

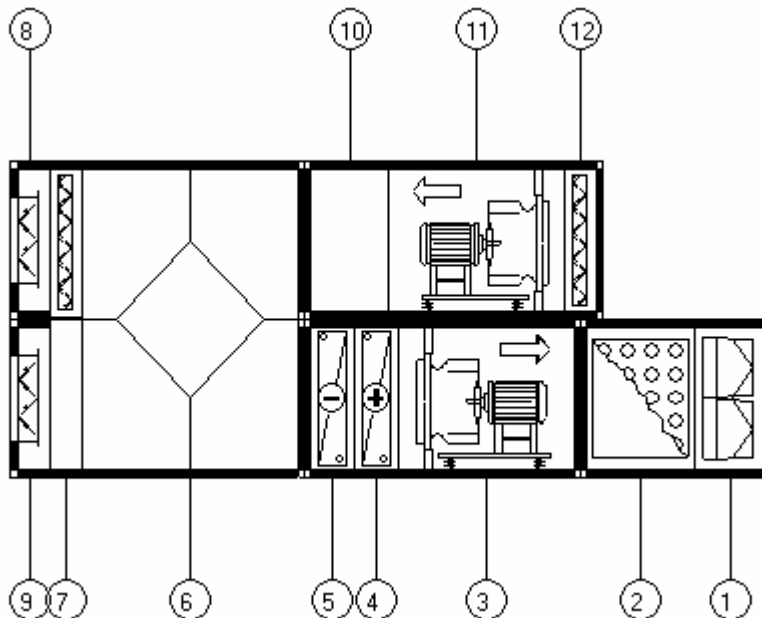



Range: D-AHU		ASTRA 5.7.61 PORD1	ADS11ECW1
AHU Technical data sheet			
Offer No.	13.ES2003.F.00685-002/004	13-03-2013	Page 1/6
Unit Quantity	1	Reference	
Project	Regia Douro Park - Edificio 3		
Unit	UTAN 1		
Revision	1 controlo		

Unit Sketch - Lateral view (not in scale - for description only)



Series	Professional	Unit Configuration	Double Deck
Model No	SIZE 11	Panel type	SP 45
Return Air Flow	3930,00 m3/h	Insulation type	Foam
Supply Air Flow	7390,00 m3/h	Profile	Natural
Net Overall Height	Supply=1050 mm Return=750 mm		
Overall Width	Supply=1400 mm Return=1400 mm		
Outer skin material	Grey Plastisol		
Inner skin material	Galvanized	Total Weight	1241 Kg
Overall Length	5030 mm		
Unit Base Height	100 mm	Aluminium	
Unit Options			
1 x Polyethylene		1 x Flat Roof	
		Payment	Standard terms and Conditions
		Validity	30 days
Ex. Works - All sections Transportable			
All the information in this report should be considered as indicative and can be subject to variations.			
To be finalised on our General Arrangement drawing.			
Individual sections are supplied for site assembly by others and support legs (if applicable) are supplied loose for site fitting by others			
All quoted fan volumes and noise levels are provided in accordance with the relevant fan manufacturers standard and are subject to industry accepted tolerances			
Calculation done with air density of rho = 1.2 Kg/m3			
MECHANICAL CHARACTERISTIC (EN1886)			
Casing Strength	Casing air leakage	Thermal Transmit	Thermal bridging
D1	L1/L2	T3	TB3
			A
DAIKIN is participating in the Eurovent Certification Program for Air Handling Unit. The range D-AHU International is certified under the number 11.05.003 and presented in the Directory of Certified Air Handling Unit.			

Component 3							
Model: MCPA-450 S4				SUPPLY FAN			
Size: 450				Single Fan			
Rot. Speed: 1791 rpm				Type : Plug			
Fan Shaft Power: 2,32 Kw				Air flow: 7390,00 m3/h			
Electrical Power Input: 2,80Kw				Efficiency: 76,72%			
External static: 260 Pa				Quantity : 1			
Component Static: 534 Pa				Dynamic: 75 Pa			
Total Static: 794 Pa				AVM Rubber			
Total Press: 869 Pa							
LWS (dB)							
63 Hz:	125 Hz:	250 Hz:	500 Hz:	1 kHz:	2 kHz:	4 kHz:	8 kHz:
82	78	86	84	83	78	73	69
Motor Data		Quantity: 1	Model: IE2	Power: 3,00 Kw	N. Pole: 4	Volt./Freq: 400V/50Hz	
		Options Included					
		1 x Door with porthole					
		1 x Light mounted wired until external switch (w/o bulb)					
		1 x Inverter [3.0-3.0] kw					

