

NIQ No. 1 of 2019-20

1. SUBMERSIBLE PUMP SET: Submersible pump set, ISI marked conforming to latest IS specification, including IS : 8034 – 2002 complete with approx 20 (twenty) Mtrs. of standard length of column pipe (as per IS : 1239 Part – II) of required diameter with suitable pump, motor, starter, fittings and all other accessories. The column pipe of 20 Mtr. (approx) length should consist 6 Nos. of 3 Mtr. length & 1 No. of 2 Mtr. length. Each column pipe should have both end threaded & one end socketed. The efficiency of the pump should not be below 80% of the rated duty point

A. Submersible Pump set with 20 HP motor suitable for discharge capacity approximately 0.0566 cumec at 20 Mtr head.

PUMP :

1. Make : KSB/ Kirloskar
2. Type / Model : BPN 394-1/ 393-2
3. No. of stages : 1/ 2
4. Normal capacity in M³ / Sec : 0.0566
5. Head Range with discharge range: 13 – 26 M
6. Efficiency in % : 73.5%
7. Dia and thickness of column pipe (conforming to IS : 1239 Part-II) :150 mm x 6 mm
8. HP : 20 /25 HP
9. Materials of Impeller : Chrome Steel/ Bronze
10. OD of Bowl Assembly : 212/ 244 mm
11. Suitable size of TW : 300 mm

MOTOR :

1. Make : KSB/ Kirloskar
2. Type / Model : HBC 253/ HBC 203
3. Operating Power Supply : 415 V \pm 10%, 3- PH/ 50 Hz
4. Motor HP & RPM : 20/ 25 HP & 2900 RPM
5. Class of Motor Insulation : F
6. PF of Motor at 100% Load : 0.86
7. Size of Cable for Motor / Starter Connection : (3 x 10 sq. mm)

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ L&T/ Havells/ Equivalent
2. Type / Model : FASD
3. Relay Range : 20 – 32 A

ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to starter) : 50 Mtr. (approx)

N.B :- The flat flexible cable should be joint less cable of copper conductor with water proof PVC and rubber sheathing net of standard and reputed make as per IS : 694 – 1977 or equivalent International BSS / DIN standard. Cable guard and cable clips should be provided along with the pump to prevent damage to cable when lowering or handling of the pump.

PRICE :

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|------------------------|----------------------|------------------------------------|
| 1. MOTOR | : ₹ 70,000.00 / Each | (Rupees Seventy Thousand) only |
| 2. PUMP | : ₹ 57,000.00 / Each | (Rupees Fifty Seven Thousand) only |
| 3. COLUMN PIPE (20 M) | : ₹ 40,000.00 / Lot | (Rupees Forty Thousand) only |
| 4. STARTER | : ₹ 24,000.00/ Each | (Rupees Twenty Four Thousand) only |
| 5. ACCESSORIES | : ₹ 15,000.00 / Lot | (Rupees Fifteen Thousand) only |

Rate of complete Pump set (1 to 5) : ₹ 2,28,000.00 / Set
(Rupees Two lakh Twenty Eight Thousand) only

Price for Additional length of Column Pipe of following length:

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|---|---------------------|-----------------------------|
| 1. 3.00 M in length of required dia | : ₹ 6,000.00 / Each | (Rupees Six Thousand) only |
| 2. 2.00 M in length of required dia | : ₹ 4,000.00 / Each | (Rupees Four Thousand) only |
| 3. 1.00 M in length of required dia | : ₹ 2,000.00 / Each | (Rupees Two Thousand) only |
| 4. Flat Cable for 20 HP motor (Motor to starter): | ₹ 200.00 / Mtr | (Rupees Two Hundred) only |

**B. Submersible Pump set with 15 HP motor
suitable for discharge capacity approximately 0.0424 cumec. at 20 Mtr head .**

PUMP :

1. Make : KSB/ Kirloskar
2. Type / Model : BPHA 373/ 2A
3. No. of stages : 2
4. Normal capacity in M³ / Sec : 0.0424
5. Head Range with discharge range: 17 – 35 M
6. Efficiency in % : 72
7. Dia and thickness of column pipe (conforming to IS : 1239 Part – II) : 150 mm x 6 mm
8. HP : 15 HP
9. Materials of Impeller : Chrome Steel/ Bronze
10. OD of Bowl assembly : 194 mm
11. Suitable size of TW : 250 mm / 300 mm

MOTOR :

1. Make : KSB/ Kirloskar
2. Type / Model : HBC 153/ UMAI 150
3. Operating Power Supply : 415 V ± 10% 3 Ph 50 Hz
4. Motor HP & RPM : 15 HP & 2900 RPM
5. Class of Motor Insulation : F
6. PF of Motor at 100% Load : 0.84
7. Size of Cable for Motor / Starter Connection : (3 x 10 sq. mm)

STARTER SUTABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ L&T
2. Type / Model : FASD
3. Relay Range : 13 – 22 A

ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to starter) : 50 Mtr. (approx)

N.B :- The flat flexible cable should be joint less cable of copper conductor with water proof PVC and rubber sheathing net of standard and reputed make as per IS : 694 – 1977 or equivalent International BSS / DIN standard. Cable guard and cable clips should be provided along with the pump to prevent damage to cable when lowering or handling of the pump.

PRICE :

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|-----------------------|--|
| 1. MOTOR | : ₹ 55,000.00 / Each (Rupees Fifty Five Thousand only) |
| 2. PUMP | : ₹ 44,500.00/ Each (Rupees Forty Four Thousand Five Hundred) only |
| 3. COLUMN PIPE (20 M) | : ₹ 40,000.00 / Lot (Rupees Forty Thousand) only |
| 4. STARTER | : ₹ 18,000.00 / Each (Rupees Eighteen Thousand) only |
| 5. ACCESSORIES | : ₹ 18,000.00 / Lot (Rupees Eighteen Thousand) only |

Rate of complete Pump set (1 to 5) : ₹1,93,500/ Set

(Rupees One Lakh Ninety Three Thousand Five Hundred) only

Price for Additional length of Column Pipe of following length:

