



CLIMATEWORX  
INTERNATIONAL

## Series 6

Intelligent Precision Air Conditioning System

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***Technical Data - 50Hz***

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## Air-cooled System

Model no. 6AU__/_6AD__		02	03	04	05
<b>Cooling Capacity - Rated at standard air volume, 35°C ambient temperature</b>					
<b>24°C(75.2°F)DB, 50%rh</b>					
Total	kW	8.3	11.4	14.4	18.9
Sensible	kW	8.1	10.7	13.3	17.7
THR	kW	10.0	13.9	17.8	23.1
<b>24°C(75.2°F)DB, 45%rh</b>					
Total	kW	8.1	11.2	14.1	18.7
Sensible	kW	8.1	11.2	14.1	18.7
THR	kW	9.9	13.6	17.5	22.8
<b>22°C(71.6°F)DB, 50%rh</b>					
Total	kW	7.9	10.9	13.7	18.0
Sensible	kW	7.5	10.4	13.0	17.0
THR	kW	9.6	13.3	17.1	22.2
<b>22°C(71.6°F)DB, 45%rh</b>					
Total	kW	7.7	10.7	13.4	17.8
Sensible	kW	7.7	10.7	13.4	17.8
THR	kW	9.5	13.1	16.8	21.9
<b>20°C(68.0°F)DB, 50%rh</b>					
Total	kW	7.5	10.3	13.0	17.1
Sensible	kW	7.1	10.2	12.9	16.8
THR	kW	9.3	12.8	16.4	21.3
<b>20°C(68.0°F)DB, 45%rh</b>					
Total	kW	7.3	10.1	12.8	16.9
Sensible	kW	7.3	10.1	12.8	16.9
THR	kW	9.1	12.6	16.2	21.1
<b>Fan Section - Single belt, variable pitch, single shaft centrifugal blower system</b>					
Standard Air Volume	m <sup>3</sup> /h	2380	3230	4080	5100
External Static Pressure	Pa	25	25	25	25
Quantity of Fans		1	1	1	1
Total Fan Motor Power	kW	0.75	0.75	0.75	1.12
Absorbed Power	kW	0.18	0.31	0.54	1.03
<b>Compressor - Refrigerant R22</b>					
Quantity of Compressors		1	1	1	1
Type		Scroll	Scroll	Scroll	Scroll

Model no.	6AU__ /6AD__	02	03	04	05
<b>Evaporator Coil - Copper tube / aluminium fin - Stainless steel drain pan</b>					
Face Area	m <sup>2</sup>	0.58	0.58	0.58	0.58
Rows Deep		3	3	3	4
Fins per inch		12	12	12	12
Face Velocity	m/s	1.14	1.55	1.95	2.44
Refrigerant Charge	kg	1.5	1.5	1.5	2.0
<b>Reheat Section – Electric Reheat - finned tubular type heater, SCR controlled</b>					
Capacity	kW	9	9	9	9
Quantity of Heaters		3	3	3	3
<b>Humidifier - Electrode boiler type, Serviceable Bottle</b>					
Steam Generation Capacity	kg/h	4.5	4.5	4.5	4.5
Humidifier Power	kW	3.4	3.4	3.4	3.4
<b>Filter Section - Pleated disposable type</b>					
Quantity of Filters		3	3	3	3
Nominal Size	LxWxD mm	610 x 457 x 51			
<b>Piping Connection Size</b>					
Liquid Line	-ODM-mm	13	13	13	13
Hot Gas Line	-ODM-mm	22	22	22	22
Humidifier Water	-ODM-mm	6.4	6.4	6.4	6.4
Condensate Drain	-ODM-mm	19	19	19	19
<b>Physical Details</b>					
Width x Depth x Height	mm	915 x 637 x 1880			
Weight	kg	235	265	265	270
<b>Air Cooled Condenser – Factory Matched</b>					
Model		KCV03	KCV05	KCV05	KCV08
No. of Condenser		1	1	1	1
<b>Alternative Air Cooled Condenser</b>					
Model		-	-	-	KD107
No. of Condenser		-	-	-	1

