

TriaAir[®]

Ventilationsanlæg

Tekniske data

J Prime 25_170, 2RH og MODSTRØM



Varenr.: QH20000300
Med 2RH og MODSTRØM
(2RH varmefflade maks. 128,80 kW)

Standardfarve: RAL 9002 glans 30 (hvid)



TECHNICAL DATA			
Date	10.07.2020	Rev. Date	21.10.2020
Project ID	4261	Tracking Number	
Project Name	Item no. QH20000300		
AHU Name	J Prime_25_170_CF_2RH		
AHU Model	JUPITER 16 X 20		

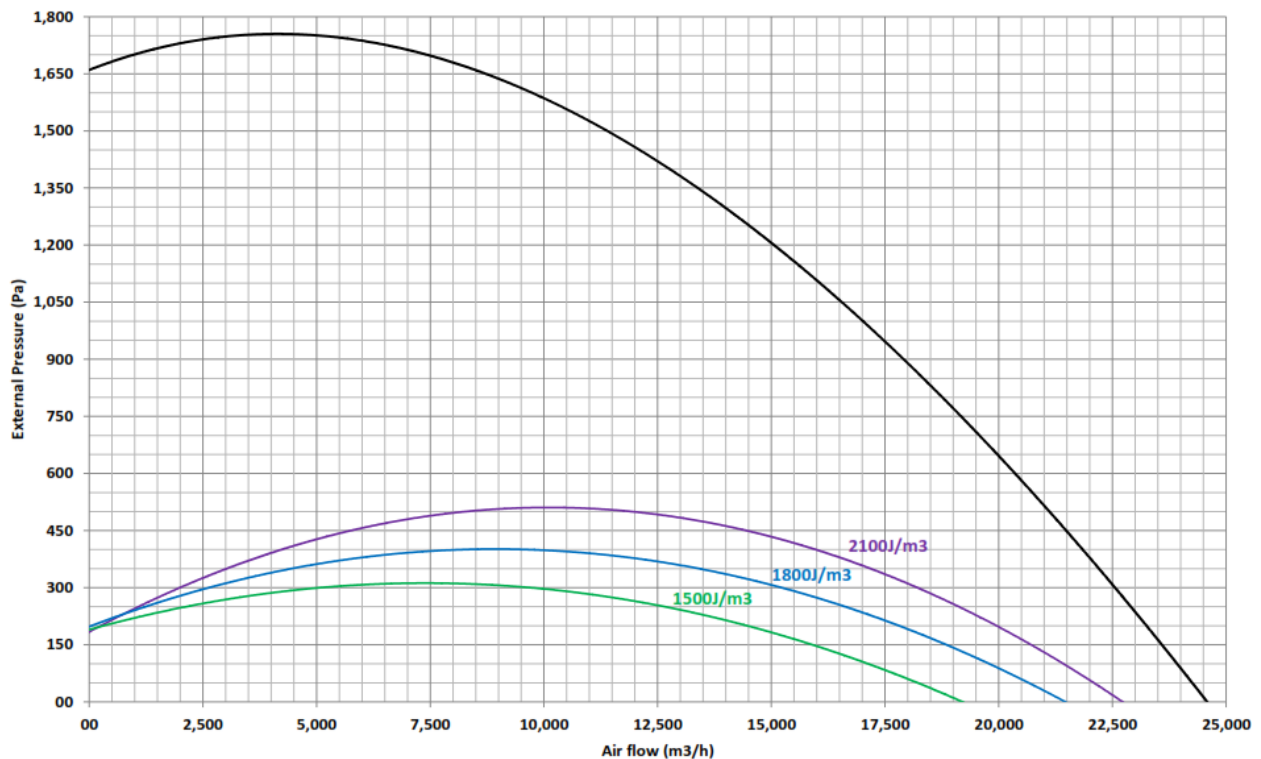


Ecodesign Requirements Table

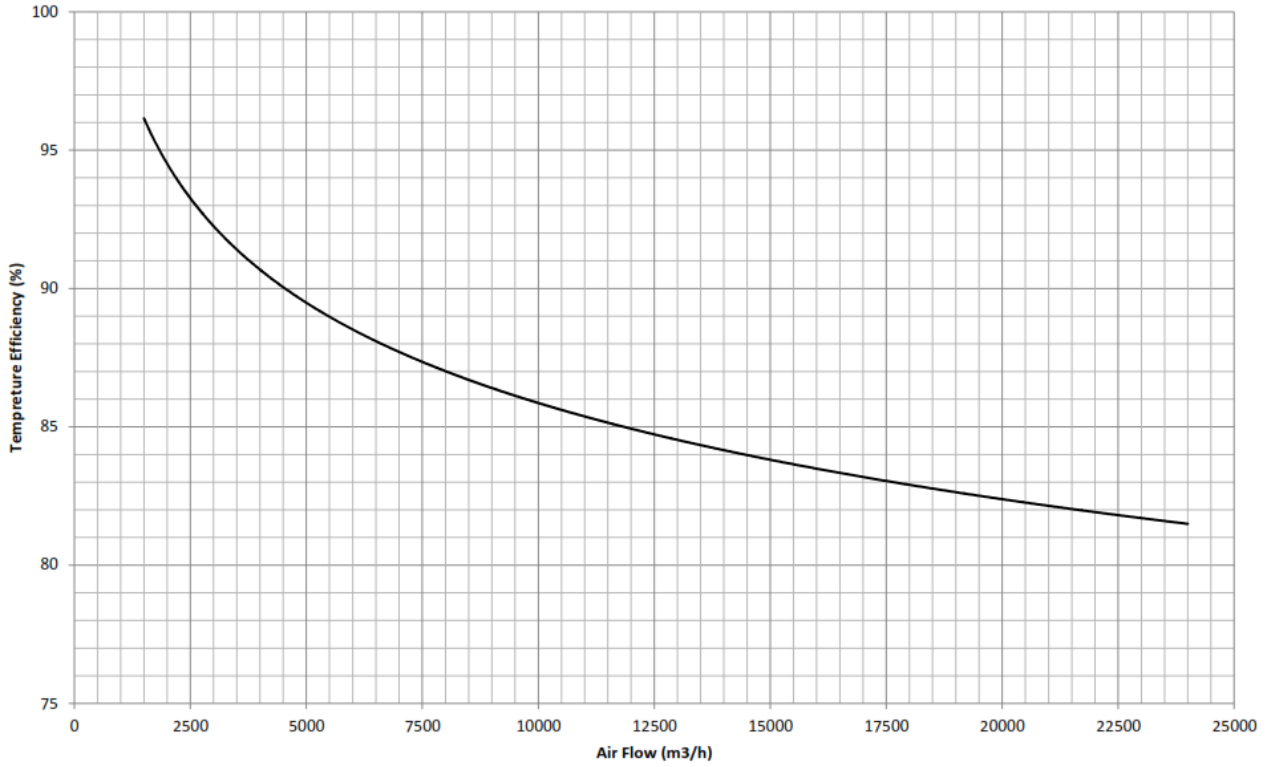
		Value		2018
	Product	JUPITER 25		
	Erp	2018		
A	Manufacturer	BSK Havalandırma Ekipmanları A.Ş.		
B	Model Identifier	JUPITER 16 X 20		
C	ErP Code	NRVU - BVU		
D	Type Of Drive	Variable Speed Drive (VSD)In	Variable Speed Drive (VSD)Out	Required
E	Type Of HRS	Counterflow		
	HRS Damper	Exists		Exists Required
F	Thermal Efficiency of HRS	83,69 %		83,69 % >= 73 %
G	Nominal Flow Rate	4,72 m ³ /s	4,72 m ³ /s	
H	Effective Electrical Power Input	2,79 kW x 2	2,84 kW x 2	11,26 kW
I	SFPInt	510 W/(m ³ /s)	483 W/(m ³ /s)	993W/(m ³ /s) <= 1121
J	Face Velocity	1,95 m/s	1,91 m/s	
K	Nominal External Drop Δps, Ext	300 Pa		300 Pa
L	Internal Pressure Drop Δps, Int Supply Air	348 Pa		348 Pa
	Internal Pressure Drop Δps, Int Exhaust Air	362 Pa		362 Pa
M	Additional Pressure Drop Δps, Add	79 Pa	79 Pa	
N	Static Fan Efficiency EC327/2011	59,52 %	59,90 %	
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	Required
R	Casing Sound Power Level (Lwa)	66,6 dBA		66,6 dBA
S	Internet Address Of Instructions	www.Termicplus.dk		
	Total Dimension mm	W 2.540 x H 2.305 x L 4.510		
	Supply Airflow	17.000 m ³ /h		17.000 m ³ /h
	Return Airflow	17.000 m ³ /h		17.000 m ³ /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	2,93 m/s		2,93 m/s
	SUPPLY CONNECTION Air Velocity	2,93 m/s		2,93 m/s
	RETURN CONNECTION Air Velocity	2,93 m/s		2,93 m/s
	EXHAUST CONNECTION Air Velocity	2,93 m/s		2,93 m/s
	Total Heating Capacity	90,34 kW		90,34 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	2.945 kg		2.945 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	

