

[illegible]

Sr. No.		Description	UOM (Wherever Applicable)	Data (Common For All Models)	KAS045.14	KAS070.14	KAS095.14	KAS110.14	KAS130.14	KAS150.14	KAS165.14	KAS125.24	KAS165.24	KAS185.24	KAS205.24	KAS230.24	KAS265.24	KAS300.24	KAS325.24	KAS355.24	KAS380.34	KAS400.34	KAS425.34
		iii Life of Bearing	Hours	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv Class of Bearing	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	Lubrication																					
		i Type	-	Lubrication by Differential Pressure Mechanism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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	3000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	Ingress Protection (IP)	-	NA, Being Semi-Hermetic Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7	GD² of Rotor	-	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8	Whether SPDP or TEFC?	-	NA, Being Semi-Hermetic Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9	Power Supply Details (Standard)																					
		i Supply Voltage	V	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii Permissible Voltage Variation	%	±10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii Frequency	Hz	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		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	°C	10 to 15 (At Normal Condntions)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	—————→	104	172	172	260	260	338	394	172 + 172	172 + 172	172 + 172	260 + 260	260 + 260	338 + 260	338 + 338	394 + 394	394 + 394	338 + 260 + 260	338 + 338 + 260	338 + 338 + 338
		vii No Load Current	A	—————→	36.5	45.7	45.7	72.3	72.3	101	108	45.7 + 45.7	45.7 + 45.7	45.7 + 45.7	72.3 + 72.3	72.3 + 72.3	101 + 72.3	101 + 101	108 + 108	108 + 108	101 + 72.3 + 72.3	101 + 101 + 72.3	101 + 101 + 101
		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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8	Fault Level at Busbar	kA	As per KCPL Standard Practice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E		Oil Separator Details																					
	1	Type	-	Dome Type (Built in Compressor)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	Internal Structure	-	Demister Arrangement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	Method of Oil Separation	-	Differential Mass Between Oil and Gas, Impact with Surfaces, Filtering of Oil-Gas Mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	Oil Heater Details																					
		i Make	-	Kirloskar Approved Vendor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii Quantity	Nos.	—————→	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3

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	3		Heat Duty	kW	Proprietary Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Material of Construction	-	Brazed PHE, Plate Material - SS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P			Starter and Control Panel																					
	1		Panel Enclosure	-	Starter and Control Panel Integrated in Single Fabricated Box	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Make	-	Kirloskar Approved Vendor													-	-	-	-	-	-	-
	3		Material of Enclosure	-	Fabricated Enclosure - GI	-	-	-	-	-	-							-	-	-	-	-	-	-
	4		Thickness of Enclosure	mm	Fabricated Enclosure Load Bearing Member - 2 mm Non-Load Bearing Member - 1.6 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5		Ingress Protection (IP)	-	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	Star-Delta Starter (Soft Starter / VFD - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9		Type of Isolation	-	MCCB in case of Star-Delta Starter FSD in case of Soft Starter Consult with Engineering Department on Case to Case Basis in case of VFD Starter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10		Type of Protection	-	MCCB in case of Star-Delta Starter FSD in case of Soft Starter Consult with Engineering Department on Case to Case Basis in case of VFD 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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		VFD for Condenser Fans	-	Special-Optional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q			Controller																					
	1		Make	-	Refer "Make List" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		Transmitters	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		Oil Level Switch	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4		Oil Level Failure Trip	-	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-