

# GUARDIAN Series



CANATAL

CANATAL - A NAME YOU CAN TRUST FOR ALL YOUR PRECISION AIR CONDITIONING NEEDS

## PRECISION COOLING SYSTEMS GUARDIAN SERIES

**CAPACITY : 5kW to 40kW**

CANATAL GUARDIAN Series systems are designed with quality and cutting edge technology for precise cooling and humidity control, to be able to ensure reliability and efficiency in the 24/7 operation within the highly sensitive environment. The compact, modular floor standing units features options that are catered for tight spaces, especially suitable for small server rooms and technology based spaces. Available in Air Cooled and Chilled Water cooling options, they are built with advantages of an intelligent network and variable speed control, for better optimization of air volume and energy efficiency.

CANATAL Guardian Series is specially developed for precise environmental control applications :

- > Data Centres / Server Farms
- > Telecommunications facilities
- > Test labs
- > Command Centers
- > Production facilities



## FEATURES & BENEFITS

- > **Brushless Backward Curved EC Fan** for maintenance free operation
- > **Automatic Variable Speed controls** for optimal air volume control
- > **Symmetrical A/V Coil Designs** with uniformed air return and low resistance
- > **Electronic Expansion Valves** automatically adjust according to heat load requirements
- > **Upthrow or downthrow air configuration.**  
Downthrow underfloor fan for optimized air distribution
- > **Intelligent Microprocessor Controller** with multiple monitoring functions and BMS connection capabilities
- > **Co-Work™** Dynamic Network for co-ordinated and backup controls
- > **R410A** environmental friendly refrigerant for Air Cooled systems
- > **Ease of maintenance** via the front & side panels
- > Option for DC inverter scroll compressor

**TECHNICAL DATA**  
**GUARDIAN SERIES - AIR COOLED SYSTEM**

Model (GAD/U**)		05	07	10	12	15	20
<b>Cooling Capacity - DB24°C, 50%RH</b>							
Total Cooling Capacity	kW	5.61	7.50	10.50	12.63	15.61	20.51
Sensible Cooling Capacity	kW	5.10	6.90	9.19	11.25	14.20	18.30
<b>Indoor Fan - Backward Curved EC Fan</b>							
Air Volume	m <sup>3</sup> /h	1750	2200	2750	3200	4150	4950
Power	kW	0.47	0.47	0.57	0.57	0.77	0.77
External Static Pressure	Pa	20	20	20	20	20	20
Fan Quantity	No.	1	1	1	1	1	1
<b>Scroll Compressor</b>							
Power	kW	3.7	4.4	4.4	5.0	6.3	7.5
Compressor Quantity	No.	1	1	1	1	1	1
<b>Air Filter – EN799, Efficiency 90%, G4</b>							
Size – Upflow	mm	900 x 505 x 20				1125 x 600 x 20	
Size – Downflow	mm	620 x 550 x 20				715 x 720 x 20	
Filter Quantity	No.	1	1	1	1	1	1
<b>Heater - PTC Heater (Optional)</b>							
Power	kW	4	4	4	4	6	6
<b>Humidifier - Electrode Steam Humidification (Optional)</b>							
Humidification Volume	kg/h	3	3	3	3	3	3
Power	kW	2	2	2	2	2	2
<b>Noise : Measured at a distance of 1.5m from front of unit</b>							
Noise	db(A)	<60	<60	<60	<60	<60	<60
<b>Pipe Connection Size</b>							
Liquid Pipe	mm	12	12	12	12	16	16
Exhaust Pipe	mm	16	16	16	16	19	19
Humidifier Inlet Pipe	mm	6	6	6	6	6	6
Drain Pipe	mm	25	25	25	25	25	25
<b>Dimensions &amp; Weight</b>							
Length x Width x Height	mm	650 x 580 x 1700				750 x 750 x 1870	
Weight	kg	165	175	190	215	235	250
<b>Electrical Parameters – 380V-420V, 50Hz</b>							
Full Load Current	A	15.5	16.6	16.6	17.6	19.7	21.6
<b>Outdoor Condenser</b>							
Model	/	NACD04J	NACD04J	NACD05J	NACD05J	NACD12J	NACD12J
Power	/	220V / 1N / 50Hz					
Quantity	No.	1	1	2	2	1	1
Dimensions (Length x Width x Height)	mm	790 x 355 x 828		790 x 355 x 1228		1320 x 560 x 1140	

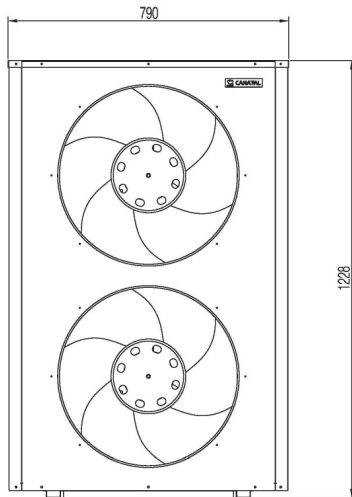
- Please contact our representatives for other requirements.
- The manufacturer reserves the rights to make changes to the product specifications. The data shown above may vary.