## Water-cooled System

Model no. 6WU__/6WD__		02	03	04	05
<b>Cooling Capacity - Rated at standard air volume, 35°C ambient temperature</b>					
<b>24°C(75.2°F)DB, 50%rh</b>					
Total	kW	8.4	11.4	14.8	19.1
Sensible	kW	8.2	10.7	13.5	17.8
THR	kW	10.2	13.8	18.2	23.2
<b>24°C(75.2°F)DB, 45%rh</b>					
Total	kW	8.2	11.2	14.5	18.8
Sensible	kW	8.2	11.2	14.5	18.8
THR	kW	10.0	13.6	17.9	23.0
<b>22°C(71.6°F)DB, 50%rh</b>					
Total	kW	8.0	10.8	14.0	18.1
Sensible	kW	7.6	10.3	13.2	17.1
THR	kW	9.7	13.2	17.4	22.3
<b>22°C(71.6°F)DB, 45%rh</b>					
Total	kW	7.8	10.6	13.7	17.9
Sensible	kW	7.8	10.6	13.7	17.9
THR	kW	9.6	13.0	17.1	22.0
<b>20°C(68.0°F)DB, 50%rh</b>					
Total	kW	7.5	10.2	13.2	17.2
Sensible	kW	7.2	10.1	13.0	16.8
THR	kW	9.3	12.6	16.6	21.3
<b>20°C(68.0°F)DB, 45%rh</b>					
Total	kW	7.4	10.0	13.0	16.9
Sensible	kW	7.4	10.0	13.0	16.9
THR	kW	9.2	12.4	16.3	21.1
<b>Fan Section - Single belt, variable pitch, single shaft centrifugal blower system</b>					
Standard Air Volume	m <sup>3</sup> /h	2380	3230	4080	5100
External Static Pressure	Pa	75	75	75	75
Quantity of Fans		1	1	1	1
Total Fan Motor Power	kW	0.75	0.75	0.75	1.12
Absorbed Power	kW	0.18	0.31	0.54	1.03
<b>Compressor - Refrigerant R22</b>					
Quantity of Compressors		1	1	1	1
Type		Scroll	Scroll	Scroll	Scroll

Model no.	6WU__ /6WD__	02	03	04	05
<b>Evaporator Coil - Copper tube / aluminium fin - Stainless steel drain pan</b>					
Face Area	m <sup>2</sup>	0.58 0.58	0.58	0.58	
Rows Deep		3 3 3 4			
Fins per inch		12	12	12	12
Face Velocity	m/s	1.14 1.54	1.95	2.44	
<b>Reheat Section – Electric Reheat - finned tubular type heater, SCR controlled</b>					
Capacity	kW	9 9 9 9			
Quantity of Heaters		3 3 3 3			
<b>Humidifier - Electrode boiler type, Serviceable Bottle</b>					
Steam Generation Capacity	kg/h	4.5 4	.5 4	.5 4	.5
Humidifier Power	kW	3.4 3.4	3.4	3.4	
<b>Filter Section - Pleated disposable type</b>					
Quantity of Filters		3 3 3 3			
Nominal Size	LxWxD mm	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51
<b>Condensing Water Requirement</b>					
35°C EWT					
Flow Rate	l/s	0.52 0.69	0.77	1.14	
Unit Pressure Drop	kPa	75.3	104.6	98.5	114.4
32.2°C EWT					
Flow Rate	l/s	0.28 0.33	0.44	0.66	
Unit Pressure Drop	kPa	28.6	28.9	36.2	43.8
<b>Water Regulating Valve - 2-way, head pressure controlled</b>					
Size	mm	19.1 19.1	19.1	25.4	
<b>Piping Connection Size</b>					
Liquid Line	- ODM-mm	13	13	13	13
Hot Gas Line	- ODM-mm	22	22	22	22
Humidifier Water	- ODM-mm	6.4 6.4	6.4	6.4	
Condensate Drain	- ODM-mm	19	19	19	19
Condensing Water	- ODM-mm	28.6	28.6	28.6	28.6
<b>Physical Details*</b>					
Width x Depth x Height	mm		915 x 637 x 1880		
Weight	kg	264 276	276		281