1. 3.00 M in length of required dia : ₹ 6,000.00 / Each (Rupees Six Thousand) only.
2. 2.00 M in length of required dia : ₹ 4,000.00 / Each (Rupees Four Thousand) only.
3. 1.00 M in length of required dia : ₹ 1,100.00 / Each
(Rupees One Thousand & One Hundred) only.
4. Flat Cable for 15 HP motor (Motor to starter): ₹ 180.00/ Mtr (Rupees One Hundred & Eighty) only

C. Submersible Pump set with 10 HP motor

suitable for discharge capacity approximately 0.0283 cumec at 20 Mtr head

PUMP :

1. Make : KSB/ Kirloskar
2. Type / Model : BPHA 384-2G / 1B
3. No. of stages : 2
4. Normal capacity in M³ / Sec : 0.0283
5. Head Range with discharge range: 24 – 35 M
6. Efficiency in % : 73%
7. Dia and thickness of column pipe (conforming to IS : 1239 Part – II) : 125 mm x 5 mm
8. HP : 15 HP
9. Materials of Impeller : Chrome Steel/ Bronze
10. OD of Bowl assembly : 190 mm
11. Suitable size of TW : 250 mm

MOTOR :

1. Make : KSB/ Kirloskar
2. Type / Model : HBC 153/ LIMAI 150
3. Operating Power Supply : 415 V ± 10%
4. Motor HP & RPM : 10 HP & 2900 RPM
5. Class of Motor Insulation : F
6. PF of Motor at 100% Load : 0.82
7. Size of Cable for Motor / Starter Connection : (3 x 6 sq. mm)

STARTER SUTABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ L & T/ Havells
2. Type / Model : FASD
3. Relay Range : 13 – 22 A

ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to starter) : 50 Mtr. (approx)

N.B :- The flat flexible cable should be joint less cable of copper conductor with water proof PVC and rubber sheathing net of standard and reputed make as per IS : 694 – 1977 or equivalent International BSS / DIN standard. Cable guard and cable clips should be provided along with the pump to prevent damage to cable when lowering or handling of the pump.

PRICE :

1. MOTOR : ₹ 53,000.00/ Each (Rupees Fifty Three Thousand) only
2. PUMP : ₹ 35,000.00/ Each (Rupees Thirty Five Thousand) only
3. COLUMN PIPE (20 M) : ₹ 35,000.00/ Lot (Rupees Thirty Five Thousand) only
4. STARTER : ₹ 18,000.00/ Each (Rupees Eighteen Thousand) only
5. ACCESSORIES : ₹ 20,051.00/ Lot (Rupees Twenty Thousand and Fifty One) only

Rate of complete Pump set (1 to 5) : ₹ 1,59,489.00/ Set
(Rupees One Lakh Fifty Nine Thousand Four Hundred & Eighty Nine) only .

Price for Additional length of Column Pipe of following length:

1. 3.00 M in length of required dia : ₹ 4,900.00 / Each
(Rupees Four Thousand Nine Hundred) only
2. 2.00 M in length of required dia : ₹ 3,300.00 / Each
(Rupees Three Thousand Three Hundred) only
3. 1.00 M in length of required dia : ₹ 1,750.00 / Each
(Rupees One Thousand Seven Hundred Fifty) only
4. Flat Cable for 10 HP motor (Motor to starter): ₹ 180.00/ Mtr
(Rupees One Hundred Eighty) only

D. Submersible Pump set with 7.5 HP motor

suitable for discharge capacity approximately 0.021 cumec. at 20 Mtr head .

PUMP :

1. Make : KSB/ Kirloskar
2. Type / Model : BPT 312/ 3
3. No. of stages : 3
4. Normal capacity in M³ / Sec : 0.021
5. Head Range with discharge range:14 – 32 A
6. Efficiency in % : 70 %
7. Dia and thickness of column pipe (conforming to IS : 1239 Part – II) :100 mm x 4.5 mm
8. HP : 7.5 HP
9. Materials of Impeller : Chrome Steel/ Bronze
10. OD of Bowl assembly : 142 mm
11. Suitable size of TW : 200mm/ 250 mm

MOTOR :

1. Make : KSB/ Kirloskar
2. Type / Model : VMA I 150
3. Operating Power Supply : 415 V ± 10%
4. Motor HP & RPM : 7.5 HP & 2900 RPM
5. Class of Motor Insulation : F
6. PF of Motor at 100% Load : 0.85
7. Size of Cable for Motor / Starter Connection : (3 x 4 sq. mm)

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ L&T/ Havells
2. Type / Model : DOL
3. Relay Range : 9 – 16 A

ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to starter) : 50 Mtr. (approx)

N.B :- The flat flexible cable should be joint less cable of copper conductor with water proof PVC and rubber sheathing net of standard and reputed make as per IS : 694 – 1977 or equivalent International BSS / DIN standard. Cable guard and cable clips should be provided along with the pump to prevent damage to cable when lowering or handling of the pump.

PRICE :

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|-----------------------|---|
| 1. MOTOR | : ₹ 41,000.00 / Each (Rupees Forty One Thousand) only |
| 2. PUMP | : ₹ 30,000.00 / Each (Rupees Thirty Thousand) only |
| 3. COLUMN PIPE (20 M) | : ₹ 30,0000.00 / Lot (Rupees Thirty Thousand) only |
| 4. STARTER | : ₹ 8,000.00 / Each (Rupees Eight Thousand) only |
| 5. ACCESSORIES | : ₹ 10,000.00 / Lot (Rupees Ten Thousand) only |

Rate of complete Pump set (1 to 5) : ₹ 1,33,500.00 / Set (Rupees One Lakh Thirty Three Thousand & Five Hundred) only

Price for Additional length of Column Pipe of following length:

1. 3.00 M in length of required dia : ₹ 4,000.00 / Each (Rupees Four Thousand) only
2. 2.00 M in length of required dia : ₹ 2,500.00 / Each (Rupees Two Thousand Five Hundred) only
3. 1.00 M in length of required dia : ₹ 1,500.00 / Each (Rupees One Thousand Five Hundred) only
4. Flat Cable for 7.5 HP motor (Motor to starter): ₹ 145.00/Mtr (Rupees One Hundred Forty Five) only

E. Submersible Pump set with 3 HP motor suitable for discharge capacity approximately 0.0085 cumec. at 20 Mtr head .

PUMP :

1. Make : KSB/ Kirloskar
2. Type / Model : BPD 273/ 2
3. No. of stages : 2
4. Normal capacity in M³ / Sec : 0.0085
5. Head Range with discharge range: 13 – 21 M

