN ISO 12100
- EN ISO 14120
- EN ISO 13849-1
- EN 60204-1

**Date and Place of Declaration :** 28.09.2020/İSTANBUL

**Name and Surname :**

Deniz Palat

**Signature, Stamp**



Mimar Sinan Mah. Basra Cad. No:59/A

Sultanbeyli İSTANBUL

Tel: 0216 669 09 72 (pbx) Fax: 0216 669 09 72

Sultanbeyli V.D : 187 000 3997

**Address/Adres:** Mimar Sinan, Basra Cad. No:59 Sultanbeyli / İstanbul

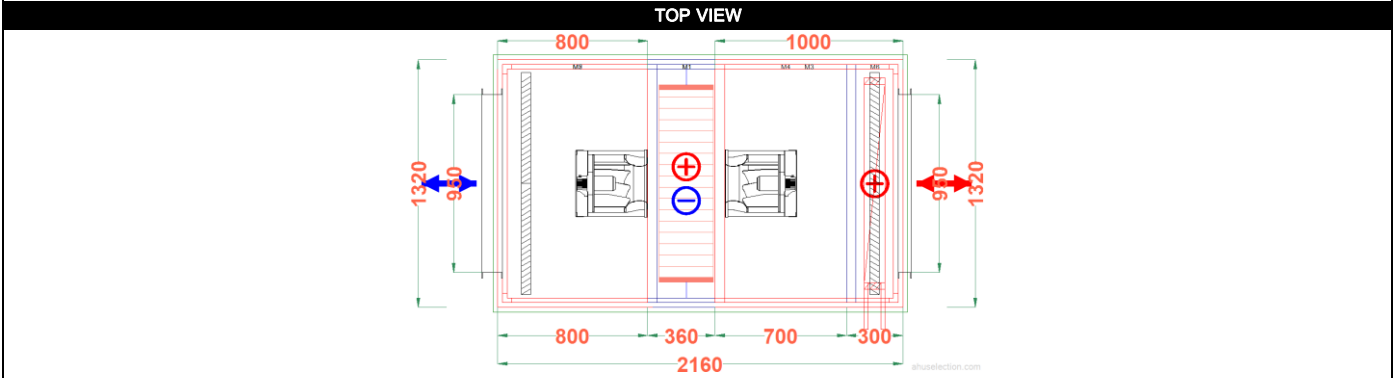
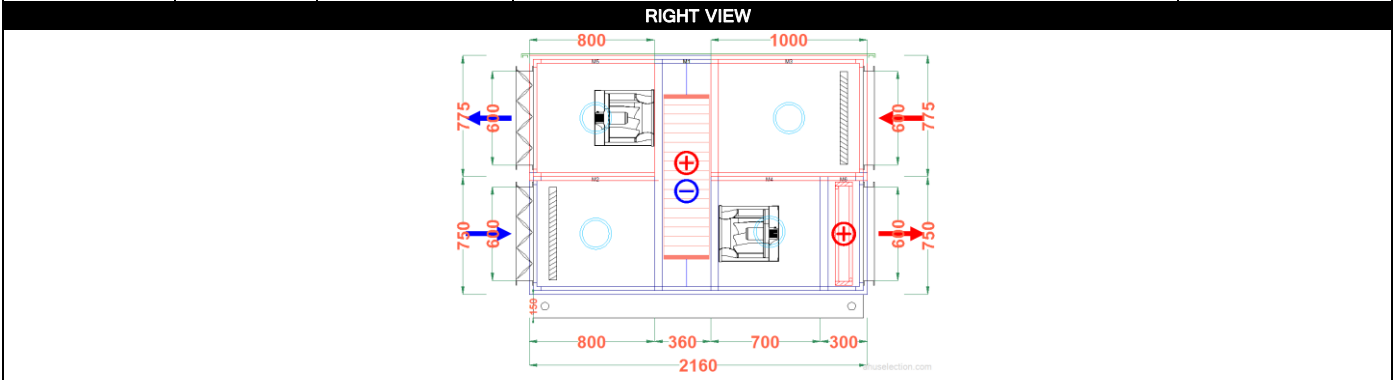
**Phone / Telefon:** : + 90 216 669 09 70