## Glycol-cooled System

Model no.	6GU__ /6GD__	02	03	04	05
<b>Cooling Capacity - Rated at standard air volume, 35°C ambient temperature</b>					
<b>24°C(75.2°F)DB, 50%rh</b>					
Total	kW	8.4	11.4 14.8	19.1	
Sensible	kW	8.2 10.7	13.5	17.8	
THR	kW	10.2 13.8	18.2	23.2	
<b>24°C(75.2°F)DB, 45%rh</b>					
Total	kW	8.2 11.2	14.5	18.8	
Sensible	kW	8.2 11.2	14.5	18.8	
THR	kW	10.0 13.6	17.9	23.0	
<b>22°C(71.6°F)DB, 50%rh</b>					
Total	kW	8.0 10.8	14.0		18.1
Sensible	kW	7.6 10.3	13.2		17.1
THR	kW	9.7	13.2 17.4	22.3	
<b>22°C(71.6°F)DB, 45%rh</b>					
Total	kW	7.8 10.6	13.7	17.9	
Sensible	kW	7.8 10.6	13.7	17.9	
THR	kW	9.6	13.0 17.1	22.0	
<b>20°C(68.0°F)DB, 50%rh</b>					
Total	kW	7.5 10.2	13.2	17.2	
Sensible	kW	7.2	10.1 13.0	16.8	
THR	kW	9.3	12.6 16.6	21.3	
<b>20°C(68.0°F)DB, 45%rh</b>					
Total	kW	7.4	10.0 13.0	16.9	
Sensible	kW	7.4	10.0 13.0	16.9	
THR	kW	9.2	12.4 16.3	21.1	
<b>Fan Section - Single belt, variable pitch, single shaft centrifugal blower system</b>					
Standard Air Volume	m <sup>3</sup> /h	2380	3230	4080	5100
External Static Pressure	Pa	75	75	75	75
Quantity of Fans		1 1 1 1			
Total Fan Motor Power	kW	0.75	0.75	0.75	1.12
Absorbed Power	kW	0.18 0.31	0.54	1.03	
<b>Compressor - Refrigerant R22</b>					
Quantity of Compressors		1 1 1 1			
Type		Scroll Scro	Il Scro	Il Scro	Il

Model no.	6GU__ /6GD__	02	03	04	05
<b>Evaporator Coil - Copper tube / aluminium fin - Stainless steel drain pan</b>					
Face Area	m <sup>2</sup>	0.58	0.58	0.58	
Rows Deep		3	3	3	4
Fins per inch		12	12	12	12
Face Velocity	m/s	1.14	1.54	1.95	2.44
<b>Reheat Section – Electric Reheat - finned tubular type heater, SCR controlled</b>					
Capacity	kW	9	9	9	9
Quantity of Heaters		3	3	3	3
<b>Humidifier - Electrode boiler type, Serviceable Bottle</b>					
Steam Generation Capacity	kg/h	4.5	4	.5	4
Humidifier Power	kW	3.4	3.4	3.4	3.4
<b>Filter Section - Pleated disposable type</b>					
Quantity of Filters		3	3	3	3
Nominal Size	LxWxD mm	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51
<b>Glycol Solution Requirement</b>					
40.5°C EWT					
Flow Rate	l/s	0.63	0.59	0.79	1.10
Unit Pressure Drop	kPa	80.0	50.4	81.5	74.4
35°C EWT					
Flow Rate	l/s	0.25	0.30	0.34	0.56
Unit Pressure Drop	kPa	17.4	18.8	18.5	26.6
<b>Glycol Solution Regulating Valve - 2-way, head pressure controlled</b>					
Size	mm	19.1	19.1	19.1	25.4
<b>Piping Connection Size</b>					
Liquid Line	- ODM-mm	13	13	13	13
Hot Gas Line	- ODM-mm	15.9	15.9	15.9	15.9
Humidifier Water	- ODM-mm	6.4	6.4	6.4	6.4
Condensate Drain	- ODM-mm	19	19	19	19
Glycol Solution	- ODM-mm	41.3	41.3	41.3	41.3
<b>Physical Details*</b>					
Width x Depth x Height	mm	915 x 637 x 1880			
Weight	kg	273	285	285	290



## Chilled-water System

Model no.	6CU__/_6CD__	02	03	04	05
<b>Cooling Capacity - Rated at standard air volume, 7.2°C entering water &amp; 5.6°C temperature rise</b>					
<b>26°C(78.8°F)DB, 50%rh</b>					
Total	kW	12.5	16.3	19.4	28.3
Sensible	kW	9.7	12.3	14.7	21.0
Flow Rate	l/s	0.54	0.70	0.83	1.22
Unit Pressure Drop	kPa	22	34	45	106
<b>26°C(78.8°F)DB, 45%rh</b>					
Total	kW	11.3	14.7	17.4	25.3
Sensible	kW	9.9	12.6	15.0	21.2
Flow Rate	l/s	0.48	0.63	0.74	1.09
Unit Pressure Drop	kPa	19	29	37	88
<b>24°C(75.2°F)DB, 50%rh</b>					
Total	kW	9.8	12.8	15.1	22.0
Sensible	kW	8.5	10.8	12.9	18.3
Flow Rate	l/s	0.42	0.55	0.65	0.95
Unit Pressure Drop	kPa	15	23	30	70
<b>24°C(75.2°F)DB, 45%rh</b>					
Total	kW	8.7	11.0	13.1	20.1
Sensible	kW	8.7	11.0	13.1	18.8
Flow Rate	l/s	0.37	0.47	0.56	0.86
Unit Pressure Drop	kPa	14	18	24	60
<b>22°C(71.6°F)DB, 50%rh</b>					
Total	kW	7.4	9.3	11.1	15.9
Sensible	kW	7.4	9.3	11.1	15.9
Flow Rate	l/s	0.32	0.40	0.47	0.68
Unit Pressure Drop	kPa	10	14	18	41
<b>22°C(71.6°F)DB, 45%rh</b>					
Total	kW	7.4	9.3	11.1	15.9
Sensible	kW	7.4	9.3	11.1	15.9
Flow Rate	l/s	0.32	0.40	0.47	0.68
Unit Pressure Drop	kPa	10	14	18	41
<b>Fan Section - Single belt, variable pitch, single shaft centrifugal blower system</b>					
Standard Air Volume	m <sup>3</sup> /h	2380	3230	4080	5100
External Static Pressure	Pa	75	75	75	75
Quantity of Fans		1 1 1 1			
Total Fan Motor Power	kW	0.75	0.75	0.75	1.12
Absorbed Power	kW	0.18 0.31	0.54	1.03	

