		11014											
Sr. No.	Description	UOM	Data (Camman Fay All Madala)	VCN4200 14	VCN42E0 14	VCN4400 14	VCN4700 14	VCN4200 24	VCN42E0 24	VCN400 24	VCN4700 24	VCN4400 24	KCN4700 24
Sr. No.	Description	(Wherever	Data (Common For All Models)	KCIVI300.14	KCM350.14	KCIVI400.14	KCM/00.14	KCIVI300.24	KCIVI350.24	KCIVI400.24	KCIVI700.24	KCIVI400.34	KCIVI700.34
	General Points	Applicable)											
A													
1	Cooling Capacity	ton _R	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
2	Power Consumption	kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
3	Specific Power Consumption	kW/ton _R	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
4	Co-Efficient of Performance (COP)	kW/kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
5	No. of Compressors	Nos.	\longrightarrow	1	1	1	1	2	2	2	2	3	3
6	No. of Individual Refrigerant Circuits	Nos.	\longrightarrow	1	1	1	1	1	1	1	1	1	1
7	Refrigerant												
i	Name	-	R134a	-	-	-	-	-	-	-	-	-	-
ii		kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
iii	Technical Specifications	-	Refer ESP-18-19-003	-	-	-	-	-	-	-	-	-	-
8	Sound Pressure Level												
i	Noise Level	dB	Consult with Engineering Department on Case to Case Basis	-	-	-	ı	-	-	-	-	-	-
ii	Measuring Standard	-	ANSI/AHRI Standard 575-2008	-	-	-	ı	-	-	-	-	-	-
9	Insulation Details												
i	Material	-	Closed Cell Nitrile Foam	-	-	-	ı	-	-	-	-	-	-
ii	Insulation Thickness on Various Parts	-	For Standard Temperature Range (LWT upto 3 0C)	-	-	-	-	-	-	-	-	-	-
	Evaporator Shell	mm	32	-	-	-	-	-	-	-	-	-	-
	Evaporator Tubesheet	mm	19	-	-	-	-	-	-	-	-	-	-
	Evaporator Dished End	mm	19	-	-	-	-	-	-	-	-	-	-
	Evaporator M.W.Box (If Applicable)	mm	19	-	-	-	ı	-	-	-	-	-	-
	Evaporator Support Plate	mm	19	-	-	-	-	-	-	-	-	-	-
	Compressor Motor Body	mm	19	-	-	-	-	-	-	-	-	-	-
	Suction Line Assembly	mm	19	-	-	-	-	-	-	-	-	-	-
	Liquid Line Assembly	mm	9	-	-	-	-	-	-	-	-	-	-
iii	Density	kg/m ³	76.6	-	-	-	-	-	-	-	-	-	-
iv	Thermal Conductivity	W/m.K	0.035 (at 0 0C Mean Temperature)	-	-	-	-	-	-	-	-	-	-
V	Standard	-	IS 14164	-	-	-	-	-	-	-	-	-	-
vi	Adhesive	-	Blend of Synthetic Polymers and Synthetic Resin	-	-	-	-	-	-	-	-	-	-
vii	Insulation Specifications	-	Refer ESP-18-19-004	-	-	-	-	-	-	-	-	-	-
10	Vibration												
i	Vibration Level	mm/sec	Less than 1.5 mm/sec	-	-	-	-	-	-	-	-	-	-
ii	Vibration control	-	Rubber Pads (Standard) / Spring Isolators (At an Additional Cost)	-	-	-	ı	-	-	1	-	-	-
iii	Standard	-	IS 12075	-	-	-	ı	-	-	1	-	-	-
11	Painting Specification												
i	Paint Type	-	RAL 7035	-	-	-	ı	-	-	-	-	-	-
ii	Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-
12	Overall Dimensions												
i	Approx. Length	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
ii	The state of the s	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
iii		mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
13	Space Clearances Required												
i	Plain End Side (For Tube Cleaning)	mm	→	2900	2900	2900	2900	2900	2900	3800	3800	3800	3800
	All Other Sides	mm	\rightarrow	1000	1000	1000	1000	1000	1000	1000	1000	1500	1500
	Overhead	mm	\rightarrow	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
14	Weight			ı		1					1	1	
i	Approx. Shipping Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
ii	- Physical Character 8 11 a 811	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
15	Cable Sizes												
i	Aluminum Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-
ii	Sold began consistent	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-
