

Supply, Installation & Commissioning of different Electrical Works at different Sites

SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
1	LED TV (43") Samsung	1.00	Each		
2	Decorative Garden Light fixture Die casting aluminium diffuser glass IP 43 with Pole (Jaquar- Romantica model 10 watt- 3000k)	20.00	Each		
3	AMF Panel (Feeder Pillar) Make of switchgear - Schneider, legrand, ABB and Panle should be manufactured at CPRI approved panel builder 315 A FP mccb with 300 A TP contactor, multifunctional meter and 250 A FP mccb with 250 A TP contactor, multifunctional meter and indicator (For d.g) AMF Relay Voltmeter and Ammeter with Selector Switch	1.00	Each		
4	D.G Set Supplying, erection, testing and commissioning of Radiator Cooled silent DG sets of following capacity (rating in kVA) compact packaged silent type, with acoustic enclosure (outdoor type) to reduce the noise level as per requirements of central pollution control board, (72 db from 3 mtrs.) 415Volts, 3 phase, 50 Hz AC alternator coupled to diesel engine with STD PANEL ELECTRONIC GOVERNER SUITABLE FOR AUTO LOAD SHARING AND AUTO SYNCHRONISING SYSTEM complete with all accessories, standard specifications tool kits, service manual, self starting device, fly wheel, coupling with guard, V belt, radiator, instrument panel (starting switch with key, Water Temperature indicator gauge, Lub Oil Pressure gauge, Lube oil temperature gauge, Battery Charging Ammeter, indicating lamp, hour counter etc.), residential type silencer, common bed plate, anti vibration isolation pads, grouting bolts, first charge of engine oil, gear oil, high speed diesel oil, 24 volt chargeable battery set with Trickle/Boost Battery charger, PCC or equivalent controller complete as required including erecting, testing and commissioning of following type 415 Volts, 3 phase, 50 Hz. AC alternator coupled to Diesel Engine complete with all accessories. Make- Cummins, Volvo, Perkins	1	Set		
	250kva	1	Set		
	500 kva				
5	Supply, Installation, Testing & Commissioning OF DG SYNCHRONIZATION PANEL <u>SUBHEAD :-A (Main LT Cum DG Synchronization Panel) Outdoor Type (Make- Schneider/L&T/ABB/Legrand)</u>				

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
1 (A-D)	Design, Manufacturing, Supply of Outdoor cubicle type compartmentalized Main LT Cum DG Synchronization Panel , suitable for 415 V 50 Hz AC system, suitable for 50 KA short circuit rating, confirming to IP: 55 degree of protection , made of 14 SWG MS sheet frame work and 16 SWG MS sheet shutters, floor mounted, dust & vermin proof enclosure, having hinged cover on front and back having neoprene gasket stuck to the doors, duly painted with 65- 75 micron thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following accessories complete with all interconnections with suitable size of Electrical Grade Aluminum strip/hard drawn PVC insulated copper cable etc. as per requirement. The panel shall be provided with two distinct terminals for earthing connection with Copper conductor. Panel shall be designed to Auto Start of 250KVA & 500KVA DG sets, Load sharing & Synchronization of two DGs during absence of Raw power from Transformer.	1	Set		
A	INCOMERS:				
	1 No. 1600 amps FP ACB Microprocessor based, EDO, 50KA with LSIG & Under voltage release having suitable terminals. (For Transformer). (Similar to Model No.: MVS16N4NW6L Or Equivalent)				
	1 No. Multifunction Meter & 1 No. Digital Voltmeter and Phase Indication lamps will be provided backed up with 4 Nos. 6A SP MCB, 10KA and 3 Nos. CT-1600/5A, CI-1.0, 10VA.				
	1 No. 630 amps TP ACB Microprocessor based, EDO, 50KA with LSIG release having suitable terminals along with 1 No. 160A TP AC-3 duty Power Contactor. (For DG-1). (Similar to Model No.: MVS08N3NW6L Or Equivalent)				
	1 No. Multifunction Meter & 1 No. Digital Voltmeter and Phase Indication lamps will be provided backed up with 4 Nos. 6A SP MCB, 10KA and 3 Nos. CT-630/5A, CI-1.0, 10VA.				
	1 No. 800 amps TP ACB Microprocessor based, EDO, 50KA with LSIG release having suitable terminals along with 1 No. 250A TP AC-3 duty Power Contactor. (For DG-2). (Similar to Model No.: MVS08N3NW6L Or Equivalent)				
	1 No. Multifunction Meter & 1 No. Digital Voltmeter and Phase Indication lamps will be provided backed up with 4 Nos. 6A SP MCB, 10KA and 3 Nos. CT-800/5A, CI-1.0, 10VA.				
B	CONTROL & METERS:				
	1No. Synchronization Relay each for each DG sets				
	1No. Single Phase Preventer with Over Voltage/Under Voltage & Single Phasing relay suitable for 220V AC Or 415V AC.				
	Suitable Auxiliary Contactors & Add On Blocks				
	3 Nos. 8 Pole Relay Cards of 24V along with 24VDC Battery Chargers				
	Indication Lamps showing Busbar Live Indication, DG On/Off indications, DG Run/Fault, Battery Charger On etc. indications.				
	Start/Stop Push Buttons for Two DGs				
	1 No. Emergency Push Buttons & Auto Manual Selector Switches.				
	1 No. 8 Way Window for Annunciation with Hooter.				
	DC Volt Meter (0-30V DC) & DC Ammeters for Two DGs.				