Model no.	6CU__/6CD__	02	03	04	05
<b>Evaporator Coil - Copper tube / aluminium fin - Stainless steel drain pan</b>					
Face Area	m <sup>2</sup>	0.58	0.58	0.58	
Rows Deep		3	3	4	4
Fins per inch		12	12	12	12
Face Velocity	m/s	1.14	1.55	1.95	2.44
<b>Reheat Section - Electric Reheat - finned tubular type heater, SCR controlled</b>					
Capacity	kW	9	9	9	9
Quantity of Heaters		3	3	3	3
<b>Humidifier - Electrode boiler type, Serviceable Bottle</b>					
Steam Generation Capacity	kg/h	4.5	4	.5	4
Humidifier Power	kW	3.4	3.4	3.4	3.4
<b>Filter Section - Pleated disposable type</b>					
Quantity of Filters		3	3	3	3
Nominal Size	LxWxD mm	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51	610 x 457 x 51
<b>Chilled-water Valve - 3-Way modulating</b>					
Valve Size	mm	25.4	25.4	25.4	25.4
<b>Piping Connection Size</b>					
Chilled-water - ODM	mm	29	29	29	29
Humidifier Water - ODM	mm	6.4	6.4	6.4	6.4
Condensate Drain- ODM	mm	19	19	19	19
<b>Physical Details</b>					
Width x Depth x Height	mm		915 x 637 x 1880		
Weight	kg	235	235	240	240

## Electrical Data (380V/3PH/50Hz)

### Air/Water/Glycol Cooled Systems\*†

Model 6 Reheat/Humidifier Option	02			6 03			6 04			6 05		
	FLA	MCA	MFS	LA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Electric (9kW)/Boiler	20.9	25.2	30	22.3	27.0	30	24.1	29.2	35	26.7	32.3	35
Electric (9kW)/None	20.9	25.2	30	22.3	27.0	30	24.1	29.2	35	26.7	32.3	35
Electric (6kW)/Boiler	16.5	19.7	25	17.9	21.4	25	19.7	23.7	25	22.3	26.7	30
Electric (6kW)/None	16.5	19.7	25	17.9	21.4	25	19.7	23.7	25	22.3	26.7	30
None, Non-electric/Boiler	16.3	19.4	25	17.7	21.2	25	19.5	23.4	25	22.1	26.5	30
None, Non-electric/None	7.3	8.3	15	8.7	10.0	15	10.5	12.3	20	13.1	15.3	25

### Chilled Water Systems\*

Model 6 Reheat/Humidifier Option	CU/CD02			6CU/CD03			6CU/CD04			6CU/CD05		
	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Electric (9kW)/Boiler	24.9	28.4	30	24.9	28.4	30	24.9	28.4	30	25.7	29.4	35
Electric (9kW)/None	15.9	19.5	25	15.9	19.5	25	15.9	19.5	25	16.7	20.5	25
Electric (6kW)/Boiler	20.4	22.8	25	20.4	22.8	25	20.4	22.8	25	21.2	23.8	25
Electric (6kW)/None	11.5	13.9	15	11.5	13.9	15	11.5	13.9	15	12.3	14.9	20
None, Non-electric/Boiler	13.3	13.7	15	11.3	13.7	15	11.3	13.7	15	12.1	14.7	20
None, Non-electric/None	2.3	2.5	15	2.3	2.5	15	2.3	2.5	15	3.1	3.5	15

† Above FLA does not include air-cooled condenser amps.

