ANNEXTURE- A1

Specification of Pendent Air Conditioner of 160 W

Cooling Capacity	160W (Closed loop type)	
Refrigerant	R22/R134a/R404a	
Mounting Type	Side/Door	
Display and Temperature	Digital Temperature Controller	
Control		
Operating Temperature	25-30 Degree Centigrade	
Ambient Temperature	50 Degree Centigrade	
Compressor	Hermetically Sealed	
Overall Dimensions (Width x	385 MM x 165 MM x 365 MM (Approx.)	
Depth x Height)		
Weight	18 KG (approx.)	
Operating voltage	230V, AC, 50 Hz, 1Φ	
Spares Required:	1. Suitable Compressor (01 No.)	
	2. Condenser Fan Motor Assembly (01 No.)	
	3. Evaporator Fan Motor Assembly (01 No.)	
4. Digital Temperature Controller along with sensor (01 No.)		

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ANNEXTURE- A2

Specification of Pendent Air Conditioner of 250 W

250W (Closed loop type)
R22/R134a/R404a
Side/Door
Digital Temperature Controller
25-30 Degree Centigrade
50 Degree Centigrade
Hermetically Sealed
382 MM x 255 MM x 370 MM (Approx.)
20 KG (approx.)
230V, AC, 50 Hz, 1Φ
1. Suitable Compressor (01 No.) 2. Condenser Fan Motor Assembly (01 No.) 3. Evaporator Fan Motor Assembly (01 No.) 4. Digital Temperature Controller along with sensor (01 No.)

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ANNEXTURE- A3

Specification of Pendent Air Conditioner of 2000 W

Cooling Capacity	2000W (Closed loop type)
Refrigerant	R22/R134a/R404a
Mounting Type	Side/Door
Display and Temperature Control	Digital Temperature Controller
Operating Temperature	25-30 Degree Centigrade
Ambient Temperature	50 Degree Centigrade
Compressor	Hermetically Sealed
Overall Dimensions (Width x Depth x Height)	440 MM x 300 MM x 982 MM (Approx.)
Operating voltage	230V, AC, 50 Hz, 1Φ
Spares Required:	 Suitable Compressor (01 No.) Condenser Fan Motor Assembly (01 No.) Evaporator Fan Motor Assembly (01 No.) Digital Temperature Controller along with sensor (01 No.)



ANNEXTURE- A4

Specification of Oil Chilling Unit (1.5 TR)

SI. No.	Item	Rating & Details	Spares with each unit	Make
01.	Medium to be cooled	Hydraulic Oil		
02.	Cooling Capacity	4500 Kcal/Hr. (1.5 TR)		
03.	Operating Temperature	25-30 Degree Centigrade		
04.	Ambient Temp.	50 Degree Centigrade		- 1 T T T T T T T T T T T T T T T T T T
05.	Refrigerant	R22/R134a/R407c		
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Plate type/Shell type compact chiller	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Pump	Suitable		
10.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
11.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	01 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
12.	Electrical Rating	50 Hz, 3 Phase, 400-420 V OR 1 Phase, 230V.	F	
13.	Safety	HP& LP cut off switches, Overload Protection.		Indfoss/ Ranutrol (For HP & LP cut off switches)

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ANNEXTURE- A5

Specification of Oil Chilling Unit (3.5 TR)

SI.	Item	Rating & Details	Spares with each unit	Make
No.				1
01.	Medium to be cooled	Hydraulic Oil		
02.	Cooling Capacity	10500 Kcal/Hr. (3.5 TR)		2
03.	Operating Temperature	25-30 Degree Centigrade		
04.	Ambient Temp.	50 Degree Centigrade	1	
05.	Refrigerant	R22/R134a/R407c		
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Plate type/Shell type compact chiller	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Pump	Suitable		
10.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
11.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	01 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
12.	Electrical Rating	50 Hz, 3 Phase, 400-420 V.		
13.	Safety	HP & LP cut off switches, Overload Protection.		Indfoss/ Ranutrol (For HP & LP cut off switches)

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ANNEXTURE- A6

Specification of Oil Chilling Unit (5 TR)