6. Efficiency in % : 76%
7. Dia and thickness of column pipe (conforming to IS : 1239 Part – II) : 100 mm x 4.5 mm
8. HP : 3 HP
9. Materials of Impeller : Chrome Steel/ Bronze
10. OD of Bowl assembly : 144 mm
11. Suitable size of TW : 200 mm/ 250 mm

MOTOR :

1. Make : KSB/ Kirloskar/ Marathon/ Crompton
2. Type / Model : VMA I 150
3. Operating Power Supply : 415 V \pm 10% 3-Ph 50- Hz
4. Motor HP & RPM : 3 HP & 2900 RPM
5. Class of Motor Insulation : F
6. PF of Motor at 100% Load : 0.82
7. Size of Cable for Motor / Starter Connection : (3 x 4 sq. mm)

STARTER SUTABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ L&T/ Havells
2. Type / Model : DOL
3. Relay Range : 6 – 10 A

ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to starter) : 50 Mtr. (approx)

N.B :- The flat flexible cable should be joint less cable of copper conductor with water proof PVC and rubber sheathing net of standard and reputed make as per IS : 694 – 1977 or equivalent International BSS / DIN standard. The length of the cable should be total assembly length + 5.00 M and cable packing ring should be provided to ensure non entry of sand into the motor. Cable guard and cable clips should be provided along with the pump to prevent damage to cable when lowering or handling of the pump.

PRICE :

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|-----------------------|--|
| 1. MOTOR | : ₹ 28,000.00 / Each (Rupees Twenty Eight Thousand) only |
| 2. PUMP | : ₹ 19,000.00 / Each (Rupees Nineteen Thousand) only |
| 3. COLUMN PIPE (20 M) | : ₹ 30,000.00 / Lot (Rupees Thirty Thousand) only |
| 4. STARTER | : ₹ 8,000.00/ Each (Rupees Eight Thousand) only |
| 5. ACCESSORIES | : ₹ 15,266.00/Lot (Rupees Fifteen Thousand Two hundred Sixty Six) only |

Rate of complete Pump set (1 to 5) : ₹ 1,06,500.00/ Set
(Rupees One Lakh Six Thousand Five Hundred) only

Price for Additional length of Column Pipe of following length:

1. 3.00 M in length of required dia : ₹ 4,000.00/ Each (Rupees Four Thousand) only
2. 2.00 M in length of required dia : ₹ 2,900.00/ Each (Rupees Two Thousand Nine Hundred) only
3. 1.00 M in length of required dia : ₹ 1,500.00 / Each (Rupees One Thousand Five Hundred) only
4. Flat Cable for 3 HP motor (Motor to starter): ₹ 145.00/Mtr (Rupees One Hundred Forty Five) only

2. ELECTRIC MOTOR DRIVEN CENTRIFUGAL PUMPSET :- The pump should be Horizontal axially split casing type with CI impeller with required discharge range in LPS, head range in Metre and to be coupled with TEFC squirrel cage induction motor having temperature rise limited to B class and temperature rise of winding to F class of insulation to be connected to power source 400 / 440 Volts, 3 phase, 50 cycle complete with automatic Star Delta / Oil immersed type starter / ATS with protection against under voltage, overload etc. and both the motor and pump to be mounted on same best quality MS frame.

A. Centrifugal pump set with 227 LPS minimum discharge at 15 Mtrs Head, working efficiently at head range (13 – 21) Mtrs coupled with **60 HP** induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON/ KIRLOSKAR/ LUBI/ Crompton/ Havells
2. Type / Model : Squirrel cage TEFC
3. HP : 60 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F/ IP 55

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar
2. Type : Horizontal Axially Spilt Casing
3. Model : LHC 250/ 250 or UP 250/30
4. Size (Suction X Delivery) : 300 mm x 250 mm/ 250 mm x 200 mm
5. Head Range : 10 – 20 M
6. Pump Input : 38.29 KW
7. Efficiency at duty Point :78%

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells
2. Model : NASACT 2LLGM
3. Type : FASD
4. Relay Range :37.6 – 60 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

1. MOTOR :- ₹ 2,20,000.00 / Each (Rupees Two Lakh Twenty Thousand) only
2. PUMP :- ₹ 2,05,000.00 / Each (Rupees Two Lakh Five Thousand) only
3. STARTER :- ₹ 85,000.00 / Each (Rupees Eighty Five Thousand) only
4. BASE FRAME :- ₹ 29,000.00 / Each (Rupees Twenty Nine Thousand) only
5. COUPLING :- ₹ 14,000.00./ Pair (Rupees Fourteen Thousand) only

Rate of complete Pump set (1 to 5): Rs 5,60,000.00/ Set (Rupees Five Lakh Sixty Thousand) only

B. Centrifugal pump set with 156 LPS minimum discharge at 13 Mtrs Head, working efficiently at head range (13 – 21) Mtrs coupled with **40 HP** induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON/ LUBI/ Kirloskar/ Crompton/ Havells
2. Type / Model : Squirrel Cage TEFC
3. HP : 40 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar
2. Type : Horizontal Axially Split Casing
3. Model : LHC 200- 250/ UP 250/30
4. Size (Suction X Delivery) : 250 mm x 200 mm/ 250 mm x 250 mm
5. Head Range : 13 – 21 M
6. Pump Input : 23.30 KW
7. Efficiency at duty Point : 82.7%

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells/ Equivalent
2. Model : NASACT ILEM
3. Type : FASD
4. Relay Range : 24 – 39 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

1. MOTOR : ₹ 1,45,000.00 / Each (Rupees One Lakh Forty Five Thousand) only
2. PUMP : ₹ 1,40,000.00 / Each (Rupees One Lakh Forty Thousand) only
3. STARTER : ₹ 40,421.00 / Each (Rupees Forty Thousand Four Hundred Twenty One) only
4. BASE FRAME : ₹ 18,500.00 / Each (Rupees Eighteen Thousand Five Hundred) only
5. COUPLING : ₹ 8,000.00 / Pair (Rupees Eight Thousand) only

Rate of complete Pump set (1 to 5): ₹ 3,66,000 / Set (Rupees Three Lakh Sixty Six Thousand) only