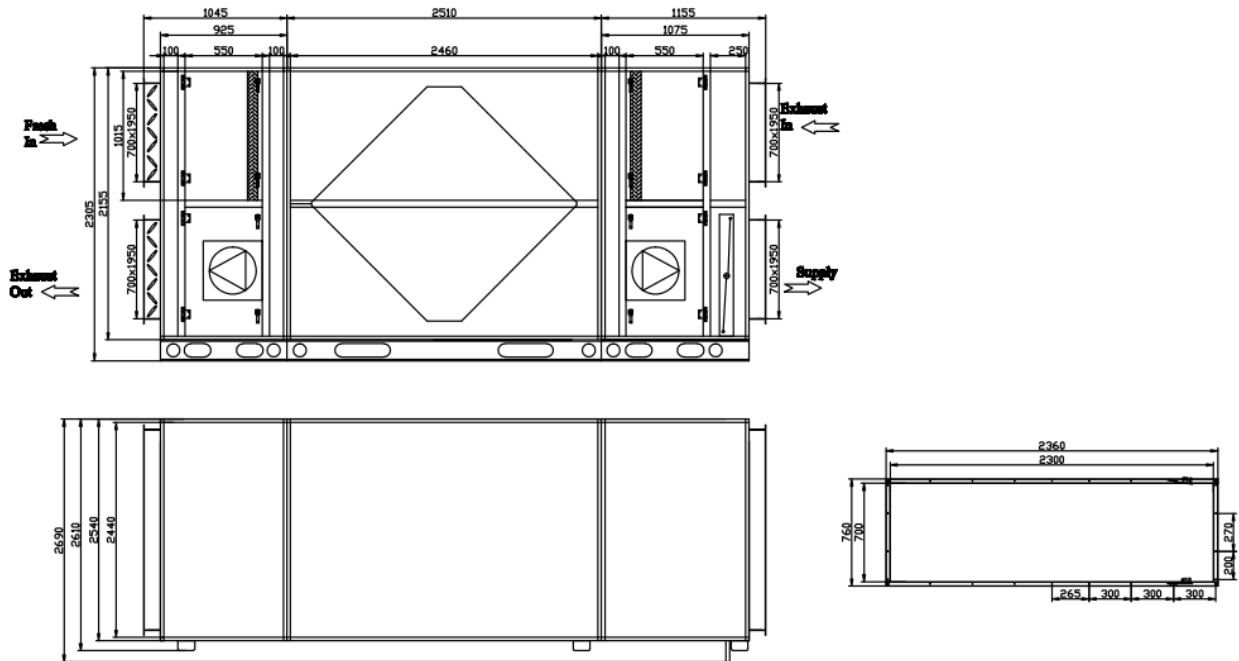
Air Flow



Efficiency



170CF-RH





ATTESTATION OF CONFORMITY UYGUNLUK ONAYI

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

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

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




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

Phone / Telefon: : + 90 216 669 09 70

Mail: info@bskhavalandirma.com

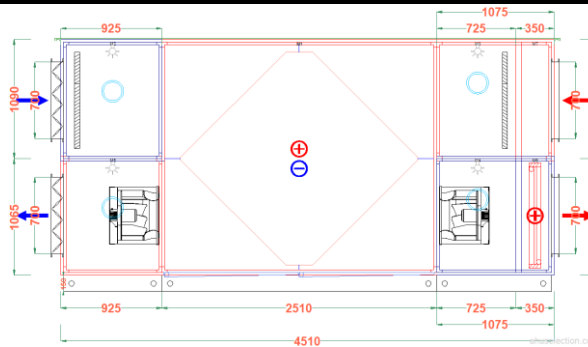
Web : www.bskhavalandirma.com

DECLARATION OF CONFORMITY

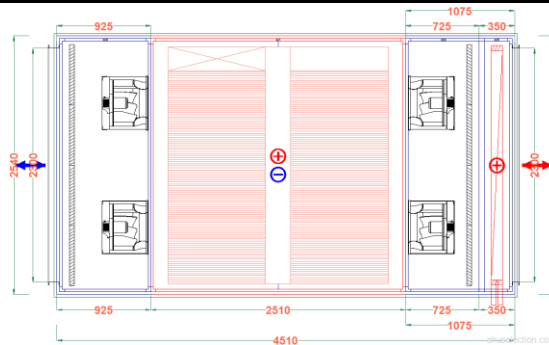
		TECHNICAL DATA			
		Date	10.07.2020	Rev. Date	21.10.2020
		Project ID	4261	Tracking Number	
		Project Name	J Prime_CounterFlow_Onaylı_Düzeltilme		
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_170_CF_2RH - (1 QTY)		
BSK	1/6	AHU Model	JUPITER 16 X 20		



RIGHT VIEW



TOP VIEW



GENERAL SPECIFICATIONS

Air Flow 17.000 m³/h	Return Air Flow 17.000 m³/h	Frame 25 steel profile	Total Dimensions mm W 2.540 x H 2.305 x L 4.510	
Air Velocity 1,95 m/s	Return Air Velocity 1,91 m/s	Insulation Material 50 mm Rockwool 70 kg/m³	Total Weight 2.945 kg	
Coil Air Velocity 2,36 m/s	Air Density 1,3478 kg/m³	Outside Sheet Material 0,9 mm Painted Galvanize	Base Height 150 mm	Roof (Outside) Sheet
Design Outdoor Temp.(W-S) (-12°C/90%)-(-25,80°C/60%) (Odense)		Inside Sheet Material 0,9 mm Galvanize	Total Absorbed Power 11,26 kW	
Total Heating Capacity 90,34 kW		Total Sensible Capacity	Motor Power 4,5 kW x 2 / 4,5 kW x 2	
Specific Fan Power(SFP Total) 0,99 kW/(m³/s)	ErP Compliance 2018	ErP Code NRVU - BVU	Real Unit CAL Class -400 Pa L1	Real Unit CAL Class +400 Pa L2

SOUND POWER LEVEL (dB)

Frequency Hz	125	250	500	1000	2000	4000	8000	LwA-tot	
Airborne Sound Power Level	78,1	68,9	63,2	54,0	52,9	47,0	34,4	66,6	dBA