В	Compressor Details												
1	Make	-	Refer "Make List" Sheet										
2	Type / Description	-	Semi Hermetic, Magnetic Bearings Centrifugal Compressor	-	-	-	-	-	-	-	-	-	-
3	Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
4	Drive	-	Direct Driven by Rotor Shaft	-	-	-	-	-	-	-	-	-	-
5	Compressor Speed (Impeller Tip Speed)	RPM	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-

	_		Compaits Control Doubleton	0/	Defen VCDI Chiller Colection Costons Coftware										
	6		Capacity Control Percentage	%	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
	7		Type of Capacity Control	-	Stepless	-	-	-	-	-	-	-	-	-	-
	8		Capacity Control Mechanism	-	IGV and Speed Variation	-	-	-	-	-	-	-	-	-	-
	9		Design and Test Parameters												
		i	Design Pressure	bar	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
		ii	Test Pressure	kgf/cm ²	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
		iii	Design Temperature	°C	Consult with Engineering Department on Case to Case Basis	_	-	_	-	_	-	_	-	_	_
				°C											
			Max. Allowable Discharge Temperature	, ,	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
	10		Bearings									1		ı	_
		İ	Types of Bearings	-	Magnetic Bearings	-	-	-	-	-	-	-	-	-	-
	11		Lubrication	-	Being Mag-Bearing Compressor, No Lubication is Required	-	-	-	-	-	-	-	-	-	-
	12	_	Compressor Components MOC									_			
		i	Impeller	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-
		ii	Casing	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-
		iii	Shaft	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-
	13		Physical Data of Compressor					•				•			•
		i	Impeller Diameter	mm	Consult with Engineering Department on Case to Case Basis	_	_	-	-	-	-	-	-	_	_
		_	No. of Impeller Stages	Nos.	Consult with Engineering Department on Case to Case Basis	_	_	_	_	_	_	_	_	_	_
	14		Copressor Isolation Type	1											
	± T	_	At Suction	-	Butterfly Valve	_		_		_		_		_	_
		_	At Discharge	-	Check Valve (NRV)								_		
_			Compressor Motor Details		CHECK Valve (INNV)	-	-	-	-	-	-	-	_	-	-
С	4		· · · · · · · · · · · · · · · · · · ·	I	Defer "Make Liet" Chapt										
	1		Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-
	2		Type of Duty	-	Continuous	-	-	-	-	-	-	-	-	-	-
	3	_	Motor Rating	kW	Refer KCPL Chiller Selection System Software	-	1	-	-	-	-	-	1	-	-
	4		Motor Speed	RPM	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
	5		Performance Indicators												
		i	Motor Efficiency Class	-	NA	-	-	-	-	-	-	-	-	-	-
		ii	Motor Power	kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
	6		Motor Cooling												•
		i	Motor Cooling Type	-	Refrigerant Cooled	_	_	-	-	_	_	-	-	-	-
		ii	Cooling Mechanism	-	Liquid Refrigerant	-	-	-	-	-	-	-	-	-	-
			Temperature at full load	°C	10 to 15 (At Normal Condtions)	_	_	_	_	_	_	_	_	_	_
	_		Current Details	<u> </u>	10 to 15 (At Normal Conditions)										
	7														
			Rated Load Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
			Full Load Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
			Inrush/Starting Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
			Locked Rotor Current	Α	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
	8	_	Control Settings									_			
		i	No. of Starts per Hour	Nos.	6	-	-	-	-	-	-	-	-	-	-
			Time Between STOP to START	Sec	300	-	-	-	-	-	-	-	-	-	-
		iii	Time Between START to START	Sec	600	-	-	-	-	-	-	-	-	-	-
D			Power Supply (Standard-Chiller Icomer)	-											
	1	-	Supply Voltage	V	415	-	-	-	-	-	-	-	-	-	-
