Inrow Cooling CW HCH1870

Features	
	HCH1870
Total Cooling Capacity@38DegC Return(kW)Chiller supply7℃	33.1
Sensible Cooling Capacity@38DegC Return.(kW)7℃	28.8
SHR	0.87
Controller & Display	
Control Logic	**PID/Fuzzy**
Backlit LCD Display	Yes
Touch Screen	No
Graphic Advanced Display	No
Humidifier & Re-Heat	
Humidifier Capacity(KG)	NO
Humidifier Type	NO
Flush Cycle	NO
Humidifier Power(kW)	NO
Re-Heat Capacity(kW)	NO
No. of steps	NO
Physical Details-Indoor Unit	
Width(mm)	300
Depth(mm)	1090
Height(mm)	2000
Weight(kg)	187
Air Filter	
MERV value	MERV1
Efficiency (% with particle size)	70<=E3(3~10um)
Optinal filter	NO
Compliance Approval	
UL	NO
CE	NO
RCM	NO
C-UL	NO
Cooling Coil & Fan	
Type of fins (specify)	
Fin material	Aluminium
Tube Material	Copper
Face velocity (MPS)	5.08
Face Area—m2	0.41
Rows Deep	88
Fins per inch	16
External static pressure (mm)	<10
EC Plug Fans	Yes
EC Plug Fans Hot swappabal	Yes
EC Fan (Nos.)	8

Two fan power supply	Yes
CFM@Full Speed-CFM	4400
Rating of fan motor (Watt) each	221
Misc	
Top/Bottom piping connection	Optional
Frame	Zincification
Internal chilled water Flow meter	Yes
2/3 Way modulating valve	Yes
Front and rear exterior panels	Perforated
Water Leak Detection(WLD)	
Condensate Management	Dual Float
Noise Level(dB)	88
Adjustable modular baffle system	NO
Units provided with clasters and leveling feet	Yes
Remote racks temperature sensors (Nos)	4
Dual Float Condensate pump	Yes
Pump Capacity	60L/h@5m
Pump Lift-maximum (m)	<5
Pump distance (m)	15
Dual Power Supply	Standard
Intellislot Housing or equivalent monitoring solution(LAN/BMS)	Optional
SMS Alert	NO
E-Mail Alert	NO
Service Notifications	YES
Dew point control pump (DPCP)	NO
Seismic latch kit	NO
Condensate Drain Pan(GI/SS)	YES

Technical Data Sheet

	General	
	Total actual capacity(TR) at specified outdoor/indor conditions	43.3
	Sensible capacity(TR) at operating parameters	42.8
	Total heat Rejection(TR)	45.1
	CFM delivered at 10mm external static pressure	4400
	Power consumption(KW) at the operating parameters(Seprately, fans, Heater and humidifier)	2.41
	Power supply	Single phase 198-240Vac
A.	**CABINET FOR PACKAGE UNIT**	
1	Size of Unit (H X W X D)	2000X300X1090
2	Sheet Thickness	1.2
C.	**OPERATING PARAMETERS**	
1	Capacity of Package Unit in TR at above Parameters	43.4
2	Sensible Heat Factor	0.99
E.	**EVAPORATOR**	
1	Size of cooling Coil (Face area in sqmt.)	0.41 m2
2	Static Pressure	302 Pa
3	Tube Material	Copper
	(Manufacturer's Certificate in support of above)	
4	Tube Outside diameter	9.52 mm
5	Tube thickness	0.31 mm
	(Manufacturer's Certificate in support of above)	
6	Method of Expansion of tubes	mechanical expanding
7	No of Rows	4
8	Fin Material	Aluminum
9	Fin Thickness (0.1 mm with Hydrophilic coating)	0.115 mm
	(Manufacturer's Certificate in support of above)	
10	No. of Fins per Inch	16 FPI
12	Air Velocity across Coil	5.08 m/s
13	Condensate Tray Gauge	N/A
14	Condensate Tray Material	SUS304
G	**ELECTRICAL MOTORS**	
	(A) EVAPORATOR MOTOR (EC MOTOR)	
1	No. of Motors	8
	(Electronically commuted with variable speed)	
2	Manufacturer	Delta
3	Rated output (K.W.)	0.221
4	Range of working Voltage (Volts)	DC36~60V
5	Powe supply	DC54V
5	Rated speed (R.P.M)	4500
6	Full Load Current (Amp.)	2.38
7	Class of insulation	UL Class A
H	**(A) EVAPORATOR Fan**	
1	No. of fans	8
2	Make	Plastic
3	Type	Axial
4	Dia (MM)	188
J.	**AIR FILTERS**	
1	Make	MERV8
2	Size of filter (face area in sq. Mt.)	909*270*15*1.2
3	Type of filter	V type
4	Filter medium	Acetate Flber&Nylon
5	Material of frame	Card board
6	Thickness of frame (mm)	2
M	**GENERAL**	
1	GPM at above	
2	Chilled water Pipe connection size	DN25 PT Female
N	**DEHUMIDIFICATION PROCESS**	Mechanical dehumidification

