		UOM																							
Sr. No.	Description General Points	(Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24	KWK445.24	KWK460.24	KWK475.24
1	Cooling Capacity	ton _R	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Power Consumption Specific Power Consumption	kW kW/ton _R	Refer KCPL Chiller Selection System Software Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Co-Efficient of Performance (COP)	kW/kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	No. of Compressors No. of Individual Refrigerant Circuits	Nos.	→	1	1	1	1	1 1	1	1	1	1	1	1	2	1	1	2	2	2	1	1	2	1	1
	Refrigerant		Inere.																						
i	Name Quantity	- kg	R134a Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 ii	i Technical Specifications Sound Pressure Level	-	Refer ESP-18-19-003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
i	Noise Level	dB	Refer ESP-18-19-001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 ii	Measuring Standard Insulation Details	-	ANSI/AHRI Standard 575-2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Material	-	Closed Cell Nitrile Foam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Insulation Thickness on Various Parts Evaporator Shell	- mm	For Standard Temperature Range (LWT upto -10 0C) 32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator Tubesheet Evaporator Dished End	mm mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator Disned End Evaporator M.W.Box (If Applicable)	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator Support Plate Compressor Motor Body	mm mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Suction Line Assembly	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	Liquid Line Assembly Insulation Thickness on Various Parts	mm -	9 For Brine Temperature Range (LWT below -10 0C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator Shell	mm	51 (32+19)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator Tubesheet Evaporator Dished End	mm mm	32 32	-	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Evaporator M.W.Box (If Applicable) Evaporator Support Plate	mm mm	32	-	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Compressor Motor Body	mm	28 (19+9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Suction Line Assembly Liquid Line Assembly	mm mm	28 (19+9) 19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Density	kg/m ³	76.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thermal Conductivity i Standard	W/m.K -	0.035 (at 0 0C Mean Temperature) IS 14164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
vi	i Adhesive	-	Blend of Synthetic Polymers and Synthetic Resin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii Insulation Specifications Vibration	-	Refer ESP-18-19-004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vibration Level Vibration control	mm/sec	Less than 1.5 mm/sec Rubber Pads (Standard) / Spring Isolators (At an Additional Cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii	Standard	-	IS 12075	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Painting Specification Paint Type	-	RAL 7035	-	-	_	-	I - I	_	-	-	- 1	-	-	-	-	-	-	-	-	-	-	-	- 1	-
ii	Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 i		mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Approx. Width i Approx. Height	mm mm	Refer KCPL Chiller Selection System Software Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Space Clearances Required		Neier NCFE Clinier Selection System Software	-	-	-	-		-	-			-	-	-	-		-	-	-	-		-		-
	Plain End Side (For Tube Cleaning) All Other Sides	mm mm	→ →	2900 1000	2900 1000	2900 1000	2900 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1000	3800 1500	3800 1500	3800 1500	3800 1500	3800 1500
ii	i Overhead	mm	-	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
14 i	Approx. Shipping Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Approx. Operating Weight Cable Sizes	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
i	Aluminum Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper Cable Compressor Details	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	Make Type / Description	-	Kirloskar Chillers Private Limited Semi-Hermetic Twin Screw Compressor																						