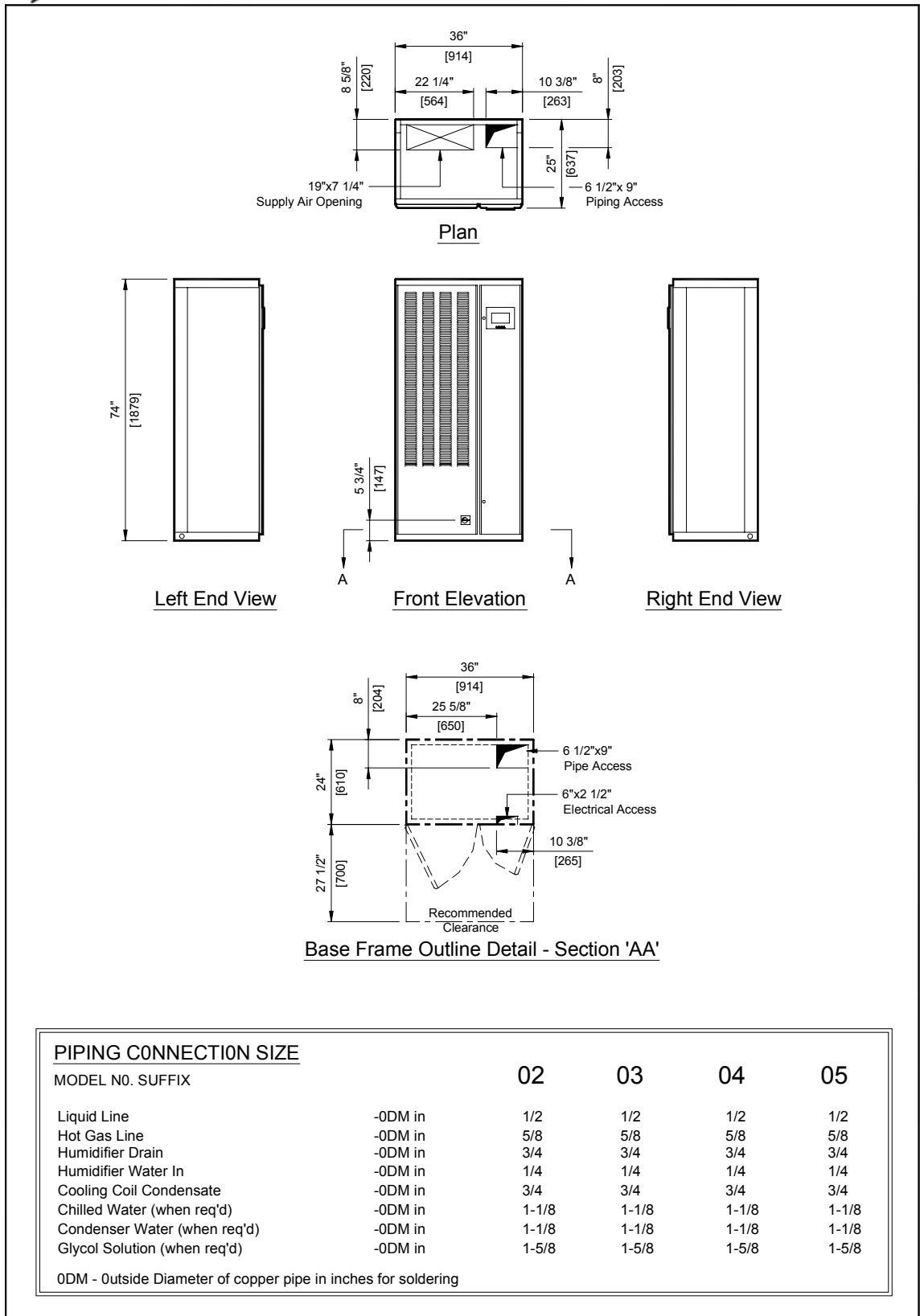
- FLA is based on full load current of individual components that result in maximum electrical load condition during normal operation.  
FLA = Full Load Amps, MCA = Minimum Circuit Ampacity, MFS = Maximum Fuse Size

## ***Dimensional Drawings***

<b><u>Drawing Title</u></b>	<b><u>Drawing Number</u></b>	<b><u>Page No.</u></b>
Upflow System	S6DD101	13
Downflow System	S6DD102	14
Upflow System with Ducted Return Plenum	S6DD103	15
Downflow System with Ducted Return Plenum	S6DD104	16