Air Outlet Induct Sound Power Level	87,1	87,7	85,5	82,6	80,3	78,2	74,0	88,1	dBA
Air Inlet Induct Sound Power Level	96,6	86,3	76,1	65,7	59,3	53,2	43,3	83,1	dBA
Return Air Outlet Induct Sound Power Level	89,4	89,9	87,6	84,5	81,4	79,2	75,2	89,6	dBA
Return Air Inlet Induct Sound Power Level	95,2	85,1	75,0	64,7	58,4	52,4	42,8	81,7	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	10.07.2020	Rev. Date	21.10.2020
	Project ID	4261	Tracking Number	
	Project Name	J Prime_CounterFlow_Onaylı_Düzelme		
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_170_CF_2RH - (1 QTY)	
BSK	2/6	AHU Model	JUPITER 16 X 20	



FRESH AIR CONNECTION

Connection Type	Control Type	Pressure Drop
Gear Damper	Automatic (NM230ASR)	0 Pa
Air Flow	Dimensions	Air Velocity
17.000 m³/h	W 2.300 mm x H 700 mm	2,93 m/s

SUPPLY CONNECTION

Connection Type	Control Type	Pressure Drop
Flange		0 Pa
Air Flow	Dimensions	Air Velocity
17.000 m³/h	W 2.300 mm x H 700 mm	2,93 m/s

RETURN CONNECTION

Connection Type	Control Type	Pressure Drop
Flange		0 Pa
Air Flow	Dimensions	Air Velocity
17.000 m³/h	W 2.300 mm x H 700 mm	2,93 m/s

EXHAUST CONNECTION

Connection Type	Control Type	Pressure Drop
Gear Damper	Automatic (NM230ASR)	0 Pa
Air Flow	Dimensions	Air Velocity
17.000 m³/h	W 2.300 mm x H 700 mm	2,93 m/s

EMPTY SECTION (M7)

Air Flow	Droplet Eliminator	Condensation Pan	Pressure Drop	Section Weight
17.000 m³/h			0 Pa	146 kg

ACCESSORIES (M7)



FILTER (M3)

Air Flow	Condensation Pan	Hygienic	Spare Filter	Section Weight
17.000 m³/h				176 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*
M6 Panel	84 Pa / 184 Pa / 84 Pa	2,27 m/s	592x592x48/4/E	592x287x48/4/E


* Filter Energy Performance; preferably energy classification

* Frame sealing applied.