3	Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Drive Capacity Control Percentage	- %	Direct Driven by Rotor Shaft	100-25%	100-25%	100-25%	100-25%	100-25%	100-25%	100-25%	- 100-25%	- 100-12.5%	- 100-12.5%	100-12.5%	- 100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	- 100-12.5%	100-12.5%	100-12.5%	- 100-12.5%	- 100-12.5%	100-12.5%
6	Type of Capacity Control	-	Stepless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Capacity Control Mechanism Volumetric Ratio	-	Slide Valve Mechanism Fixed Ratio (2.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Design and Test Parameters Design Pressure	bar	30		_									_											
ii	Test Pressure (Pneumatic)	bar	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii	i Design Temperature Max. Allowable Discharge Temperature	°C °C	120 120	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Bearings																								
i	Types of Bearings	-	Roller Bearings - For Radial Load Angular Contact Roller Bearing - For Axial Load	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Material of Construction	-	Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
iv	Life of Bearing Class of Bearing	Hours -	50,000 Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lubrication Type	- -	Lubrication by Differential Pressure Mechanism																						
ii	Lubricating Oil	-	Synthetic Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Grade of Lubricating Oil Quantity	- Liter	Proprietary Data Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Compressor Components MOC																								
i		-	Alloy Steel Cast Iron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii	Shaft	-	Alloy Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Physical Data of Compressor	l	Aluminum Alloy		-								-					-	-						-
	Screw Construction	-	Twin Screw	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C. N.		UOM																						
Sr. No.	Description	(Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24 KWK445.2	24 KWK460.24	KWK475.24
	No. of Lobes Male Rotor	Nos.	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
	No. of Lobes Female Rotor	Nos.	6	-					-	-	-	-	-	-	-	-	-	-	-	-			-	4 -
	Male Rotor Diameter (mm)	mm	Proprietary Data	-	للنا			+	-	-	-	-	-	-	-	-	-	-	-	-			-	4
	Female Rotor Diameter (mm)	mm	Proprietary Data Male Rotor						-	-	-		-	-	-	-	-	-		-			-	4
	Driving Rotor Oil Filter	-	Iviale Rotor						-	-	-		-	-	-	-	-	-		-			-	
	Micron Rating	Micron	10	-	-	-	-	- 7	-	-	-	-	-	-	-	-	-	-	-	-	- 1		_	
	Material of Construction		Resin Impregnated Fibres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	- 7
iii	Quantity	Nos.	1 No. per Compressor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
16	Copressor Isolation Type																			•				
	At Suction	-	Butterfly Valve Shut-off Valve	-			<u> </u>	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	4 -
С	At Discharge Compressor Motor Details		Strut-off valve						-	-	-	-	-	-	-	-	-	-		-			-	
1	Make	-	Kirloskar Approved Vendor	- 1	-	-	-	- 1	-	-	-	-	-	-	-	-	-	-	-	-	-		-	- /
2	Motor Type	-	Semi-Hermetic Squirrel Cage Induction Motor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	- /
	Type of Duty	-	Continuous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
5	Motor Rating		Refer KCPL Chiller Selection System Software	-			<u> </u>		-	-	-	-	-	-	-	-	-	-	-	-			-	4 -
	Motor Speed (Synchronous) Ingress Protection (IP)	KPIVI	3000 NA, Being Semi-Hermetic Type	 				 			-			-	-	-	-			-			-	+ :
7	GD ² of Rotor		Proprietary Data	- 1	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
8	Whether SPDP or TEFC?		NA, Being Semi-Hermetic Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	Power Supply Details (Standard)																							
	Supply Voltage		400						-	-	-	-	-	-	-	-	-	-	-	-				
	Permissible Voltage Variation Frequency	,	±10%																					
	Permissible Frequency Variation		±3%			-	-		-	-	-	-	-	-	-	-	-	-		-				