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Component	4	HEATING COIL	Fluid: Water Coil
Model: Cu-Al-FeZn P40AC 1R-19T-1100A-3.0pa 2C 3/4"		Calculated in dry condition	
P40			
Rows: 1		N° Coil: 1	
Fin Space: 3,00 mm		Tube diameter: 5/8"	
Tube material: Copper		Fin material: Al	
Water connections: 3/4"/Screwed/ LH		Total Capacity: 35,87 KW	
Air Side		Fluid Side	
Air Flow: 2,05 m3/s Vel: 2,46 m/s		Fluid Flow: 0,44 kg/s	
Temp. db On: 8,70 °C		Temp. On : 90,00 °C	
Temp. wb On:		Temp. Off : 70,00 °C	
Temp. db Off: 23,00 °C		Press. Drop: 26 kPa	Max Pd : 50 kPa
Temp. wb Off:		Glycol:	
Press. Drop: 24 Pa		Fluid velocity: 1,15 m/s	Fluid Volume: 5,70 dm3

Component	5	COOLING COIL	Fluid: Water Coil
Model: Cu-Al-FeZn P40AR 3R-19T-1100A-2.5pa 6C 1 1/2"		Calculated in wet condition	
P40			
Rows: 3		N° Coil: 1	
Fin Space: 2,50 mm		Tube diameter: 5/8"	
Tube material: Copper		Fin material: Al	
Water connections: 1 1/2"/Screwed/ LH		Total Capacity: 41,45 KW	Sens. Power: 34,82 KW
Air Side		Fluid Side	
Air Flow: 2,05 m3/s Vel: 2,46 m/s		Fluid Flow: 1,98 kg/s	
Temp. db On: 30,80 °C		Temp. On : 7,00 °C	
Temp. wb On: 21,50 °C r.h. :44,00 %		Temp. Off : 12,00 °C	
Temp. db Off: 17,00 °C		Press. Drop: 39 kPa	Max Pd : 50 kPa
Temp. wb Off: 16,28 °C r.h. :93,07 %		Glycol:	
Press. Drop: 120 Pa		Fluid velocity: 1,71 m/s	Fluid Volume: 17,10 dm3
Options Included			
1 x Internal Drain Standard - SS304			

Section n° 3		Length:	2170	[mm]
		Height:	1800	[mm]
Weight:	505	[kg]	Width:	1400
				[mm]

Component	6	Heat Cube+ bypass HC840B1316A3	L = 840mm B = 1316mm	Eff. : 49,60 %
Return Air		Supply Air		
Flow rate: 3930 m3/h	Pr. Drop: 44 Pa	Flow rate: 7390 m3/h	Pr. Drop: 133 Pa	
Temp db on: 20,00 °C	Temp db off: 4,50 °C	Temp db on: -2,50 °C	Temp db off: 8,70 °C	
Temp wb on: 13,78 °C	Temp wb off: 4,30 °C	Temp wb on: -3,00 °C	Temp wb off: 3,60 °C	
Options Included				
1 x Actuator fitted ON-OFF 24V				
1 x Internal Drain Standard - SS304				

Range: D-AHU		ASTRA 5.7.61 PORD1	
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Component 7		FILTER	Type: Panel Filter	Slide-Galvanized
Quantity	Class	Dimensions	Thickness: 48 mm	Air flow rate: 2,05 m3/s
		305x610 mm	Filtering media: Glass without Gasket	
2	G4	610x305 mm	Air Velocity: 1,8 m/s	
2	G4	610x610 mm	Pressure drops selection on filter: Mean	
		610x508 mm	Clean Dp: 57 Pa	
		508x610 mm	Mean Dp.: 103 Pa	
		508x508 mm	Dirty Dp.: 150 Pa	
		Options Included		
		1 x Door without porthole		
		1 x Differential pressure switch 50-500 Pa		

Component: 8		END SECTION		Length: 170 mm	
Damper One					
Mounting: Internal		Rod location: Left		Alignment:	
Height: 810 mm		Width: 1060 mm		Torque: 8,00 Nm	
Material: Galvanized		Press. Drop: 7,26 Pa			
Damper Two					
Mounting:		Rod location:		Alignment:	
Height:		Width:		Torque:	
Material:		Press. Drop:			
	Options Included				
	1 x Actuator fitted ON-OFF 24V				

