



Series 7, Wall - Mount Units

Technical Data - 50Hz

Table of Contents

Table of Contents	2
Air-cooled System.....	3
Water-cooled System.....	5
Chilled Water System	7
Electrical Data - 208Volts/1 Phase/60 Hertz	9

Air-cooled System

Indoor Unit Model no.		7AI15	7AI20	7AI25
Cooling Capacity - Rated at standard air volume, 49°C condensing temperature, R407c				
27°C(80.6°F)DB, 48%rh				
Total	kW	5.5	6.6	8.1
Sensible	kW	5.2	6.2	8.1
26°C(78.8°F)DB, 50%rh				
Total	kW	5.4	6.5	8.0
Sensible	kW	4.8	5.7	7.4
24°C(75.2°F)DB, 50%rh				
Total	kW	5.0	6.2	7.5
Sensible	kW	4.5	5.4	7.1
24°C(75.2°F)DB, 45%rh				
Total	kW	5.1	6.2	7.4
Sensible	kW	4.9	5.9	7.4
22°C(71.6°F)DB, 50%rh				
Total	kW	4.8	5.9	7.1
Sensible	kW	4.6	5.4	6.8
22°C(71.6°F)DB, 45%rh				
Total	kW	4.8	5.9	7.1
Sensible	kW	4.8	5.7	7.1
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	1	1	1
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

Indoor Unit Model no.	7AI15	7AI20	7AI25
<i>Filter Section - Pleated disposable type</i>			
Quantity of Filters	2	2	2
Nominal Size WxHxD mm	406 x 381 x 25		
<i>Piping Connection Size</i>			
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
<i>Physical Details</i>			
Width x Depth x Height mm	1067 x 273 x 533		
Weight kg	44	44	44
Condensing Unit Model no.	7AO15	7AO20	7AO25
<i>Fan Section – Direct driven Propeller Fan</i>			
Standard Air Volume m ³ /h	2718	2718	3738
Quantity of Fans	1	1	1
Total Fan Motor Power kW	0.19	0.19	0.25
<i>Compressor - Refrigerant R407c, Located in outdoor unit</i>			
Quantity of Compressors	1	1	1
Type	Scroll	Scroll	Scroll
<i>Condenser Coil - Copper tube / aluminium fin</i>			
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
<i>Physical Details</i>			
Width x Depth x Height mm	968 x 305 x 645		
Weight kg	66	66	66

Water-cooled System

Model no.		7WI15	7WI20	7WI25
Cooling Capacity - Rated at standard air volume, and 46°C condensing temperature, R407c				
27°C(80.6°F)DB, 48%rh				
Total	kW	5.3	6.4	7.9
Sensible	kW	5.1	6.1	7.9
26°C(78.8°F)DB, 50%rh				
Total	kW	5.2	6.3	7.9
Sensible	kW	4.7	5.6	7.4
24°C(75.2°F)DB, 50%rh				
Total	kW	4.9	5.9	7.4
Sensible	kW	4.4	5.3	7.1
24°C(75.2°F)DB, 45%rh				
Total	kW	4.9	5.9	7.3
Sensible	kW	4.9	5.8	7.3
22°C(71.6°F)DB, 50%rh				
Total	kW	4.8	5.6	6.9
Sensible	kW	4.5	5.2	6.8
22°C(71.6°F)DB, 45%rh				
Total	kW	4.8	5.6	6.9
Sensible	kW	4.8	5.6	6.9
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	1	1	1
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.		7WI15	7WI20	7WI25
<i>Filter Section - Pleated disposable type</i>				
Quantity of Filters		2	2	2
Nominal Size	WxHxD mm	406 x 381 x 25		
<i>Piping Connection Size</i>				
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
<i>Physical Details</i>				
Width x Depth x Height	mm	1067 x 273 x 533		
Weight	kg	44	44	44
Model no.		7W015	7W020	7W025
<i>Compressor - Refrigerant R407c, Located in outdoor unit</i>				
Quantity of Compressors		1	1	1
Type		Scroll	Scroll	Scroll
<i>Condensing Water Requirement</i>				
75°F EWT				
Flow Rate	GPM	1.8	2.3	3.6
Unit Pressure Drop	ft-H ₂ O	4.4	6.3	12.5
85°F EWT				
Flow Rate	GPM	2.4	3.0	4.8
Unit Pressure Drop	ft-H ₂ O	6.8	9.9	21.9
<i>Physical Details Water Regulating Valve - 2-way, head pressure controlled</i>				
Size	in.	8.5	8.5	8.5
<i>Piping Connection Size</i>				
Liquid Line	- ODM - mm	8.5	8.5	8.5
Suction Line	- ODM - mm	12	12	12
Condensing Water	- ODM - mm	12	12	12
<i>Physical Details</i>				
<i>Outdoor Unit</i>				
Width x Depth x Height	mm	968 x 305 x 645		
Weight	kg	66	66	66

Chilled Water System

Model no.		7CI15	7CI20	7CI25
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
Coil Pressure Drop	KPa	15.2	17.9	28.3
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
Coil Pressure Drop	KPa	12.4	15.9	25.5
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
Coil Pressure Drop	KPa	6.9	9.0	15.9
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
Coil Pressure Drop	KPa	6.2	7.6	14.5
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
Coil Pressure Drop	KPa	2.8	4.1	8.3
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
Coil Pressure Drop	KPa	2.8	4.1	8.3
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

Model no.		7CI15	7CI20	7CI25
<i>Evaporator Coil - Copper tube /enhanced aluminium fin - Stainless steel drain pan</i>				
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
<i>Reheat Section – Electric Reheat - finned tubular type heater, -Optional</i>				
Capacity	kW	1	1	1
Quantity of Heaters		1	1	1
<i>Humidifier - Electrode boiler type, -Optional</i>				
Steam Generation Capacity	kg/h	2.25	2.25	2.25
Humidifier Power	kW	1.7	1.7	1.7
<i>Filter Section - Pleated disposable type</i>				
Quantity of Filters		2	2	2
Nominal Size	WxHxD mm	406 x 381 x 25		
<i>Piping Connection Size</i>				
Chilled Water	- ODM – mm	14	14	14
Humidifier Water	- ODM -mm	6.4	6.4	6.4
Condensate Drain	- ODM -mm	19	19	19
<i>Chilled-water Valve - 3-Way modulating, field mounted</i>				
Valve Size	mm	12.7	12.7	12.7
Cv		0.73	0.73	0.73
<i>Physical Details</i>				
<i>Indoor Unit</i>				
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 *

<i>Model</i>	<i>7AI15</i>			<i>7AI20</i>			<i>7AI25</i>		
Reheat Option / Humidifier Option	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
None/ None	1.6	1.9	15	1.6	1.9	15	1.6	1.9	15
Electric / None	10.7	12.6	15	10.7	12.6	15	10.7	12.6	15
Electric / Boiler	10.7	12.6	15	10.7	12.6	15	10.7	12.6	15
None / Boiler	9.3	10.9	15	9.3	10.9	15	9.3	10.9	15

Condensing Unit *

<i>Model</i>	<i>7_015</i>			<i>7_020</i>			<i>7_025</i>		
	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Air-Cooled (7A...)	12.5	15.2	25	13.2	16.1	25	14.7	17.9	30
Water-Cooled (7W...)	10.7	13.4	20	11.4	14.3	25	12.9	16.1	30

- 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