V	Phase	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	Performance Indicators																							
	Motor Efficiency Class		NA Defeat VCDL Chilles Colorbine System Coffusion						-	-	-	-	-	-	-	-	-	-	-	-				4
	Motor Power Motor Efficiency	kW -	Refer KCPL Chiller Selection System Software Consult with Engineering Department on Case to Case Basis																-					
	Power Factor	-	Consult with Engineering Department on Case to Case Basis Consult with Engineering Department on Case to Case Basis		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-				
v	Class of Insulation		Class F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
	Motor Cooling																							
	Motor Cooling Type	-	Refrigerant Cooled	-			<u> </u>	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	4 -
-	Cooling Mechanism Temperature at full load	°C	Suction Gas 10 to 15 (At Normal Condtions)					-	-	-	-	-	-	-	-	-	-	-		-			-	+
	Current Details	L L	10 to 13 (At Normal Conditions)						-	-	-	-	-	-	-	-	-	-		-			-	
	Rated Load Current	А	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1		-	- 7
	Full Load Current	А	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1		-	
	Inrush/Starting Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
	Locked Rotor Current	A	Refer KCPL Chiller Selection System Software	- 170	- 170				-	-	-	- 470	- 470		-	-	-	-	-	-	-		-	
	Starting Torque No Load Current	N.m A		172 45.7	172 45.7	260 72.3	260 72.3	260 72.3	260 72.3	260 72.3	260 72.3	172 + 172 45.7 + 45.7	172 + 172 45.7 + 45.7	260 + 172 72.3 + 45.7	260 + 260 72.3 + 72.3	260 + 260 72.3 + 72.3		260 + 260 72.3 + 72.3	72.3 + 72.3	260 + 260 72.3 + 72.3	260 + 260 72.3 + 72.3	260 + 260 260 + 260 72.3 + 72.3 72.3 + 72.	260 + 260	260 + 260 3 72.3 + 72.3
	Acceleration Time to Reach Rated Speed		2 to 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	Control Settings	'																						
	No. of Starts per Hour	1105.	4	-		-	- '	-	-	-	-	-	-	-	-	-	-	-	-	-			-	4 -
	Time Between STOP to START Time Between START to START		300 900				- '		-	-	-	-	-	-	-	-	-	-	-	-			-	4
	Power Supply (Standard-Chiller Icomer)	sec	300		-				-	-	-	-	-	-	-	-	-	-		-	-		-	
	Supply Voltage	V	415	- 1	-	-	- 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	- /
	Permissible Voltage Variation		±10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
3		Hz	50				- '		-	-	-	-	-	-	-	-	-	-	-	-	-		-	4
5	Permissible Frequency Variation	%	±3%					+:-	-	-	-	-		-	-	-	-	-		-			1	+
			230 (Standard)	 						-				-	-		-			-				
6	Control Voltage	V	110 (Special-Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
7	Supply Wire System	-	3 Phase - 4 Wire System (Standard)	-	-	-	- '	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
+	Fault Level at Busbar	1.4	3 Phase - 3 Wire System (Special-Optional)						-	-	-	-	-	-	-	-	-	-	-	-				4
	Oil Separator Details	kA	As per KCPL Standard Practice		-	-				-	-			-	-	-	-	-	-	-	-		-	
1	Type	-	Horizontal Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
2	Internal Structure		Baffle - Demister Arrangement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-
3	Method of Oil Separation		Separation by "Filtering Effect" Obtained Through Demister	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
4 i	Material of Construction Body and Other Parts		Mild Steel (Refer "MOC" Sheet)																	_				
	Demister		SS SS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
5	Physical Details										'													
	Shell Diameter	inch	\rightarrow	22	22	22	22	26	26	26	26	22	22	22	22	22	22	26	26	26	26	26 26	26	26
	Approx. Length Seperation Efficiency	mm %	99	1225	1225	1225	1225	1395	1395	1395	1395	2035	2035	2035	2035	2035	2035	2365	2365	2365	2365	2365 2365	2365	2365
	Oil Heater Details	%	33		-					-	-			-	-	-	-	-	-	-	-		-	
	Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-			-	
ii	Quantity	Nos.	· · · · · · · · · · · · · · · · · · ·	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2 2	2	2
	Power Supply	V	230	- 1		-	-		-	-	-	-	-	-	-	-	-	-	-	-	- 1		-	4 -
F iv	Rating		250 Not Applicable			-			-	-	-	-	-	-	-	-	-	-	-	-			-	
	Evaporator Details		постурновие						-	-	-		-	-			-			-				