C. Centrifugal pump set with 60 / 70 LPS minimum discharge at 10.35 Mtrs Head, working efficiently at head range (7.62 – 13.71) Mtrs coupled with **20 HP** induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON/ LUBI/ Kirloskar/ Crompton/ Havells
2. Type / Model : Squirrel cage TEFC
3. HP : 20 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar
2. Type : Horizontal Axially Split Casing
3. Model : LHC 125 -250/ UP-125/30 A
4. Size (Suction X Delivery) : 150 mm x 125 mm
5. Head Range :7.62 – 13.71 M
6. Pump Input : 10.81 KW
7. Efficiency at duty Point : 78 %

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells/ Equivalent
2. Model : NASALLEM
3. Type : FASD
4. Relay Range : 13 – 21 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

1. MOTOR : ₹ 81,688.00 / Each (Rupees Eighty One Thousand Six Hundred & Eighty Eight) only
2. PUMP : ₹ 81,000.00 / Each (Rupees Eighty One Thousand) only
3. STARTER : ₹ 14,910.00 / Each (Rupees Fourteen Thousand Nine Hundred Ten) only
4. BASE FRAME : ₹ 11,920.00 / Each (Rupees Eleven Thousand Nine Hundred Twenty) only
5. COUPLING : ₹ 4,000.00 / Pair (Rupees Four Thousand) only

Rate of complete Pump set (1 to 5) : ₹ 2,20,053.00 / Set

(Rupees Two Lakh Twenty Thousand & Fifty Three) only

D. Centrifugal pump set with 60 / 70 LPS minimum discharge at 18 Mtrs Head, working efficiently at head range (15-21) Mtrs coupled with 20 HP induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON/ LUBI/ Kirloskar/ Crompton/ Havells
2. Type / Model : Squirrel Cage TEFC
3. HP : 20/ 25 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar
2. Type : Horizontal Axially Split Casing
3. Model : LHC 125-150/ UP 125/30/ UP 150/125 A
4. Size (Suction X Delivery) : 150 mm x 125 mm
5. Head Range : 13 – 22 M
6. Pump Input : 12.2 KW
7. Efficiency at duty Point : 85%

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells/ Equivalent
2. Model : NASA LLEM
3. Type : FASD
4. Relay Range : 13 – 21 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

1. MOTOR :- ₹ 81,688.00 / Each (Rupees Eighty One Thousand Six Hundred Eighty Eight) only
2. PUMP :- ₹ 81,000.00 / Each (Rupees Eighty One Thousand) only
3. STARTER :- ₹ 14,910.00 / Each (Rupees Fourteen Thousand Nine Hundred Ten) only
4. BASE FRAME :- ₹ 11,700.00 / Each (Rupees Eleven Thousand Seven Hundred) only
5. COUPLING :- ₹ 4,000.00 / Pair (Rupees Four Thousand) only

Rate of complete Pump set (1 to 5) : ₹ 2,10,808.00 / Set

(Rupees Two Lakh Ten Thousand Eight Hundred & Eight) only

3. ELECTRIC MOTOR DRIVEN CENTRIFUGAL PUMPSET :- The pump should be Horizontally / Vertically split casing **Mixed Flow** type with CI impeller having required discharge range in LPS, head range in Meter and to be coupled with TEFC squirrel cage induction motor having temperature rise limited to B class and temperature rise of winding to F class of insulation to be connected to power source 400 / 440 Volts, 3 phase, 50 cycles complete with automatic Star Delta / Oil immersed type starter / ATS with protection against under voltage, overload etc. and both the motor and pump to be mounted on same best quality MS frame.

A. Centrifugal pump set with 227 LPS minimum discharge at 13.10 Mtrs Head, working efficiently at head range 11 – 15.24 Mtrs coupled with **60 HP** induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON / LUBI/ Kirloskar/ Crompton/ Havells
2. Type / Model : Squirrel Cage TEFC
3. HP : 60 HP
4. RPM :1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar
2. Type : Horizontal/ Vertical Split Casing/ Mix Flow
3. Model : LHC 250- 250/ MF 25-30
4. Size (Suction X Delivery) : 300 mm x 250 mm
5. Head Range : 11 – 18 M
6. Pump Input : 40.6 KW
7. Efficiency at duty Point : 77 %

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells
2. Model : NASACT 2LEEM
3. Type : Fully Automatic Star Delta
4. Relay Range :37.6 – 60 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

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|---------------|---|
| 1. MOTOR | : ₹ 2,20,000.00 / Each (Rupees Two Lakh Twenty Thousand) only |
| 2. PUMP | : ₹ 2,05,000.00 / Each (Rupees Two Lakh Five Thousand) only |
| 3. STARTER | : ₹ 85,000.00 / Each (Rupees Eighty Five Thousand) only |
| 4. BASE FRAME | : ₹ 29,000.00 / Each (Rupees Twenty Nine Thousand) only |
| 5. COUPLING | : ₹ 14,000.00 / Pair (Rupees Fourteen Thousand) only |

Rate of complete Pump set (1 to 5): ₹ 5,60,000.00/ Set

(Rupees Five Lakh & Sixty Thousand) only

B. Centrifugal pump set with 60 LPS minimum discharge at 10.35 Mtrs Head, working efficiently at head range 7.62 – 11 Mtrs coupled with 20 HP induction motor. Pump, Motor, Starter should be of reputed brand and as per IS Specification.

MOTOR : Conforming to IS : 325 - 1978

1. Make : MARATHON / LUBI/ Kirloskar/ Crompton/ KSB/ Havells
2. Type / Model : Squirrel cage TEFC
3. HP : 20 HP
4. RPM :1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6595 Part – I

1. Make : LUBI/ Kirloskar/ KSB
2. Type : Horizontal/ Vertical Split Casing
3. Model : LHC 125 -250/ STANORM 150- 125- 200
4. Size (Suction X Delivery) : 150 mm x 125 mm
5. Head Range : 7.62 – 13 M
6. Pump Input : 8.3 KW
7. Efficiency at duty Point : 85%

STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make : BCH/ Havells
2. Model : NASALLEM
3. Type : Fully Automatic Star Delta
4. Relay Range :13.2 – 20 A

BASE FRAME : Best quality MS frame of required size and shape for complete pump set.