**Mail:** info@bskhavalandirma.com

**Web :** www.bskhavalandirma.com

DECLARATION OF CONFORMITY

	<b>TECHNICAL DATA</b>			
	Date	21.08.2020	Rev. Date	22.09.2020
	Project ID	4157	Tracking Number	4126
Project Name		J Prime 25 Selection		
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name J Prime_25_45_1RH - (1 QTY)		
BSK	1/7	AHU Model JUPITER 8 X 16		



<b>GENERAL SPECIFICATIONS</b>				
Supply Air Flow	Return Air Flow	Frame	Total Dimensions mm	
4.300 m³/h	4.300 m³/h	25 steel profile	W 1320 x H 1675 x L 2160	
Supply Air Velocity	Return Air Velocity	Insulation Material	Total Weight	
1,45 m/s	1,4 m/s	50 mm Rockwool 70 kg/m³	776 kg	
Coil Air Velocity	Air Density	Outside Sheet Material	Base Height	Roof (Outside)
1,86 m/s	1,3505 kg/m³	0,9 mm Painted Galvanize	150 mm	Sheet
Design Outdoor Temp.(W-S)		Inside Sheet Material	Total Absorbed Power	
(-12°C/90%)-(25,80°C/60%)(Odense)		0,9 mm Galvanize	2,79 kW	
Total Heating Capacity		Total Sensible Capacity	Motor Power(Vent/Asp)	
22,96 kW			1,8 kW / 1,8 kW	
Specific Fan Power(SFP Total)	ErP Compliance	ErP Code	Real Unit CAL Class -400 Pa	Real Unit CAL Class +400 Pa
0,94 kW/(m³/s)	2018	NRVU - BVU	L1	L2

<b>SOUND POWER LEVEL (dB)</b>										
Frequency Hz		125	250	500	1000	2000	4000	8000	LwA-tot	
Airborne Sound Power Level		61,6	63,3	55,9	48,4	47,7	46,9	34,7	57,8	dBA
Air Outlet Induct Sound Power Level		72,2	82,5	78,8	77,4	75,7	78,1	74,5	83,6	dBA
Air Inlet Induct Sound Power Level		75,3	76,3	70,7	58,6	55,2	51,5	43,1	70,8	dBA
Return Air Outlet Induct Sound Power Level		74,4	84,7	80,9	79,4	76,6	79,1	75,4	85,6	dBA
Return Air Inlet Induct Sound Power Level		75,3	76,3	70,7	58,6	55,2	51,5	43,1	70,8	dBA

**ACCESSORIES**




Lightening, Observation Glass, Manometer Pressure Gauge

Model	CS Class	CAL Class -400 Pa	CAL Class +700 Pa	FBL Class	TT Class	TBF Class	Casing acoustical insulation at 125 Hz [dB]	Casing acoustical insulation at 250 Hz [dB]	Casing acoustical insulation at 500 Hz [dB]	Casing acoustical insulation at 1000 Hz [dB]	Casing acoustical insulation at 2000 Hz [dB]	Casing acoustical insulation at 4000 Hz [dB]	Casing acoustical 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


\*These results obtained according to Eurovent modelbox test.

