



Series 7, Wall - Mount Units

Technical Data - 50Hz

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Air Handling Unit – With Air-cooled Remote Outdoor Condensing Unit (7AC**)

Model no.		7AH15	7AH20	7AH25
Cooling Capacity - Rated at standard air volume, 35°C ambient temperature				
27°C(80.6°F)DB, 48%rh				
Total	kW	5.8	6.9	8.5
Sensible	kW	5.5	6.5	8.5
26°C(78.8°F)DB, 50%rh				
Total	kW	5.7	6.8	8.4
Sensible	kW	5.0	6.0	7.8
24°C(75.2°F)DB, 50%rh				
Total	kW	5.3	6.5	7.9
Sensible	kW	4.7	5.7	7.5
24°C(75.2°F)DB, 45%rh				
Total	kW	5.4	6.5	7.8
Sensible	kW	5.2	6.2	7.8
22°C(71.6°F)DB, 50%rh				
Total	kW	5.1	6.2	7.5
Sensible	kW	4.8	5.7	7.2
22°C(71.6°F)DB, 45%rh				
Total	kW	5.1	6.2	7.5
Sensible	kW	5.0	6.0	7.5
Fan Section – Tangential blower system				
Standard Air Volume	m ³ /h	1275	1530	2210
Quantity of Fans		1	1	1
Total Fan Motor Power	kW	0.07	0.15	0.25
Evaporator Coil - Copper tube /enhanced aluminium fin - Stainless steel drain pan				
Face Area	m ²	0.31	0.31	0.31
Rows Deep		3	3	3
Fins per inch		9	9	9
Face Velocity	m/s	1.14	1.37	1.98
Reheat Section – Electric Reheat - finned tubular type heater, -Optional				
Capacity	kW	2	2	2
Quantity of Heaters		1	1	1
Humidifier - Electrode boiler type, -Optional				
Steam Generation Capacity	kg/h	2.25	2.25	2.25
Humidifier Power	kW	1.7	1.7	1.7

Model no.		7AH15	7AH20	7AH25
Filter Section - Pleated disposable type				
Quantity of Filters		2	2	2
Nominal Size	HxWxD		406 x 381 x 25	
Piping Connection Size				
Liquid Line	- ODM -mm	9.5	9.5	9.5
Hot Gas Line	- ODM -mm	12	12	12
Humidifier Water	- ODM -mm	6.4	6.4	6.4
Condensate Drain	- ODM -mm	19	19	19
Physical Details				
Width x Depth x Height	mm		1067 x 273 x 533	
Weight	kg	44	44	44

Air-cooled Remote Outdoor Condensing Unit

Model no.		7AC15	7AC20	7AC25
Fan Section – Direct driven Propeller Fan				
Standard Air Volume	m ³ /h	2718	2718	3738
Quantity of Fans		1	1	1
Total Fan Motor Power	kW	0.19	0.19	0.19
Compressor - Refrigerant R22, Located in outdoor unit				
Quantity of Compressors		1	1	1
Type		Scroll	Scroll	Scroll
Condenser Coil - Copper tube / aluminium fin				
Face Area	m ²	0.387	0.387	0.387
Rows Deep		3	3	3
Fins per inch		13	13	13
Face Velocity	m/s	1.3	1.3	1.98
Physical Details				
Width x Depth x Height	mm		968 x 305 x 645	
Weight	kg	66	66	66

Air Handling System – With Water-cooled Remote Indoor Condensing Unit (7WC**)