**SERIES 6 - VERTICAL FLOOR MOUNT UPFLOW UNIT  
DIMENSIONAL DETAIL**

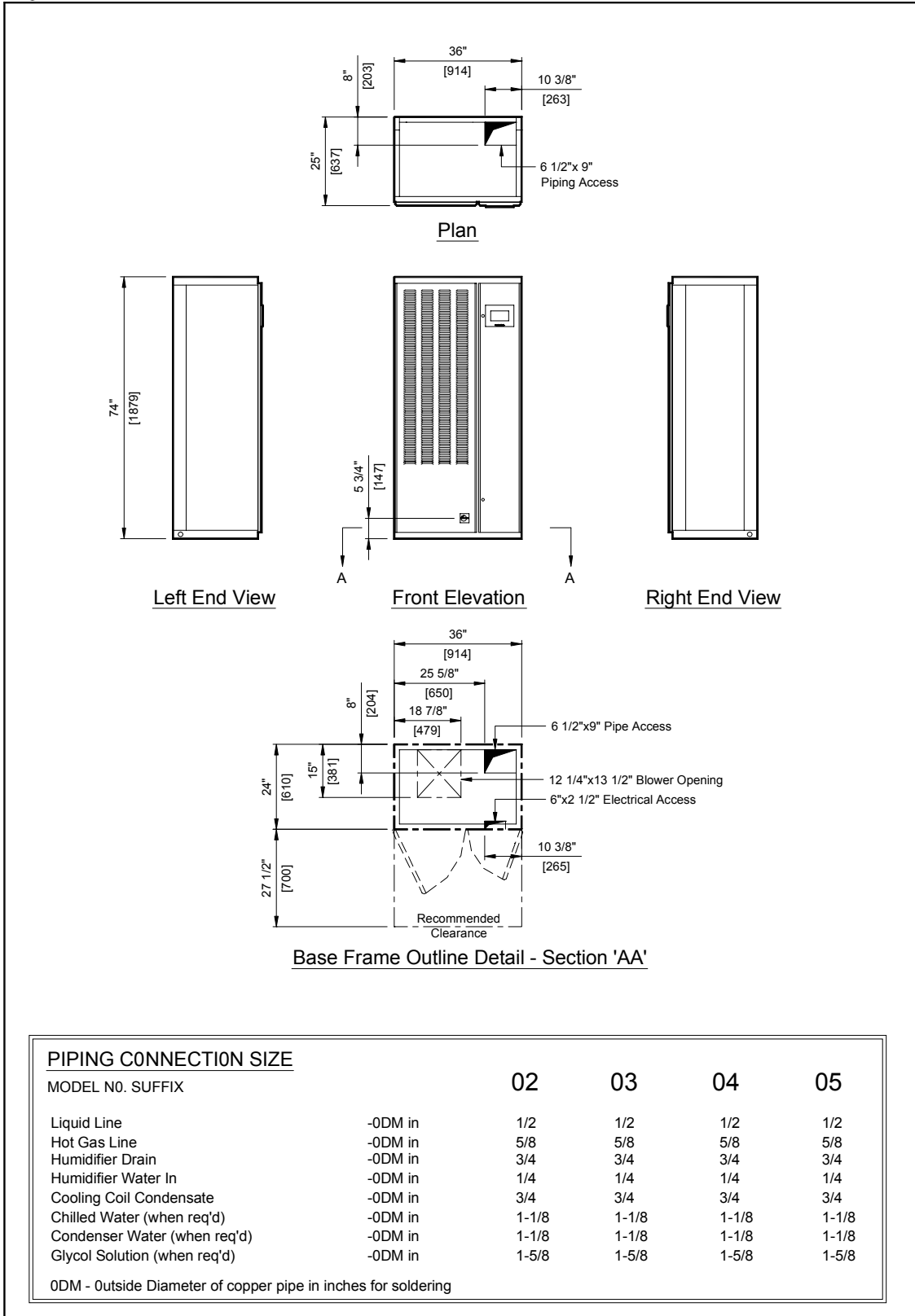


PIPING CONNECTION SIZE		02	03	04	05
MODEL NO. SUFFIX					
Liquid Line	-ODM in	1/2	1/2	1/2	1/2
Hot Gas Line	-ODM in	5/8	5/8	5/8	5/8
Humidifier Drain	-ODM in	3/4	3/4	3/4	3/4
Humidifier Water In	-ODM in	1/4	1/4	1/4	1/4
Cooling Coil Condensate	-ODM in	3/4	3/4	3/4	3/4
Chilled Water (when req'd)	-ODM in	1-1/8	1-1/8	1-1/8	1-1/8
Condenser Water (when req'd)	-ODM in	1-1/8	1-1/8	1-1/8	1-1/8
Glycol Solution (when req'd)	-ODM in	1-5/8	1-5/8	1-5/8	1-5/8