ACCESSORIES (M3)

Lightening, Observation Glass, Manometer Pressure Gauge



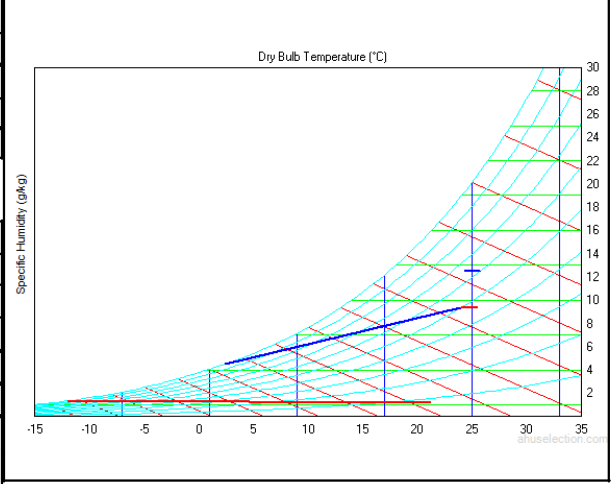
	TECHNICAL DATA			
	Date	10.07.2020	Rev. Date	21.10.2020
	Project ID	4261	Tracking Number	
	Project Name	J Prime CounterFlow Onaylı Düzeltme		
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime 25_170_CF_2RH - (1 QTY)	
BSK	3/6	AHU Model	JUPITER 16 X 20	



COUNTERFLOW HEAT EXCHANGER (M1)

Model	Maximum Internal Leakage Rate	Quantity	Section Weight
Klingenburg-GS Kombi 110 / 2096 - BY234	1 %	1	1.517 kg

	Fresh Air	Exhaust	Capacity	Winter	Summer
Air Flow	17.000 m³/h	17.000 m³/h		172,10 kW	-8,58 kW
Air Vel.	1,55 m/s	1,77 m/s		Fresh	Exhaus
	Winter		P.D	205 Pa	268 Pa
	Summer			248 Pa	245 Pa
	Effic.	Balan.(*)	1.2kg/m³	240 Pa	240 Pa
	Effic.	Balan.(*)		240 Pa	240 Pa
Wet	92,35	92,35			
Dry	83,69	83,69			



Air Inlet / Outlet	Winter				Summer			
	Fresh Air		Exhaust		Fresh Air		Exhaust	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
	DT	-12,00 °	21,25 °C	24,00 °C	2,40 °C	25,80 °C	24,31 °C	24,00 °C
WT	-12,29 °	7,91 °C	17,07 °C	2,40 °C	20,16 °C	19,70 °C	17,07 °C	17,58 °C
RH	90,00 %	7,76 %	50,03 %	100,00	60,00 %	65,56 %	50,03 %	45,77 %

Condensation Pan Size mm Bypass Damper

Stainless Steel (Connection:Right) (Pressure:Negative) 2.170-1.344-246-21-2.096-1.9 W 234 mm x H 1.344 mm

* Efficiency at balanced flow

ACCESSORIES (M1)



EXHAUST FAN (M5)

Air Flow	Fan Model	Quantity	Section Weight
8.500 m³/h x 2	EBM Papst-R3G450PA3103	2	368 kg

Internal Static Pressure	Motor P./Pha./Volt./Freq.	Isolator	Isolator Count	Backup Fan	Backup Motor
362 Pa	4,5 kW/3P/400V/50-60Hz				

