

Supply of Electrical Devices and Materials

i. Specification:

1- Soft Starter Control Module:

Specification	Comply (Yes/No)	Remark
Brand: Allen-Bradley SMC Flex		
Model num: 41391-454-01-B1FX		
Application: Pumps		

2- MCCB:

Specification	Comply (Yes/No)	Remark
Number of poles: 3		
Protective poles: 3		
Nominal Voltage and frequency: 415 V AC, 50 Hz		
Rated impulse voltage: 6 KV		
current Rating: as mentioned in BOQ		
Mounting: fixed		
Icu: not less 36 KA at 415 V AC		
Isc: 50% or more at 415 V AC		
Adjustable thermal protection		
Internal close and trip feedback auxiliary contacts are required for each MCCB		

3- Panel Fans:

Specification	Comply (Yes/No)	Remark
Size: (120*120) mm		
Operation voltage: 230 V		
aluminum cast frame		
ball bearing or sintered bronze sleeve		

4- Contactors:

Specification	Comply (Yes/No)	Remark
Number of poles: 4		
415 V AC for power circuit, 230 V AC for coil		
Type: AC3		
Load: induction		
Rate: 22 KW		
With NO and NC auxiliary contact		
Mechanical interlock is required		

5- Dry Run Liquid Relay:

Specification	Comply (Yes/No)	Remark
Rated voltage: 220 V		
NO, NC contacts		
Adjustable sensitivity		
LEDs indication for operation status		

6- Three Phase Protection Relay:

Specification	Comply (Yes/No)	Remark
Protection types : Overvoltage, undervoltage, phase loss and phase sequence protection		
Adjustable time delay		
2 *(NO, NC) contacts		
LEDs indication for operation status		
Measurement voltage :3* 400 V AC		

7- Motor Protection Circuit Breaker With Auxiliary:

Specification	Comply (Yes/No)	Remark
Number of poles: 3		
Thermal and electromagnetic protection		
Rated Voltage and frequency: 690 V, 50 Hz		

Specification	Comply (Yes/No)	Remark
Rotary handle with ON & OFF switch-position indicator		
NO/NC auxiliary contact		
Rating current: as per BOQ		

8- Electrical Float Switch:

Specification	Comply (Yes/No)	Remark
It is used for drinking and wastewater		
The cable of the level switch shall be absolutely waterproof, and PVC insulated		
10 m cable length		
IP68		
250 Voltage, 3 A. NO/ NC		

9- Isolation Transformer:

Specification	Comply (Yes/No)	Remark
Single phase ,400V/230V		
Insulation class: B		
Insulation tension between primary and secondary: 3.5 KV		
Max ambient temperature: 50 °C		
Rate: as per BOQ		

10- Industrial Power Supply

Specification	Comply (Yes/No)	Remark
Input voltage and frequency:230 V, 50 Hz		
Output voltage and current : 24 VDC , as mentioned in BOQ		
Din rail mounting		
LED for output DC status		
Operation temperature: from 0 to 60 °C		
Protection: Transient surge protection varistor		
Output relay contact for DC status		

11- Generator Start Battery Charger

Specification	Comply (Yes/No)	Remark
AC Input: 240 V, 50 Hz.		
DC Output: as mentioned in BOQ.		
Charging Capacity: 10A.		
Battery Types: Suitable for charging Lead Acid ,Gel, AGM and flooded batteries		
Charging Modes : 3 stages (Bulk , Absorption , Float)		
High-efficiency power conversion (more than 90 %)		
Short-circuit protection ,Reverse polarity protection, Overvoltage and undervoltage protection, Overload protection , Overcharge Protection		
Indicators: LED showing charging status, battery health, and errors		
Operating Temperature: -10°C to +50°C		
Output signal (optional) : Fault signal feedback (Dry Contact)		

Note: The bidder is required to provide detailed data sheets for each item included in the technical proposal. Additionally, a one-year warranty for all items is mandatory.