SI. No.	Item	Rating & Details	Spares with each unit	Make
01.	Medium to be cooled	Hydraulic Oil		
02.	Cooling Capacity	15000 Kcal/Hr. (5 TR)		8
03.	Operating Temperature	25-30 Degree Centigrade		
04. 05.	Ambient Temp. Refrigerant	50 Degree Centigrade R22/R134a/R407c		
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Plate type/Shell type compact chiller	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Pump	Suitable		
10.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
11.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	01 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
12.	Electrical Rating	50 Hz, 3 Phase, 400-420 V.		
13.	Safety	HP & LP cut off switches, Overload Protection.		Indfoss/ Ranutrol (For HP & LP cut off switches)

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ANNEXTURE- A7

Specification of Water Chilling Unit (3 TR)

SI. No.	Item	Rating & Details	Spares with each unit	Make
01.	Medium to be cooled	Water		
02.	Cooling Capacity	9000 Kcal/Hr. (3 TR)		
03.	Ambient Temperature	50 Degree Centigrade		9
04.	Operating Temperature	15-18 Degree Centigrade		90
05.	Refrigerant	R22/R134a/R407c		(E) #
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Shell type/ plate type compact chiller	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
10.	Tank	120 Liter (Approx.).		
11.	Pump	Suitable		
12.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	01 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
13.	Electrical Rating	3 Phases, 50 Hz, 400-420 Volt.		
14.	Safety	HP& LP cut off switches, Overload protection, Water level controller, Flow switch.		Indfoss/ Ranutrol (For HP & LP cut off switches)

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ANNEXTURE- A8

Specification of Water Chilling Unit (5 TR)

SI. No.	Item	Rating & Details	Spares with each unit	Make
01.	Medium to be cooled	Water		
02.	Cooling Capacity	15000 Kcal/Hr. (5 TR)		
03.	Ambient Temperature	50 Degree Centigrade		76
04.	Operating Temperature	15-18 Degree Centigrade	-	
05.	Refrigerant	R22/R134a/R407c		
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Shell type/ plate type compact chiller	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
10.	Tank	250 Liter (Approx.).		*
11.	Pump	Suitable		4
12.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	01 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
13.	Electrical Rating	3 Phases, 50 Hz, 400-420 Volt.	514	
14.	Safety	HP& LP cut off switches, Overload protection, Water level controller, Flow switch.		Indfoss/ Ranutrol (For HP & LP cut off switches)

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ANNEXTURE- A9

Specification of Water Chilling Unit (7.5 TR)

SI. No.	Item	Rating & Details	Spares with each unit	Make
01.	Medium to be cooled	Water		
02.	Cooling Capacity	22500 Kcal/Hr. (7.5 TR)		
03.	Ambient Temperature	50 Degree Centigrade		
04.	Operating Temperature	15-18 Degree Centigrade		
05.	Refrigerant	R22/R134a/R407c		#1 21
06.	Condenser	Air Cooled, Copper tube with aluminium fins & fan motor assembly.	01 No. extra Fan Motor Assembly should be provided with each unit of machine as spare.	
07.	Compressor	Hermetically sealed compressor.	01 No. extra Compressor should be provided with each unit of machine as spare.	Danfoss/Emerson /Kirloskar/Tecum seh
08.	Evaporator	Shell type/ plate type compact chiller.	01 No. extra Evaporator should be provided with each unit of machine as spare.	
09.	Refrigeration Parts	Drier Expansion Valve	01 No. extra Expansion Valve & Drier should be provided with each unit of machine as spare.	Danfoss/ Alco
10.	Tank	180 Liter (Approx.).		
11.	Pump	Suitable		
12.	Display and Temperature Control	Suitable Digital Temperature Controller with sensors & display.	O1 No. extra set of Digital Temperature Controller with sensor should be provided with each unit of machine as spare.	Danfoss/ Dixell/ Carel/ Advance/Eliwell
13.	Electrical Rating	3 Phases, 50 Hz, 400-420 Volt.		
14.	Safety	HP& LP cut off switches, Overload protection, Water level controller, Flow switch.		Indfoss/ Ranutrol (For HP & LP cut off switches)