Sr. No.	Description	UOM (Wherever	Data (Common For All Models)	KWS050.14	KW5060 14	KWS080.14	KWS000 1/	KWS110 14	KWS130.14	KWS165 14	VWS180 1/	KWS100.24 KWS130.24	KW\$145 24	KW\$160.24	K/W/\$1.85.24	KW5215 24	KW5235 24	KW/\$275 24	KW/5202 24	KWS330.24	KW6360 34
	,	Applicable)	Data (Common For All Models)	KW3030.14	KW3000.14	KW3080.14	KW3030.14	KW3110.14	KW3130.14	KW3103.14	KW3180.14	KW3100.24 KW3130.24	KW3143.24	KW3100.24	KW3163.24	KW3213.24	KW3233.24	KW3273.24	KW3293.24	KW3330.24	KW3300.24
A 1	General Points 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	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
5	Co-Efficient of Performance (COP) No. of Compressors	kW/kW Nos.	Refer KCPL Chiller Selection System Software	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	2 2	-	-	-	-	- 2	-	-	- 2	-
6	No. of Individual Refrigerant Circuits	Nos.	· · · · · · · · · · · · · · · · · · ·	1	1	1	1	1	1	1	1	2 2	2	2	2	2	2	2	2	2	2
7	Refrigerant												1								
-	i Name ii Quantity	- kg	R134a Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	iii Technical Specifications	-	Refer ESP-18-19-003	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
8	Sound Pressure Level i Noise Level	dB	Refer ESP-18-19-001	_	1 -	_	_	_	_	1 .			1 -	_	_	_	_	_	_		_
	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 -10 0C)	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Evaporator Shell	mm	32	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
+++	Evaporator Tubesheet Evaporator Pass Partition Assembly	mm mm	19	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Evaporator Head Cover	mm	32	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
\vdash	Evaporator Support Plate Compressor Motor Body	mm mm	19	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Suction Line Assembly	mm	19	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Liquid Line Assembly	mm	9	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
++	iii Insulation Thickness on Various Parts Evaporator Shell	- mm	For Brine Temperature Range (LWT below -10 0C) 51 (32+19)	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
	Evaporator Tubesheet	mm	32	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
\vdash	Evaporator Pass Partition Assembly Evaporator Head Cover	mm mm	32	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Evaporator Head Cover Evaporator Support Plate	mm	51 (32+19) 32	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Compressor Motor Body	mm	28 (19+9)	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
$\overline{}$	Suction Line Assembly Liquid Line Assembly	mm	28 (19+9) 19	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	iv Density	kg/m ³	76.6	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	v Thermal Conductivity	W/m.K	0.035 (at 0 0C Mean Temperature)	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	vi Standard vii Adhesive	-	IS 14164 Blend of Synthetic Polymers and Synthetic Resin	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	viii Insulation Specifications	-	Refer ESP-18-19-004	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
10	Vibration i Vibration Level	mm/sec	Less than 1.5 mm/sec	_	_	_	_	_	_	_	_	T . T .	_	_	_	_	_	_	_	_	_
	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	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
13	iii Approx. Height Space Clearances Required	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	i Plain End Side (For Tube Cleaning)	mm	→	1900	2900	2900	2900	2900	2900	2900	2900	2900 2900	2900	2900	2900	3800	3800	3800	3800	3800	3800
	iii All Other Sides iii Overhead	mm mm	→	1000 1500	1000 1000 1500 1500	1000 1500	1000 1500	1000 1500	1000 1500	1000 1500	1000 1500	1000 1500	1000	1000 1500							
	Weight	111111		1300	1300	1300	1300	1300	1300	1300	1500	1300 1300	1300	1300	1300	1500	1300	1300	1300	1500	1300
	i Approx. Shipping Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
15	ii Approx. Operating Weight Cable Sizes	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	i Aluminum Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
В	ii Copper Cable Compressor Details	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
1	Make	-	Kirloskar Chillers Private Limited																		
3	Type / Description Model	-	Semi-Hermetic Twin Screw Compressor Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
4	Drive	-	Direct Driven by Rotor Shaft	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