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		TECHNICAL DATA				
		Date	21.08.2020	Rev. Date	22.09.2020	
		Project ID	4157	Tracking Number	4126	
		Project Name	J Prime 25 Selection			
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_45_1RH - (1 QTY)			
BSK	2/7	AHU Model	JUPITER 8 X 16			
FRESH AIR CONNECTION						
Connection Type		Control Type		Pressure Drop		
Gear Damper		Automatic (LM230ASR)		0 Pa		
Airflow		Dimensions		Air Velocity		
4.300 m³/h		W 950 mm x H 600 mm		2,10 m/s		
SUPPLY CONNECTION						
Connection Type		Control Type		Pressure Drop		
Flange				0 Pa		
Airflow		Dimensions		Air Velocity		
4.300 m³/h		W 950 mm x H 600 mm		2,10 m/s		
RETURN CONNECTION						
Connection Type		Control Type		Pressure Drop		
Flange				0 Pa		
Airflow		Dimensions		Air Velocity		
4.300 m³/h		W 950 mm x H 600 mm		2,10 m/s		
EXHAUST CONNECTION						
Connection Type		Control Type		Pressure Drop		
Gear Damper		Automatic (LM230ASR)		0 Pa		
Airflow		Dimensions		Air Velocity		
4.300 m³/h		W 950 mm x H 600 mm		2,10 m/s		
FILTER (M2)						
Airflow	Condensation Pan			Spare Filter	Section Weight	
4.300 m³/h					152 kg	
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
F7 Panel	70 Pa / 170 Pa / 120 Pa	1,7 m/s	592x592x48/2/E			
* Filter Energy Performance; preferably energy classification						
* Frame sealing applied.						
ACCESSORIES (M2)						
Lightening, Observation Glass, Manometer Pressure Gauge						



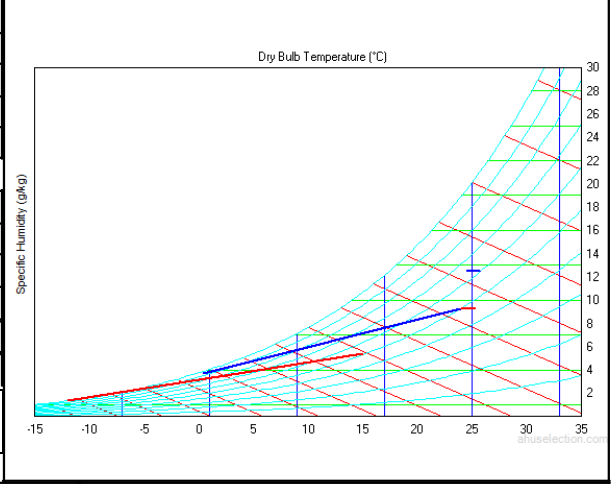
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AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_45_1RH - (1 QTY)	
BSK	3/7	AHU Model	JUPITER 8 X 16	



**ROTARY HEAT EXCHANGER (M1)**

Model	Rpm	Quantity	Section Weight
RRU_ECO-P-E18-1050/1050-1000	15	1	148 kg

	Fresh Air	Exhaust	Capacity	Winter		Summer	
Airflow	4.300 m³/h	4.300 m³/h		54,17 kW		-1,86 kW	
Air Vel.	2,70 m/s	3,09 m/s		Fresh	Exhau	Fresh	Exhaus
	Winter		P.D	144 Pa	171 Pa	182 Pa	171 Pa
	Summer			176 Pa	166 Pa	176 Pa	166 Pa
	Effic.	Balan.(*)	1,2kg/m³	176 Pa	166 Pa	176 Pa	166 Pa
	74,95	74,95		70,94	70,94		



Air Inlet / Outlet	Winter				Summer			
	Fresh Air		Exhaust		Fresh Air		Exhaust	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
	DT	-12,00 °	14,98 °C	24,00 °C	0,42 °C	25,80 °C	24,52 °C	24,00 °C
WT	-12,29 °	9,80 °C	17,07 °C	0,14 °C	20,16 °C	19,77 °C	17,07 °C	17,51 °C
RH	90,00 %	51,22 %	50,00 %	95,00 %	60,00 %	64,74 %	50,00 %	46,32 %

Condensation Pan	OACF (*)	EATR (%) (*)
	0,00	0,00

<input type="checkbox"/> Frequency Inverter	Size mm (1.050 x 1.050 x 290) - 1.000	Bypass Damper
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\* Efficiency at balanced flow


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

**ACCESSORIES (M1)**



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AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_45_1RH - (1 QTY)	
BSK	4/7	AHU Model	JUPITER 8 X 16	