COUPLING : Best quality coupling of required size suitable for the pump set

PRICE:

- | | |
|---------------|--|
| 1. MOTOR | : ₹ 81,688.00/ Each |
| | (Rupees Eighty One Thousand Six Hundred & Eighty Eight) only |
| 2. PUMP | : ₹ 1,00,000.00 / Each (Rupees One Lakh) only |
| 3. STARTER | : ₹ 14,910.00 / Each |
| | (Rupees Fourteen Thousand Nine Hundred Ten) only |
| 4. BASE FRAME | : ₹ 11,920.00 / Each |
| | (Rupees Eleven Thousand Nine Hundred Twenty) only |
| 5. COUPLING | : ₹ 5,000.00 / Pair (Rupees Five Thousand) only |

Rate of complete Pump set (1 to 5) : ₹ 2,20,053.00 / Set

(Rupees Two Lakh Twenty Thousand Fifty Three) only

4. ELECTRIC MOTOR DRIVEN VACUUM PUMPSET

- A. Electric motor driven vacuum pumpset, water ring type mounted on common base frame and coupled by means of flexible coupling capable of handling minimum 2.2 litre of free air per second (0.1333 cubic metre per minute) and to produce minimum vacuum of 600 mm of mercury (approx.) coupled with **5 HP** , 440 / 400 V, 3 ph, 50 cycles Induction motor. The pump set should be mounted on a common base frame and should be provided with vacuum gauge. Pump set & Starter should be of reputed brand and as per IS Specification.

MOTOR :- Conforming to IS : 325 - 1978

1. Make : MARATHON/ LUBI/ KSB/ Kirloskar/ Havells
2. Type / Model : Squirrel Cage TEFC/ IE2- TEFC
3. HP : 5 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6849

1. Make : Stan-Hi-Vac/ Kirloskar
2. Type : Watert Ring
3. Model : SDV-3/ DV 40
4. Size (Suction X Delivery) : 40 mm x 40 mm
5. Duty Range : 0.134 M³/ Min, 630 mm of Hg
6. HP consumed : 4.6/ 5 HP

STARTER SUITABLE TO RUN ABOVE MOTOR:

1. Make : BCH/ L&T/ Havells
2. Model : MLI
3. Type : DOL

BASE FRAME :- Best quality MS frame of required size and shape for complete set.

COUPLING :- Best quality coupling of required size suitable for the pump set

PRICE :

- | | |
|---------------|---|
| 1. MOTOR | : ₹ 23,000.00 / Each (Rupees Twenty Three Thousand) only |
| 2. PUMP | : ₹ 55,000.00 / Each (Rupees Fifty Five Thousand) only |
| 3. STARTER | : ₹ 6,000.00 / Each (Rupees Six Thousand) only |
| 4. BASE FRAME | : ₹ 7,500.00 / Each (Rupees Seven Thousand Five Hundred) only |
| 5. COUPLING | : ₹ 2,500.00 / Pair (Rupees Two Thousand Five Hundred) only |

Rate of complete Pump set (1 to 5) : ₹ 1,07,00.00 / Set

(Rupees One Lakh Seven Thousand) only

B. Electric motor driven vacuum pump set, water ring type mounted on common base frame and coupled by means of flexible coupling capable of handling minimum 14 litre of free air per second (0.084 cubic metre per minute) and to produce minimum vacuum of 600 mm of mercury (approx.) coupled with **3 HP** , 440 / 400 V, 3 ph, 50 cycles Induction motor. The pump should have specific suction & delivery provided with vacuum gauge complete. Vacuum Pump set & Starter should be of reputed brand and as per IS Specification.

MOTOR :- Conforming to IS : 325 - 1978

1. Make : MARATHON/ LUBI/ KSB/ Kirloskar
2. Type / Model : Squirrel cage TEFC
3. HP : 3 HP
4. RPM : 1450
5. Supply Voltage / Phase / Cycle : 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation : F

PUMP :- Conforming to IS : 6849

1. Make : Stand-Hi-Vac/ Kirloskar
2. Type : Water Ring
3. Model : SWV -2
4. Size (Suction X Delivery) : 25 mm x 25 mm
5. Duty Range : 0.085 M³/ Min, 600 mm of Hg
6. HP consumed :2.46/ 3 HP

STARTER SUITABLE TO RUN ABOVE MOTOR:

1. Make : BCH/ L&T/ Havells
2. Model : MLI
3. Type : DOL

BASE FRAME :- Best quality MS frame of required size and shape for complete set.

COUPLING :- Best quality coupling of required size suitable for the pump set

PRICE :

- | | | |
|---------------|---|--|
| 1. MOTOR | : | ₹ 19,000.00 / Each (Rupees Nineteen Thousand) only |
| 2. PUMP | : | ₹ 18,000.00 / Each (Rupees Eighteen Thousand) only |
| 3. STARTER | : | ₹ 6,000.00 / Each (Rupees Six Thousand) only |
| 4. BASE FRAME | : | ₹ 7,000.00 / Each (Rupees Seven Thousand) only |
| 5. COUPLING | : | ₹ 2,000.00 / Pair (Rupees Two Thousand) only |

Rate of complete Pump set (1 to 5): ₹ 58,000.00 / Set
(Rupees Fifty Eight Thousand) only

5. MONO BLOCK PUMP SET:

A. Mono block pump set having discharge capacity 30 LPS(approx) at total head 18 Mtrs with head range (14-22) Mtr coupled with 3 phase 400/415 V, 50 C/S, **10 HP** motor. Mono block pump set should be of reputed brand and should conform to I.S Specification. Pump set should be designed to prevent overloading, motor burning and automatic air release during priming. Motor should be of class B/F insulation.

1. Make of Pump set: LUBI/ Kirloskar/ KSB/ Equivalent
2. Model / Type of Pump set: LBL- 53D/ KDS 1040
3. Suction & Delivery size of Pump:100 mm x 75 mm/ 80 x 65 mm
4. Discharge Range: 30 LPS at 18.0 M
5. Head Range: 15 – 25 M
6. Efficiency of Pump: 72%
7. RPM of Motor: 1440
8. Class of Insulation of Motor: F
9. Voltage Range: 415 V \pm 10% 3 PH/ 50 Hz

STARTER SUITABLE TO RUN THE ABOVE PUMP SET:

1. Make: BCH/ L&T/ Havells
2. Model: DOL
3. Amp. Rating: 14 – 20 A

RATE PER PUMP SET INCLUDING STARTER : ₹ 68,000.00 / Set

(Rupees Sixty Eight Thousand) only

B. Mono block pump set having discharge capacity 45 LPS at total head 20 Mtrs with head range (16-26) Mtr coupled with 3 phase 400/415 V, 50 C/S, **20 HP** motor. Mono block pump set should be of reputed brand and should conform to I.S Specification. Pump set should be designed to prevent overloading, motor burning and automatic air release during priming. Motor should be of class B/F insulation.