	2		Permissible Voltage Variation	%	±10%	-	-	-	-	-	-	-	-	-	-
	3														_
	,		Frequency	H7	150	_	_	_	_	_	_	_	_	-	
	4		Frequency Permissible Frequency Variation	Hz %	50 +3%	-	-	-	-	-	-	-	-	-	_
	4		Permissible Frequency Variation	%	50 ±3%	-	-	-	-	-	-	-	-	-	-
	5		Permissible Frequency Variation Phase		±3% 3	- - -	-	-	-	-	-	-	-	-	-
			Permissible Frequency Variation	%	±3% 3 230 (Standard)		- - -	-	- - -	- - -	-	- - -	- - -	-	-
	5		Permissible Frequency Variation Phase	% -	±3% 3 230 (Standard) 110 (Special-Optional)	- - - -			- - - -	- - - -	-			- - -	
	5		Permissible Frequency Variation Phase Control Voltage	% -	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard)	- - - -	-		- - - -	- - - -	- - - -	-	-	-	
	5 6 7		Permissible Frequency Variation Phase Control Voltage Supply Wire System	% - V	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional)	- - - - - -			- - - - -	- - - - -	- - - - -	-	-	-	- - - - -
	5 6		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar	% -	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard)	- - - - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - -		- - - - - - -	
	5 6 7		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details	% - V	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice	- - - - - -	- - - - - -	- - - - -	- - - - - -	- - - - - -	- - - - - -	-	-	-	
E	5 6 7		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar	% - V	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional)	- - - - - - -	- - - - - -		- - - - - - -	- - - - - - -	- - - - - - -	- - - - - -	- - - - - - -	-	
E	5 6 7 8		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice	- - - - - - - -	- - - - - - -	- - - - - -	- - - - - - -	- - - - - -	- - - - - - -	- - - - - -	- - - - - - - -	- - - - - - -	
E	5 6 7 8 1 2		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details Model Design Code	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice Refer KCPL Chiller Selection System Software As per KCPL Standards	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - - -	- - - - - - -	- - - - - - - -	- - - - - - -	- - - - - - - -	- - - - - - -	
E	5 6 7 8 1 2 3		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details Model Design Code Type	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice Refer KCPL Chiller Selection System Software As per KCPL Standards Shell and Tube Flooded Design	- - - - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - -	- - - - - - - - -	- - - - - - - -	
E	5 6 7 8 1 2 3 4		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details Model Design Code Type Tube Side (Fluid)	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice Refer KCPL Chiller Selection System Software As per KCPL Standards Shell and Tube Flooded Design Chilled Water	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - -	- - - - - - - -	- - - - - - - - - -	- - - - - - - - - -	
E	5 6 7 8 1 2 3 4 5		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details Model Design Code Type Tube Side (Fluid) Shell Side (Fluid)	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice Refer KCPL Chiller Selection System Software As per KCPL Standards Shell and Tube Flooded Design		- - - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - - - - - - - - -	- - - - - - - - - - -		- - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - - -	
