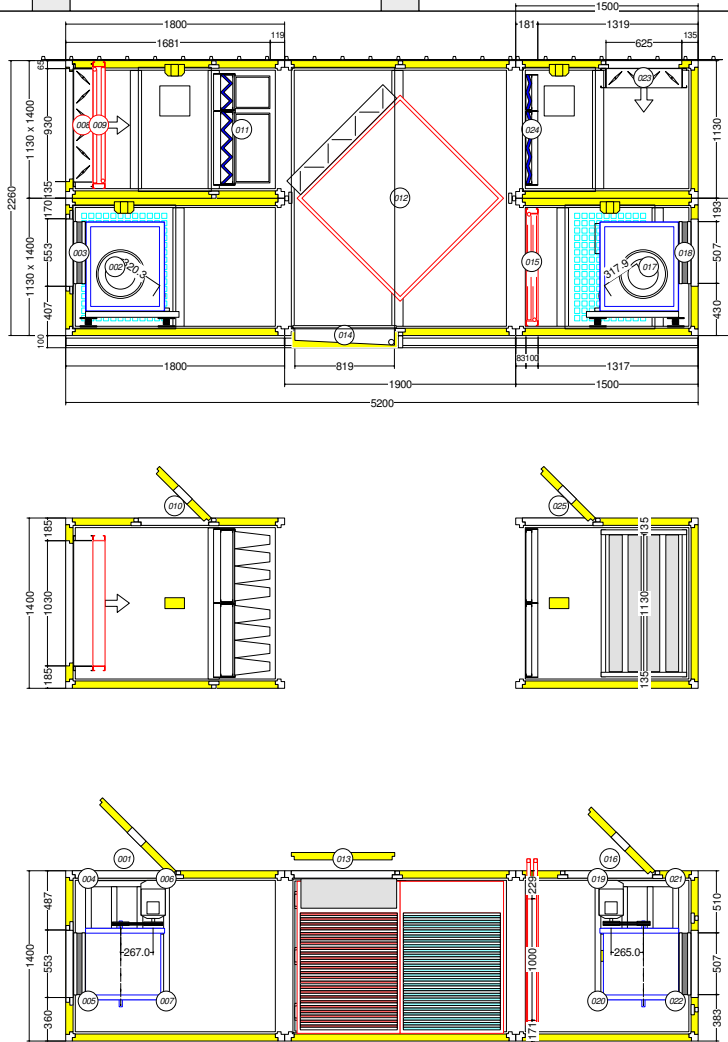
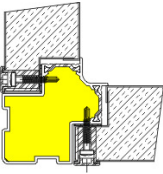




DATA SHEET

19/04/2011	08/06/2011	P 1 / 12	08A72185	A>@AJHGJLTRVUSY{[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project				00060000	NXSCSTSVRI-L073	
Project Example					Model A1-1130H-1400W	
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

02	RDH 400 R - 1607 RPM - 2.20 kW	08	FA DAMPER 930 x 1030 mm	09	P40-16AC 1/2R-24T-1030A-4.0Pa Cu/Al	11	G4+F7
12	HA1200-1030-060-2EOO-1-1-2-1250 x 1250	15	P40-16AC 1/2R-22T-1000A-2.5Pa Cu/Al	17	RDH 400 R - 1779 RPM - 3.00 kW	23	RA DAMPER 625 x 1130 mm
24	G3						



	PANELS / FRAME		Break out Airborne sound power (dB)								
	PART CODE	PU6055TB		A	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz
	Insulation	PUFOAM		59.6	68	60	55	54	48	34	26
	External sheet	CB1-06	Preplasticized steel sheet 0.6 mm - BLU B1	Model Box Mechanical characteristics (EN1886)							
Internal sheet	CA4SA06	Preplasticized steel sheet 0.6 mm - WHITE A4SA	Casing strength	Casing air leakage	Thermal transmitt.	Thermal bridging					
ALUMINIUM FRAME	PR55TT		D1M	L1	T2	TB2	UNIT SFP (W/(l/s))				
BASE FRAME	CBZN{ H = 100 mm }						1.70				
	Copertura -		Unit SFP (prEN 13779:2005) calculated based on total electrical fan power input and clean filter pressure drop								

NOTE :	designed for wet conditions		
	OPERATING CONDITIONS		
	(037790) LONDON WEATHER CENT UNITED KINGDOM	latitude	+51517
		longitude	-000117
		elevation	43 m
	LOWER OPERATING CONDITIONS	UPPER OPERATING CONDITIONS	
-2.2 °C @ 75 %	31.1 °C @ 36 %		
VELOCITY CLASS(SUPPLY)	VELOCITY CLASS(EXTRACT)		
V2 (1.70 m/s)	V2 (1.70 m/s)		
Total weight	1550 kg		