Model no.		7AH15	7AH20	7AH25
Cooling Capacity - Rated at standard air volume, and 46°C condensing temperature				
27°C(80.6°F)DB, 48%rh				
Total	kW	5.6	6.7	8.3
Sensible	kW	5.4	6.4	8.3
26°C(78.8°F)DB, 50%rh				
Total	kW	5.5	6.6	8.3
Sensible	kW	4.9	5.9	7.8
24°C(75.2°F)DB, 50%rh				
Total	kW	5.2	6.2	7.8
Sensible	kW	4.6	5.6	7.5
24°C(75.2°F)DB, 45%rh				
Total	kW	5.2	6.2	7.7
Sensible	kW	5.2	6.1	7.7
22°C(71.6°F)DB, 50%rh				
Total	kW	5.0	5.9	7.3
Sensible	kW	4.7	5.5	7.2
22°C(71.6°F)DB, 45%rh				
Total	kW	5.0	5.9	7.3
Sensible	kW	5.0	5.9	7.3
Fan Section – Tangential blower system				
Standard Air Volume	m ³ /h	1275	1530	2210
Quantity of Fans		1	1	1
Total Fan Motor Power	kW	0.15	0.15	0.15
Evaporator Coil - Copper tube /enhanced aluminium fin - Stainless steel drain pan				
Face Area	m ²	0.31	0.31	0.31
Rows Deep		3	3	3
Fins per inch		9	9	9
Face Velocity	m/s	1.14	1.37	1.98
Reheat Section – Electric Reheat - finned tubular type heater, -Optional				
Capacity	kW	2	2	2
Quantity of Heaters		1	1	1
Humidifier - Electrode boiler type, -Optional				
Steam Generation Capacity	kg/h	2.25	2.25	2.25
Humidifier Power	kW	1.7	1.7	1.7

Model no.	7AH15	7AH20	7AH25
Filter Section - Pleated disposable type			
Quantity of Filters	2	2	2
Nominal Size HxWxD mm		406 x 381 x 25	
Piping Connection Size			
Liquid Line - ODM -mm	9.5	9.5	9.5
Hot Gas Line - ODM -mm	12	12	12
Humidifier Water - ODM -mm	6.4	6.4	6.4
Condensate Drain - ODM -mm	19	19	19
Physical Details			
Width x Depth x Height mm		1067 x 273 x 533	
Weight kg	44	44	44

Water-cooled Remote Indoor Condensing Unit

Model no.	7WC15	7WC20	7WC25
Compressor - Refrigerant R22, located in remote unit			
Quantity of Compressors	1	1	1
Type	Scroll	Scroll	Scroll
Condensing Water Requirement			
24°C EWT			
Flow Rate L/s	0.11	0.15	0.23
Unit Pressure Drop kPa	13.1	18.8	37.3
29°F EWT			
Flow Rate L/s	0.15	0.19	0.30
Unit Pressure Drop kPa	20.3	29.6	65.4
Physical Details Water Regulating Valve - 2-way, head pressure controlled			
Size mm	8.5	8.5	8.5
Piping Connection Size			
Liquid Line - ODM - mm	8.5	8.5	8.5
Suction Line - ODM - mm	12	12	12
Condensing Water - ODM - mm	12	12	12
Physical Details			
Width x Depth x Height mm		968 x 305 x 645	
Weight kg	66	66	66

Chilled Water System

Model no.		7CW15	7CW20	7CW25
Cooling Capacity - Rated at standard air volume, 7.2°C entering water & 5.6°C temperature rise				
27°C (80.6°F) DB, 48%rh				
Total	kW	7.4	8.2	10.7
Sensible	kW	6.1	6.8	9.1
Flow Rate	l/s	0.32	0.35	0.45
Unit Pressure Drop	kPa	23	28	42
26°C (79°F) DB, 50%rh				
Total	kW	6.8	7.5	9.9
Sensible	kW	5.7	6.3	8.5
Flow Rate	l/s	0.29	0.32	0.42
Unit Pressure Drop	kPa	21	25	39
24°C (75°F) DB, 50%rh				
Total	kW	5.2	5.7	7.6
Sensible	kW	4.9	5.4	7.3
Flow Rate	l/s	0.22	0.25	0.33
Unit Pressure Drop	kPa	15	18	28
24°C (75°F) DB, 45%rh				
Total	kW	4.8	5.4	7.2
Sensible	kW	4.8	5.4	7.2
Flow Rate	l/s	0.21	0.23	0.31
Unit Pressure Drop	kPa	13	16	26
22°C (72°F) DB, 50%rh				
Total	kW	3.7	4.1	5.6
Sensible	kW	3.7	4.1	5.6
Flow Rate	l/s	0.16	0.18	0.24
Unit Pressure Drop	kPa	8	10	17
22°C (72°C) DB, 45%rh				
Total	kW	3.7	4.1	5.6
Sensible	kW	3.7	4.1	5.6
Flow Rate	l/s	0.16	0.18	0.24
Unit Pressure Drop	kPa	7	10	17
Fan Section – Tangential blower system				
Standard Air Volume	m³/h	1275	1530	2210
Quantity of Fans		1	1	1
Total Fan Motor Power	kW	0.15	0.15	0.15