ODM - Outside Diameter of copper pipe in inches for soldering



SERIES 6 - VERT. FLOOR MOUNT DOWNFLOW UNIT  
DIMENSIONAL DETAIL



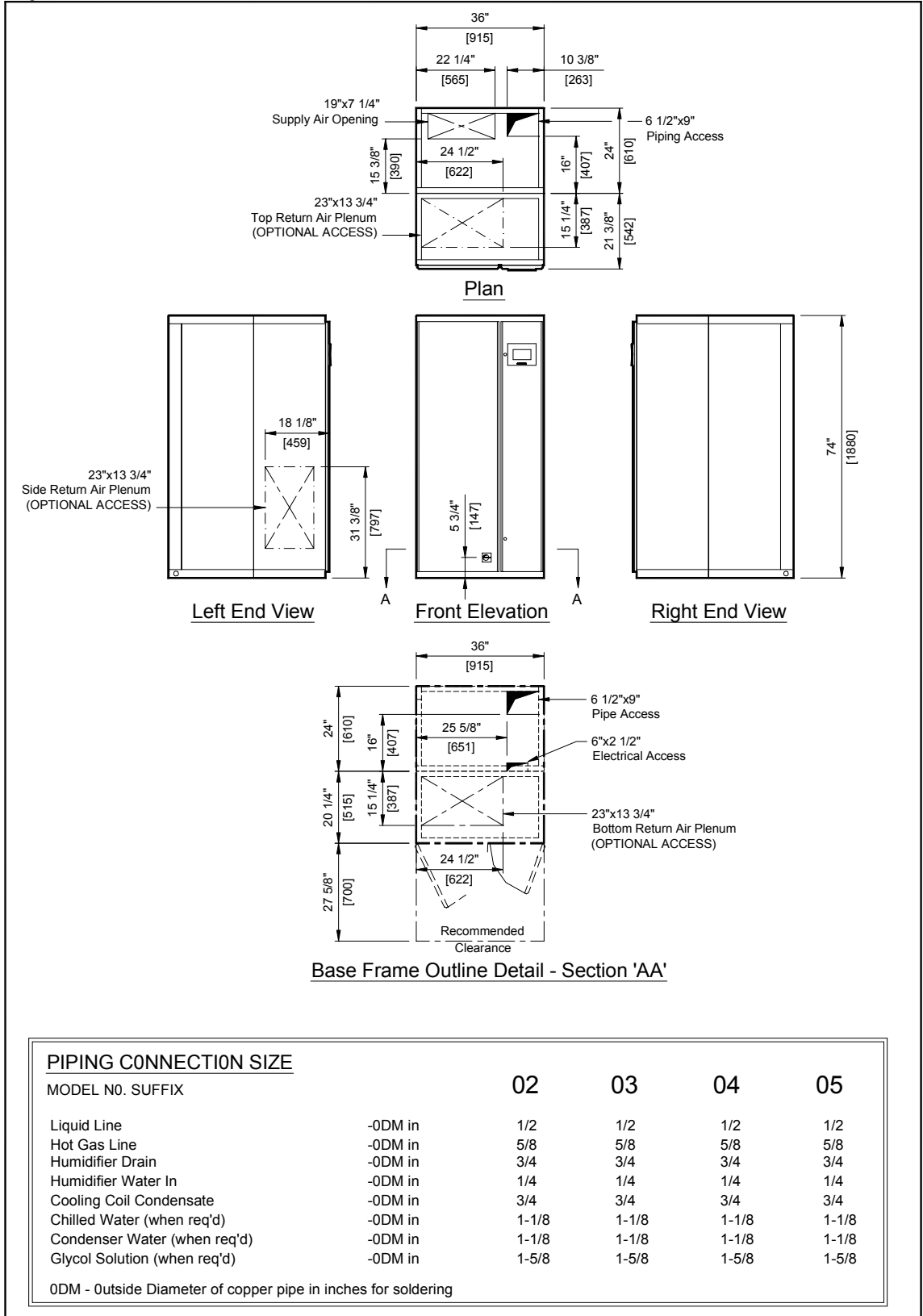
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25 JULY 2001