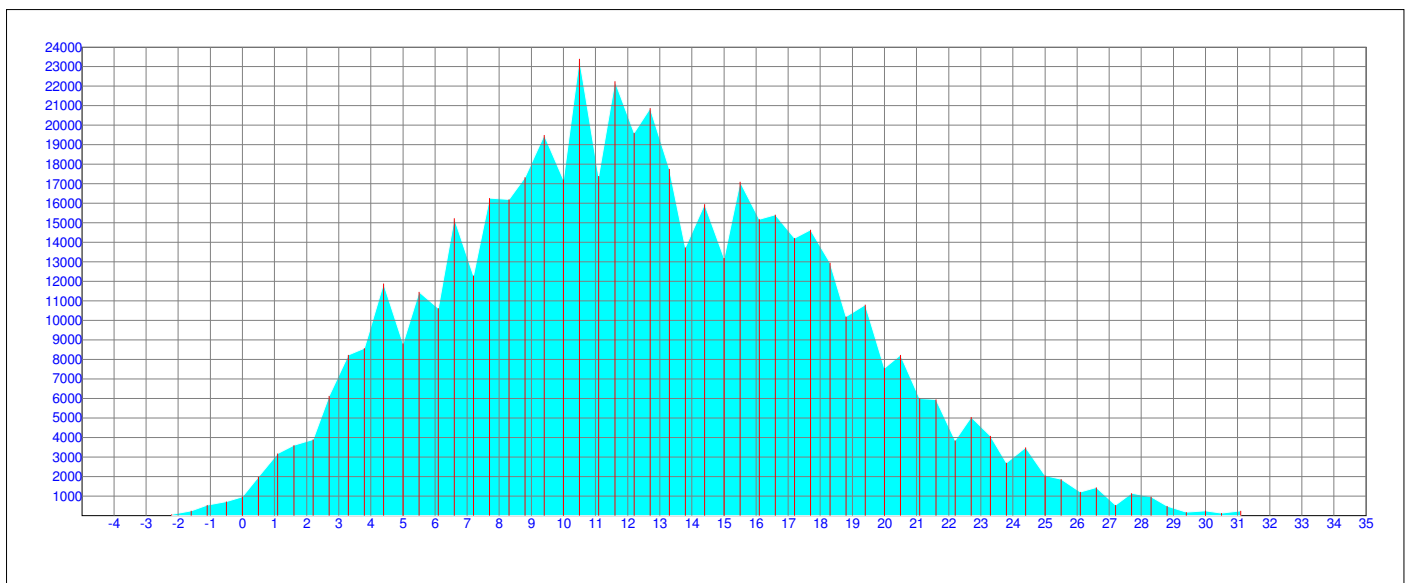
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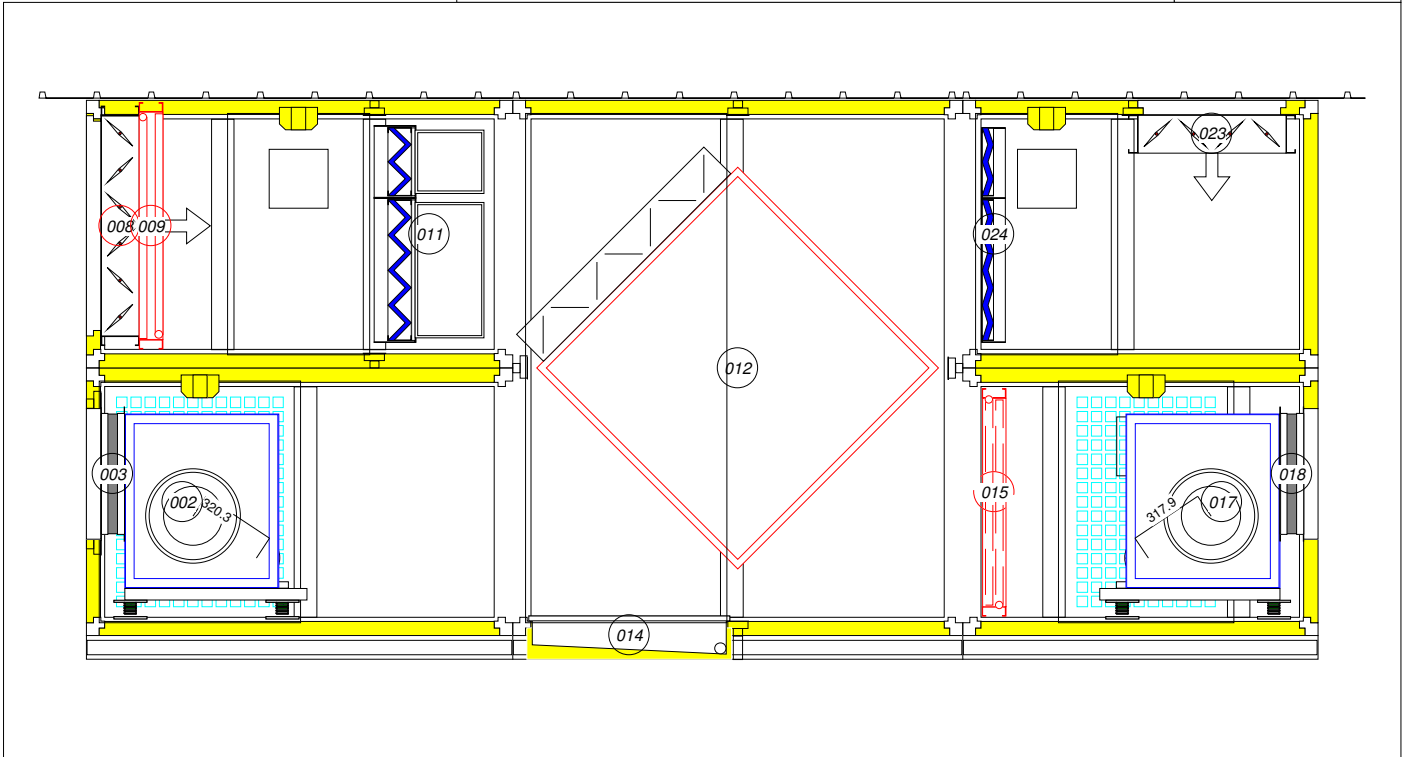
19/04/2011	08/06/2011	P 2 / 12	08A72185	A>8AJHGJLTRVUS[Y{[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model NXSCSTSVRI-L073		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