5		%		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%
7	Type of Capacity Control Capacity Control Mechanism	-	Stepless Slide Valve Mechanism	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
8	Volumetric Ratio	-	Fixed Ratio (3.2)	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
9	Design and Test Parameters i Design Pressure	bar	30	-	-	_	-	-	-	-	-		-	-	-		-	_	-	_	-
	ii Test Pressure (Pneumatic)	bar	33	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	iii Design Temperature	°C	120	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
10	iv Max. Allowable Discharge Temperature Bearings	°C	120	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
10	i Types of Bearings		Roller Bearings - For Radial Load	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
$\sqcup \sqcup$			Angular Contact Roller Bearing - For Axial Load	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	iii Material of Construction iii Life of Bearing	- Hours	Steel 50,000	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	iv Class of Bearing	-	Proprietary Data	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
11	Lubrication i Type	-	Lubrication by Differential Pressure Mechanism	_	-			_	-	_	-				_				-		_
шШ	. 1700		Education by Differential Pressure Medianism																		

1	5.24 KWS330.24 KWS360.24	KW/\$205 24	KW/5275 24	KW2325 34	KW\$215 24	VW/\$185.24	KWS160 24	KW2115 21	KW2130 24	KWS100 24	KWS180 14	KWS165 1/	KWS130.14	KWS110.14	KW5000 1/	KW5080 14	KW5060 14	KWS050.14	Data (Common For All Models)	UOM (Wherever	Description	Sr. No.
1 1 Section	.24 KW3330.24 KW3300.24	KW3233.24	KVV3273.24	KW3233.24	KVV3213.24	KW3163.24	KW3100.24	KW3143.24	KW3130.24	KW3100.24	KW3100.14	KW3103.14	KW3130.14	KW3110.14	KW3030.14	KW3000.14	KW3000.14	KW3030.14	Data (common rol All widdels)		Description	31.140.
1 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
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1 1 1 1 1 1 1 1 1 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aluminum Alloy	-		
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To 1 A Control of		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	Nos.	lo. of Lobes Male Rotor	
To produce better General period To produce 3 and To produce 3 a		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 Proprietory Data			-
2 1 Street Ministration Street Minis		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Male Rotor	-		
1 1		_	_	_	_	_	_	_	-	_	_	-	_	-	-	_	_	-	10	Micron		14
20 1 March		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Resin Impregnated Fibres	-		
1 12 25 25 25 25 25 25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 No. per Compressor	Nos.	•	
No. Statement Statement		-	-	_	-	-	-	-	- 1	-	-	-	-	-	-	_	_	-	Butterfly Valve	-		-
1 Mac March Ma		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				at Discharge	
2 1 1 1 1 1 1 1 1 1																			Virlachar Approved Vandar		*	
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7 0 Off-left attent		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Novel Supply Principle (Standard)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Proprietary Data	-	GD ² of Rotor	7
1 Supply Voltage V 400		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA, Being Semi-Hermetic Type	-		-
No. Promissible Voltage Vivations St. 1006 St.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	V		
Performance Industrials V Permissible Frequency Variations S 258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	±10%		Permissible Voltage Variation	
Note		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50 +3%			
1 Motor Efficiency Class		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-		
I Motor Provent 1																						
In Notice Efficiency		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11 Mont Cooling 11 Mont Cooling 12 13 Mont Cooling 14 Mont Cooling 15 Mont Cooling 15 Mont Cooling 16 Mont Cooling 17 Mont Cooling 17 Mont Cooling 18 Mont Cooling		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			Notor Efficiency	i
1 Motor Cooling		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
I Cooling Mechanism Surtion Gas Surt		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Cld55 F	-		
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1 1 1 1 1 1 1 1 1 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
III Sull Load Current		-	_	-	-		-							-		_	-		10 to 13 (At Normal Conditions)	C		-