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
	Necessary communicable cables with MCBs for controlling purpose.				
C	BUS BAR: 1 Set of 415V,1600A,3Ø,4W,50Hz,50KA FOR 1 SEC. busbars of high conductivity electrolytic quality aluminium alloy. Bus bar shall be supported by DMC/SMC bus bar supports fixed at a distance as per				
D	OUTGOINGS:				
	5 Nos. 630 amps FP MCCB for each Chiller Panels considering 1 No. as Spare.MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV563309 Or Equivalent)				
	1 No. 100 amps FP MCCB for Plant Lighting & other miscellaneous load.MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510347 Or Equivalent)				
	Each outgoing should have 1 no. Digital VAF meters & suitable rated CT of rating 100/5A & 630/5A of Class-1.0, 10VA.				
6	SUPPLY OF LT PANELS FOR Heavy Machine				
	Supply installation testing and commissioning of following LT Panel . The Panel should be manufactured at any reputed CPRI Panel manufacturer and all drawings of panel should be get approved from E.I/Consultant (Make- Schneider/L&T/ABB/ Legrand)				
I (A-E)	LT PANEL FOR A.C CHILLER-1&2				
A	Design, Manufacturing, Supply of Indoor cubicle type compartmentalized LT Panel, suitable for 415 V 50 Hz AC system, suitable for 25 KA short circuit rating, confirming to minimum IP: 42 degree of protection , made of 14 SWG MS sheet frame work and 16 SWG MS sheet shutters, floor mounted, dust & vermin proof enclosure, having hinged cover on front and back having neoprene gasket stuck to the doors, duly painted with 65- 75 micron thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following accessories complete with all interconnections with suitable size of Electrical Grade Aluminum strip/hard drawn PVC insulated copper cable etc. as per requirement. The panel shall be provided with two distinct terminals for earthing connection with Copper conductor.	1	Set		

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
B	INCOMER: 1 No. 630 amps Four Pole MCCB as Incomer. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36 KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV563309 Or Equivalent)				
C	CONTROL & METERS: 1 No. Analog type Voltmeter of (0-500V) 1 No. Analog type Ammeter of (0-630A) Indication Lamps (Red, Yellow, Blue) for Phase indication protected with 4 Nos. 6A Single Pole, 10KA Control MCBs 3 Nos. Metering Class CT of rated 630/5A, CL-1.0, 10VA				
D	BUS BAR: 1 Set of 415V, 630A, 3Ø, 4W, 50Hz, 25KA FOR 1 SEC. busbars of high conductivity electrolytic quality aluminium alloy. Bus bar shall be supported by DMC/SMC bus bar supports fixed at a distance as per relevant IS standards.				
E	OUTGOING: 1 No. 200 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV525312 Or Equivalent)				
	1 No. 160 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV516313 Or Equivalent)				
	9 Nos. 63 amps Four Pole MCCB outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				
	1 No. 160 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV516313 Or Equivalent)				
	2 Nos. 63 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
II (A-E)	LT PANEL FOR Heavy Machine-3&4				
A	Design, Manufacturing, Supply of Indoor cubicle type compartmentalized LT Panel, suitable for 415 V 50 Hz AC system, suitable for 25 KA short circuit rating, confirming to minimum IP: 42 degree of protection , made of 14 SWG MS sheet frame work and 16 SWG MS sheet shutters, floor mounted, dust & vermin proof enclosure, having hinged cover on front and back having neoprene gasket stuck to the doors, duly painted with 65- 75 micron thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following accessories complete with all interconnections with suitable size of Electrical Grade Aluminum strip/hard drawn PVC insulated copper cable etc. as per requirement. The panel shall be provided with two distinct terminals for earthing connection with Copper conductor.	1	Set		
B	INCOMER: 1 No. 630 amps Four Pole MCCB as Incomer. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV563309 Or Equivalent)				
C	CONTROL & METERS: 1 No. Analog type Voltmeter of (0-500V) 1 No. Analog type Ammeter of (0-630A) Indication Lamps (Red, Yellow, Blue) for Phase indication protected with 4 Nos. 6A Single Pole, 10KA Control MCBs 3 Nos. Metering Class CT of rated 630/5A, CL-1.0, 10VA				
D	BUS BAR: 1 Set of 415V, 630A, 3Ø, 4W, 50Hz, 25KA FOR 1 SEC. busbars of high conductivity electrolytic quality aluminium alloy. Bus bar shall be supported by DMC/SMC bus bar supports fixed at a distance as per relevant IS standards.				
E	OUTGOING: 1 No. 200 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV525312 Or Equivalent) 1 No. 160 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV516313 Or Equivalent)				

