

TECHNICAL DATASHEET

ITEM	Water Cooled Chiller
MAKE	Carrier / York / Equivalent
DESCRIPTION	Water Cooled Centrifugal Chiller Chlorine Free R134a Refrigerant Two Stage Compressor 2110 kW Complete with Unit Mounted VFD
NUMBER OF UNITS	2 NOS. (1 DUTY AND 1 STAND BY)

SPECIFICATIONS

Chiller	Cooling Capacity	kW	2110
		Tons	600
	Input Power	kW	377.5
Motor	Full Load COPs	ikW/kW	0.179
	RLA	A	651.9
	LRYA	A	1222
Evaporator	Flow Rate	l/s	100.8
	Pressure Drop	kPa	68.8
	Water Connection	mm	DN200
Condenser	Flow Rate	l/s	119.7
	Pressure Drop	kPa	48.5
	Water Connection	mm	DN200
Unit Dimensions	Length	mm	4460
	Width	mm	2054
	Height	mm	2207
Weight	Operating	kG	10225
	Shipping Weight	kG	8603

TECHNICAL DATASHEET

ITEM	Air Handling Unit
MAKE	Carrier / York / SystemAir / Equivalent
DESCRIPTION	Air Handling Unit Floor Mounted with 25mm foaming double par structure with thermal acoustic insulation
NUMBER OF UNITS	2 NOS. (1 DUTY AND 1 STAND BY)

SPECIFICATIONS

6 Rows	Air Volume	m3/h	6000
	Cooling Capacity	kW	39.3
	Heating Capacity	kW	73
	Water Flow Rate	l/s	1.9
	Water Pressure Drop	kPa	40.3
	Water Pipe Size	DN	40
	Drain Water Pipe Size	DN	25
		mm	1640
	Dimensions (L X W X H)	mm	1840
		mm	990
	Weight	kG	318
	ESP Motor Power	kW	3

TECHNICAL DATASHEET

ITEM	Fresh Air Handling Unit
MAKE	Carrier / York / SystemAir / Equivalent
DESCRIPTION	Fresh Air Handling Unit Floor Mounted with 25mm foaming douk structure with thermal acoustic insulation
NUMBER OF UNITS	1 No.

SPECIFICATIONS

4 Rows	Air Volume	m3/h	8000
	Cooling Capacity	kW	88.4
	Heating Capacity	kW	97.8
	Water Flow Rate	l/s	4.2
	Water Pressure Drop	kPa	57.7
	Water Pipe Size	DN	65
	Drain Water Pipe Size	DN	25
		mm	800
	Dimensions (L X W X H)	mm	1000
		mm	1400
	Weight	kG	322
	ESP Motor Power	kW	2.2

TECHNICAL DATASHEET

ITEM	Heat Exchanger	
MAKE	DanFoss / Gunter GmbH / General Electric / Equivalent	
DESCRIPTION	Fresh Air Handling Unit Floor Mounted with 25mm foaming double panel structure with thermal acoustic insulation	
NUMBER OF UNITS	8 Nos.	
SPECIFICATIONS		
Max. Working Pressure	PN (bar)	
Max. Operating Temp	°C	
Min. Operating Temp	°C	
Flow Medium		Water
Volume / Channel	Li	
Connection Size		DN100 / 4"
Connection Type		DN 100/4" flanges. Carbon steel,
Plate material		Stainless steel EN 1.4404 (AISI 316L)
Plate Thickness	mm	0.7
Gasket material		EPDM
Liners in Connections		EPDM
Frame		Painted Frame, Colour RAL 5010
Frame Painting Specification		C4M
Insulation material	40mm PU-Foam DIN 4102-1 B2	
Outer Cap	1mm Aluminum	
Internal Insulation	0.05mm Aluminum Foil	
Panel Fixation	Plastic Rivets	
Temperature	-50 to -80°C	
U-Value	0.38 W/m ² -K	
Insulation Class		4
Heat Loss		
	mm	1039
Dimanesions (LXWXH)	mm	480
	mm	1069
Weight	kG	499