E	5 6 7 8 1 2 3 4		Permissible Frequency Variation Phase Control Voltage Supply Wire System Fault Level at Busbar Evaporator Details Model Design Code Type Tube Side (Fluid)	% - V - kA	±3% 3 230 (Standard) 110 (Special-Optional) 3 Phase - 4 Wire System (Standard) 3 Phase - 3 Wire System (Special-Optional) As per KCPL Standard Practice Refer KCPL Chiller Selection System Software As per KCPL Standards Shell and Tube Flooded Design Chilled Water	- - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - -	- - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - -	

ii	Max. Operating Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
iii	Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
iv	Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	-	-	_	_	_	_	_	-	_	_
	No. of Passes (Refrigerant Side)	Nos.	Single Pass	_	_	_	_	_	_	_	_	_	_
					_	_			_			_	
	Design Temperature (Water Side)	°C	65	-	-	-	-	-	-	-	-	-	-
	Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
ix	Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
х	Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
xi	Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	_	-	-	_	-	_
	Water Velocity	m/s	Less than 3 m/s	_	_	_	_	_	_	_	_	_	_
	Inlet Pressure (Water Side)	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	_	_	_	_	_	_	_	_	_	_
		°C		_	_	_	_		_			_	
	Evaporating Temperature	-0	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
7	Physical Data of Evaporator												
i	Overall Length of Evaporator	ft		9	9	9	9	9	9	12	12	12	12
ii	Shell Diameter	inch	\longrightarrow	18	18	20	20	22	26	26	26	30	36
iii	Shell Thickness	mm	\longrightarrow	8	8	8	8	8	8	8	8	10	10
iv	Approx. Shell Length	mm	\rightarrow	2668	2668	2662	2662	2662	2650	3536	3536	3526	3504
	Material of Construction of Shell	-	Mild Steel	-	-	_	-	_	-	-	-	-	_
	Material Standard of Shell	-	Refer "MOC" Sheet	_	_	_	_	_	_	_	_	_	_
	imaterial standard of Sileli		Integral Helical Fins on the Outside Surface and Integral Helical Ridges on										
vii	Tube Type/ Nature of Tube Surface	-		-	-	-	-	-	-	-	-	-	-
			the Inside Surface										
	Tube Length	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-
	Tube Diameter	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-
x	Tube Thickness	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-
xi	Material of Construction of Tube	-	Cu	-	-	-	-	-	-	-	-	-	-
xii	Material Standard of Tube	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-
	Water Volume in Evaporator	Liter	Refer KCPL Chiller Selection System Software	-	_	_	_	_	_	_	_	_	_
	Water Box Details												
	Type	_	Standard - Dish Ends (M.W.Box - Optional)	_	_	_		_	_	_	_	_	_
	Material	-	Mild Steel		_				_	_		_	
-		-		-	-	-	-	-	-	-	-	-	-
	Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-
	Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
	End connection	-	Standard - Victaulic Conn. (Flanged Conn Optional)	-	-	-	-	-	-	-	-	-	-
	MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-
vii	MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	1	-	-
9	Accessories Provided												
i	Pressure Relief Valve	-	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-	-	-	-	-	-	-	-	-	-
ii	Drain/Vent Valves	Inch	Plugged Connection Provided (3/8" NPT)	-	-	-	-	-	-	_	-	-	-
F	Condenser Details	•	1 00			•			•			•	
1	Model	-	Refer KCPL Chiller Selection System Software		-	_	-	_	_	-	-	_	-
2	Design Code	-	As per KCPL Standards		_								
3			Shell and Tube Flooded Design										
	Type	-						-					
4	Tube Side (Fluid)	-	Chilled Water	-	-	-	-	-	-	-	-	-	-
5	Shell Side (Fluid)	-	Refrigerant	-	-	-	-	-	-	-	-	-	-
6	Design Parameters	-											