BASIC REQUIREMENT	A		FINAL EVALUATION	
velocity [m/s]	1.800		fs	0.854
f-ref	0.900		result	OK
efficiency [%]	75.0		RESULTING CLAS	A
pressure drop [Pa]	280			
INDATA				
Unit Type				
connected to outdoor air			DETAIL OF CORRECTION	
SUPPLY			SUPPLY	
air flow [m3/s]	2.200		velocity [Pa]	-22.647
internal static pressure [Pa]	421		pressure drop [Pa]	-136.000
total static pressure [Pa]	618		efficiency supply [Pa]	127.963
power input real [kW]	2.553		pref-class [kW]	3.069
velocity real [m/s]	1.702			
efficiency HR real balanced [%]	62.0			
pressure drop HR real [%]	144			
mixing ratio = recycled air / supply air [%%]				
design temperature [°C]	-2.220			
			EXTRACT	
EXTRACT			velocity [Pa]	-7.890
air flow [m3/s]	2.200		pressure drop [Pa]	-137.000
internal static pressure [Pa]	239		efficiency extract [Pa]	127.963
total static pressure [Pa]	437		pref-class [kW]	2.206
power input real [kW]	1.949			
velocity real [m/s]	1.702			
efficiency HR real balanced [%]	62.0			
pressure drop HR real [%]	143			



SOUND DATA

19/04/2011	08/06/2011	P 3 / 12	08A72185	A>8AJHGJLTRVUS[Y{[_acgojqg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model A1-1130H-1400W		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	



IN-DUCT SOUND POWER LEVEL dB

		125	250	500	1000	2000	4000	8000	A
	INLET	75	78	77	77	71	61	54	80.7
011	G4+F7	0	0	0	0	-1	-1	-1	
012	HA1200-1030-060-2E00-1-1-2-1250 x 1250	-2	-3	-3	-3	-7	-8	-8	
015	P40-16AC 1/2R-22T-1000A-2.5Pa Cu/Al	-1	-1	-1	-1	-1	-1	-1	
017	RDH 400 R - 1779 RPM - 3.00 kW	78	82	81	81	80	71	64	86.1
	OUTLET	78	82	81	81	80	71	64	86.1

IN-DUCT SOUND POWER LEVEL dB







		125	250	500	1000	2000	4000	8000	A
	INLET	75	79	78	78	70	60	54	81.1
024	G3	0	0	0	0	-1	-1	-1	
012	HA1200-1030-060-2E00-1-1-2-1250 x 1250	-2	-3	-3	-3	-7	-8	-8	
002	RDH 400 R - 1607 RPM - 2.20 kW	77	82	81	81	78	69	63	85.2
	OUTLET	77	82	81	81	78	69	63	85.2

AIRBORNE SOUND POWER LEVEL dB

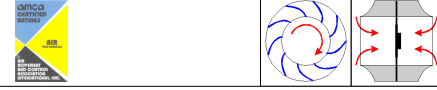
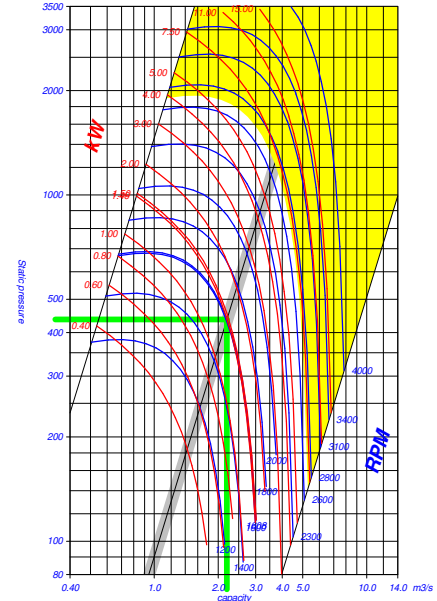
	125	250	500	1000	2000	4000	8000	A
	68	60	55	54	48	34	26	59.6

DATA SHEET

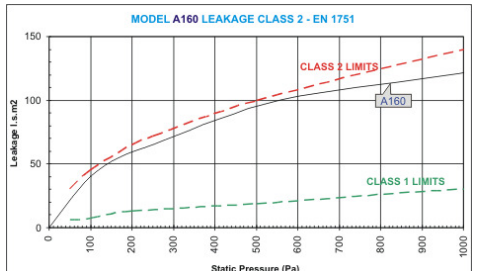
19/04/2011	08/06/2011	P 4 / 12	08A72185	A>@AJHGJLTRVUS[Y[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project				Model		
Project Example				A1-1130H-1400W		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	


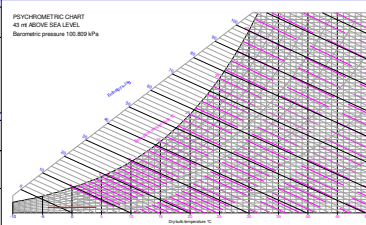
001	ACCESS DOOR					
	Dimensions 1020 x 850 mm		Handles + Hinges + Window + Lamp + IP65 switch + Wiring of switch			
						





