Sr. No.			Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWI130.1G	KWI145.1G	KWI170.1G	KWI195.1G	KWI210.1G	KWI260.2G	KWI275.2G	KWI295.2G	KWI320.2G	KWI340.2G	KWI355.2G	KWI370.2G	KWI390.2G	KWI405.2G	KWI420.2G
A			General Points																	
	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.	→	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	6		No. of Individual Refrigerant Circuits	Nos.	→	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7		Refrigerant																	
		i	Name	-	R1234ze	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Quantity	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Technical Specifications	-	Refer ESP-18-19-006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8		Sound Pressure Level																	
		i	Noise Level	dB	Refer ESP-18-19-001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Measuring Standard	-	ANSI/AHRI Standard 575-2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9		Insulation Details																	
		i	Material	-	Closed Cell Nitrile Foam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Standard	-	IS 12075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11		Painting Specification																	
		i	Paint Type	-	RAL 7035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12		Overall Dimensions																	
		i	Approx. Length	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Approx. Width	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Approx. Height	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13		Space Clearances Required																	
		i	Plain End Side (For Tube Cleaning)	mm	→	2900	2900	2900	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
		ii	All Other Sides	mm	→	1000	1000	1000	1000	1000	1000	1000	1000	1000	1500	1500	1500	1500	1500	1500
		iii	Overhead	mm	→	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	14		Weight																	
		i	Approx. Shipping Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Approx. Operating Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15		Cable Sizes																	
		i	Aluminum Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Copper Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B			Compressor Details																	
	1		Make	-	Kirloskar Chillers Private Limited															
	2		Type / Description	-	Semi-Hermetic Twin Screw Compressor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Drive	-	Direct Driven by Rotor Shaft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Capacity Control Percentage	%	→	100-35%	100-35%	100-35%	100-35%	100-35%	100-35%	100-35%	100-35%	100-17.5%	100-17.5%	100-17.5%	100-17.5%	100-17.5%	100-17.5%	100-17.5%
	6		Type of Capacity Control	-	Stepless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Capacity Control Mechanism	-	Variable Speed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8		Volumetric Ratio		Fixed Ratio (2.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9		Design and Test Parameters																	
		i	Design Pressure	bar	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Test Pressure (Pneumatic)	bar	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Design Temperature	^0C	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Max. Allowable Discharge Temperature	^0C	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10		Bearings																	
		i	Types of Bearings	-	Roller Bearings - For Radial Load	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Angular Contact Roller Bearing - For Axial Load	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Material of Construction	-	Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Life of Bearing	Hours	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Class of Bearing	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	11		Lubrication																	
		i	Type	-	Forced Lubrication by Differential Pressure Mechanism as well as External Oil Pump	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Lubricating Oil	-	Synthetic Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Grade of Lubricating Oil	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Quantity	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12		Compressor Components MOC																	
		i	Screw	-	Alloy Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Casing	-	Cast Iron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Shaft	-	Alloy Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Rotor	-	Aluminum Alloy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13		Physical Data of Compressor																	
		i	Screw Construction	-	Twin Screw	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	No. of Lobes Male Rotor	Nos.	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	No. of Lobes Female Rotor	Nos.	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Male Rotor Diameter (mm)	mm	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Female Rotor Diameter (mm)	mm	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	Driving Rotor	-	Male Rotor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14		Oil Filter																	
		i	Micron Rating	Micron	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Material of Construction	-	Resin Impregnated Fibres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Quantity	Nos.	1 No. per Compressor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15		Copressor Isolation Type																	
		i	At Suction	-	Butterfly Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	At Discharge	-	Shut-off Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C			Compressor Motor Details																	
	1		Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Motor Type	-	Semi-Hermetic Squirrel Cage Induction Motor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Type of Duty	-	Continuous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Motor Rating	kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Motor Speed (Synchronous)	RPM	3600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Ingress Protection (IP)	-	NA, Being Semi-Hermetic Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		GD^2 of Rotor	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8		Whether SPDP or TEFC?	-	NA, Being Semi-Hermetic Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9		Power Supply Details (Standard)																	
		i	Supply Voltage	V	415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Permissible Voltage Variation	%	±10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Frequency	Hz	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Permissible Frequency Variation	%	±3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Phase	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10		Performance Indicators																	