i	Design Temperature (Refrigerant Side)	°C	100	-	-	-	-	-	-	-	-	-	-
ii	Max. Operating Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	_	-	-
	Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	_	_	_	_	_	-	_	_	-	_
	No. of Passes (Refrigerant Side)	Nos.	Single Pass		_			_		_	_	_	
		°C											
	Design Temperature (Water Side)		100	-	-	-	-	-	-	-	-	-	-
	Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
х	Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
xi	Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-
	No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-
	Water Velocity	m/s	Less than 3 m/s	_	-	-	-	_	-	_	_	-	_
	Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)										
XIV	illiet riessure	Dai	Depends on site riping Layout (Maximum Allowable - 9.4 bar)										_

			0 1 1 7 1	0-			ı								
		XV	Condensing Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-
	7		Physical Data of Condenser												
			Overall Length of Condenser	ft	\longrightarrow	9	9	9	9	9	9	12	12	12	12
			Shell Diameter	inch	\longrightarrow	16	16	18	18	20	22	22	22	26	30
		iii	Shell Thickness	mm	\longrightarrow	8	8	8	8	8	8	8	8	8	10
		iv	Shell Length	mm	─	2668	2668	2668	2668	2662	2654	3540	3540	3528	3516
			Material of Construction of Shell	-	Mild Steel	-	-	-	-	-	-	-	_	-	-
			Material Standard of Shell	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	_	_
					Integral Helical Fins on the Outside Surface and Integral Helical Ridges on										
		vii	Tube Type/ Nature of Tube Surface	-	the Inside Surface	-	-	-	-	-	-	-	-	-	-
		viii	Tube Length	mm	Refer "HX Details" Sheet										
			Tube Diameter		Refer "HX Details" Sheet	-	-	-	_	-	-	-	-	-	
				mm		-	-	-	-	-	-	-	-	-	-
-			Tube Thickness	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-
			Material of Construction of Tube	-	Cu	-	-	-	-	-	-	-	-	-	-
			Material Standard of Tube	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-
		xiii	Water Volume in Condenser	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
	8		Water Box Details												
		i	Type	-	Standard - Dish Ends (M.W.Box - Optional)	-	-	-	-	-	-	-	-	-	-
			Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-
			Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-
			Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-
			End connection	-	Standard - Victaulic Conn. (Flanged Conn Optional)	_	-	_	_	-	_	-	_	_	_
			MOC of Water Side Gasket	_	NAM AF 120	_	-	_	_	-	_	_	_	_	_
			MOC of Refrigerant Side Gasket		NAM AF 159										
-	9		Accessories Provided		INDINI DI 133					_		_			-
	9				C - / [C. [-1 - V.] C. D D. [FCD)										
		I	Pressure Relief Valve		Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-	-	-	-	-	-	-	-	-	-
		ii	Drain/Vent Valves	Inch	Plugged Connection Provided (3/8" NPT)	-	-	-	-	-	-	-	-	-	-
I			Suction Line												
	1		Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-
	2		Isolation Valve	-	Butterfly Valve	-	-	-	-	-	-	-	-	-	-
	3		Material of Construction	-	Carbon Steel	-	-	-	-	-	-	-	-	-	-
	4		Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-
	5		Angle Valve	-	Provided on Suction Line For Oil Recovery Line	-	-	-	-	-	-	-	-	-	-
J			Discharge Line	•	•		•			•	•	•			
	1		Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-
	2		Isolation Valve	_	Check Valve (NRV)	_	_	_	_	_	_	_	_	_	_
	3		Material of Construction	_	Carbon Steel	_	_	_	_	_	_	_	_	_	_
	4		Material Standard	_	Refer "MOC" Sheet	_	_	_	_	_	_	_	_	_	_
	5		Skin Type Thermowell	-	Provided on Discharge Line For Discharge Temp. Sensor		-	-	-	-	-	-	-		-