External Static Pressure
300 Pa

Total Static Pressure
662 Pa

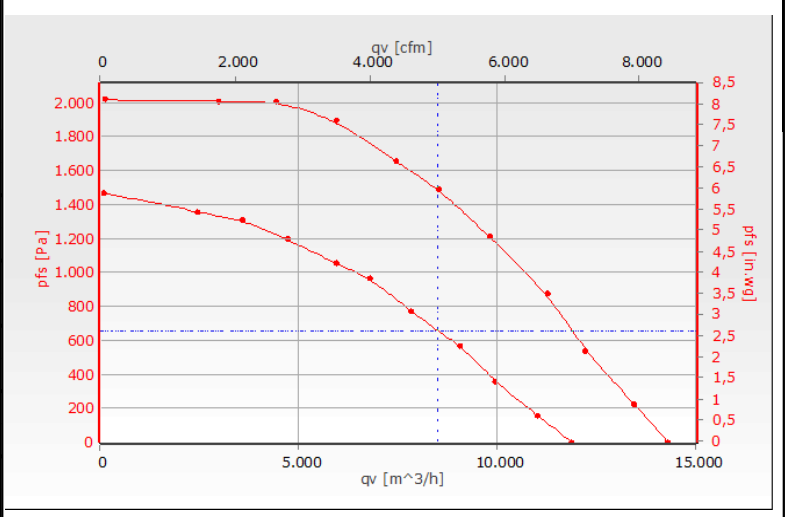
Total Pressure	System Effect
741 Pa	10 Pa

Total / Static Efficiency
67,02 / 59,90 %

Shaft Power / Absorbed Power	Absorbed Pow.With VFD
2,61 / 2,84 kW x 2	2,84 kW x 2

Fan Speed
1980 rpm (Max.2480 rpm)

Air Density
1,3478 kg/m³




Specific Fan Power (SFPe int)	Sound Power Level (dB)										
	0,48 kW/(m³/s)	Hz	63	125	250	500	1000	2000	4000	8000	LwA-tot
Electrical Current	SPLm - Outlet Side	74,0	79,9	78,7	80,0	81,5	80,9	79,5	76,1	87,0	dBA
	SPLa - Inlet Side	71,6	78,6	79,4	76,4	73,3	73,7	77,1	73,5	82,3	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



		TECHNICAL DATA			
		Date	10.07.2020	Rev. Date	21.10.2020
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		Project Name	J Prime_CounterFlow_Onaylı_Düzeltilme		
AHUSEL V.	2.2.3.17 15.08.2020	AHU Name	J Prime_25_170_CF_2RH - (1 QTY)		
BSK	4/6	AHU Model	JUPITER 16 X 20		



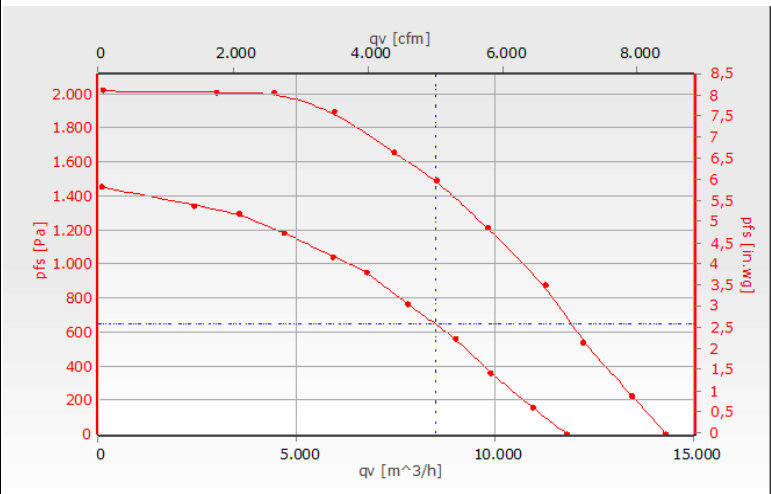
ACCESSORIES (M5)				
Lightening, Observation Glass				

FILTER (M2)						
Air Flow	Condensation Pan		Hygienic		Spare Filter	Section Weight
17.000 m³/h						319 kg
Filter Type	Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
F7 Panel	101 Pa / 201 Pa / 101 Pa	2,27 m/s	592x592x48/4/E	592x287x48/4/E		
* Filter Energy Performance; preferably energy classification						
* Frame sealing applied.						