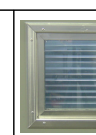

002	RETURN/EXTRACT FAN						
	FAN		MOTOR		V-BELT DRIVE		ACCESSORIES
	Model 1 x RDH 400 R		Qty & motor model 1xD100LA-4P-2,2KW		Fan pulley 140SPZ2+BU161030		<input checked="" type="checkbox"/> Belt drive
	Flow 1 x 2.20 m3/s		AB1-D100LA-4P-2,2KW		Motor pulley 160SPZ2+BU201228		<input checked="" type="checkbox"/> Inlet wire mesh
	Fan outlet vel. 8.56 m/s		Nominal motor power 2.20 kW		Belts 2 x SPZ1112		<input checked="" type="checkbox"/> EFF1 Motor
	Ext. static 250 Pa		motor RPM 1420(400V/3/50)				<input checked="" type="checkbox"/> PTO/PTC Thermistors
	Min. I.P.D. 128 Pa		Motor efficiency 86.80 %				<input checked="" type="checkbox"/> n. belts + 1
	Max I.P.D. 246 Pa		In 4.80 Amp				<input checked="" type="checkbox"/> external grease nipples
	Avg. I.P.D. 187 Pa		Is/In 8.50				
	Avg. I.P.D. 187 Pa		Power factor 0.77				
	Total static pressure 437 Pa		Start Power factor 0.76				
	RPM 1608 rpm		Nominal torque 14.50 Nm				
	Efficiency 72.54 %		Locked rotor torque Ts/Tn 4.00				
	Shaft power[0.00] 1 x 1.46 kW		Maximum torque Tmax/Tn 4.60				
Air volume		m3/s	2.090	2.145	2.200	2.255	2.310
Total static pressure		Pa	472	454	437	418	399
Shaft power		kW	1.442	1.450	1.458	1.465	1.471
Electrical Power Input		kW	1.927	1.938	1.949	1.957	1.965
					0.663		
					0.886		
In-duct sound power (dB)							
A	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz
85.2	77	82	81	81	78	69	63
Vibration monitoring (sensors+teflon cable+BNC termination box) NO							
Vibration class BV-2 ISO1694:2003 5.6 mm/s RMS filter in @ rot. freq.							
Spring Deflection 20 mm							
Bearing life 20000 HRS							

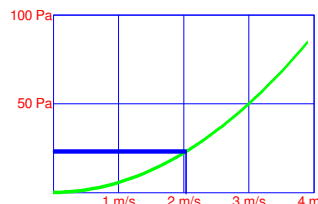
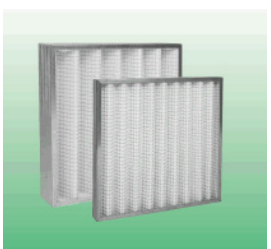
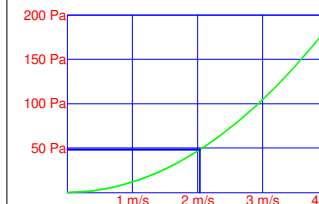





19/04/2011	08/06/2011	P 5 / 12	08A72185	A>@AJHGJLTRVUS[Y{[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project				00060000	NXSCSTSVRI-L073	
Project Example					Model A1-1130H-1400W	
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

008	FRESH AIR DAMPER					
	Flow 2.20 m3/s	Dimensions 930 x 1030 mm	Model A160	Air vel. 2.29 m/s	Pressure drop 3 Pa	
	Damper Yes	Flexible connection No	Louvre No	Actuator 1 x LM230-S		
						

009	COIL								coil performance	
	Flow 2.20 m3/s	Qty 1	Model P40-16AC 1/2R-24T-1030A-4.0Pa Cu/Al [43 mt]				7.06 dm3	15.69 m2	Air dens. 1.225 kg/m3	
	Air side	DB	WB	UR	Total load	Sensible load	Air vel.	Pressure Drop		
	In	-4.00 °C			1x21.6 kW		2.22 m/s	14 Pa		
	Out	4.00 °C								
	WATER	temp.	Water flow		Water P.D.	Water vel.	Connection size			
In	82.00 °C	1 x 0.47 l/s		16.37 kPa	1.21 m/s	1"				
Out	71.00 °C					1"				
NC	Fins material		Tubes material		Headers	Frame	Flange	Counterflange		
2	AL@0.13mm		CU@0.40mm		Steel	Galvanised steel	NO	NO	[1190][0.44RT][2][53][23.0]	


010	ACCESS DOOR					
	Dimensions 1020 x 600 mm		Handles + Hinges + Window + Lamp + IP65 switch + Wiring of switch			
						

011	FILTERS																						
	STAGE #	Air Volume	CLASS		TYPE	Model	QTY. FULL SIZE	QTY. HALF SIZE	LENGTH MM														
	1	2.20 m3/s	G4		PANEL	MQZ-98	2	2	98 mm														
	2	2.20 m3/s	F7		RIGID BAG	8RTE	2	2	290 mm														
	Frame					Galvanised Steel																	
	<table border="1"> <tr> <td>Clean</td> <td>Final</td> <td colspan="2">Avg</td> </tr> <tr> <td>23 Pa</td> <td>150 Pa</td> <td colspan="2">86 Pa</td> </tr> </table>  				Clean	Final	Avg		23 Pa	150 Pa	86 Pa		<table border="1"> <tr> <td>Clean</td> <td>Final</td> <td colspan="2">Avg</td> </tr> <tr> <td>48 Pa</td> <td>250 Pa</td> <td colspan="2">149 Pa</td> </tr> </table>  				Clean	Final	Avg		48 Pa	250 Pa	149 Pa
Clean	Final	Avg																					
23 Pa	150 Pa	86 Pa																					
Clean	Final	Avg																					
48 Pa	250 Pa	149 Pa																					
ACCESSORIES																							
				Inclined gauge SAIVER																			
MM200600																							
Qta : 2				PRESSURE SWITCH																			
				DCPD000100																			
				Qta : 2																			


