

Annexure-C
Technical Specifications

Item wise Technical Specifications			
Enq. Item SL.No	Item Description and Technical Specifications	Qty (Nos)	Bidder Confirmation
10	Compact PLC S7200 Specification: PLC CPU Module Rated value (DC): 24 V Inrush current: max. 2 A; at 28.8 V Number of digital inputs: 14 Number of digital outputs: 10 memory integrated (for program) kbyte: 8 KB with active run-time edit Memory integrated (for data): kbyte Backup battery time: max. 100 h; (min. 70 h at 40 °C); 200 days (typ.) with optional battery module CPU processing times for bit operations: max.0.22 µs Analog inputs/outputs: max. 35; max. 28 inputs and 7 outputs (EM) or max. 0 inputs and 14 outputs (EM) Digital inputs/outputs: max. 168; max. 94 inputs and 74 outputs (CPU + EM) AS-Interface inputs/outputs: max. 62; AS-Interface A/B slaves (CP 243-2) Flag Number: max. 32 byte Counters, timers and their retentivity: 256 Interface type: Integrated RS 485 interface (MPI, PPI &Serial data exchange) Programming language: # LAD Yes # FBD Yes # STL Width 120.5 mm Height 80 mm Depth 62 mm Reference Make and Model: Siemens S7-200, Part No: 6ES7214-1AD23-0XB0 Note: 1. The PLC module shall be compatible with other Simens Products like S7 300 PLC and S7 200 series via MPI, PPI or profibus communications. 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model.	1	
20	Analog IO Module S7-200 Specification: Analog IO Module Number of analog inputs: 4 Number of analog outputs: 1 permissible input voltage for voltage input (destruction limit): max. 30 V permissible input current for current input (destruction limit): max. 32 mA Input ranges: Voltage ? -10 V to +10 V Current ? 0 to 20 mA Output ranges: voltage ? -10 V to +10 V current ? 0 to 20 mA Input Resolution with overrange (bit including sign): max. 12 bit input Basic conversion time (ms) : < 0.25 ms Outputs Resolution with overrange (bit including sign): max. 11 bit Width 71.2 mm Height 80 mm Depth 62 mm Reference Make and Model: Siemens, Part No: 6ES7235-0KD22-0XA0	1	

	Note: 1. .The PLC analog module shall be compatible with Simens S7 200 CPU 224 PLC part no: 6ES7 214-1AD23-0XB0 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model.		
30	Servo motor control module Specification: Servo motor control module Axis: Single-axis drive Servo motor control module Rated motor torque: 6Nm Rated output current: 6A Max. output current: 12A Rated output power:1.2 kW Rated input power: 1.4kW Display: 6-digit, 7-segment LED display, two LED status indicators Keys on panel 4 tact switch keys Setpoint interface : Pulse interface Input pulse frequency = 333 kHz Drive input: 1. Servo enable 2. Alarm cancel Drive output: 1. Brake output 2. Servo alarm 3. Servo ready 4. Zero mark Protection functions: Overcurrent, overvoltage, undervoltage, overload, IGBT overtemperature, overspeed, encoder abnormal protections, I2t detection Encoder: TTL encoder 2500p/r with U, V, W rotor position signal; one zero mark Mains supply voltage: Rated voltage: 3 AC 220 V to 240 V Tolerance: - 15 % ~ + 10 % 50/60 Hz, unregulated DC-Link Outline dimensions (W x H x D): 106 x 226 x 200 mm Reference Make and Model: Siemens, Part No: 6SL3210-5CC16-0UA0 Note: 1. The Servo motor module shall be compatible with Simens servo motor 7.7 Nm Part No: 1FL5064-0AC21-0AG0 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model.	1	
40	Analog Module Specification: Analog module for Temperature measurement Rated Voltage: 24VDC 8 inputs in 4 channel groups Programmable measurement type at each channel group: Temperature Programmable resolution at each channel group (15 bits + sign) Programmable limit value monitoring for 8 channels Programmable hardware interrupt when limit is exceededHigh-speed update of measured values at up to 4 channels Electrically isolated from the CPU Dimensions W x H x D (mm) 40 x 125 x117 Basic conversion time in ms: 95 Thermocouples Types B, C, N, E, R, S, J, L, T, K, U, TxK/xK (L)/ > 10 megaohms Reference Make and Model: Siemens, Part No: 6ES7331-7PF11-0AB0	1	

	Note: 1.The PLC analog module shall be compatible with Simens S7 300 PLC CPU 315 2DP and remote IO module siemens ET200M through profibus communications 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model.		
50	Profibus Communication Module for Drive Profibus Communication Module for Drive: Application: The PROFIBUS-DP communication board is to provide a PROFIBUS-DP-based link between drives of the Siemens MICROMASTER 4 product range and higher-level automation systems. Dimensions: 161 mm x 73 mm x 43.5 mm Climate class: Class 3K3 to DIN IEC 60 721-3-3 (in operation) Cooling method: Natural air cooling Supply voltage: 6.5V $\pm$ 5%, max. 300mA, internal from basic inverter or 24V $\pm$ 10%, max. 350mA, from external source Output voltage: 5V $\pm$ 10%, max. 100mA, electrically isolated supply Data transmission rate: Max. 12 MBaud Relative humidity: < 85 % during operation (condensation not permissible) Permissible ambient temperature: -10° C to +50° C Reference Make and Model: Siemens 6SE6400-1PB00-0AA0 Note: 1. The communication module shall be compatible with 22kW spindle drive of item 10 and also with other drives of Siemens MICROMASTER 4 product range and higher-level automation systems like Siemens S7 series 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model.	1	
60	0.75KW DRIVE Specification: 0.75KW DRIVE Rated Power : 0.75KW Input Voltage: 3Phase AC 380 V to 480 V $\pm$ 10 % Output rated input current: 3.7 A Output rated output current: 2.2 A Input frequency: 47 Hz to 63 Hz Output frequency: 0 Hz to 650 Hz (in V/f mode), 0 Hz to 200 Hz (in vector mode) Power factor : 0.95 Control method: Vector control, torque control, linear V/f characteristic, quadratic V/f characteristic; Multipoint characteristic (programmable V/f characteristic); flux current control (FCC) Analog inputs: 2 programmable analog inputs # 0 V to 10 V, 0 mA to 20 mA and #10 V to +10 V (AIN1) # 0 V to 10 V and 0 mA to 20 mA (AIN2) # both can be used as 7th/8th digital input Digital inputs: 6 fully programmable isolated digital inputs; switchable PNP/NPN Relay outputs: 3, programmable, 30 V DC/5 A (resistive load); 250 V AC/2A (inductive load) Analog outputs: 2, programmable (0/4 mA to 20 mA) Serial interfaces: RS-485, optional RS-232 Braking: Resistance braking with DC braking, compound braking, integrated brake chopper	1	

	(integrated brake chopper only with 0.12 kW to 75 kW inverters) Degree of protection: IP20 Pulse frequency: 4 kHz Reference Make and Model: Siemens, Part No: 6SE6440-2UD17-5AA1 Note: 1.The Drive shall be compatible with Simens S7 300 PLC CPU 315 2DP through profibus communication. 2. Vendor to ensure compatibility with the existing systems here. Vendor shall prove-out integration of the supplied model in case it is different from the reference model		
--	---	--	--

Vendor Seal & Sign