Model no.		7CW15	7CW20	7CW25
Evaporator Coil - Copper tube /enhanced aluminium fin - Stainless steel drain pan				
Face Area	m ²	0.31	0.31	0.31
Rows Deep		3	3	3
Fins per inch		9	9	9
Face Velocity	m/s	1.14	1.37	1.98
Reheat Section – Electric Reheat - finned tubular type heater, -Optional				
Capacity	kW	2	2	2
Quantity of Heaters		1	1	1
Humidifier - Electrode boiler type, -Optional				
Steam Generation Capacity	kg/h	2.25	2.25	2.25
Humidifier Power	kW	1.7	1.7	1.7
Filter Section - Pleated disposable type				
Quantity of Filters		2	2	2
Nominal Size	HxWxD mm		406 x 381 x 25	
Piping Connection Size				
Chilled Water	- ODM – mm	14	14	14
Humidifier Water	- ODM -mm	6.4	6.4	6.4
Condensate Drain	- ODM -mm	19	19	19
Chilled-water Valve - 2-Way modulating, field mounted				
Valve Size	mm	12.7	12.7	12.7
Physical Details				
Indoor Unit				
Width x Depth x Height	mm		1067 x 273 x 533	
Weight	kg	44	44	44

Electrical Data - 220Volts/1 Phase/50 Hertz

Indoor Unit *

Model	7AH15			7AH20			7AH25		
Reheat Option / Humidifier Option	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Electric/Boiler	18.2	20.7	25	18.7	21.3	25	19.7	22.5	25
Electric / None	10.5	12.4	15	11.0	13.0	15	12.0	14.2	20
None / Boiler	9.1	11.2	15	9.6	11.9	15	10.6	13.1	15
None / None	1.4	1.6	15	1.9	2.2	15	2.9	3.4	15

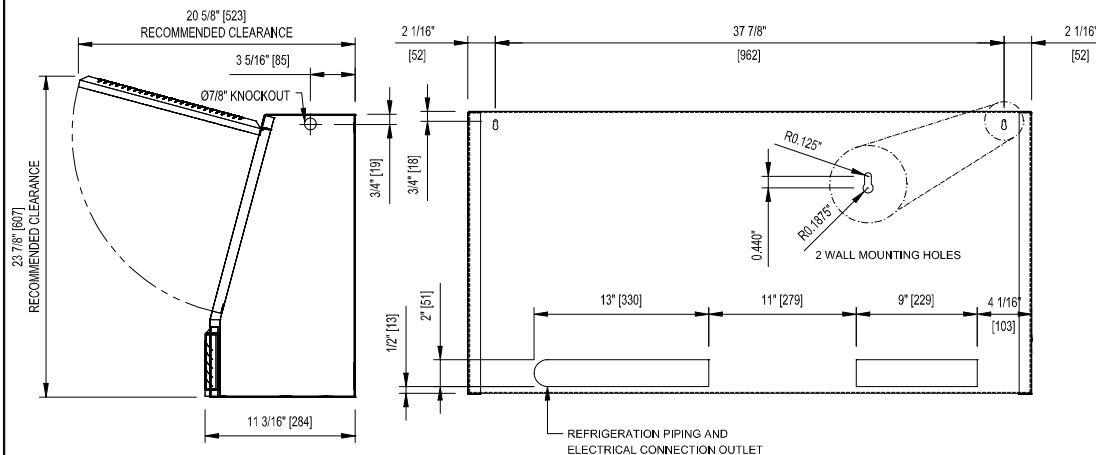
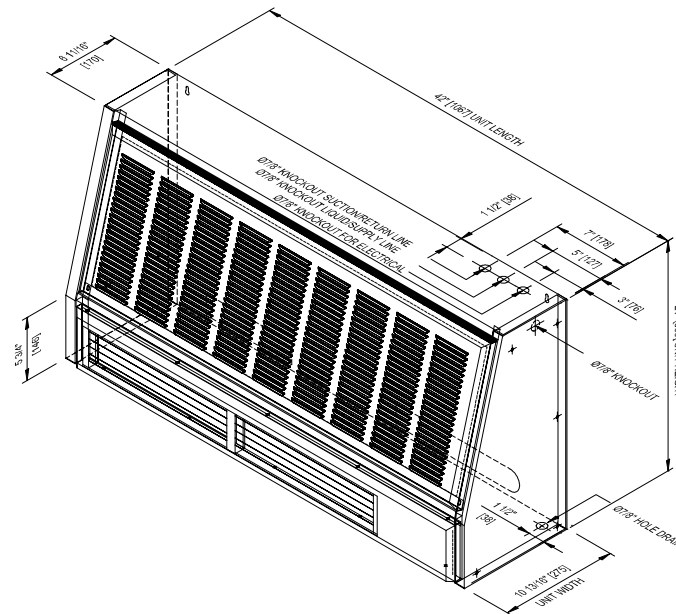
Condensing Unit *

