1. VFD BOOSTER SYSTEM / HYDROPHEUMATIC SYSTEM

Application: Water supply, Hydro pneumatic system
Pumps configuration: Vertical inline pumps, **Grundfos Hydro 3 X CR 32-3-2 or equivalent**

Flow Rate of the System:	17.6 LPS (280 GPM)
Actual Head:	32.6 meters
Efficiency:	65.3 %
Electrical Supply:	**3 x 380-415 V, 50Hz (Three phase)**
Speed:	2900 RPM
Motor Capacity:	5.5 KW
Number of pumps in the system:	3 nos. - (2 Working +1Stand by)
Max. Ambient temp:	40 0C
MOC Chamber:	SS-304
MOC Impeller:	SS-304
MOC Shaft:	SS-316
MOC Base/Head:	C.I.

Mechanical Seal O-ring (Cartridge-balanced seal), Sic/Sic

Pressure tank 1 x 300 Liter
Pressure Tank: Aventura / Well Mate/ or equivalent

Number of VFDs in the system : 3 each
Danfoss / ABB or equivalent

PLC – 1 each in the system
Make of PLC Grundfos/Reputed or equivalent

2. VFD BOOSTER SYSTEM / HYDROPHEUMATIC SYSTEM

Application: Water supply, Hydro pneumatic system
Pumps configuration: Vertical inline pumps, **Grundfos Model Hydro 3 X CR 15-4 or equivalent**

Flow Rate of the System:	10 LPS (160 GPM)
Actual Head:	46.6 Meters
Efficiency:	69.8 %
Electrical Supply:	**3 x 380-415 V, 50Hz (Three phase)**
Speed:	2900RPM
Motor:	4.0KW
Number of pumps in the system:	3 nos. - (2 Working +1Stand by)
Max. Ambient temp:	40 0C
MOC Chamber:	SS-304

MOC Impeller:	SS-304
MOC Shaft:	SS-316
MOC Base/Head:	C.I.

Mechanical Seal O-ring (Cartridge-balanced seal), Sic/Sic

Pressure tank:	1 x 300 Liters
Pressure Tank:	Aventura / Well mate/ or equivalent

Number of VFDs in the system: 3 each
Danfoss / ABB or equivalent

PLC:	1 each in the system
Make of PLC:	Grundfos/Reputed or or equivalent

3. FILTER FEED PUMPS – 2 each.

Vertical, non-self-priming, multistage, in-line, centrifugal pumps for installation in pipe systems and mounting on a foundation.

The pump should have the following characteristics:
- Impellers and intermediate chambers are made of
Stainless steel, DIN W.-Nr. 1.4301.
- Pump head and base are made of Cast iron.
- The shaft seal has assembly length
According to EN 12756.
- Power transmission is via cast iron split
Coupling.
- Pipework connection is via DIN flanges.
The motor is a 3-phase AC motor.

Liquid:
Liquid temperature range: -20 .. 90 °C
Density: 1000 kg/m³

Technical:
Speed for pump data: 2902 rpm
Rated flow: 30 m³/h
Rated head: 22.6 m
Shaft seal: HQQV

Materials:
Pump housing: Cast iron
Pump housing: EN-JS1050
Pump housing: ASTM 80-55-06

Impeller: Stainless steel
Impeller: DIN W.-Nr. 1.4301
Impeller: AISI 304
Installation:
Maximum ambient temperature: 60 °C
Max pressure at stated temp: 16 bar / 90 °C
Max pressure at stated temp: 16 bar / -20 °C
Flange standard: DIN
Pipe connection: DN 65
Pressure stage: PN 16 / PN 25 / PN 40
Flange size for motor: FT130
Electrical data:
Motor type: 100LC
IE Efficiency class: IE3
Number of poles: 2
Rated power - P2: 3 kW
Power (P2) required by pump: 3 kW
Mains frequency: 50 Hz
Rated voltage: 3 x 220-240 D/380-415 Y V
Rated current: 11,0/6,30 A
Starting current: 840-920 %
Cos phi - power factor: 0,87-0,82
Rated speed: 2900-2920 rpm
IE efficiency: IE3 87,1%
Motor efficiency at full load: 87,1-87,1 %
Motor efficiency at 3/4 load: 88,0-87,0 %
Motor efficiency at 1/2 load: 87,7-85,4 %
Enclosure class (IEC 34-5): 55 (Protect. water jets/dust)
Insulation class (IEC 85): F

Model;-CR 32-2-2 or equivalent
Make;-Grundfos or equivalent

Specification should match the above specifications.