Note		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Refer KCPL Chiller Selection System Software	Α		
V Locked Rotor Current		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Vii No Load Current		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Viii Acceleration Time to Reach Rated Speed Sec 2 to 3 Sec S		260 + 260																				
13 Control Settings	22.3 72.3 + 72.3 101 + 101	72.3 + 72.3	72.3 + 72.3	/2.3 + 45.7	45.7 + 45.7	45.7 + 45.7	45.7 + 45.7	45.7 + 36.5	36.5 + 36.5	36.5 + 36.5	101	72.3	72.3	45.7	45.7	45.7	36.5	36.5				
ii Time Between STOP to START Sec 300 - - - - - - - - -																				300	Control Settings	13
III Time Between START to START Sec 900 Sec		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4		No. of Starts per Hour	\Box
Power Supply (Standard-Chiller Icomer)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2 Permissible Voltage Variation % ±10%																					ower Supply (Standard-Chiller Icomer)	D
3 Frequency Hz 50		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
4 Permissible Frequency Variation % ±3%		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-				
6 Control Voltage V 230 (Standard)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	±3%	%	ermissible Frequency Variation	4
5 Control Voltage V 110 (Special-Optional)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 230 (Standard)	-		
2 Phase A Mire Furtow (Standard)		-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	110 (Special-Optional)	V	Control Voltage	6
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			upply Wire System	7
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				8
E Oil Separator Details																					Dil Separator Details	E
1 Type - Dome Type (Built in Compressor)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			71	
2 Internal Structure - Demister Arrangement		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-				2
3 Method of UII Separation Gas Mixture		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				3
4 Oil Heater Details i Make - Kirloskar Approved Vendor	_																		Virlacker Approved Vender			
i 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	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	- Approved vendor			
iii Power Supply		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		V	ower Supply	i
iv Rating W 250 -		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-
1 Type - Plate Type Plate Type		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
2 Quantity Nos. One per Compressor		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

Sı	. No.	Description	UOM (Wherever	Data (Common For All Models)	KWS050.14	KWS060.14	KWS080.14	KWS090.14	KWS110.14	KWS130.14	KWS165.14	KWS180.14	KWS100.24	KWS130.24	KWS145.24	KWS160.24	KWS185.24	KWS215.24	KWS235.24	KWS275.24	KWS295.24 K	WS330.24	KWS360.24
	3	Heat Duty	Applicable) kW	Depends on Working Conditions																			
		Method of Cooling	-	Refrigerant Cooled	-	-	-	-	-	,	-	-	-	-	-	-	-		-	-	-	-	_
	5	Material of Construction Pressure Drop	-	Brazzed PHE, Plate Material - SS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Oil Side	bar	less than 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Refrigerant Side	bar	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	_	Evaporator Details Model	_	Refer KCPL Chiller Selection System Software	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
	_	Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Type	-	Shell and Tube DX Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tube Side (Fluid) Shell Side (Fluid)	-	Refrigerant Chilled Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	Design Parameters																			-	· ·	
\vdash		Design Temperature (Refrigerant Side) Max. Operating Pressure (Refrigerant Side)	⁰ C bar	65 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H		Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv	Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H		Testing method (Refrigerant Side) No. of Passes (Refrigerant Side)	Nos.	Refer ESP-07-08-107	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_	Design Temperature (Water Side)	°C	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	viii	Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Design Pressure (Water Side) Test pressure (Water Side)	bar bar	Refer ESP-07-08-107 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	xi	Testing method (Water Side)	-	Refer ESP-07-08-107 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