NOT TO SCALE



SERIES 6 - VERT. FLOOR MOUNT UPFLOW UNIT  
DUCTED RETURN PLENUM DIMENSIONAL DETAIL



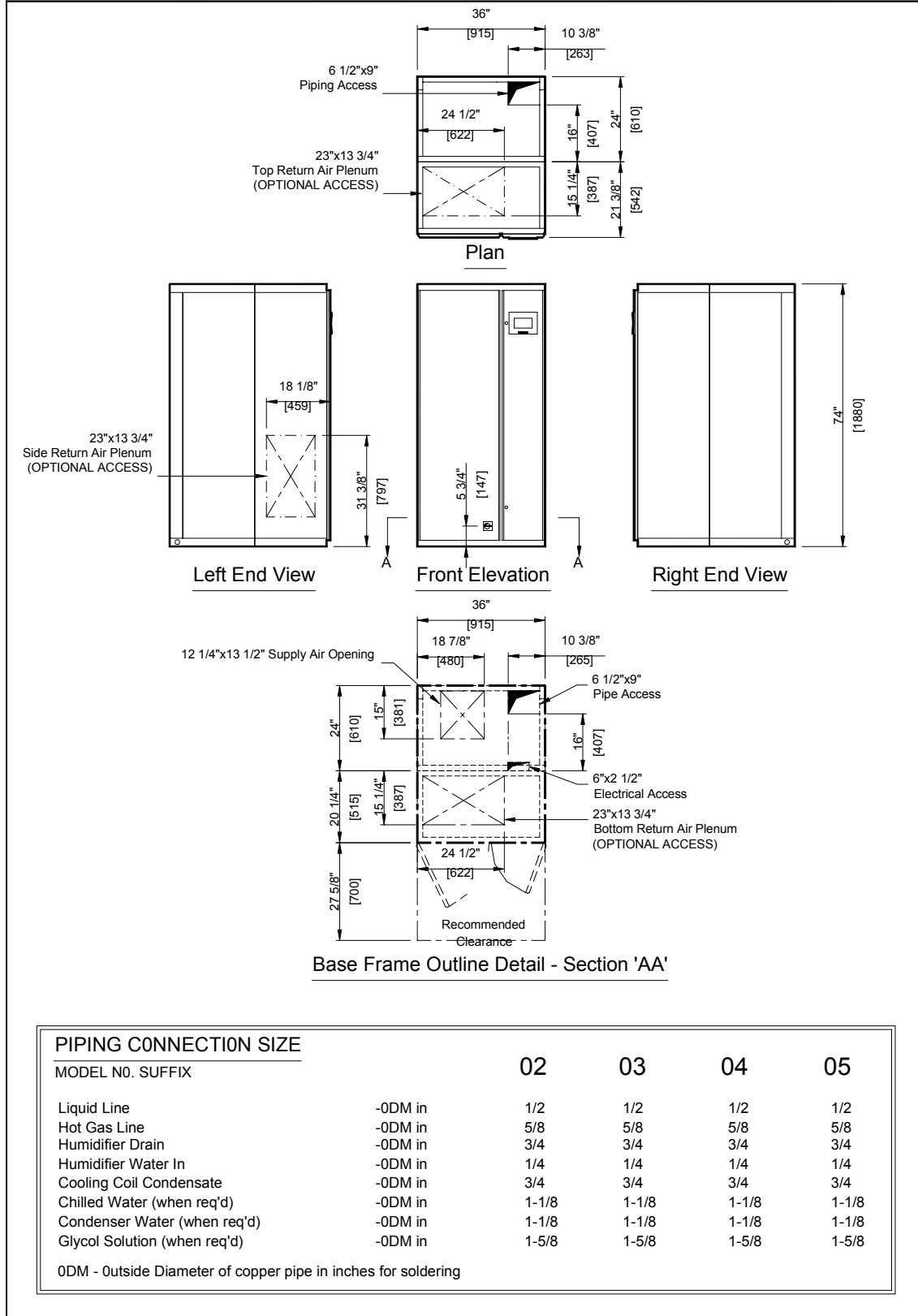
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30 JULY 2001

NOT TO SCALE



**SERIES 6 - VERT. FLOOR MOUNT DOWNFLOW UNIT  
DUCTED RETURN PLENUM DIMENSIONAL DETAIL**



PIPING CONNECTION SIZE		02	03	04	05
MODEL NO. SUFFIX					
Liquid Line	-ODM in	1/2	1/2	1/2	1/2
Hot Gas Line	-ODM in	5/8	5/8	5/8	5/8
Humidifier Drain	-ODM in	3/4	3/4	3/4	3/4
Humidifier Water In	-ODM in	1/4	1/4	1/4	1/4
Cooling Coil Condensate	-ODM in	3/4	3/4	3/4	3/4
Chilled Water (when req'd)	-ODM in	1-1/8	1-1/8	1-1/8	1-1/8
Condenser Water (when req'd)	-ODM in	1-1/8	1-1/8	1-1/8	1-1/8
Glycol Solution (when req'd)	-ODM in	1-5/8	1-5/8	1-5/8	1-5/8

ODM - Outside Diameter of copper pipe in inches for soldering

S6DD104A

30 JULY 2001

NOT TO SCALE