Component: 9		END SECTION		Length: 170 mm	
Damper One					
Mounting: Internal		Rod location: Left		Allignment:	
Height: 210 mm		Width: 1060 mm		Torque: 4,00 Nm	
Material: Galvanized		Press. Drop: 28,94 Pa			
Damper Two					
Mounting:		Rod location:		Allignment:	
Height:		Width:		Torque:	
Material:		Press. Drop:			
	Options Included				
	1 x Actuator fitted ON-OFF 24V				

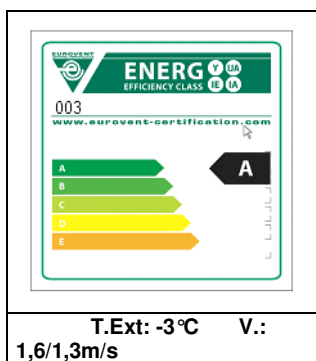
Section n° 4		Length:	2240	[mm]
		Height:	750	[mm]
Weight:	237	[kg]	Width:	1400
				[mm]

Component	10	EMPTY SECTION	
Type: Quadro Eletrico	Length: 1000 mm		

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Component 11							
Model: MCPA-315 S4				RETURN FAN			
Size: 315				Single Fan			
Rot. Speed: 2198 rpm				Type : Plug			
Fan Shaft Power: 0,74 Kw				Air flow: 3930,00 m3/h			
Electrical Power Input: 0,96Kw				Efficiency: 69,58%			
External static:220 Pa				Quantity : 1			
Component Static: 175 Pa				Dynamic: 77 Pa			
Total Static: 395 Pa				AVM Rubber			
Total Press: 473 Pa							
LWS (dB)							
63 Hz:	125 Hz:	250 Hz:	500 Hz:	1 kHz:	2 kHz:	4 kHz:	8 kHz:
71	71	71	80	77	77	71	70
Motor Data	Quantity: 1		Model: IE2	Power: 1,10 Kw	N. Pole: 2	Volt./Freq: 400V/50Hz	
	Options Included						
	1 x Door with porthole						
	1 x Light mounted wired until external switch (w/o bulb)						
	1 x Inverter [1.1-1.5] kw						

Component 12		FILTER	Type: Panel Filter	Slide-Galvanized
Quantity	Class	Dimensions	Thickness: 48 mm	Air flow rate: 1,09 m3/s
		305x610 mm	Filtering media: Glass without Gasket	
		610x305 mm	Air Velocity: 1,5 m/s	
2	G4	610x610 mm	Pressure drops selection on filter: Mean	
		610x508 mm	Clean Dp: 45 Pa	
		508x610 mm	Mean Dp.: 98 Pa	
		508x508 mm	Dirty Dp.: 150 Pa	
		Options Included		
		1 x Door without porthole		
		1 x Differential pressure switch 50-500 Pa		



Range: D-AHU	RELEASE ASTRA 5.7.61 PORD1	
AHU Technical data sheet		

SOUND REPORT

Offer No	13.ES2003.F.00685-002/004	13-03-2013	Page 6/6
Project	Regia Douro Park - Edificio 3		
Unit	UTAN 1		
Revision	1_controlo		

Panel type	SP 45	Insulation type	Foam
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PANEL SOUND REDUCTION INDEX

	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	
dB	15	19	19	16	14	29	36	

SUPPLY	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	Total
LW	dB	dB	dB	dB	dB	dB	dB	dB(A)
FAN INLET	78	86	84	83	78	73	69	87
FAN OUTLET	78	86	84	83	78	73	69	87
UNIT INLET	62	71	74	73	63	50	50	76
UNIT OUTLET	68	72	63	54	49	48	43	66
AIRBORNE	63	67	65	67	64	44	33	70

RETURN	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	Total
LW	dB	dB	dB	dB	dB	dB	dB	dB(A)
FAN INLET	71	71	80	77	77	71	70	82
FAN OUTLET	71	71	80	77	77	71	70	82
UNIT INLET	71	71	80	77	77	71	70	82
UNIT OUTLET	71	71	79	76	76	70	68	81
AIRBORNE	56	52	61	61	63	42	34	66