ACCESSORIES (M2)				
Lightening, Observation Glass, Manometer Pressure Gauge				


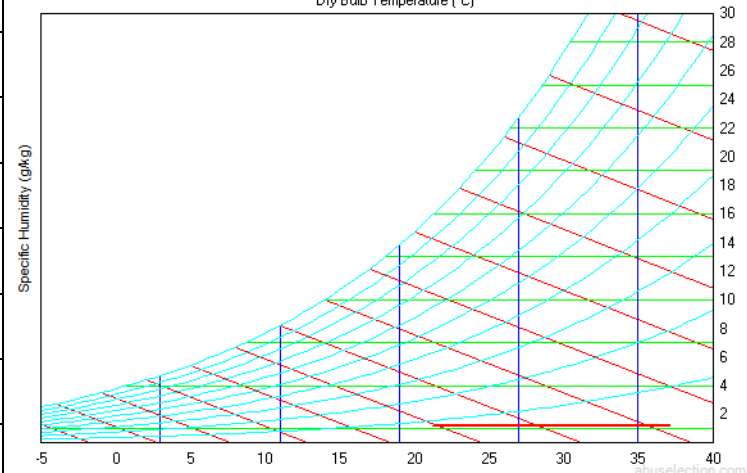



SUPPLY FAN (M4)													
Air Flow		Fan Model				Quantity		Section Weight					
8.500 m³/h x 2		EBM Papst-R3G450PA3103				2		210 kg					
Internal Static Pressure		Motor P./Pha./Volt./Freq.		Isolator		Isolator Count		Backup Fan		Backup Motor			
348 Pa		4,5 kW/3P/400V/50-60Hz											
External Static Pressure													
300 Pa													
Total Static Pressure													
648 Pa													
Total Pressure		System Effect											
727 Pa		10 Pa											
Total / Static Efficiency													
66,74 / 59,52 %													
Shaft Power / Absorbed Power		Absorbed Pow.With VFD											
2,57 / 2,79 kW x 2		2,79 kW x 2											
Fan Speed													
1971 rpm (Max.2480 rpm)													
		Air Density											
		1,3478 kg/m³											
Specific Fan Power (SFP _e int)		Sound Power Level (dB)											
0,51 kW/(m³/s)		Hz		63	125	250	500	1000	2000	4000	8000	LwA-tot	
Electrical Current		SPLm - Outlet Side		73,9	79,8	78,7	80,0	81,6	80,8	79,5	75,9	87,0	dBA
4,03 A x 2 (Max.7,06 A x 2)		SPLa - Inlet Side		71,6	78,6	79,4	76,4	73,3	73,7	77,2	73,3	82,3	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	5/6	AHU Model	JUPITER 16 X 20							
COIL (Heating) (M6)										
Air Flow	Capacity / Sensible	Required Cap.	Face Vel.	Quantity	Tube Mat.	Fin Mat.	Section Weight			
17.000 m³/h	90,34/90,34 kW		2,36 m/s	1	Copper	Aluminium	208 kg			
Coil Code	32 x 28 12 28T 2R 2250A 3P 14NC		Tube Thickness	0,35 mm		Fin Thickness	0,1 mm	Mixing Ratio	%	
Droplet Elimin. / Press. Drop	Condensation Pan / Hmin U-Trap		Size (W x H x L) mm	2.250 x 889 x 110		Conn. Material	Steel	Frame Material	Galvanized Steel	
Fluid Kind	WATER		Fluid In / Out	70/50 °C						
Air Inlet Drybulb Temperature	21,25 °C		Air Outlet Drybulb Temperature	37,14 °C						
Air Inlet Wetbulb Temperature	7,91 °C		Air Outlet Wetbulb Temperature	14,62 °C						
Air Inlet Relative Humidity	7,76 %		Air Outlet Relative Humidity	3,10 %						
Air Inlet - Outlet Enthalpy	24,44 - 40,46 kJ/kg		Fluid Flow / Vol. Flow	3.885 kg/h / 3.973 dm³/h						
Air Press.Drop	32 Pa		Fluid Press.Drop / Fluid Velocity	10,73 kPa / 0,72 m/s						
Coil Surface Area	68,59 m²		Tube Inner Volume	16,17 L						
Manifold / Conn.QTY	1 / 1		Conn.Direction	Right						
Connection Sizes	42,2 / 42,2 mm (1-1/4" DN32 / 1-1/4" DN32)		Air Condensation	0,00 l/h					Hygienic	Blygold
Bypass Damper										
ACCESSORIES (M6)										



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TSEK



Designer: Senem Şengül

18.08.2020

AHU Selection
AHU Selection