Model	7_C15			7_C20			7_C25		
	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Air-Cooled (7A...)	12.0	14.7	25	12.7	15.6	25	14.2	17.4	30
Water-Cooled (7W...)	10.7	13.4	20	11.4	14.3	25	12.9	16.1	25

- 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

Appendix A: Dimensional Drawings

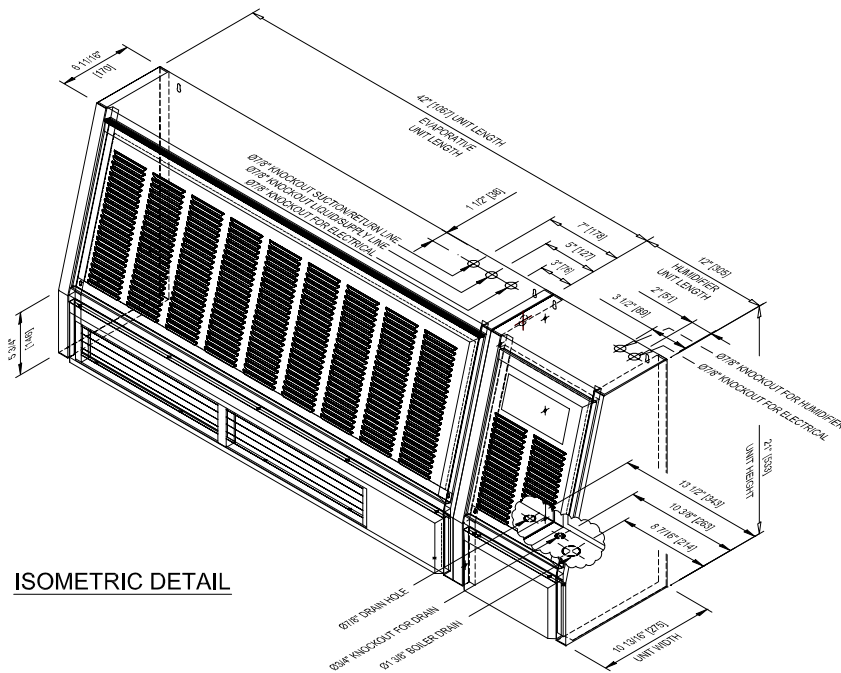
<u>Drawing Title</u>	<u>Drawing No.</u>	<u>Page No.</u>
Indoor Evaporative Unit Dimensional Detail	S7DD101C	11
Indoor Evaporative Unit with Humidifier Detail	S7DD102C	12
Outdoor Condensing Unit with Head Pressure Control	S7DD302E	13
Water Cooled Condensing Unit Detail	S7DD401C	14