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
	6 Nos. 63 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				
	1 No. 160 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV516313 Or Equivalent)				
	1 No. 63 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				
III (A-E)	LT PANEL FOR Heavy Machine-5				
A	Design, Manufacturing, Supply of Indoor cubicle type compartmentalized LT Panel, suitable for 415 V 50 Hz AC system, suitable for 25 KA short circuit rating, confirming to minimum IP: 42 degree of protection , made of 14 SWG MS sheet frame work and 16 SWG MS sheet shutters, floor mounted, dust & vermin proof enclosure, having hinged cover on front and back having neoprene gasket stuck to the doors, duly painted with 65- 75 micron thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following accessories complete with all interconnections with suitable size of Electrical Grade Aluminum strip/hard drawn PVC insulated copper cable etc. as per requirement. The panel shall be provided with two distinct terminals for earthing connection with Copper conductor.	1	Set		
B	INCOMER:				
	1 No. 630 amps Four Pole MCCB as Incomer. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV563309 Or Equivalent)				

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
C	CONTROL & METERS:				
	1 No. Analog type Voltmeter of (0-500V)				
	1 No. Analog type Ammeter of (0-630A)				
	Indication Lamps (Red, Yellow, Blue) for Phase indication protected with 4 Nos. 6A Single Pole, 10KA Control MCBs				
	3 Nos. Metering Class CT of rated 630/5A, CL-1.0, 10VA				
D	BUS BAR: 1 Set of 415V, 630A, 3Ø, 4W, 50Hz, 25KA FOR 1 SEC. busbars of high conductivity electrolytic quality aluminium alloy. Bus bar shall be supported by DMC/SMC bus bar supports fixed at a distance as per relevant IS standards.				
E	OUTGOING:				
	1 No. 400 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.:				
	6 Nos. 63 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.:				
	1 No. 63 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.:				
IV (A-E)	<u>LT PANEL FOR A.C CHILLER-6&Colour Mixing Machine</u>				
A	Design, Manufacturing, Supply of Indoor cubicle type compartmentalized LT Panel, suitable for 415 V 50 Hz AC system, suitable for 25 KA short circuit rating, confirming to minimum <u>IP: 42 degree of protection</u> , made of 14 SWG MS sheet frame work and 16 SWG MS sheet shutters, floor mounted, dust & vermin proof enclosure, having hinged cover on front and back having neoprene gasket stuck to the doors, duly painted with 65- 75 micron thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following accessories complete with all interconnections with suitable size of Electrical Grade Aluminum strip/hard drawn PVC insulated copper cable etc. as per requirement. The panel shall be provided with two distinct terminals for earthing connection with Copper conductor.	1	Set		

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SN	Detail	Qty.	Unit	Quoted Rate (In Figure)	Quoted Rate (In Word)
B	INCOMER:				
	1 No. 630 amps Four Pole MCCB as Incomer. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV563309 Or Equivalent)				
C	CONTROL & METERS:				
	1 No. Analog type Voltmeter of (0-500V)				
	1 No. Analog type Ammeter of (0-630A)				
	Indication Lamps (Red, Yellow, Blue) for Phase indication protected with 4 Nos. 6A Single Pole, 10KA Control MCBs				
	3 Nos. Metering Class CT of rated 630/5A, CL-1.0, 10VA				
D	BUS BAR: 1 Set of 415V, 630A, 3Ø, 4W, 50Hz, 25KA FOR 1 SEC. busbars of high conductivity electrolytic quality aluminium alloy. Bus bar shall be supported by DMC/SMC bus bar supports fixed at a distance as per relevant IS standards.				
E	OUTGOING:				
	1 No. 400 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 36KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV540309 Or Equivalent)				
	4 Nos. 63 amps Four Pole MCCB as outgoing. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				
	1 No. 63 amps Four Pole MCCB as spare. MCCB shall be Thermal Magnetic with adjustable overload & shortcircuit release, 25KA having suitable spreaders & Extended Rotary Handle. (Similar to Model No.: LV510315 Or Equivalent)				

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