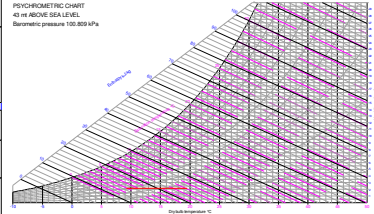
DATA SHEET





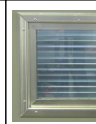
19/04/2011	08/06/2011	P 6 / 12	08A72185	A>@AJHGJLTRVUS[Y[[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model A1-1130H-1400W		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

012	Model HA1200-1030-060-2EOO-1-1-2-1250		Make HEATEX		ByPass damper YES		Qty 1		Material Aluminum		Sealant Silicone							
	heat recovery efficiency at balanced air volume flows 62.0 %																	
	SUMMER																	
	Fresh Air						Exhaust											
	m3/s		kW	Eff.%	Inlet		Outlet		Pa	m3/s		kW	Eff.%					
					°C	%	°C	%						Pa				
	2.2		11.1	61.9	29.0	48.0	24.7	62.3	145	2.2		11.1	61.9	22.0	50.0	26.3	38.7	143
	WINTER																	
	Fresh Air						Exhaust											
	m3/s		kW	Eff.%	Inlet		Outlet		Pa	m3/s		kW	Eff.%					
				°C	%	°C	%						Pa					
2.2		28.5	62.0	4.0	56.1	15.2	26.6	135	2.2		28.5	62.0	22.0	40.0	10.8	81.9	140	

013	ACCESS DOOR											
	Dimensions 2150 x 850 mm			Handles								
												

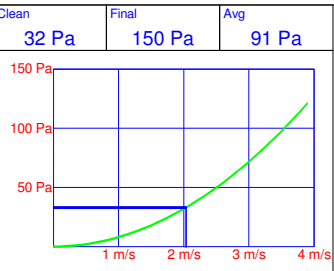
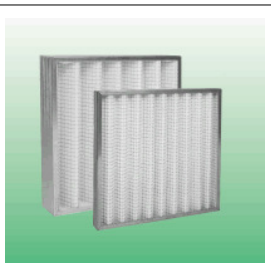

014	DRAIN PAN											
	Material CAL--12						Drain size 48.00 mm					





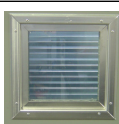
015	HEATING COIL												
	Flow 2.20 m3/s		Qty 1	Model P40-16AC 1/2R-22T-1000A-2.5Pa Cu/Al [43 mt]					6.36 dm3		21.60 m2		Air dens. 1.225 kg/m3
													
	Air side		DB	WB	UR	Total load		Sensible load	Air vel.		Pressure Drop		
	In		9.30 °C			1x27.6 kW			2.50 m/s		23 Pa		
	Out		19.50 °C										
	WATER		temp.	Water flow		Water P.D.	Water vel.		Connection size				
	In		82.00 °C	1 x 0.60 l/s		25.02 kPa	1.55 m/s		1"				
	Out		71.00 °C										
	NC	Fins material		Tubes material		Headers	Frame	Flange	Counterflange				
2	AL@0.13mm		CU@0.40mm		Steel	Galvanised steel	NO	NO		[1190][0.46RT][2][53][23.0]			
													

016	ACCESS DOOR											
	Dimensions 1020 x 740 mm			Handles + Hinges + Window + Lamp + IP65 switch + Wiring of switch								
    												

DATA SHEET

19/04/2011	08/06/2011	P 8 / 12	08A72185	A>@AJHGJLTRVUS[Y{[_acgojqg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project				00060000	NXSCSTSVRI-L073	
Project Example					Model A1-1130H-1400W	
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

024	FILTERS							
	STAGE #	Air Volume	CLASS	TYPE	Model	QTY. FULL SIZE	QTY. HALF SIZE	LENGTH MM
	1	2.20 m3/s	G3	PANEL	MCZ-48	2	2	48 mm
	Frame				Galvanised Steel			
	Clean 32 Pa				Final 150 Pa			
Avg 91 Pa								
								