	xii	No. of Passes (Water Side)	Nos.	Single Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Water Velocity Inlet Pressure	m/s bar	Less than 3 m/s Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
\vdash		Evaporating Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7	Physical Data of Evaporator																					
		Overall Length of Evaporator Shell Diameter	ft inch		6 12	9 12	9	9	9 16	9 16	9	9	9	9 16	9 18	9 18	9 20	12 18	12 20	12 20	12 20	12 22	12 22
		Shell Thickness	mm		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10
		Approx. Shell Length	mm	A Wild Could	1753	2666	2666	2666	2666	2666	2666	2666	2666	2666	2666	2666	2660	3552	3546	3546	3546	3546	3546
H		Material of Construction of Shell Material Standard of Shell	-	Mild Steel Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tube Type/ Nature of Tube Surface	_	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_		_	
		Tube Length	mm	the Inside Surface Refer "HX Details" Sheet																			
	_	Tube Diameter	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_	Tube Thickness	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Material of Construction of Tube Material Standard of Tube	-	Cu Refer "MOC" Sheet	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	xiii	Water Volume in Evaporator	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash	_	Water Box Details		Chandani On Chall Manda													1						
\vdash		Type Material	-	Standard - On Shell Nozzle Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Standard (Material)	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H		Nozzle size End connection	NB -	Refer KCPL Chiller Selection System Software Standard - Victaulic Conn. (Flanged Conn Optional)	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	vi	MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		MOC of Refrigerant Side Gasket Accessories Provided	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_	Pressure Relief Valve	-	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii	Drain/Vent Valves	Inch	Plugged Connection Provided (1" NPT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Н		Condenser Details Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
	2	Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Type Tube Side (Fluid)	-	Shell and Tube Flooded Design Chilled Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_	Shell Side (Fluid)	-	Refrigerant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Design Parameters																					
\vdash		Design Temperature (Refrigerant Side) Max. Operating Pressure (Refrigerant Side)	⁰ C bar	100 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii	Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
	iv	Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Testing method (Refrigerant Side) No. of Passes (Refrigerant Side)	Nos.	Refer ESP-07-08-107 Single Pass	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
	vii	Design Temperature (Water Side)	°C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Design Pressure (Water Side) Test pressure (Water Side)	bar bar	Refer ESP-07-08-107 Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	хi	Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\vdash		Water Velocity Inlet Pressure	m/s bar	Less than 3 m/s Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
	xv	Condensing Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_	Physical Data of Condenser	-															- 10	- 10	-10		42	- 10
		Overall Length of Condenser Shell Diameter	ft inch	→ 	6 12	9 12	9	9	9 16	9 16	9 18	9 18	9	9 12	9 12	9 12	9	12 14	12 16	12 16	12 16	12 16	12 16
	iii	Shell Thickness	mm		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		Shell Length Material of Construction of Shell	mm	Mild Steel	1755	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	3554	3554	3554	3554	3554	3554
	_ ı v	iviaterial of Construction of Shell	-	IVIIIU JEECI	-	-	-				-			-	-				-	-		-	

Fabricated Enclosure - (For Dual Circuit Chillers) Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm	295.24 KWS330.24 KW	KWS275.24 KWS295.24	4 KW	KWS235.24	4 KWS215.24	KWS185.24	KWS160.24	KWS145.24	0.24 K	KWS130.2	VS100.24	80.14 KW	KWS180.:	KWS165.14	(WS130.14	WS110.14	KWS090.14	080.14 H	14 KWS0	KWS060.1	KWS050.14	Data (Common For All Models)	UOM (Wherever	Description	Sr. No.