Pump Set :

1. Make of Pump set: LUBI/ Kirloskar
2. Model / Type of Pump set: LBL- 56B/ KDS 2050
3. Suction & Delivery size of Pump:125 mm x 100 mm/ 100 x 80 mm
4. Discharge Range: 45 LPS at 20 M
5. Head Range: 18 – 30 M
6. Efficiency of Pump: 71 %
7. RPM of Motor: 1440
8. Class of Insulation of Motor: F
9. Voltage Range: 415 V \pm 10% 3 PH/ 50 Hz

STARTER:

1. MAKE: BCH / L&T/ Havells
2. MODEL: Fully Automatic Star Delta
3. AMP. RATING: 16 – 30- A

RATE PER PUMP SET INCLUDING STARTER : Rs. 99,500.00 / Set

(Rupees Ninety Nine Thousand Five Hundred) only

6. ELECTRIC MOTOR DRIVEN SELF PRIMING CENTRIFUGAL PUMPSET :

(A). Self-Priming Centrifugal pump set (size : suction 150 mm and delivery 150 mm dia) 60 LPS minimum discharge at 10.00 Mtr head (approx), working efficiency at head range 2.00 to 15.00 Mtr (Make : Reputed brand.) and to be coupled with H.D. squirrel cage induction motor having E/B class insulation conforming to IS-325 / 78 (Make : Reputed brand) to be connected to power source 400/440 V, 50 Hz, 3 ph complete with 415 V, 50 Hz, 3 ph FASD starter in sheet enclosure, coupling, H.D. base frame, fitted in accurate alignment.

1. MOTOR : Conforming to IS : 325 - 1978

1. Make: MARATHON / KSB/ Kiorloskar/ Havells
2. Type / Model: Squirrel Cage TEFC
3. HP: 20 HP
4. RPM: 1450
5. Supply Voltage / Phase / Cycle: 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation: F

2. PUMP :- Conforming to IS : 6595 Part – I

1. Make: KSB/ Kirloskar
2. Type: Self Priming Centrifugal Mud Pump
3. Model: SP norm -60/ SDP6LA
4. Size (Suction X Delivery): 150 mm x 150 mm
5. Head Range: 10 – 22 M
6. Pump Input: 13.20 KW
7. Efficiency at duty Point: 65 %

3. STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make: BCH / L&T/ Havells
2. Model: ML 1.5
3. Type: FASD
4. Relay Range:13 – 21 A

4. **BASE FRAME:** Best quality MS frame of required size and shape for complete pump set.

5. **COUPLING:** Best quality coupling built in for the pump set

RATE PER PUMP SET INCLUDING STARTER : ₹ 2,31,605.00 / Set

(Rupees Two Lakh Thirty One Thousand Six Hundred Five) only

7. ELECTRIC MOTOR DRIVEN SUBMERGED CENTRIFUGAL PUMPSET :

(A) Submerged Centrifugal pump set of reputed brand and should conform to I.S Specification of **20 HP** with 60 LPS minimum discharge at 10.00 Mtr head (approx), working efficiency at head range 6.00 to 15.00 Mtr for both horizontally bottom rested in water body or horizontally suspended in water body from floating barge or pontoon, having Class-F or appropriate class insulation conforming to relevant IS to be connected to power source 400/440 V, 50 Hz, 3 ph complete with 415 V, 50 Hz, 3 ph automatic Star Delta / Oil immersed type starter / ATS with protection as per IP 68 against under voltage, overload etc in sheet enclosure, coupling, H.D. base frame, fitted in accurate alignment along with load chain for anchoring in complete.

1. MOTOR :

1. Make: AQUA Machineries
2. Type / Model: Submersed/ ARS
3. HP: 20 HP
4. RPM: 1000
5. Supply Voltage / Phase / Cycle: 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation: F

2. PUMP :-

1. Make: AQUA Machineries
2. Type: Submersed
3. Model: ARS
4. Size (Suction X Delivery): 150 mm
5. Head Range: 6 – 15 M
6. Pump Input:
7. Efficiency at duty Point: 80%
8. Mechanical seal should preferably be Bi-directional
(Silicon Carbide pump side/ Carbon Alloy steel motor side)

3. STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make: PRABHU/ Equivalent
2. Model:
3. Type: Star Delta
4. Relay Range: 0 – 30 A

RATE PER PUMP SET INCLUDING STARTER & PANEL : ₹ 7,30,000.00 / Set

(Rupees Seven Lakh Thirty Thousand) only

(B) Submerged Centrifugal pump set of reputed brand and should conform to I.S Specification of **40 HP** with 120 LPS minimum discharge at 10.00 Mtr head (approx), working efficiency at head range 6.00 to 15.00 Mtr for both horizontally bottom rested in water body or horizontally suspended in water body from floating barge or pontoon, having appropriate class insulation conforming to relevant IS to be connected to power source 400/440 V, 50 Hz, 3 ph complete with 415 V, 50 Hz, 3 ph automatic Star Delta / Oil immersed type starter / ATS with protection as per IP 68 against under voltage, overload etc in sheet enclosure, coupling, H.D. base frame, fitted in accurate alignment along with load chain for anchoring in complete.