ACCESSORIES								
		Inclined gauge SAIVER MM200600 Qta : 1						

025	ACCESS DOOR								
	Dimensions 1020 x 600 mm		Handles + Hinges + Window + Lamp + IP65 switch + Wiring of switch						
									



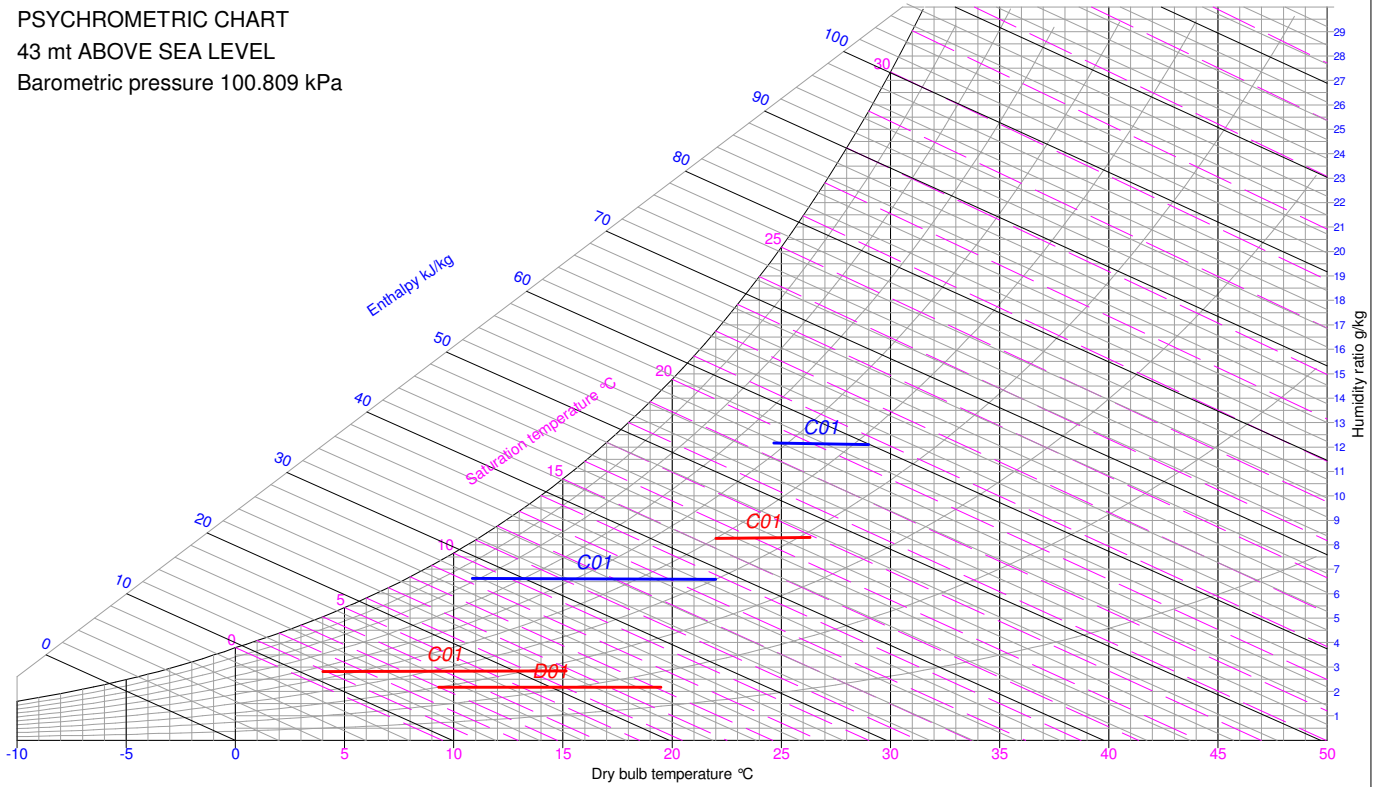
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV =ISO 9001/2000=

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PSYCHROMETRIC CHART

19/04/2011	08/06/2011	P 9 / 12	08A72185	A>@AJHGJLTRVUS[Y{[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model A1-1130H-1400W		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

PSYCHROMETRIC CHART
43 mt ABOVE SEA LEVEL
Barometric pressure 100.809 kPa



	Inlet					Outlet					Total Load kW	Sensible Load kW
	Dry Bulb	Wet Bub	Rel. Humidity	Enthalpy	Abs. Humidity	Dry Bulb	Wet Bub	Rel. Humidity	Enthalpy	Abs. Humidity		
	°C	°C	%	kJ/kg	g/kg	°C	°C	%	kJ/kg	g/kg		
C01	29.00	20.79	48.00	60.07	12.10	24.66	19.51	62.26	55.78	12.16		
C01	22.00	15.40	50.00	43.14	8.27	26.34	16.97	38.74	47.67	8.31		
C01	4.00	0.93	56.10	11.12	2.83	15.16	6.88	26.62	22.44	2.84		
C01	22.00	13.86	40.00	38.89	6.60	10.84	9.25	81.86	27.62	6.63		
D01	9.30	3.00	30.00	14.83	2.18	19.50	8.16	15.50	25.14	2.18		



