

PUNE METROPOLITAN REGION DEVELOPMENT AUTHORITY
Sub- Requirement of Pump House Panel with VFD logic controller

Sr No	Description of Panel	Unit	Qty	Rate	Amount
	Pump House Panel for 70 HP to 80 HP				
	Design, supply & erecting compartmental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be suitable for IP 55 protection with IEC 61439 or equivalent / CPRI approved design				
	Incoming section - 320/ 400 Amps with 4 Pole MCCB with 36 KA breakage current				
	Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complete				
	Outgoing				
	Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment				
1	Incoming section with 160 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equivalent with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Digital Multifunction meter for Volts/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactors for sensors such as Pump pressure transmitter, Level Sensors , Flow meter etc	Set	1		
	APFC Panel Section for 70 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard				
	Lighting & power for other sections consisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotary handle for each section total 2 Working + 1 spare feeder for each panel section				
	Pump House Panel for 50 HP to 60 HP				
	Design, supply & erecting compartmental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be suitable for IP 55 protection with IEC 61439 or equivalent / CPRI approved design				
	Incoming section - 250 Amps with 4 Pole MCCB with 36 KA breakage current				
	Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complete				
	Outgoing				
	Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment				

2	<p>Incoming section with 125 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equvallant with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Dlgital Mutifunction meter for Volrs/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactos for snesors such as Pump pressure transmittor, Level Sensors , FLOW meter etc</p> <p>APFC Panel Section for 50 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard</p> <p>Lighting & power for other sections cosisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotray handle for each section total 2 Working + 1 spare feeder for each panel section</p>	Set	1		
3	<p>Pump House Panel for 40 HP to 50 HP</p> <p>Design, supply & erecting compartental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be sutiable for IP 55 protection with IEC 61439 or equvallant / CPRI approved design</p> <p>Incoming section - 200 Amps with 4 Pole MCCB with 36 KA breakage current</p> <p>Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complate</p> <p>Outgoing</p> <p>Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment</p> <p>Incoming section with 125 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equvallant with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Dlgital Mutifunction meter for Volrs/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactos for snesors such as Pump pressure transmittor, Level Sensors , FLOW meter etc</p> <p>APFC Panel Section for 40 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard</p> <p>Lighting & power for other sections cosisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotray handle for each section total 2 Working + 1 spare feeder for each panel section</p> <p>Pump House Panel for 30 HP to 40 HP</p>	Set	1		

4	Design, supply & erecting compartental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be sutiable for IP 55 protection with IEC 61439 or equivallant / CPRI approved design	Set	1		
	Incoming section - 200 Amps with 4 Pole MCCB with 36 KA breakage current				
	Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complate				
	Outgoing				
	Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment				
	Incoming section with 100 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equivallant with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Dligital Mutifunction meter for Volrs/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactos for snesors such as Pump pressure transmittor, Level Sensors , Flow meter etc				
	APFC Panel Section for 30 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard				
Lighting & power for other sections cosisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotray handle for each section total 2 Working + 1 spare feeder for each panel section					
Pump House Panel for 20 HP to 30HP					
	Design, supply & erecting compartental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be sutiable for IP 55 protection with IEC 61439 or equivallant / CPRI approved design				
	Incoming section -200 Amps with 4 Pole MCCB with 36 KA breakage current				
	Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complate				
	Outgoing				
	Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment				

5	<p>Incoming section with 100 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equvallant with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Dligital Mutifunction meter for Volrs/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactos for snesors such as Pump pressure transmittor, Level Sensors , FLOW meter etc</p> <p>APFC Panel Section for 25 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard</p> <p>Lighting & power for other sections cosisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotray handle for each section total 2 Working + 1 spare feeder for each panel section</p>	Set	1		
6	<p>Pump House Panel for 10 HP to 20HP</p> <p>Design, supply & erecting compartental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be sutiable for IP 55 protection with IEC 61439 or equvallant / CPRI approved design</p> <p>Incoming section -200 Amps with 4 Pole MCCB with 36 KA breakage current</p> <p>Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complate</p> <p>Outgoing</p> <p>Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment</p> <p>Incoming section with 100 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer Star Delta Starter with 160 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equvallant with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Dligital Mutifunction meter for Volrs/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactos for snesors such as Pump pressure transmittor, Level Sensors , FLOW meter etc</p> <p>APFC Panel Section for 20 KVARH 440 V 3 phase, 50 Hz., Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard</p> <p>Lighting & power for other sections cosisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotray handle for each section total 2 Working + 1 spare feeder for each panel section</p>	Set	1		
	Pump House Panel for Pumps Upto 10 HP				
	Pump House Panel for 10 HP to 20HP				

7	Design, supply & erecting compartmental Panel for Pump house with Incoming section , Pump Section with Starter Panel with Auto/ manual Selector Switch Control Logic for operation of pump on flow / level sensing system with required Starter , APFC Panel Section.Each Section is consisting of Following details with incoming and outgoing cable alleys with termination strips, MCCB sections for incoming , outgoing with indication lamps for MCCB on / off RYB indication . The Panel should be suitable for IP 55 protection with IEC 61439 or equivalent / CPRI approved design	Set	1		
	Incoming section -100 Amps with 4 Pole MCCB with 36 KA breakage current				
	Required Bus bars of rated current for Pump section , Incoming section , APFC section , Spare feeders complete				
	Outgoing				
	Pump section suitable for 2 Working + 1 Stand BY & 1 Spare compartment				
	Incoming section with 32/63 Amps 4 Pole MCCB with required accessories such as rotary handle , terminal spreaders etc for as incomer DOL Starter with 63 Amp Contactor, Timer & Overload Protection relay , VFD of Danfoss/ ABB or equivalent with Pump logic controller , Pump on / Off / trip status indication , RYB indication with control & power wiring of required Copper Flexible FR / FRLS Single core cables/ wires with end terminations , Digital Multifunction meter for Volts/ Amps , KWH reading , Cable terminal Strips for Pump outgoing, Volt free contactors for sensors such as Pump pressure transmitter, Level Sensors , Flow meter etc				
	APFC Panel Section for 10 - 15 KVARH 440 V 3 phase, 50 Hz. , Contactor Logic & Intelligent Relay micro APFC passive filter panel, consisting of suitable steps of APP/MPP type capacitor units with Detuned (harmonic filter) reactors of suitable rating , APFC panel shall be compliance to IEC 61439 and power quality IEC 61921 standard				
	Lighting & power for other sections consisting of 2 Nos 32 Amps 4 Pole MCCBs with RYB indications & Rotary handle for each section total 2 Working + 1 spare feeder for each panel section				
	Packing & forwarding charges				
	Transport with in 80 KM Distance from PMRDA Office				
	Total Cost for Pump Panels				
	GST applicable Extra				
	Grand total With Taxes				

Approved Components Makes

MCCB'S, Contactors, Relays etc siemens, Scheneder, ABB, VFD,

VFD with logic controller - Danfoss, OR Equivalent

MCCB'S, Contactors, Relays etc siemens, Scheneder, ABB, VFD,

Meters Enercon, Conserve or Equivalent

Panel IEC 61439 Approved / CPRI Approved

CRCA Sheets 1.6mm / 2mm Thk with 7 Tank Powder coated approved shade (Siemens Grade)