1. MOTOR :

1. Make: AQUA Machineries
2. Type / Model: Submersed/ ARS
3. HP: 40 HP
4. RPM: 1000
5. Supply Voltage / Phase / Cycle: 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation: F

2. PUMP :-

1. Make: AQUA Machineries 2.
2. Type: Submersed
3. Model: ARS
4. Size (Suction X Delivery): 200 mm
5. Head Range: 6 – 15 M
6. Pump Input:
7. Efficiency at duty Point: 79%
8. Mechanical seal should preferably be Bi-directional
(Silicon Carbide pump side/ Carbon Alloy steel motor side)

3. STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make: PRABHU/ Equivalent
2. Model:
3. Type: Star Delta
4. Relay Range: 0 – 55 A

RATE PER PUMP SET INCLUDING STARTER & PANEL:

₹ 11,60,000.00 / Set (Rupees Eleven Lakh sixty Thousand) only

(C) Submerged Centrifugal pump set of reputed brand and should conform to I.S Specification of **60 HP** with 200 LPS minimum discharge at 10.00 Mtr head (approx), working efficiency at head range 6.00 to 15.00 Mtr for both horizontally bottom rested in water body or horizontally suspended in water body from floating barge or pontoon, having appropriate class insulation conforming to relevant IS to be connected to power source 400/440 V, 50 Hz, 3 ph complete with 415 V, 50 Hz, 3 ph automatic Star Delta / Oil immersed type starter / ATS with protection as per IP 68 against under voltage, overload etc in sheet enclosure, coupling, H.D. base frame, fitted in accurate alignment along with load chain for anchoring in complete.

1. MOTOR :

1. Make: AQUA Machineries
2. Type / Model: Submersed/ ARS
3. HP: 60 HP
4. RPM: 1000
5. Supply Voltage / Phase / Cycle: 415 V \pm 10% 3 PH/ 50 Hz
6. Class of Motor Insulation: F

2. PUMP :-

1. Make: AQUA Machineries
2. Type: Submersed
3. Model: ARS
4. Size (Suction X Delivery): 200 mm/ 250 mm
5. Head Range: 6 – 15 M
6. Pump Input:
7. Efficiency at duty Point: 74%
8. Mechanical seal should preferably be Bi-directional
(Silicon Carbide pump side/ Carbon Alloy steel motor side)

3. STARTER SUITABLE TO RUN ABOVE PUMP SETS:

1. Make: PRABHU/ Equivalent
2. Model:
3. Type: Star Delta
4. Relay Range: 0 – 80 A

RATE PER PUMP SET INCLUDING STARTER : ₹ 14,75,000.00 / Set

(Rupees Fourteen Lakh and Seventy Five Thousand) only

- 8. (A) Starter for squirrel cage Induction Motor :** 3 Ph. 415V, 50 Hz, FASD starter in sheet enclosure type having protection for under voltage and overload, suitable for operating squirrel cage induction Motor of 20/25/40/60/75 HP conforming to IS : 1822 – 1967 (Relay range of starter for different capacities of motor are shown below).

Make : BCH / L&T / Schneider / MEI / Siemens/ Havells & Equivalent.

Sl.	Particulars	Rate per Unit
i)	20/25 HP with Relay Range 13-25 Amp	₹ 25,000.00/Each (Rupees Twenty Five Thousand) only
ii)	40 HP with Relay Range 28-42 Amp	₹ 47,000.00/Each . (Rupees Forty Seven Thousand) only
iii)	60 HP with Relay Range 45-75 Amp	₹ 85,000.00/Each (Rupees Eighty Five Thousand) only
iv)	75 HP with Relay Range 66-110 Amp	₹ 85,000.00/Each (Rupees Eighty Five Thousand) only
v)	135 HP with Relay Range 75-110 Amp	₹ 1,30,000.00/Each (Rupees One Lakh Thirty Thousand) only

- 8. (B) Auto Transformer Starters:** 3 Ph. 415 Volts., 50 Hz type ATS manually operated oil immersed sheet steel clad floor mounting Auto Transformer starters fitted with under voltage release. Magnetic overload release with oil dashpot time lags, stop lever plain entries for P.V.C. cables, oil immersed Auto Transformer with 50%, 60% & 80% lappings as per IS : 8544 (Part II – 1977) suitable for operation of squirrel cage induction motors of following capacities.

Make : BCH / L&T / Schneider / MEI / Siemens / Advance/ Havells & Equivalent.

Sl. No	Particulars	Rate per Unit
i)	20 HP	₹ 41,000.00 / Each (Rupees Forty One Thousand) only
ii)	40 HP	₹ 59,000.00 / Each (Rupees Fifty Nine Thousand) only
iii)	60 HP	₹ 81,000.00 / Each (Rupees Eighty One Thousand) only
iv)	75 HP	₹ 97,000.00 / Each (Rupees Ninety Seven Thousand) only

- 9. Slip ring Motor Starter:** 3 Ph, 415 Volts, 50 Hz, OSK type manually operated oil immersed Stator – Rotor starter sheet steel clad, floor mounting type comprising of stator control triple pole oil circuit breaker with magnetic overload releases, oil dashpot time lags, under voltage release, stop lever etc. for following capacities of motors.

Rotor controller floor mounted with rotary type operating handle suitably interlocked such that the stator cannot be switched on unless the rotor is on full off position for A.C slipping motors as per I.S specification.

Make : BCH / L&T / Schneider / MEI / Siemens / Protex / Advance/ Havells & Equivalent.

Sl.	Particulars	Rate per Unit
i)	40 HP with Relay Range 30 – 50 Amp	₹ 46,000.00 / Each (Rupees Forty Six Thousand) only
ii)	60 HP with Relay Range 40 – 65 Amp	₹ 68,000.00 / Each (Rupees Sixty Eight Thousand) only
iii)	75 HP with Relay Range 45 – 75 Amp	₹ 68,000.00 / Each (Rupees Sixty Eight Thousand) only
iv)	135 HP with Relay Range 65–90 Amp	₹ 1,27,000.00 / Each (Rupees One Lakh Twenty Seven Thousand) only

10. SOLAR AC SUBMERSIBLE PUMP SET :

(A) Solar Submersible Pump set with 3 HP AC Induction motor and Solar Power Controller Unit (Conform IEC 6168311:1999 with overload, over-under voltage, short circuit protection), suitable for 100mm/150mm borewell and minimum discharge capacity approx 400 LPM at 10 M head (Dynamic Head Range 10-20 Mtr and Shut off head 25 M) working at 3000 Watt_p of solar power along with Cables, Inverter external box, surge suppressor, DC MCB, etc. in complete as per MNRE norms and as per IS.