1	Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1		-	-
	Design Code		As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
3			Shell and Tube Flooded Design				-		-	-	-	-	-	-	-	-	-	-	-	-			-	4
	Tube Side (Fluid) Shell Side (Fluid)	-	Chilled Water Refrigerant						-	-	-		-	-			-		-	-				
	Design Parameters		nemgeralit		-					-	-			-	-	-	-	-	-	-	-		-	
	Design Temperature (Refrigerant Side)	°C	65		_	-		-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	- -	_	
	Max. Operating Pressure (Refrigerant Side)	-	Refer ESP-07-08-107		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
iii	Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-]		-	
	Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	- 1		-	-		-	-	-	-	-	-	-	-	-	-	-	-	- 1		-	
	Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	-					-	-	-	-	-	-	-	-	-	-	-	-	السناس		-	4
		A1	Cinala Bass																					
vi	No. of Passes (Refrigerant Side)	Nos.	Single Pass						-	-	-	-								-				
vi vii		°C	Single Pass 65 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	

Sr. No.	Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24	KWK445.24	KWK460.24	KWK475
	Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Test pressure (Water Side)		Refer ESP-07-08-107	-							-	-	-	-	-		-		-	-	-	-			-
	ii Testing method (Water Side) iii No. of Passes (Water Side)	- Nos.	Refer ESP-07-08-107 Two Pass	-		+:-		 				-	-		-				-						
	ii Water Velocity	m/s	Less than 3 m/s	-	-		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-		
xi	v Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	v Evaporating Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Physical Data of Evaporator Overall Length of Evaporator	ft		9	g	1 0	0	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	i Shell Diameter	inch		20	20	22	24	22	22	22	22	22	22	24	24	24	26	26	26	26	30	30	30	30	36
	ii Shell Thickness	mm	→	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10	10	10	10
	Approx. Shell Length	mm		2662	2662	2662	2650	3548	3548	3548	3548	3548	3548	3536	3536	3536	3536	3536	3536	3536	3526	3526	3526	3526	3504
	Material of Construction of Shell Material Standard of Shell	-	Mild Steel Refer "MOC" Sheet	-		+				\vdash	-	-	-	-	-				-				-	\vdash	
- I V			Integral Helical Fins on the Outside Surface and Integral Helical Ridges on	-				 			-	-	-	-	-				-						
V	Tube Type/ Nature of Tube Surface	-	the Inside Surface	-		-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	-	7
	Tube Length		Refer "HX Details" Sheet	-	-	<u> </u>	-	-		-	-	-	-	-	-		-	-	-	-	-	-			-
	Tube Diameter Tube Thickness	mm mm	Refer "HX Details" Sheet Refer "HX Details" Sheet	-	- : -	 	- : -	 				-	-	-	-				-	-	-		- : - 		-
	i Material of Construction of Tube	-	Cu Cu	-	- 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7	-	-	-	-
	ii Material Standard of Tube	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii Water Volume in Evaporator	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-		-	-	-	-	-	-		-		-	-	-	-	-	-	-
	Water Box Details Type		Standard - Dish Ends (M.W.Box - Optional)			Ι.																			
	i Material		Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		- 7	-	-	-	
	Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nozzle size	NB	Refer KCPL Chiller Selection System Software	-			-			-	-	-	-	-	-	-	-		-			-		-	-
	End connection MOC of Water Side Gasket	-	Standard - Victaulic Conn. (Flanged Conn Optional) NAM AF 120																						
	ii MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	_	- 7	-	-	-	
9	Accessories Provided																								
	Pressure Relief Valve		Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-		<u> </u>	-	-		-	-	-	-	-	-		-		-	-	-	-	-		-
H	i Drain/Vent Valves Condenser Details	Inch	Plugged Connection Provided (3/8" NPT)	-		-	-	-		-		-	-	-	-	-	-	-	-			-		-	-
1		-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	-	-	-	-	-
2	Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
3			Shell and Tube Flooded Design	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-		4
	Tube Side (Fluid) Shell Side (Fluid)	-	Chilled Water Refrigerant	-		+				\vdash	-	-	-	-	-				-				-	\vdash	