1 10 10 10 10 10 10 10			+	-	_	-	-		-	_	_		_		_	_	_	_	+	_	_	Refer "MOC" Sheet	Applicable)	Material Standard of Shell	TTV
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1 1				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-		
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3 Sher Oters Provided				-			-	-		-	-		-	-	-	-	-	-		-				ŭ	
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L Designation of the property			4	-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	**			
1 Type							-								-							NEIGH MICE SHEEL	-		L
3 Operating Conditions			Т	-	-	-	-	-		-	-		-	-	-	-	-	-		-	-			Туре	
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Bill Not Water Finder Compensation Signature S				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Depends on Working Conditions	kW		
V Hot Water Flow Nate				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-				
4 Material of Construction Bazaed PHF, Plate Material - SS Safet and Control Panel Integrated in Single Fabricated Box Safet and Control Panel Integrated in Single Fabricated Box Safet and Control Panel Integrated in Single Fabricated Box Safet and Control Panel Integrated in Single Fabricated Box Safet and Control Panel Integrated in Single Fabricated Box Safet and Control Panel Integrated Integr				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-				
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Fessure Drop				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-			Water Inlet Connection	
1 Water Side bar Rest shan 0.5				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Consult with Engineering Department on Case to Case Basis	NB		
Refrigerant Side bar Proprietary Data				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	less than 0.5	bar	•	
1 Type				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-			Refrigerant Side	i
2 Quantity			_																			Diata Tuna			
Head Duty NW Proprietary Data Starter and Control Panel			4		-		-	-		-	-		-	-	-	-	-	-		-	-				
N Starter and Control Panel 1			4	-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Proprietary Data	kW	Heat Duty	3
1 Panel Enclosure Starter and Control Panel Integrated in Single Fabricated Box Starter and Control Panel Integrated in Single Fabricated Box Starter and Control Panel Integrated in Single Fabricated Box Starter and Control Panel Integrated B				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Brazzed PHE, Plate Material - SS	-		
2 Make - Kirloskar Approved Vendor				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Starter and Control Panel Integrated in Single Fabricated Box	- !		
A Thickness of Enclosure Thic				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Kirloskar Approved Vendor	-		
A Thickness of Enclosure Thic				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-			Material of Enclosure	3
4 Thickness of Enclosure mm Fabricated Enclosure - 1.5 mm Door - 2 mm Fabricated Enclosure - (For Dual Circuit Chillers) Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm			4																						++
4 Thickness of Enclosure mm Fabricated Enclosure - (For Dual Circuit Chillers) Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm																									
Fabricated Enclosure - (For Dual Circuit Chillers) Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm																						Door - 2 mm			
Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm				-	-		-	-		-	-		-	-	-	-	-	-		-		Eabricated Enclosure - (For Dual Circuit Chillers)		Thickness of Enclosure	4
Non-Load Bearing Member - 1.6 mm																									
																						Non-Load Bearing Member - 1.6 mm			
				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	P54	-	Ingress Protection (IP)	
6 Painting Specification				-	_	-	-	-		_	-		_	-		- 1	- 1	_		_	-	RAL 7035	- 1		
ii Standard - Coating as per KCPL Standards Coating as per KCPL Standards				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-			Standard	i
7 Mounting Arrangement - Mounted on Chiller				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Mounted on Chiller	-		
8 Type of Starter - Star-Delta Starter (Soft Starter - Optional)				-	-	-	-	-		-	-		-	-	-	-	-	-		-	-	Star-Delta Starter (Soft Starter - Optional)	-	Type of Starter	8

Sr. No.	Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWS050.14	KWS060.14	KWS080.14	KWS090.14	KWS110.14	KWS130.14	KWS165.14	KWS180.14	KWS100.24	KWS130.24	KWS145.24	KWS160.24	KWS185.24	KWS215.24	KWS235.24	KWS275.24	KWS295.24	KWS330.24	KWS360.24
9	Type of Isolation	-	MCCB for Star-Delta Starter FSD for Soft Starter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Type of Protection	-	MCCB for Star-Delta Starter FSD for Soft Starter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	ı	-	-	-	-	ı	1	1	-	ı	-	ı	-	-	-	-	-	-
13	Optional Features																					
	Phase Indicating Lamps	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii Hooter	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii Energymeter	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv Door Handle	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	v LOTO Arrangement	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	Controller																					
1	Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Transmitters	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Oil Level Switch	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Oil Level Failure Trip	-	NA NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-