		i	Motor Efficiency Class	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Motor Power	kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Motor Efficiency	-	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Power Factor	-	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Class of Insulation	-	Class F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11		Motor Cooling																	
		i	Motor Cooling Type	-	Refrigerant Cooled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Cooling Mechanism	-	Suction Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Temperature at full load	^0C	10 to 15 (At Normal Condtions)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12		Current Details																	
		ii	Rated Load Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Full Load Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Inrush/Starting Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Locked Rotor Current	A	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	Starting Torque	N.m	→	226	226	226	226	226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226	226 + 226
		vii	No Load Current	A	→	74.3	74.3	74.3	74.3	74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3	74.3 + 74.3
		viii	Acceleration Time to Reach Rated Speed	Sec	2 to 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13		Control Settings																	
		i	No. of Starts per Hour	Nos.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Time Between STOP to START	Sec	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Time Between START to START	Sec	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D			Power Supply (Standard-Chiller Icomer)																	
	1		Supply Voltage	V	415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Permissible Voltage Variation	%	±10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Frequency	Hz	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Permissible Frequency Variation	%	±3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Phase	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Control Voltage	V	230 (Standard)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					110 (Special-Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Supply Wire System	-	3 Phase - 4 Wire System (Standard)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					3 Phase - 3 Wire System (Special-Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	8		Fault Level at Busbar	kA	As per KCPL Standard Practice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E			Oil Separator Details																	
	1		Type	-	Horizontal Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Internal Structure	-	Baffle - Demister Arrangement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Method of Oil Separation	-	Separation by "Filtering Effect" Obtained Through Demister	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Material of Construction																	
		i	Body and Other Parts	-	Mild Steel (Refer "MOC" Sheet)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Demister	-	SS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Physical Details																	
		i	Shell Diameter	inch	→	22	26	26	26	26	22	22	26	26	26	26	26	26	26	26
		ii	Approx. Length	mm	→	1225	1395	1395	1395	1395	2035	2035	2365	2365	2365	2365	2365	2365	2365	2365
	6		Seperation Efficiency	%	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Oil Heater Details																	
		i	Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Quantity	Nos.	→	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
		iii	Power Supply	V	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Rating	W	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F			Oil Pump Details																	
	1		Pump Type	-	Gear Type (Positive Displacement)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Pump Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Capacity (Oil Flow Rate)	LPM	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Motor Type	-	Open Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Motor Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Motor Rating	kW	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Power Supply																	
		i	Motor Supply Voltage	V	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Permissible Voltage Variation	%	±10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Frequency	Hz	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Permissible Frequency Variation	%	±3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Phase	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Motor Speed	RPM	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G			Oil Cooler	-	Not Applicable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H			Evaporator Details																	
	1		Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Type	-	Shell and Tube Flooded Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Tube Side (Fluid)	-	Chilled Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Shell Side (Fluid)	-	Refrigerant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Design Parameters																	
		i	Design Temperature (Refrigerant Side)	^{0}C	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	No. of Passes (Refrigerant Side)	Nos.	Single Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	Design Temperature (Water Side)	^{0}C	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		viii	Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ix	Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		x	Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xi	Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xii	No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xiii	Water Velocity	m/s	Less than 3 m/s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xiv	Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xv	Evaporating Temperature	^{0}C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Physical Data of Evaporator																	
		i	Overall Length of Evaporator	ft	→	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12
		ii	Shell Diameter	inch	→	22	24	24	24	24	26	26	26	26	30	30	30	30	30	30
		iii	Shell Thickness	mm	→	8	8	8	8	8	8	8	8	8	10	10	10	10	10	10
		iv	Approx. Shell Length	mm	→	2662	2650	2650	3536	3536	3536	3536	3536	3536	3526	3526	3526	3256	3526	3526
		v	Material of Construction of Shell	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	Material Standard of Shell	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	Tube Type/ Nature of Tube Surface	-	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		viii	Tube Length	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ix	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xiii	Water Volume in Evaporator	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8		Water Box Details																	