	5				Provided on Discharge Line For Discharge Temp. Sensor	-	-	-	-	-	-	-	-	-	-
K	4		Liquid Line		ACME D24.2										
-	1		Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-
	2		Expansion Valve												
			Туре	-	Electronic Expansion Valve	-	-	-	-	-	-	-	-	-	-
			Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-
			Quantity	Nos.	→	1	1	1	1	1	1	1	1	2	2
			Sight Glass	-	Inbuilt	-	-	-	-	-	-	-	-	-	-
		٧	Moisture Indicator	-	NA	-	-	-	-	-	-	-	-	-	-
	3		Filter Drier	-	NA	-	-	-	-	-	-	-	-	-	-
	4		Material of Construction	-	Copper	-	-	-	-	-	-	-	-	-	-
-	5		Material Standard	-	Refer "MOC" Sheet	_	-	_	_	-	_	-	_	_	_
L			Desuperheater	_	Not Applicable	_	-	_	_	-	_	_	_	_	_
М			Economizer		Not Applicable Not Applicable										
N			Starter and Control Panel		HOEApplicable										
IN	1	-		Ι	Charter and Control Danal Integrated in Citals February d. Dan										
\vdash	1		Panel Enclosure	-	Starter and Control Panel Integrated in Single Fabricated Box	-	-	-	-	-	-	-	-	-	-
	2		Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-
	3		Material of Enclosure	-	CRCA Sheet	-	-	-	-	-	-	-	-	-	-
				I	Fabricated Enclosure -										
	4		Thickness of Enclosure	mm	Load Bearing Member - 2 mm	-	-	-	-	-	-	-	-	-	-
				<u></u>	Non-Load Bearing Member - 1.6 mm										
	5		Ingress Protection (IP)	-	IP54	-	-	-	-	-	-	-	-	-	-
	6		Painting Specification	-											
		i	Paint Type	-	RAL 7035	_	-	-	-	-	-	-	-	-	_
		<u> </u>	n e												

		ii Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	1	-
	7	Mounting Arrangement	-	Mounted on Chiller	-	-	-	-	-	-	-	-	1	-
	8	Type of Starter	-	Inverter Built in Compressor	-	-	-	-	-	-	1	-	1	-
	9	Type of Isolation	-	Common SFU/SDU with Door Handle	-	-	-	-	-	-	-	-	-	-
	10	Type of Protection	-	Fuses per Circuit	-	-	-	-	-	-	-	-	1	-
	11	Switchgear Make	-	Siemens	-	-	-	-	-	-	-	-	-	-
	12	Electrical and Control Cables	-	Power - PVC Insulated Single Core (Vtg. Grade 1.1 kV) Control- PVC Insulated Single Core, Multicore Cable (Vtg. Grade 1.1 kV) Signal- Shielded Cable	-	-	-	-	-	-	-	-	-	-
	13	Optional Features					,							
		i Phase Indicating Lamps		Special-Optional	-	-	-	-	-	-	-	-	-	-
		ii Hooter		Special-Optional	-	-	-	-	-	-	-	-	-	-
	j	ii Energymeter	-	Special-Optional	-	-	-	-	-	-	-	-	-	-
0		Controller												
	1	Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-
	2	Transmitters	-	NA	-	-	-	-	-	-	-	-	-	-
	3	Oil Level Switch	-	Not Applicable	-	-	-	-	-	-	-	-	-	-
	4	Oil Level Failure Trip		Not Applicable	-	-	-	-	-	-	-	-	-	-
	5	LP Switch and Gauge	-	No, Controller Program will Take Care of Low Pressure	-	-	-	-	-	-	-	-	-	-
	6	HP Switch and Gauge	-	No, Controller Program will Take Care of High Pressure	-	-	-	-	-	-	-	-	-	-
	7	Chilled Water Flow Failure	-	Yes	-	-	-	-	-	-	-	-	-	-
	8	Cooling Water Flow Failure	-	Yes	-	-	-	-	-	-	-	-	-	-
	9	Reverse Rotor Protection	-	No	-	-	-	-	-	-	-	-	-	-
	10	High/Low Voltage Trip	-	Yes	-	-	-	-	-	-	-	-	-	-
	11	Low Current Trip (Current Based-Analog)	-	Yes	-	-	-	-	-	-	-	-	-	-
	12	High Current Trip (Current Based-Analog)	-	Yes	-	-	-	-	-	-	-	-	-	-
	13	Phase Failure/Reverse Phasing Trip	-	Yes	-	-	-	-	-	-	1	-	1	-
	14	Earth Fault Trip	-	No	-	-	-	-	-	-	-	-	-	-
	15	Communication Through RS232/RS485	-	RS485	-	-	-	-	-	-	-	-	-	-
	16	Display of Microprocessor	-	Yes	-	-	-	-	-	-	-	-	-	-
	17	Type of Display	-	7" Touch Screen Display	-	-	-	-	-	-	-	-	-	-
	18	Remote Monitoring Facility	-	Yes	-	-	-	-	-	-	-	-	-	-
	19	Output to DCS	-	Applicable (Only if RS485 is Available)	-	-	-	-	-	-	-	-	-	-