

Annexure-1

**ANNEXURE -1, Purpose:- Mine Water Pond Pump****Technical data sheet for Pump**

SL.	Material description	UOM	
1	Application		Water
2	Quantity		1
3	Pump type		Horizontal end suction
<del>4</del>	<del>Model</del>		<del>ETHSO 15</del>
5	Number of stages	No	One
6	Temperature	Deg	Ambient
7	Specific Gravity		1
8	Viscosity	CST	1
9	Head	Mt	75
10	Discharge	M3/hr	75
11	Efficiency	%	72
12	BKW	KW	21.9
13	Recommended Motor Rating	KW	30
14	Speed	RPM	2960
15	Suction Delivery	Mm	100X65
16	NPSHR	M	2.5
17	Impeller Type		Closed
18	Gland Arrangement		Graphited cotton packing
19	Bearing Type		Antifriction - SKF/FAG
20	<b>Material of Constuction</b>		
	Casting		Cast Iron
	Impeller		Bronze
	Shaft		EN 8
	Sleeve		SS410
	<b>Motor Details</b>		
	Make of Motor		KEC, CGL, SIEMENS
	Motor Type		TEFC
	Voltage	V	415
	Insulation		Class 'F'
	Protection		IP 55
	Duty Type		Continuous ( S1 )
	Amb. Max. Temp	Deg.C	50
Accessories	Base Plate With Foundation Bolts		MS
	Flexible Coupling (PB-160)		CI
	Coupling Guard		MS

*[Signature]*  
17.7.2012

### Annexure-1

Star Delta starter for. 3 phase induction motor in IP-55 enclosure made from 14SWG sheet steel cubical in design, dust & vermin proof The starter shall be suitable for 415 volts, 3 phase, 3 wire 50 Hz A.C. supply, the bus-bar of adequate rating (25mm x 6mm) made of E.C. grade copper. All bus-bars shall be sleeved or taped for high insulation purpose. The starter shall be floor/ Wall mounted type with complete wiring. 2Nos. earthing Bolts of suitable size shall be provided for earth connection. Detachable Gland plate shall be provided at bottom for entry of Al armoured cables.

#### The starter should have.

- 1) Suitable TPN Isolator with HRC fuses
- 2) Triple pole Air Break contactors, 415 V, 50 HZ with 2 NO + 2 NC Aux contacts. L&T make of suitable range.
- 3) Suitable Thermal overload relay, L&T make.
- 4) 5 A secondary, CT operated Ammeter (96 X 96 mm) of suitable range with extended scale, Ammeter selector switch and 3 Nos. CTs.
- 5) HRC Control Fuse with Base, 10 Amps rating having 2 Amps fuse link, EE/ GE make. R,Y,B Led type indication lamps.
- 6) Start/Stop Push Button, 6 Amps with Element – ESSBEE/BCH make,

#### Painting :

One coat of primer and 2 coats of stove enameled in light grey finish.

#### Gasket :

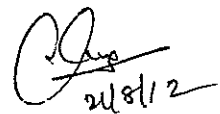
Synthetic soft Rubber Gasket without discontinuity shall be provided

#### Doors :

Front doors shall be hinged type with locking arrangement. Door interlocking with Isolator shall be provided.

#### Danger Board :

Suitable Danger Board, 440 volts in Hindi and English shall be provided.

  
21/8/2