	Design Parameters		neingerant											_											
i	Design Temperature (Refrigerant Side)	°C	100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	- /		-	-	-	-
	Max. Operating Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Design Pressure (Refrigerant Side)		Refer ESP-07-08-107	-		<u> </u>	-	-		-	-	-	-	-	-		-		-	-	-	-	-		-
	Test pressure (Refrigerant Side) Testing method (Refrigerant Side)	bar -	Refer ESP-07-08-107 Refer ESP-07-08-107	-	 	+ -		 			-	-	-	-	-			-	-						-
	No. of Passes (Refrigerant Side)	Nos.	Single Pass	-	- 7	-	- 1	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7	-	-	-	-
	ii Design Temperature (Water Side)	°C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-		-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
	Design Pressure (Water Side)	bar	Refer ESP-07-08-107 Refer ESP-07-08-107	-	-	 	-	-		-	-	-	-	-	-		-		-	-	-	-	-	-	-
	Test pressure (Water Side) Testing method (Water Side)	bar -	Refer ESP-07-08-107 Refer ESP-07-08-107	-	 						-	-	-	-	-			-	-						
	ii No. of Passes (Water Side)	Nos.	Two Pass	-	- 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7	-	-	-	-
	ii Water Velocity	m/s	Less than 3 m/s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	v Inlet Pressure	bar 0-	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-							-	-	-	-	-		-		-	-	-	-			-
	v Condensing Temperature Physical Data of Condenser	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Overall Length of Condenser	ft		9	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
i	Shell Diameter	inch	→	16	16	18	20	18	18	18	18	18	18	20	20	20	22	22	22	22	26	26	26	30	30
	Shell Thickness	mm		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10
	Shell Length Material of Construction of Shell	mm -	Mild Steel	2668	2668	2668	2662	3554	3554	3554	3554	3554	3554	3548	3548	3548	3540	3540	3540	3540	3528	3528	3528	3516	3516
	Material of Construction of Shell Material Standard of Shell		Refer "MOC" Sheet											-											
		İ	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on																						
	Tube Type/ Nature of Tube Surface		the Inside Surface																	استما					4
	Tube Length Tube Diameter	mm mm	Refer "HX Details" Sheet Refer "HX Details" Sheet	-						-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Tube Thickness		Refer "HX Details" Sheet Refer "HX Details" Sheet											-											
х	Material of Construction of Tube	-	Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7	-	-	-	-
	ii Material Standard of Tube		Refer "MOC" Sheet	-	-		-	- 1		-	-	-	-	-	-	-	-		-	-	-	-		-	_
	iii Water Volume in Condenser Water Box Details	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 i			Standard - Dish Ends (M.W.Box - Optional)	-					_	-	-	-		-	-	_		-	-	-	-	-	-	_	_
i i	i Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7	-	-	-	-
	ii Material Standard	-	Refer "MOC" Sheet	-	-		-	- 1	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
	Nozzle size End connection	NB -	Refer KCPL Chiller Selection System Software Standard - Victaulic Conn. (Flanged Conn Optional)	-						-	-	-	-	-	-	-	-	-	-		-	-	-		-
	i MOC of Water Side Gasket		NAM AF 120											-											
v	ii MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Accessories Provided																								
	Pressure Relief Valve	- Inch	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-			-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	+
1 1	i Drain/Vent Valves Suction Line	Inch	Plugged Connection Provided (3/8" NPT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-
	Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Isolation Valve	-	Butterfly Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3			Carbon Steel	-	-	1	-	-		-	-	-	-	-	-		-	-	-	-	-	-			-
	Material Standard Angle Valve		Refer "MOC" Sheet Provided on Suction Line For Oil Recovery Line	-																					
	Discharge Line		Trovided of Succion Line For On Necovery Line																						
			ASME B31.3	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		- 1	-	-	-
J 1	Design Code	-								4															ART .
