



Constant Temperature & Humidity Air Conditioner



For environmentally conditioned space such as

Telecom Facilities ,
Compute rooms & Clean Rooms

WOLF INTERNATIONAL



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General Information

Introduction

Designed to provide environmental close control tolerances within the conditioned space, such as telecommunication Facilities, Computer Rooms and Clean Rooms, WOLF INTERNATIONAL CTCH range is available with a choice of up-flow and down-flow configuration depending on position with direct expansion air cooled condensing unit includes quality proved and quiet COPELAND SCROLL COMPRESSOR and comprises 13 models. Full units provide full control of temperature, humidity and filtration.

Function

1. ROTARY (SHIFTING) RUN FUNCTION

Distributing equal running time to each Compressor, Re-Heater, Humid-Heater, it extends machine's durability to preventing a part from running excessively, Besides, it is designed for a shift-running by time.

2. RESTART IN ORDER RETURNING FROM BLACKOUT

It is designed to control the start time per each equipment in order to prevent the over-load which can be happened in case the several equipment work at the same time returning the blackout.

3. COMPRESSOR PROTECTION FUNCTION

In cold ambient or long pipe connection, it protects the compressor from damage by frequent motions at the first run.

4. AUTOMATIC DISCONNECTION IN CASE OF COMPRESSOR MALFUNCTION

In case of fault on compressor during running, it shifts

the other compressor and disconnects the faulty compressor automatically.

5. RUN/STOP STATE MEMORY FUNCTION

Memory function of the controller enables all condition to return back to the previous state when the power is on/off.

6. AUTOMATIC RESET FUNCTION

In case the MICOM is suspended or malfunctioned by NOISE, SURGE VOLTAGE, LIGHTING, VOLTAGE Drop (INPUT Voltage below 98V) etc., It automatically reset.

7. EXTRA-ALARM OUTPUT FUNCTION

In case of malfunction during operation, alarm output AC 220V is generator. If operator can not hear the MICOM warning buzzer by noise or it is necessary to know the alarm existence in distance, extra alarm or warning ramp can be equipped for additional.



Features

- Motors rated for 50 cycle application.
- Fin & tube evaporator.
- Electric Aerofin Heater.
- Multi heating step system.
- Smart & user friendly Micro Controller operation.
- Cleanable cylinder & electrodes humidifier.
- Sirocco fan for low noise.
- Upflow & downflow configuration available.
- Electric galvanized sheed steel & Epoxy powder painted construction.
- Refrigerant control by thermostatic expansion valve.
- Condensing unit with quality approved Copeland scroll compressor.

Model Nomenclature

CTC	U	030	S
Model	Airflow	Equiv. HP	Matching Condensing Unit
Constant	U = Upflow	030 = 3 HP	S = Single
Temperature	D = Downflow	050 = 5 HP	D = Dual
Humidity		060 = 6 HP	
		075 = 7.5 HP	
		100 = 10 HP	
		150 = 15 HP	

SPECIFICATION (50Hz)

Downflow Configuration		CTHD030S	CTHD050S	CTHD060S	CTHD075S	CTHD100D	CTHD150D	CTHD200D
Cooling Capacity (kW)		8.45	14.3	16.9	17.75	28.6	35.5	42.1
Power Supply	MAIN	3PH, 380V, 50Hz						
	Control	1PH, 200V, 50Hz						
Dimension(mm)	H	1780	1780	1780	1780	1780	1780	1780
	W	730	915	1243	1243	1413	1695	1963
	D	720	720	720	720	770	820	820
Construction		Electric Galvanised Sheet steel, Epoxy Baked Powder Paint-Ivory						
Evaporator	Coil	Copper Tube / Corrugated Aluminium Fin						
	Face Area (m ²)	24	41	49	53	90	114	137
Compressor	Type	Hermetic-Reciprocation						
	Q'ty	1	1	2	1	2	2	2
	Oil	SUNISO 4GS						
Refrigerant		R-22 (optional on request)						
Refrigerant Control		Thermostatic Expansion Valve						
Holding Charge		Nitrogen Charged						
Fan & Motor	Fan type	Sirocco Fan Single						
	Size/Q'ty (kw)	0.3x1	0.5x1	0.3x2	0.4x2	0.5x2	0.75x2	1.1x2
	Airflow (CMM)	30	54	61	69	101	120	159
	Static Pressure(mmAq)	11-18						
Humidifier	Type	Cleanable Cylinder & Electrodes						
	Electric(kw)	3.6	3.6	3.6	3.6	9.4	9.4	9.4
	Capacity(kg/hr)	5	5	5	5	13	13	13
Electric Heater	Type	Aerofin Heater						
	Capacity(kw)	7.5	10	12	14	16	20	24
	Heating Step	3	4	4	4	4	4	4
Protection Device		High/Low Pressure Switch						
		Over-current Relay, Fuse						
		Over-heating Protector						
Connection	Suction	3/8"	1/2"	3/8"x2	5/8"	1/2"x 2	5/8"x2	5/8"x2
	Discharge	5/8"	7/8"	5/8"x2	11/8"	7/8"x2	11/8"x2	11/8"x2
Included Accessories		Filter Drier, Sight Glass, Thermostatic Expansion Valve, Solenoid Valve, Air Filter, High/Low Pressure Gauge, Polyurethane Insulation						
Micro Controller		Run/Standby Operation, Local/Remote Networking, Automatic Compressor Rotation, Audio-Visual Alarm, Automatic Reset,						
		Occupied/Unoccupied Set point, Duty Rotation (network units)						
		Remote Monitoring (option), Remote On/Off (option)						
Coil		Inner Rippled Copper Tube/Corrugated Aluminum Fin						
Model No.		CNH030	CNH050	CNH030	CNH075	CNH050	CNH075	CNH100
		Single	Single	Dual	Single	Dual	Dual	Dual
Matched Condensing Unit	Fan	f450X1	f550x1	f550x1	f630x1	f550x2	f630x2	f630x2
	Motors (kw)	0.2X1	0.2X1	0.2X2	0.4X1	0.2X2	0.4X2	0.4X2
	Airflow (CMM)	54	102	54X2	145	102X2	145X2	158X2
	Entering Air	23±2°C						
Applicable	Ambient	46°C						
Condition	RH	55±5%						



