

**Malaviya National Institute of Technology Jaipur****Name of work : SITC of new Panel at old adm block in MNIT Jaipur****NAME OF THE FIRM****H-Schedule**

S.No	Qty	Items	Unit	Rate	Amount	Rate In words
1. Main Panel						
1	1.00	<p>Fabrication, Supply, installation, testing and commissioning of indoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area maximum upto 5 sq.mtr (as per approved design) fabricated in compartmentalized (preferably) design from CRCA sheet steel of 1.6 mm thick for frame work and covers (2.0 mm for door), 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports, with short circuit withstand capacity of 31 MVA for 1 Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5 sq. mm. PVC insulated FRLS copper conductor cable, cable alleys, cable gland plates in two half, i/c providing following switch gears:-</p> <p>Incoming</p> <p>01 No. 800 Amps, 50KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete, having on & off trip indication lamp with 2A backup MCBs.</p> <p>LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM*, % Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitable Accessories- 1 Set with suitable CT's and back up MCBs.</p> <p>3 Nos. Phase indicating LED lamps with 2 Amp backup MCB, breaker ON/OFF/Trip indication light with 2A MCB , test terminal block set, MCB , circuits as per standard practice , auxiliary contact for positive interlocking of the breakers as required .</p> <p>Shunt Trip Coil 220 V AC</p> <p>Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault level of 31 MVA for 1 sec complete with wiring, terminals, lugs, PVC channel with accessories, Earth Bus Copper (2x25x5MM).</p> <p>Outgoing</p> <p>2 Nos. 400 Amps, 36KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.</p> <p>4 Nos. 200 Amps, 36KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.</p> <p>2 Nos. 125 Amps, 25KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete.</p> <p>3 Nos. 63 Amps, 25KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete.</p> <p>NOTE:- 1) MCCB's wherever specified shall have rotary handle.</p> <p>2) All MCCB's shall be provided with phase barriers, phase spreaders complete as reqd</p>	Nos.		0.00	

2. Auto Mains failure Panel with distribution

2	1.00	Fabrication, Supply, installation, testing and commissioning of indoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area maximum upto 5 sq.mtr (as per approved design) fabricated in compartmentalized (preferably) design from CRCA sheet steel of 1.6 mm thick for frame work and covers (2.0 mm for door), 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having 400 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports, with short circuit withstand capacity of 31 MVA for 1 Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5 sq. mm. PVC insulated FRLS copper conductor cable, cable alleys, cable gland plates in two half i/c providing following switch gears :-	Nos.	0.00		
		Incoming -1 (RSEB)				
		01 No. 400 Amps, 36KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.				
		4 pole Power contactor - 400 Amp., Mechanical Interlocking and Electrical Interlocking, Digital Multi Function meter (EM6400 / 4410 or Equivalent), Shunt Trip Coil 220 VAC.				
		with suitable CT's, CL-1, 10VA for metering , CT terminal, Control MCB, LED light 22.5mm (R, Y, B), LED light 22.5mm (ON, OFF, TRIP),Control terminal, Control wiring				
		Incoming -2 (DG Set)				
		01 No. 400 Amps, 36KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.				
		4 pole Power contactor - 400 Amp., Mechanical Interlocking and Electrical Interlocking, Digital Multi Function meter (EM6400 / 4410 or Equivalent), Shunt Trip Coil 220 VAC.				
		with suitable CT's, CL-1, 10VA for metering , CT terminal, Control MCB, LED light 22.5mm (R, Y, B), LED light 22.5mm (ON, OFF, TRIP),Control terminal, Control wiring				
		Auto Mains Failure Panel with accessories,				
		Bus Bars - TPN aluminium bus bars of minimum 400 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault level of 31 MVA for 1 sec complete with wiring, terminals, lugs, PVC channel with accessories, Earth Bus Copper (1x25x5MM).				
		Outgoing				
		2 Nos. 200 Amps, 36KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.				
		4 Nos. 100 Amps, 25KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete				
NOTE:- 1) MCCB's wherever specified shall have rotary handle.						
2) All MCCB's shall be provided with phase barriers, phase spreaders complete as reqd						
The drawing of L.T. Panel to be got approved from Department before fabrication						
Manufactured by : Seimens, Mile stone, coremetal craft Ltd., AdLac,Advance, Johns Electric, Neptune. Make of the S/G: ABB, Legrand, Schneider, Seimens, L&T						
		Total			0.00	

Exective Engineer
Estate Section
MNIT