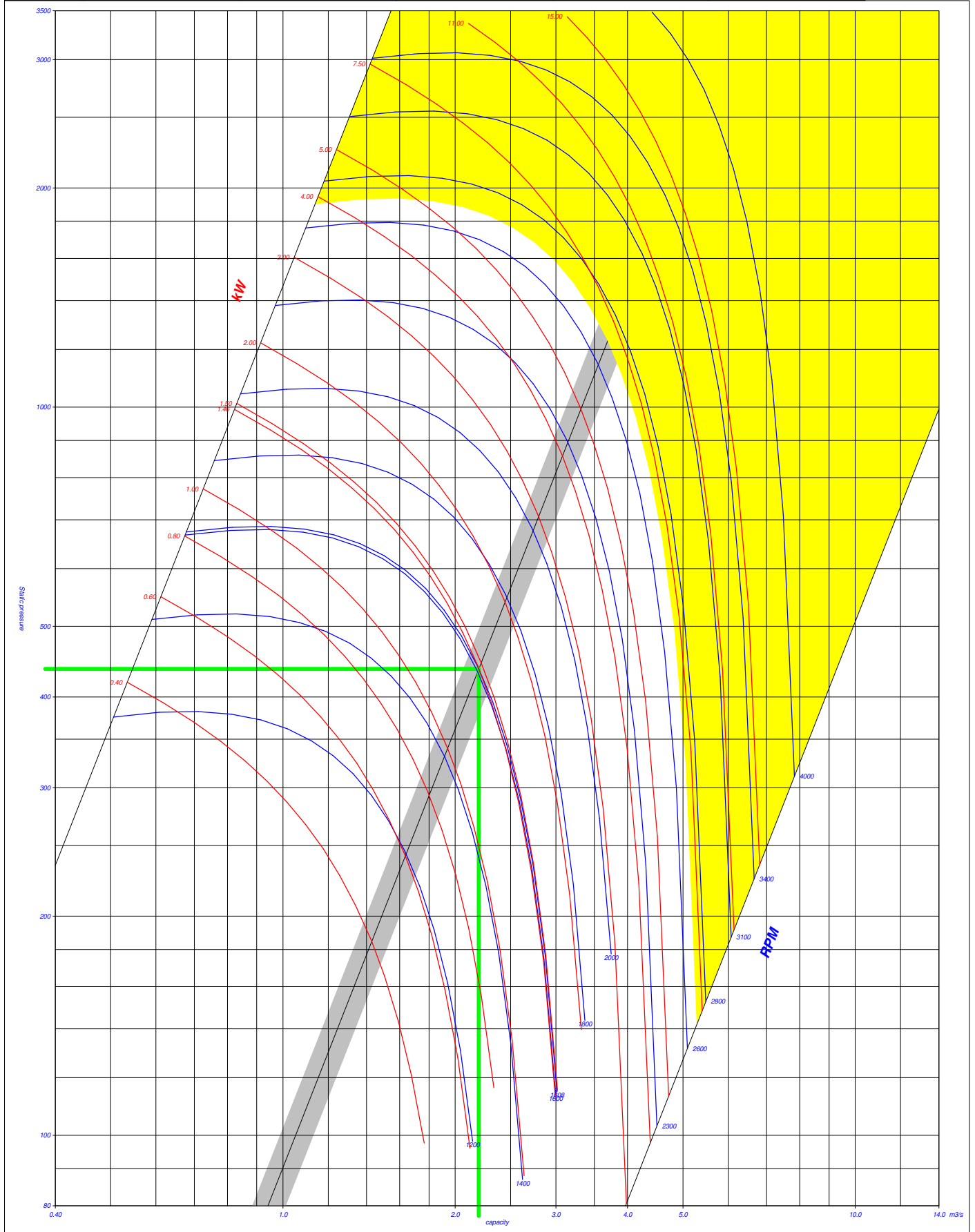
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FAN OPERATING POINT

19/04/2011	08/06/2011	P10 / 12	08A72185	A>@AJHGJLTRVUS[Y{[_acgojqg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model NXSCSTSVRI-L073		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

Item	Model	Air Volume	Static Press.	RPM	Shaft power
002	RDH 400 R	2.20 m3/s	437 Pa	1608	1.46 kW





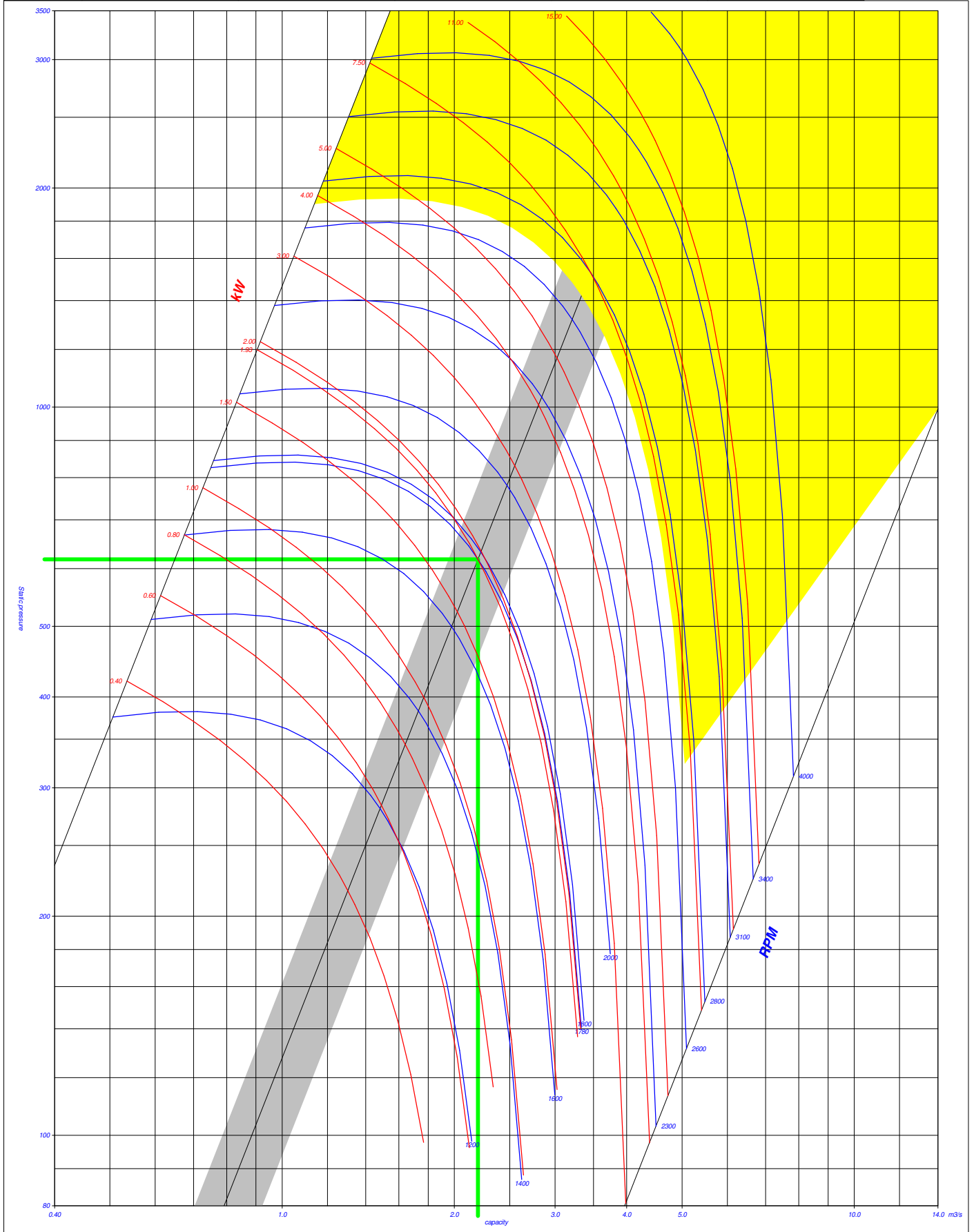
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FAN OPERATING POINT