J 1 2	Design Code Isolation Valve	-	Shut-off Valve	-	-	-	-	-	_		-	-	-	-	-		-		-	-	-	-	-		
J 1 2	Design Code Isolation Valve Material of Construction	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

		UOM																						
Sr. No.	Description	(Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24	KWK445.24 KWK460.2	24 KWK475.24
5	Skin Type Thermowell	-	Provided on Discharge Line For Discharge Temp. Sensor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
K 1	Liquid Line Design Code	-	ASME B31.3	_	_	-	-		_	_	_	_	_	_	_	_	_	_	_	-	_	_		_
	Expansion Valve		POWE BOLD																					
	Туре	-	Electronic Expansion Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
ii	Make	Nos.	Kirloskar Approved Vendor	- 1	1	- 1	- 1	- 1	1	1	1	- 1	- 1	- 1	1	1	- 1	- 1	- 1	- 1	2	- 2	2 2	- 2
	Sight Glass	-	Inbuilt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	Moisture Indicator	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
3 4	Filter Drier	-	NA Constant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
5	Material of Construction Material Standard	-	Copper Refer "MOC" Sheet	-	-	-			-		-	-		-	-	-	-	-		-	-			-
	Desuperheater																							
2	Type	-	Plate Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	Quantity Operating Conditions	Nos.	One per Compressor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
i	Heat Duty	kW	Depends on Working Conditions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
ii		°C	Depends on Site Conditions (Max. Possible - 40)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
iii	The state of the s	°C	Max. Possible - 45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
4 iv	Hot Water Flow Rate Material of Construction	L/s	Depends on Working Conditions Brazzed PHE, Plate Material - SS	-					-	-	-	-		-	-		-	-		-	-			
	Water Side End connection Details												•											
	Water Inlet Connection	NB	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
6	Water Outlet Connection Pressure Drop	NB	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Water Side	bar	less than 0.5	-	-	-	-	-	-		-	-	-	-	-	-	-	-		-		-		-
	Refrigerant Side	bar	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
M N	Economizer Starter and Control Panel	-	Not Applicable	-		-		-	-	-	-	-	-	-	-	-	-	-	-		-			
1	Panel Enclosure	-	Starter and Control Panel Integrated in Single Fabricated Box	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
3	Material of Enclosure	-	Rittal Enclosure - Sheet Steel Fabricated Enclosure - CRCA Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
			Rittal Enclosure - (For Single Circuit Chillers)																					
			Enclosure - 1.5 mm																					
			Door - 2 mm																					
4	Thickness of Enclosure	mm	Fabricated Enclosure - (For Dual Circuit Chillers)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Load Bearing Member - 2 mm																					
			Non-Load Bearing Member - 1.6 mm																					
6	Ingress Protection (IP) Painting Specification	-	IP54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
i	Paint Type	-	RAL 7035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
i	Paint Type Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
7 i	Paint Type			-	-	-	-	-	- - -	- - -	- - -	- - -	-	- - -	- - -	-	-	- - -	- - -	-	- - -	-		-
7 i	Paint Type Standard Mounting Arrangement Type of Starter		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter	-			-	-		-	- - -	-						-	-					-
7 i	Paint Type Standard Mounting Arrangement	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter	-	-	-	-	-		-		-	-	-	-	-	-		-	-	-	-		-
7 i	Paint Type Standard Mounting Arrangement Type of Starter	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter	-	-	-	-	-				-	-	-	-				-	-	-	-		
7 i	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter		-			-		-		-	-	-	-	-	-		-	-	-	-		
7 8 9	Paint Type Standard Mounting Arrangement Type of Isolation Type of Protection	- - -	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter MCCB for Star-Delta Starter FSD for Star-Delta Starter FSD for Star-Delta Starter	-		-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-
7 8 9	Paint Type Standard Mounting Arrangement Type of Isolation Type of Protection	- - -	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens Power - PVC Insulated Single Core (Vtg. Grade 1.1 kV) Control- PVC Insulated Single Core, Multicore Cable (Vtg. Grade 1.1 kV)	-		-	-	-	- - - - -			-	-	-	-	-	-			-	-	-		-
1 ii 7 8 9 10 11 11 12	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens Power - PVC Insulated Single Core (Vtg. Grade 1.1 kV)	-		-	-			-		-	-	-	-	-	-		-	-	-	-		-
1 ii 7 8 9 10 11 11 12 12 13	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens Siemens 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	-	-	-	-			-		-	-	-	-	-	-		-	-	-	-		-
1 ii ii 7 8 9 10 11 11 12 12 13	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens Power - PVC Insulated Single Core (Vtg. Grade 1.1 kV) Control- PVC Insulated Single Core, Multicore Cable (Vtg. Grade 1.1 kV)	-		-	-			-	-		-		-	-	-	-		-	-	-		-
1 i ii 12 13 1 i ii iii iii iii iii	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional			-	-					-	-		-	-	-	-		-	-	-		-
1 i ii 7 7 8 8 9 10 11 12 12 13 i ii iii ii iv iv	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional			-	-					-	-		-	-	-	-		-	-	-		-
1 i ii 7 8 9 9 10 11 12 12 13 ii iii iiv v	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional			-	-						-		-	-	-			-	-	-		-
10	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet			-	-			-			-		-	-	-			-	-	-		-
10 11 12 12 13 1 iii iii iii v v 0 1 1 2	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA			-	-						-			-	-			-		-		-