Capacity at-

A) 22+/-1 Deg C in front of server racks and return air @25 DegC and at 7/12 CHW	15.2kW
B) 22+/-1 Deg C in front of server racks and return air @30 DegC and at 7/12 Deg C ambient	22.3kW
C) 22+/-1 Deg C in front of server racks and return air @35 DegC and at 7/12 Deg C ambient	29.8kW
A) 22+/-1 Deg C in front of server racks and return air @25 DegC and at 10/15 CHW	17.2kW
B) 22+/-1 Deg C in front of server racks and return air @30 DegC and at 10/15 Deg C ambient	25.7kW
C) 22+/-1 Deg C in front of server racks and return air @35 DegC and at 10/15 Deg C ambient	35.9kW
A) 22+/-1 Deg C in front of server racks and return air @25 DegC and at 13/18 CHW	12kW
B) 22+/-1 Deg C in front of server racks and return air @30 DegC and at 13/18 Deg C ambient	20.6kW
C) 22+/-1 Deg C in front of server racks and return air @35 DegC and at 13/18 Deg C ambient	28.9kW

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Features	
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Active Flow Controller sensor fault	Yes
Air filter clogged	Yes
Air filter run hours violation	Yes
Check condensate management system	Yes
Chilled water flow meter fault	Yes
Chilled water valve actuator fault	Yes
Chilled water valve control not set to automatic	Yes
Coil chilled water temperature sensor error	Yes
Coil condensation possible	Yes
Condensate pan full (excluding ACRC301H)	Yes
Controller power supply X fault	Yes
Cool fail	No
EcoAisle door open	No
Entering chilled water high temperature high violation	Yes
Entering/leaving chilled water temperature sensor fault	Yes
Factory configuration not completed	No
Fan X error	Yes
Fan power supply X current sense fault	No
	Yes
Filter differential pressure sensor fault	Yes
Humidity sensor fault	Yes
Input contact fault	No
Insufficient airflow	No
Internal communication fault	Yes
Lower return air/supply air sensor fault	Yes
Primary/secondary power source fail	No
Rack high temperature condition	Yes
Rack temperature sensor X error	Yes
Return air/supply air high temperature violation	Yes
Shutdown due to input contact	No
Unexpected number of AFCs/leak detectors/rack inlet temperature sensors/units in group	
Unit is in maintenance mode	No
Unit service required	Yes
Upper return air/supply air sensor fault	No
Water detected fault/shutdown	No
Fan run hours exceeded	Yes
Condensate run hours exceeded	No
Group communication fault	Yes
Invalid supply setpoint	No
Link isolation relay fault	No
Humidifier water conductivity high	No
Humidifier fault tolerance exceeded	No
Humidifier low water	No

Humidifier excessive output reduction	No
Humidifier drain fault	No
Humidifier cylinder full	No
Humidifier replace cylinder	No
Humidifier RS485 communication fault	No
Humidity high/low violation	Yes
Supply humidity sensor fault	Yes
Return humidity sensor fault	Yes
Heater fault	No
Heater run hours exceeded	No