TECHNICAL DATASHEET

ITEM	Rotary UPS
MAKE	ABB / Eaton / Emerson Electric / APC / General Electric / Siemens Socomec / Equivalent
DESCRIPTION	Rotary UPS, Diesel Powered, 1760kW / 2200kVA, 400V, 50Hz Complete with automatic lubrication system, HMI, Dynamic Autonomy Control (DAC), Automatic ByPass
NUMBER OF UNITS	2 Nos. (1 Duty + 1 Stand by), N+1 configuration

SPECIFICATIONS

Voltage	400V, 3Phase
Frequency	50 Hz
Nominal Phase Current	3175 A
Nominal Apparent Power	2200 kVA
Nominal cos Ø	0.84 leading to 0.8 lagging
Efficiency	96.50%
Nominal Autonomy	10 sec
Maximum Autonomy	10.3 sec
Maximum Energy Storage	18.2 MJ
Maximum Temperature	50°C
Humidity	<90%
Control Cabinet	Included
VFD Cabinet	Included

Rotary UPS Dimensions	L (mm)	3535
	W (mm)	1205
	H (mm)	1745
Control Cabinet Dimensions	L (mm)	1210
	W (mm)	510
	H (mm)	2155
VFD Cabinet Dimensions	L (mm)	4670
	W (mm)	1250
	H (mm)	2175

TECHNICAL DATASHEET

ITEM	Central Inverters
MAKE	ABB / Schneider Electric / Huawei / LG / Equivalent
DESCRIPTION	Central Solar Inverters 250kW complete with DC/AC Protection
NUMBER OF UNITS	5 Duty + 5 Redundant, Total 10 nos.

SPECIFICATIONS

Input (DC)

Maximum Input Power (Ppv)	kWp	300
DC Voltage range, mpp (Udc)	Vdc	450 to 750
Maximum DC Voltage	Vdc	900
Maximum DC Current	A	600
Voltage Ripple		< 3%

Output (AC)

Nominal AC Output Power	kW	250
Nominal AC Current	A	485
Nominal Output Voltage	V	300
Output Frequency	Hz	50
Harmonic Distortion, Current		< 3%
Distribution Network Type		TN and IT
Efficiency		98%

Power Consumption

Internal Operation	< 300W
Standby Mode	< 55W
Aux Voltage	230V, 50Hz

Dimensions & Weight

Width	mm	1830
Height	mm	2130
Depth	mm	644
Weight	kG	1100

TECHNICAL DATASHEET

ITEM	Battery Energy Storage System (BESS)
MAKE	BYD Energy Storage / Samsung SDI / ABB / Equivalent
DESCRIPTION	BESS, 2.88 MW
NUMBER OF CONTAINER UNITS	1 No.

SPECIFICATIONS

Module & Rack Specification

Cell Capacity	Ah	200
Energy	kWh	230
Nominal Volt	V	1152
Minimum Volt	V	1008
Maximum Volt	V	1296
Width	mm	500
Depth	mm	938
Height	mm	2400
Weight	kG	2462

System Characteristics

Battery Type		Lithuim-Ion
Energy rating	DC Nominal Energy, MWh	4%
	Discharge C-Rate, C	2
Power Rating	Rated Power, MW	7.37
Battery Voltage	Nominal Voltage, Vdc	1152
	Voltage Range, Vdc	1008-1296

Physical Characteristics

	Quantity	1
Container	Dimensions	40' ISO HC
	Weight, Tons	52.41

Environmental Characteristics

Operating Temperature	-40°C to 60°C
Storage Temperature	10°C to 30°C
Maximum Humidity	95%

Performance Standards

IEC 61427-2	Secondary Cells and batteries for renewable energy storage
IEC 62620	Secondary Lithium Cells and Batteries for Industrial App
PNNL - 22010	Protocol for Measuring Performance of Energy Storage System
	Standards for Inverters, Converters, Controllers &
UL 1741	Interconnection Systems

rel

le panel