**SUPPLY FAN (M4)**

Airflow	4.300 m <sup>3</sup> /h	Fan Model	EBM Papst-R3G310PH3801			Quantity	1	Section Weight	97 kg			
Internal Static Pressure	305 Pa	Motor P./Pha./Volt./Freq.	1,8 kW/3P/400V/50-60Hz			Isolator		Isolator Count				
External Static Pressure	250 Pa				Backup Fan		Backup Motor					
Total Static Pressure	555 Pa											
Total Pressure	646 Pa											
System Effect	26 Pa											
Total / Static Efficiency	60,29 / 51,81 %											
Shaft Power / Absorbed Power	1,28 / 1,39 kW	Absorbed Pow.With VFD	1,39 kW									
Fan Speed	3027 rpm (Max.3410 rpm)											
	Air Density	1,3505 kg/m <sup>3</sup>										
Specific Fan Power (SFPe int)	0,49 kW/(m <sup>3</sup> /s)	<b>Sound Power Level (dB)</b>										
		Hz	63	125	250	500	1000	2000	4000	8000	LwA-tot	
Electrical Current	2,01 A (Max.2,82 A)	SPLm - Outlet Side	65,2	69,0	77,0	76,7	79,4	79,0	82,4	79,4	87,1	dBa
		SPLa - Inlet Side	63,0	67,6	75,9	76,4	71,0	72,9	78,8	77,0	83,0	dBa

\* 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

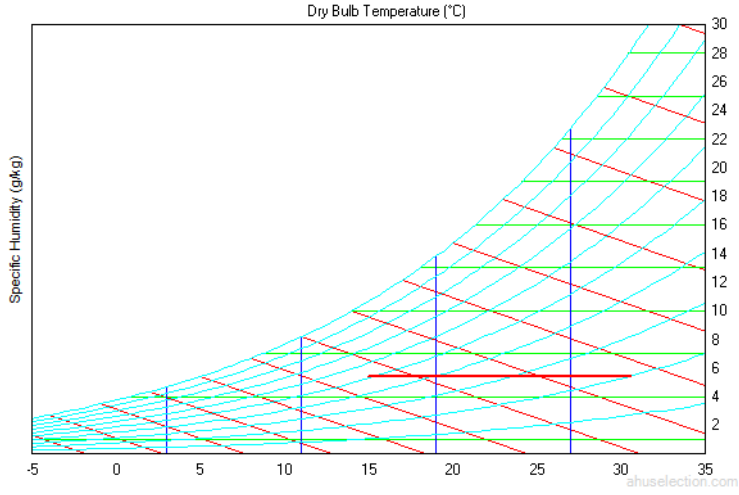
**ACCESSORIES (M4)**

Lightening, Observation Glass



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BSK	5/7	AHU Model		JUPITER 8 X 16	

**COIL (Heating) (M6)**

Airflow	Capacity / Sensible	Required Cap.	Face Vel.	Quantity	Tube Mat.	Fin Mat.	Section Weight
4.300 m³/h	22,96/22,96 kW		1,86 m/s	1	Copper	Aluminium	92 kg
Coil Code			Tube Thickness	Fin Thickness		Mixing Ratio	
25 x 22 3/8 24T 1R 1055A 1.8P 6NC			0,35 mm	0,1 mm		%	
Droplet Elimin. / Press. Drop		Condensation Pan / Hmin U-Trap		Size (W x H x L) mm		Conn. Material	Frame Material
				1.055 x 610 x 110		Steel	Galvanized Steel
Fluid Kind		Fluid In / Out					
WATER		70/50 °C					
Air Inlet Drybulb Temperature		Air Outlet Drybulb Temperature					
14,98 °C		30,57 °C					
Air Inlet Wetbulb Temperature		Air Outlet Wetbulb Temperature					
9,80 °C		16,04 °C					
Air Inlet Relative Humidity		Air Outlet Relative Humidity					
51,22 %		19,90 %					
Air Inlet - Outlet Enthalpy		Fluid Flow / Vol. Flow					
28,73 - 44,56 kJ/kg		987 kg/h / 1.010 dm³/h					
Air Press.Drop		Fluid Press.Drop / Fluid Velocity					
15 Pa		12,50 kPa / 0,69 m/s					
Coil Surface Area		Tube Inner Volume					
14,47 m²		2,11 L					
Manifold / Conn.QTY		Conn.Direction					
1 / 1		Right					
Connection Sizes			Air Condensation		Hygienic		
21,3 / 21,3 mm (1/2" DN15 / 1/2" DN15)			0,00 l/h				