1. PUMP :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlight
2. Type / Model : BPD 242/ 2
3. No. of stages : 2 / 4
4. Normal capacity in M³ / Sec :
5. Head Range with discharge range: 10 – 22 M
7. Dia (OD) : 144 mm
8. HP : 3 HP
9. Materials of Impeller : Chrome Steel
10. Bowl assembly : SS

2. MOTOR_ :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlight
2. Type / Model : UMAISOL 150-310/22
3. Operating Power Supply : 230 V – 3 Ph
4. Motor HP & RPM : 3 HP & 2890 RPM
5. Class of Motor Insulation : IP 58
6. Size of Cable for Motor / Controller Connection : 2.5 Sq. mm

3. SOLAR POWER CONTROLLER UNIT :

- i) Input Voltage : 450 V – 800 V DC
- ii) Input Current : 11 A
- iii) Output AC voltage : 230 V
- iv) Output AC current : 9 A
- v) Inverter Type : VFD
- vi) Inverter efficiency : 95%
- vii) Protection : IP 54

4. ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Column pipes : 20 Mtr
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to controller) : 40 Mtr. (approx)

- NB.**
1. Solar Pumpset should be of reputed make and carry 5 years warranty/ guarantee
 2. Flow Range : 90 L per Wp of PV array from TDH of 10 M
 3. Controller DC Input Voltage: (i) System Vmp > 587 V & (ii) System Voc < 800 V
 4. Controller Conforming To: IEC 61683 – 1999 & IEC 60068-1-2, IEC 60068 – 2-(2,14,30,78)

Rate of complete Pump set (1 to 4) :- ₹ 1,51,000.00 / Set

(Rupees One Lakh Fifty One Thousand) only

(B). Solar Submersible Pump set with 7.5 HP AC Induction motor and Solar Power Controller Unit (Conform IEC 6168311:1999) with overload, over-under voltage, short circuit protection, suitable for 150 mm/200mm borewell and discharge capacity approx 1400 LPM at 10 M head (Dynamic Head Range 10-20 Mtr and Shut off head 30 M) working at 8000 Watt_p of solar power along with Cables, Inverter external box, surge suppressor, DC MCB, etc. in complete as per MNRE norms and as per IS.

1. PUMP :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlight
2. Type / Model : BPI 343/ 2B
3. No. of stages : 2
4. Normal capacity in M³ / Sec :
5. Head Range with discharge range:10 – 20 M
7. Dia (OD) : 170 mm
8. HP : 7.5 HP
9. Materials of Impeller : Chrome Steel
10. Bowl assembly : SS

2. MOTOR :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlight
2. Type / Model : UMA ISOL 150- 6/ 22
3. Operating Power Supply : 320 V – 3 PH
4. Motor HP & RPM : 7.5 HP & 2890 RPM
5. Class of Motor Insulation : IP 58
6. Size of Cable for Motor / Controller Connection : 4 Sq. mm

3. SOLAR POWER CONTROLLER UNIT :

- i) Input Voltage : 450 V – 800 V DC
- ii) Input Current : 18 A
- iii) Output AC voltage : 320 V
- iv) Output AC current : 16 A
- v) Inverter Type : VFD
- vi) Inverter efficiency : 95%
- vii) Protection : IP 54

4. ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Column pipes : 20 Mtr
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to controller) : 40 Mtr. (approx)

NB. 1. Solar Pump set should be of reputed make and carry 5 years warranty/ guarantee

2. *Flow Range : 90 L per Wp of PV array from TDH of 10 M*

3. *Controller DC Input Voltage: (i) System Vmp > 587 V & (ii) System Voc < 800 V*

4. *Controller Conforming to : IEC 61683–1999 & IEC 60068-1-2, IEC 60068–2-(2,14,30,78)*

Rate of complete Pump set (1 to 4) : ₹ 2,10,000.00 / Set

(Rupees Two Lakh Ten Thousand) only

(C) Solar Submersible Pump set with 15 HP AC Induction motor and Solar Power Controller Unit (Conform IEC 6168311:1999) with overload, over-under voltage, short circuit protection, suitable for 200 mm/250mm/300 mm borewell and discharge capacity approx 1700 LPM (0.0283 cumec) at 10 M head (Dynamic Head Range 10-20 Mtr and Shut off head 30 M) working at 16000 Watt_p of solar power along with Cables, Inverter external box, surge suppressor, DC MCB, etc. in complete as per MNRE norms and as per IS.

1. PUMP :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlioght
2. Type / Model : BPH 384-1
3. No. of stages : 1
4. Normal capacity in M³ / Sec :
5. Head Range with discharge range: 14 – 20 M
6. Dia (OD) : 192 mm
7. HP : 15 HP
8. Materials of Impeller : Chrome Steel
9. Bowl assembly : SS

2. MOTOR :

1. Make : KSB/ Kirloskar/ Shakti/ Sunlight
2. Type / Model : UMAI SOL 150 – 13/ 22
3. Operating Power Supply :400 V – 3 Ph
4. Motor HP & RPM : 15 HP & 2890 RPM
5. Class of Motor Insulation : IP 58
6. Size of Cable for Motor / Controller Connection : 6 Sq. mm

3. SOLAR POWER CONTROLLER UNIT :

- i) Input Voltage : 450 V – 800 V DC
- ii) Input Current : 24 A
- iii) Output AC voltage : 400 V
- iv) Output AC current : 23 A
- v) Inverter Type : VFD
- vi) Inverter efficiency : 95%
- vii) Protection ; IP 54

4. ACCESSORIES :

1. Assembly support clamp : 2 pairs
2. Cable clamp / clip : 10 nos.
3. Delivery bend : 1 (one) no.
4. Column pipes : 20 Mtr
4. Short pipe 1.5 Mtr. length of required diameter : 1 (one) no.
5. Flat flexible cable (motor to controller) : 40 Mtr. (approx)

- NB. 1. Solar Pump set should be of reputed make and carry 5 years warranty/ guarantee
2. Flow Range : 90 L per Wp of PV array from TDH of 10 M
 3. Controller DC Input Voltage: (i) System V_{mp} > 587 V & (ii) System V_{oc} < 800 V
 4. Controller Conforming To: IEC 61683 – 1999 & IEC 60068-1-2, IEC 60068 – 2-(2,14,30,78)

Rate of complete Pump set (1 to 4) :- ₹ 3,10,000.00 / Set

(Rupees Three Lakh Ten Thousand) only