

“澳電大樓空調更換系統工程 ”
CEM BUILDING'S HVAC SYSTEM REPLACEMENT
設備一覽表
EQUIPMENT SCHEDULE

Water-Cooled Magnetic Oil Free Centrifugal Liquid Chiller

Item	Specified	Offered
Location	CV4 Chiller plant RM.	
Reference No	-	
Quantities	2	
Manufacturer	Carrier or equivalent	
Country of Origin	PRC	
Model No.	19MV-31K31M339E39	
Cooling Capacity (kW)	1230	
Unit Power Input (kW)	207	
Efficiency - COP _R	5.94	
IPLV. IP COP _R	10.3	
Refrigerant	R-513A	
Operating Weight (kg)	9050	
Overall Dimension (L x W x H) (mm)	4021 x 2002 x 2538	
Compressor		
Type of Compressor	Back-to-back Two-stage, Direct Drive Semi-hermetic Magnetic Oil Free Centrifugal Compressor	
No. of Compressor	1	
Minimum No. of Capacity Step	Stepless	
Minimum Capacity Control	10%	
Evaporator		
Type	Shell and Tube - Flooded Type	
Insulation Material	25mm thick Closed-Cell Foam	
Fouling Factor ((M2-K)/kW)	0.0176	
Chilled Water Out/In Temp (°C)	7 / 12	
Water Quantity (L/s)	58.65	
Maximum Water Pressure Drop (kPa)	65	
Water Inlet / Outlet Pipe (mm)	DN 200	
Condenser		
Type	Shell and Tube Type	
Fouling Factor ((M2-K)/kW)	0.044	
Condenser Water Out/In Temp (°C)	37 / 32	
Water Quantity (L/s)	69.12	
Maximum Water Pressure Drop (kPa)	60	
Water Inlet / Outlet Pipe (mm)	DN 200	
Starter		
Line Volt/Phase/Hertz	400 / 3 / 50	
Starter Type	Factory Supplied and Installed Unit-Mounted Variable Frequency Drive and Active Harmonic Filter	
Total Harmonic Distortion	≤ 5%	
Chiller Line Current (A)	307	
Chiller Inrush Current (A)	307	
Control System		
Control Panel	Microprocessor Control Panel	
Noise:		
Quiet operation	82dBA	
Remark		

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Water-Cooled Centrifugal Liquid Chiller (Oil Lubricated Bearing)

Item	Specified	Offered
Location	As Shown	
Reference No		
Quantities	2	
Manufacturer	Carrier or equivalent	
Country of Origin	PRC	
Model No.	19MVR31K31M339E39	
Cooling Capacity (kW)	1230	
Unit Power Input (kW)	207.5	
Efficiency - COP _R	5.928	
IPLV, IP COP _R	10.03	
Refrigerant	R-513A	
Operating Weight (kg)	9020	
Overall Dimension (L x W x H) (mm)	4321 x 2002 x 2538	
Compressor		
Type of Compressor	Back-to-back Two-stage, Direct Drive Semi-hermetic Centrifugal Compressor	
No. of Compressor	1 (Not More Than One Centrifugal Compressor per Condenser)	
Minimum No. of Capacity Step	Stepless	
Minimum Capacity Control	10%	
Evaporator		
Type	Shell and Tube - Flooded Type	
Insulation Material	25mm thick Closed-Cell Foam	
Fouling Factor ((M2-K)/kW)	0.0176	
Chilled Water Out/In Temp (°C)	7 / 12	
Water Quantity (L/s)	58.65	
Maximum Water Pressure Drop (kPa)	65	
Minimum Working Pressure	240 psi (1654 kPa)	
Water Inlet / Outlet Pipe (mm)	DN 200	
Condenser		
Type	Shell and Tube Type	
Fouling Factor ((M2-K)/kW)	0.044	
Condenser Water Out/In Temp (°C)	37 / 32	
Water Quantity (L/s)	69.06	
Maximum Water Pressure Drop (kPa)	60	
Minimum Working Pressure	240 psi (1654 kPa)	
Water Inlet / Outlet Pipe (mm)	DN 200	
Starter		
Line Volt/Phase/Hertz	400 / 3 / 50	
Starter Type	Factory Supplied and Installed Unit-Mounted Variable Frequency Drive and Active Harmonic Filter	
Total Harmonic Distortion	≤ 5%	
Chiller Line Current (A)	306	
Chiller Inrush Current (A)	306	
Control System		
Control Panel	Microprocessor Control Panel	
Remark		