**TECHNICAL DATA**  
**GUARDIAN SERIES - CHILLED WATER SYSTEM**

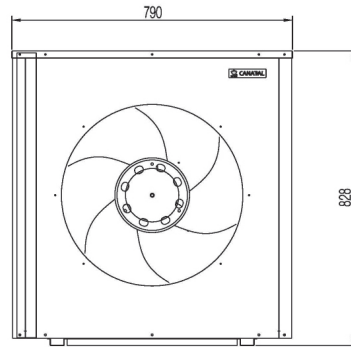
Model (GAD/U**)		12	15	20	30	40
<b>Cooling Capacity - DB24°C, 50%RH – Inlet Water Temp 7°C, Outlet Water Temp 12°C</b>						
Total Cooling Capacity	kW	12.24	17.37	22.77	29.10	38.10
Sensible Cooling Capacity	kW	10.71	15.15	19.83	25.80	33.18
Chilled Water Flow Rate	l/s	0.65	0.92	1.2	1.39	1.67
Pressure Drop	kPa	<70	<70	<70	<70	<80
<b>Cooling Capacity - DB24°C, 50%RH – Inlet Water Temp 10°C, Outlet Water Temp 15°C</b>						
Total Cooling Capacity	kW	9.50	11.88	15.30	18.90	25.56
Sensible Cooling Capacity	kW	9.50	11.88	15.30	18.90	25.56
Chilled Water Flow Rate	l/s	0.45	0.63	0.81	1.00	1.36
Pressure Drop	kPa	<70	<70	<70	<70	<70
<b>Cooling Capacity - DB24°C, 50%RH – Inlet Water Temp 12°C, Outlet Water Temp 18°C</b>						
Total Cooling Capacity	kW	11.25	15.66	20.16	25.20	33.84
Sensible Cooling Capacity	kW	11.25	15.66	20.16	25.20	33.84
Chilled Water Flow Rate	l/s	0.5	0.69	0.89	1.07	1.50
Pressure Drop	kPa	<70	<70	<70	<70	<70
<b>Indoor Fan - Backward Curved EC Fan</b>						
Air Volume	m <sup>3</sup> /h	3150	4150	4950	7800	9950
Power	kW	0.5	0.9	0.9	1.7	1.7
External Static Pressure	Pa	20	20	20	20	20
Fan Quantity	No.	1	1	1	1	1
<b>Air Filter – EN799, Efficiency 90%, G4</b>						
Size - Upper Air Supply	mm	490 x 697 x 20	692 x 678 x 20		490 x 697 x 20	
Size - Lower Air Supply	mm	558 x 558 x 40	758 x 558 x 40		558 x 558 x 40	
Filter Quantity	No.	1	1	1	2	2
<b>Heater – PTC Heater (Optional)</b>						
Power	kW	6	6	9	9	9
<b>Humidifier – Electrode Steam Humidification (Optional)</b>						
Humidification Volume	kg/h	3	3	3	3	3
Power	kW	2.0	2.0	2.0	2.0	2.0
<b>Noise - Measured at a distance of 1.5m from front of unit</b>						
Noise	db(A)	<60	<60	<60	<60	<60
<b>Pipe Connection Size</b>						
Chilled Water Inlet Water Pipe	mm	25.4	25.4	25.4	25.4	25.4
Humidifier Inlet Pipe	mm	6	6	6	6	6
Drain Pipe	mm	25	25	25	25	25
<b>Electrical Parameters – 380V-420V, 50Hz</b>						
Full Load Current	A	18.4	18.4	21.9	21.9	21.9
<b>Dimensions &amp; Weight</b>						
Length x Width x Height	mm	650 x 650 x 1700	835 x 650 x 1700		1250 x 650 x 1700	
Weight	kg	130	140	160	240	280

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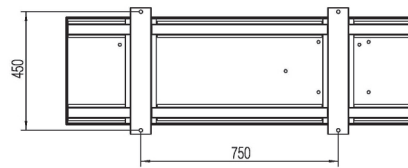
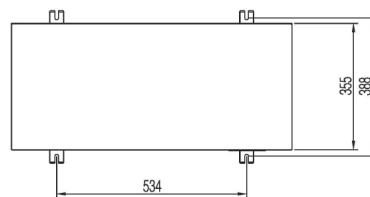
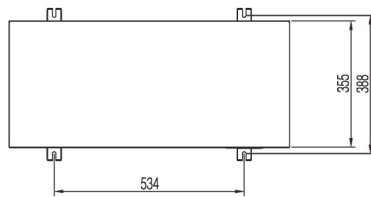
**DIMENSION SPECIFICATIONS**  
**GUARDIAN SERIES - OUTDOOR CONDENSER**



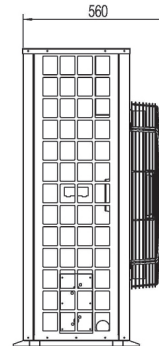
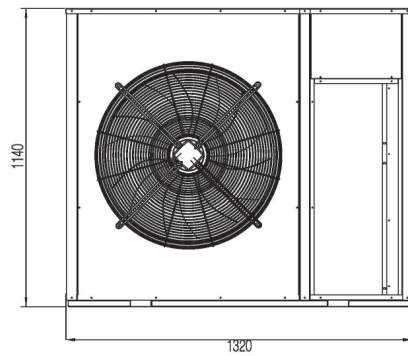
NACD05J



NACD04J



NACD12J



Model	Length	Width	Height	Power Supply
NACD04J	790	355	828	220V/1N/50Hz
NACD05J	790	355	1228	220V/1N/50Hz
NACD12J	1320	560	1140	220V/1N/50Hz