10 11 12 12 13 14 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet				-										-							
10	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided No, Controller Program will Take Care of Low Pressure				-						-				-			-				
10 11 12 13 14 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure														-							
10 11 12 13 14 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge	-	Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided No, Controller Program will Take Care of Low Pressure																					
10	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Cooling Water Flow Failure Cooling Water Flow Failure Cooling Water Flow Failure Reverse Rotor Protection		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided Yes, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes Yes																					
10 11 12 12 13 14 15 16 17 18 19 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip L P Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip High Isolation High/Low Voltage Trip High Isolation High/Low Voltage Trip High Isolation Type of Isolation High/Low Voltage Trip High Isolation High/Low Voltage Trip High/Low Voltage Trip High/Low Voltage Trip		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes Yes No																					
10 11 12 13 14 16 16 17 18 17 19 17	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Cooling Water Flow Failure Cooling Water Flow Failure Cooling Water Flow Failure Reverse Rotor Protection		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided Yes, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes Yes																					
10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Isolature Phase Indirection In Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Isolator Indirection In Indirection In Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Failure/Reverse Phasing Trip Low Love Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes No No Yes Yes Yes																					
10	Paint Type Standard Mounting Arrangement Type of Isolation Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Sailter Dil Level Failure Trip LP Switch and Gauge HHP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failur Prip Earth Fault Trip		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes Yes Yes Yes Yes Yes Yes Yes																					
10	Paint Type Standard Mounting Arrangement Type of Starter Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Isolature Phase Indirection In Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Isolator Indirection In Indirection In Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Hpsoe Failure/Reverse Phasing Trip Low Love Indirection High/Low Voltage Trip Low Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes No No Yes Yes Yes																					
10 11 12 13 14 15 16 17 17 8 17 7 18 10 11 11 11 11 11 11 11 11 11 11 11 11	Paint Type Standard Mounting Arrangement Type of Isolation Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip Earth Fault Trip Communication Through RS232/RS485 Display of Microprocessor Type of Display		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Soft Starter FSD for Soft Starter Siemens 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 Special-Optional Spec																					
10	Paint Type Standard Mounting Arrangement Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Cooling Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip Earth Fault Trip Communication Through RS232/RS485 Display of Microprocessor Type of Display Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optio																					
I	Paint Type Standard Mounting Arrangement Type of Isolation Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Switch Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip Earth Fault Trip Communication Through RS232/RS485 Display of Microprocessor Type of Display		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Soft Starter Siemens 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 Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Special-Optional Refer "Make List" Sheet NA Ves, Provided Yes, Provided No, Controller Program will Take Care of Low Pressure No, Controller Program will Take Care of High Pressure Yes Yes Yes No No RSA85 Yes																					
10	Paint Type Standard Mounting Arrangement Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Cooling Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip Earth Fault Trip Communication Through RS232/RS485 Display of Microprocessor Type of Display Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optio																					
10	Paint Type Standard Mounting Arrangement Type of Isolation Type of Protection Switchgear Make Electrical and Control Cables Optional Features Phase Indicating Lamps Hooter Energymeter Door Handle LOTO Arrangement Controller Make Transmitters Oil Level Failure Trip LP Switch and Gauge HP Switch and Gauge Chilled Water Flow Failure Cooling Water Flow Failure Reverse Rotor Protection High/Low Voltage Trip Low Current Trip (Current Based-Analog) High Current Trip (Current Based-Analog) Phase Failure/Reverse Phasing Trip Earth Fault Trip Communication Through RS232/RS485 Display of Microprocessor Type of Display Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility Remote Monitoring Facility		Coating as per KCPL Standards Mounted on Chiller Star-Delta Starter (Soft Starter - Optional) MCCB for Star-Delta Starter FSD for Soft Starter MCCB for Star-Delta Starter FSD for Soft Starter Siemens 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 Special-Optional Special-Optio																					