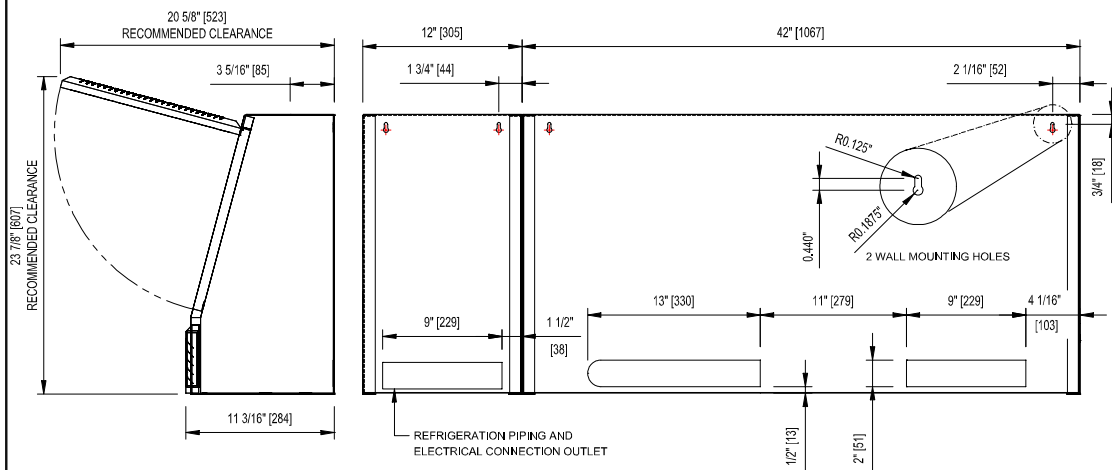


SERIES 7 - DIMENSIONAL DETAIL

WALL MOUNT INDOOR EVAP UNIT W/ HUMIDIFIER



ISOMETRIC DETAIL



SIDE PANEL DETAIL

BACK PANEL MOUNTING DETAIL

PIPING CONNECTION SIZE

MODEL NO. SUFFIX		7AH15	7AH20	7AH25	7CW15	7CW20	7CW25
Liquid Line	-ODM in	3/8"	3/8"	3/8"	-	-	-
Suction Line	-ODM in	1/2"	1/2"	1/2"	-	-	-
Humidifier Water	-ODM in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Condensate Drain	-ODM in	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Chilled Water	-ODM in	-	-	-	5/8"	5/8"	5/8"