SPECIFICATION (50hz)

Upflow Configuration		CTHU030S	CTHU050S	CTHU060S	CTHU075S	CTHU100D	CTHU150D	CTHU200D
Cooling Capacity (kW)		8.45	14.3	16.9	17.75	28.6	35.5	42.1
Power Supply	MAIN	3PH, 380V, 50Hz						
	Control	1PH, 200V, 50Hz						
Dimension(mm)	H	1950	1950	1950	1950	1950	1950	1950
	W	730	915	1243	1243	1413	1693	1963
	D	700	700	700	700	750	800	800
Construction		Electric Galvanised Sheet steel, Epoxy Baked Powder Paint -Ivory						
Evaporator	Coil	Copper Tube / Corrugated Aluminium Fin						
	Face Area (m ²)	24	41	49	53	90	114	137
Compressor	Type	Hermetic-Reciprocation						
	Q'ty	1	1	2	1	2	2	2
	Oil	SUNISO 4GS						
Refrigerant		R-22						
Refrigerant Control		Thermostatic Expansion Valve						
Holding Charge		Nitrogen Charged						
Fan & Motor	Fan type	Sirocco Fan Single						
	Size/Q'ty (kw)	0.3x1	0.5x1	0.3x2	0.4x2	0.5x2	0.75x2	1.1x2
	Airflow (CMM)	30	54	61	69	101	120	159
	Static Pressure(mmAq)	11-18						
Humidifier	Type	Cleanable Cylinder & Electrodes						
	Electric(kw)	3.6	3.6	3.6	3.6	9.4	9.4	9.4
	Capacity(kg/hr)	5	5	5	5	13	13	13
Electric Heater	Type	Aerofin Heater						
	Capacity(kw)	7.5	10	12	14	16	20	24
	Heating Step	3	4	4	4	4	4	4
Protection Device		High/Low Pressure Switch						
		Over-current Relay, Fuse						
		Over-heating Protector						
Connection	Suction	3/8"	1/2"	3/8"x2	5/8"	1/2"X 2	5/8"X2	5/8"X2
	Discharge	5/8"	7/8"	5/8"X2	1 1/8"	7/8"X2	1 1/8"2	1 1/8"X2
Included Accessories		Filter Drier, Sight Glass, Thermostatic Expansion Valve, Solenoid Valve, Air Filter, High/Low Pressure Gauge, Polyurethane Insulation						
Micro Controller		Run/Standby Operation, Local/Remote Networking, Automatic Compressor Rotation, Audio-Visual Alarm, Automatic Reset,						
		Occupied/Unoccupied Set point, Duty Rotation (network units)						
		Remote Monitoring (option), Remote On/Off (option)						
Coil		Inner Rippled Copper Tube/Corrugated Aluminum Fin						
Model No.		CNH030	CNH050	CNH030	CNH075	CNH050	CNH075	CNH100
		Single	Single	Dual	Single	Dual	Dual	Dual
Matched Condensing Unit	Fan	f450X1	f550x1	f550x1	f630x1	f550x2	f630x2	f630x2
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	Airflow (CMM)	54	102	54X2	145	102X2	145X2	158X2
	Entering Air	23±20C						
Applicable Condition	Ambient	46°C						
	RH	55±5%						

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