		i	Type	-	Standard - Dish Ends (M.W.Box - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sr. No.			Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWI130.1G	KWI145.1G	KWI170.1G	KWI195.1G	KWI210.1G	KWI260.2G	KWI275.2G	KWI295.2G	KWI320.2G	KWI340.2G	KWI355.2G	KWI370.2G	KWI390.2G	KWI405.2G	KWI420.2G
		ii	Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	End connection	-	Standard - Victaulic Conn. (Flanged Conn. - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I			Condenser Details																	
	1		Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Type	-	Shell and Tube Flooded Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Tube Side (Fluid)	-	Chilled Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Shell Side (Fluid)	-	Refrigerant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Design Parameters																	
		i	Design Temperature (Refrigerant Side)	^{0}C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	No. of Passes (Refrigerant Side)	Nos.	Single Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	Design Temperature (Water Side)	^{0}C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		viii	Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ix	Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		x	Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xi	Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xii	No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xiii	Water Velocity	m/s	Less than 3 m/s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xiv	Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		xv	Condensing Temperature	^{0}C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Physical Data of Condenser																	
		i	Overall Length of Condenser	ft	→	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12
		ii	Shell Diameter	inch	→	18	20	20	20	20	20	22	22	22	26	26	26	26	26	26
		iii	Shell Thickness	mm	→	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		iv	Shell Length	mm	→	2668	2662	2662	3548	3548	3548	3540	3540	3540	3528	3528	3528	3528	3528	3528
		v	Material of Construction of Shell	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	Material Standard of Shell	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	Tube Type/ Nature of Tube Surface	-	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		viii	Tube Length	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ix	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	End connection	-	Standard - Victaulic Conn. (Flanged Conn. - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J			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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K			Discharge Line																	
	1		Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Isolation Valve	-	Shut-off Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Material of Construction	-	Carbon Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Skin Type Thermowell	-	Provided on Discharge Line For Discharge Temp. Sensor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L			Liquid Line																	
	1		Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	2		Expansion Valve																	
		i	Type	-	Electronic Expansion Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Quantity	Nos.	→	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2
		iv	Sight Glass	-	Inbuilt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	Moisture Indicator	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Filter Drier	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Material of Construction	-	Copper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M			Desuperheater	-	Not Applicable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N			Economizer	-	Not Applicable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O			Starter and Control Panel																	
	1		Panel Enclosure	-	Single Circuit - Starter and Control Panel Integrated in Single Fabricated Box Dual Circuit - VFDs are Mounted on Both Sides (Outside) of Control Panel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Material of Enclosure	-	Rittal Enclosure - Sheet Steel Fabricated Enclosure - CRCA Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Thickness of Enclosure	mm	For Single Circuit Chillers (Starter and Control Panel) Fabricated Enclosure - (For Dual Circuit Chillers) Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm For Dual Circuit Chillers Control Panel Rittal Enclosure Enclosure - 1.5 mm Door - 2 mm Starter Panel Fabricated Enclosure Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Ingress Protection (IP)	-	IP54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6		Painting Specification																	
		i	Paint Type	-	RAL 7035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii	Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7		Mounting Arrangement	-	Mounted on Chiller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8		Type of Starter	-	VFD Starter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9		Type of Isolation	-	SDU as Incomer for Individual Circuit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10		Type of Protection	-	Motor Protection - Built in VFD Motor Winding Protection - WPU (Winding Protection Unit)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11		Switchgear Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii	Energymeter	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv	Door Handle	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		v	LOTO Arrangement	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi	Active Harmonic Filter	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vii	AC Input Choke	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		viii	Purge Panel	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P			Controller																	
	1		Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Transmitters	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Oil Level Switch	-	Yes, Provided	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Oil Level Failure Trip	-	Yes, Provided	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14		Earth Fault Trip	-	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sr. No.	Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWI130.1G	KWI145.1G	KWI170.1G	KWI195.1G	KWI210.1G	KWI260.2G	KWI275.2G	KWI295.2G	KWI320.2G	KWI340.2G	KWI355.2G	KWI370.2G	KWI390.2G	KWI405.2G	KWI420.2G
15	Communication Through RS232/RS485	-	RS485	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Display of Microprocessor	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Type of Display	-	PGD0 Screen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Remote Monitoring Facility	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Output to DCS	-	Applicable (Only if RS485 is Available)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-