ODM - Outside Diameter of copper pipe in inches for soldering

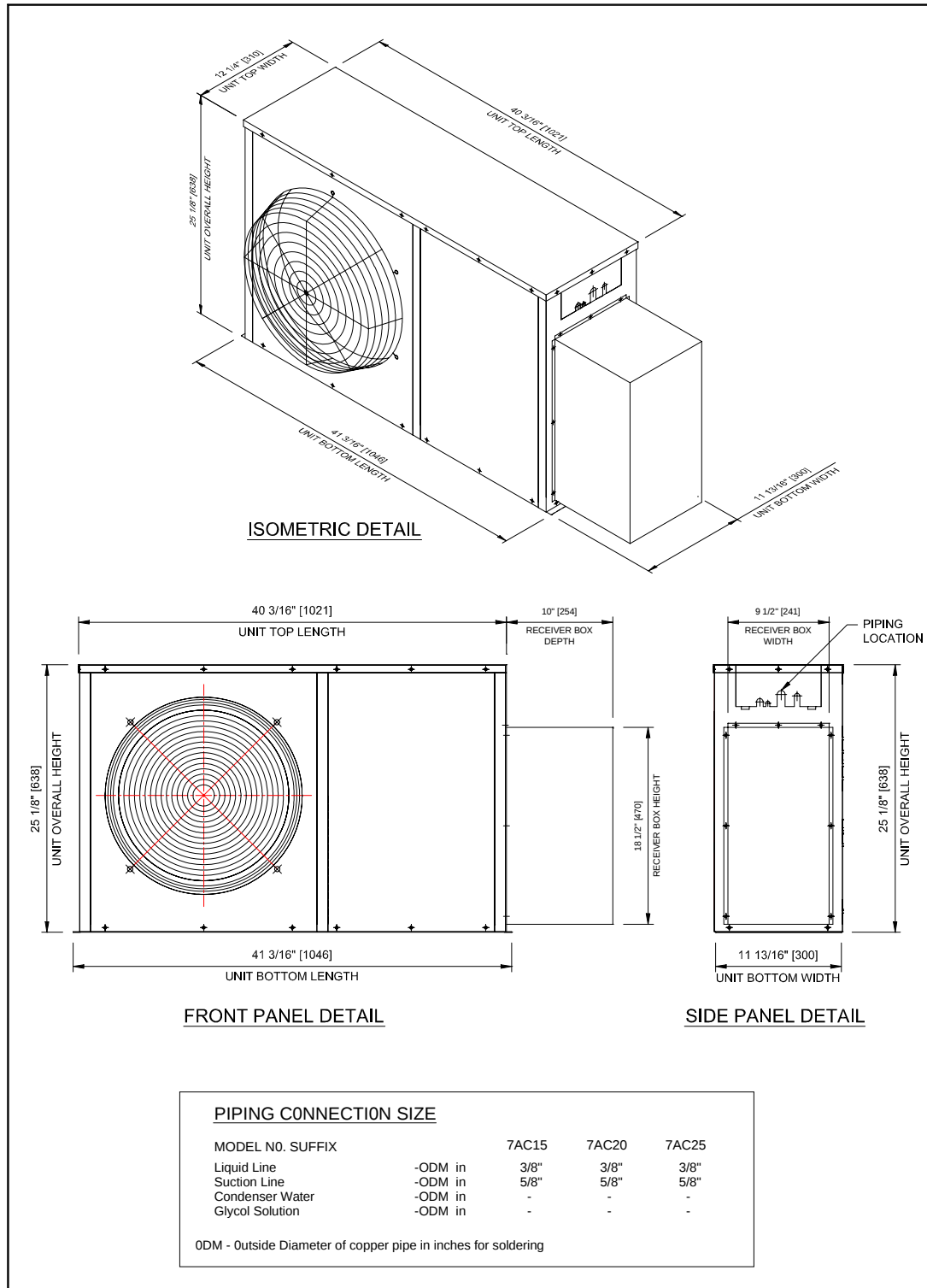
S7DD102C

10 JULY 2002

NOT TO SCALE



SERIES 7 - DIMENSIONAL DETAIL OUTDOOR CONDENSING UNIT W/ HEAD PRESS. CTRL.



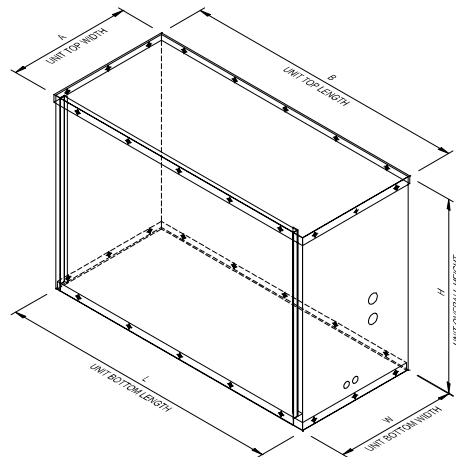
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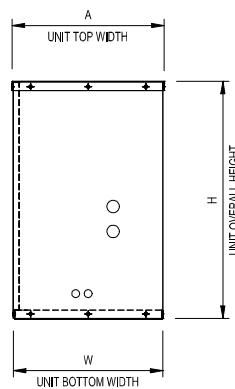
SERIES 7 - DIMENSIONAL DETAIL WATER/GLYCOL COOLED CONDENSING UNIT



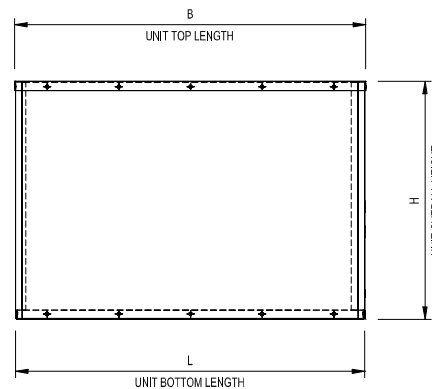
ISOMETRIC DETAIL

CONDENSER DIMENSIONS

TYPE	WATER COOLED	GLYCOL COOLED
A-Unit Top Width	12-1/4"	12-1/4"
B-Unit Top Length	25-1/4"	28-1/4"
H-Unit Overall Height	16"	19"
W-Unit Bottom Width	12"	12"
L-Unit Bottom Length	25"	28"



SIDE PANEL DETAIL



FRONT PANEL DETAIL

PIPING CONNECTION SIZE

MODEL NO. SUFFIX		7WC15	7WC20	7WC25	7GC15	7GC20	7GC25
Liquid Line	-ODM in	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line	-ODM in	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Condenser Water	-ODM in	1/2"	1/2"	1/2"	-	-	-
Glycol Solution	-OD in	-	-	-	1/2"	3/4"	3/4"

ODM - Outside Diameter of copper pipe in inches for soldering