**ACCESSORIES (M6)**

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**FILTER (M3)**


Airflow	Condensation Pan			Spare Filter	Section Weight
4.300 m³/h					150 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
M6 Panel	57 Pa / 157 Pa / 107 Pa	1,7 m/s	592x592x48/2/E		

\* Filter Energy Performance; preferably energy classification

\* Frame sealing applied.

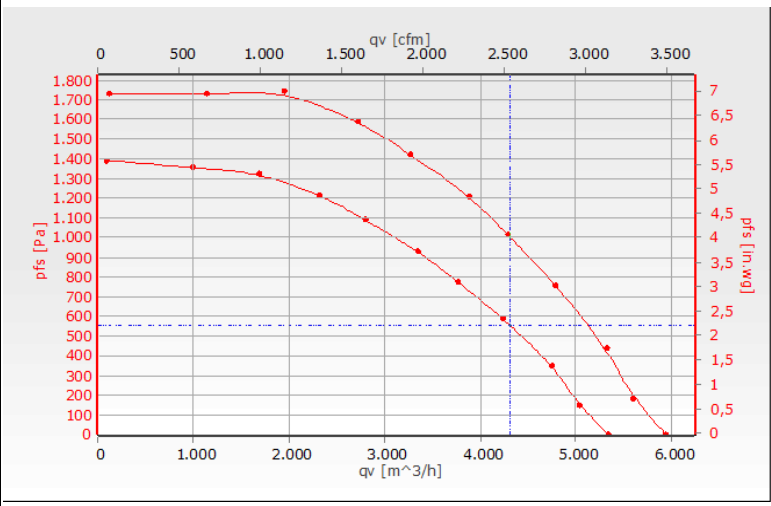
**ACCESSORIES (M3)**

Lightening, Observation Glass, Manometer Pressure Gauge				
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BSK	6/7	AHU Model	JUPITER 8 X 16	



**EXHAUST FAN (M5)**

Airflow	4.300 m <sup>3</sup> /h	Fan Model	EBM Papst-R3G310PH3801		Quantity	1	Section Weight	138 kg				
Internal Static Pressure	307 Pa	Motor P./Pha./Volt./Freq.	1,8 kW/3P/400V/50-60Hz		Isolator		Isolator Count					
External Static Pressure	250 Pa				Backup Fan		Backup Motor					
Total Static Pressure	557 Pa											
Total Pressure	648 Pa											
System Effect	29 Pa											
Total / Static Efficiency	60,33 / 51,87 %											
Shaft Power / Absorbed Power	1,28 / 1,39 kW	Absorbed Pow.With VFD	1,39 kW									
Fan Speed	3029 rpm (Max.3410 rpm)											
	Air Density	1,3505 kg/m <sup>3</sup>										
Specific Fan Power (SFPe int)	0,45 kW/(m <sup>3</sup> /s)	<b>Sound Power Level (dB)</b>										
		Hz	63	125	250	500	1000	2000	4000	8000	LwA-tot	
Electrical Current	SPLm - Outlet Side		65,2	69,0	77,0	76,7	79,4	79,0	82,4	79,4	87,1	dBa
2,01 A (Max.2,82 A)	SPLa - Inlet Side		63,0	67,6	75,9	76,4	71,0	72,9	78,8	77,0	83,0	dBa

\* 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 (M5)**

Lightening, Observation Glass