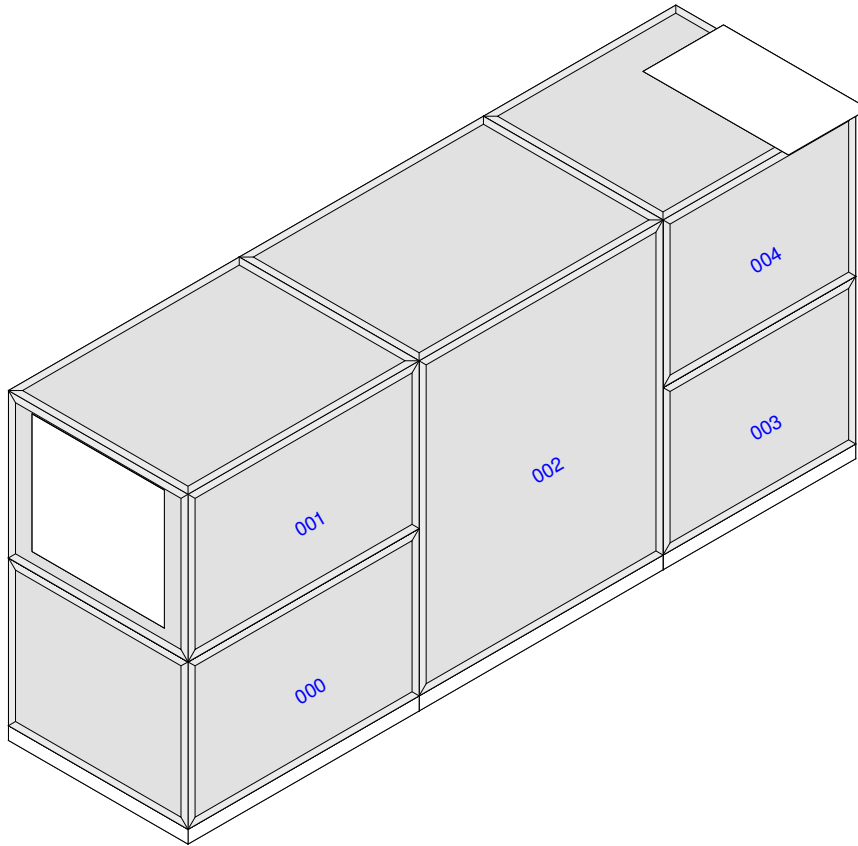
19/04/2011	08/06/2011	P11 / 12	08A72185	A>@AJHGJLTVUS[Y{[_acgojgg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model NXSCSTSVRI-L073		
Ref. Air Handling Unit with PHE - (2.2m3/s)					Flow 2.20 m3/s	

Item	Model	Air Volume	Static Press.	RPM	Shaft power
017	RDH 400 R	2.20 m3/s	618 Pa	1780	1.93 kW



DATA SHEET

19/04/2011	08/06/2011	P12 / 12	08A72185	A>@AJHGJLTRVUS[Y{[_acgojqg	Nexus-1 ver.611.3022(S)	Altitude 43 (m)
Project Project Example				Model A1-1130H-1400W		
Ref. Air Handling Unit with PHE - (2.2m3/s)						Flow 2.20 m3/s



ITEM	Dimensions			Shipping dimensions			
	L mm	W mm	H mm	L mm	W mm	H mm	Kg
-000	1800	1400	1230	0	0	0	342
-001	1800	1400	1130	0	0	0	317
-002	1900	1400	2360	0	0	0	340
-003	1500	1400	1230	0	0	0	344
-004	1500	1400	1130	0	0	0	205