

Section GTP

SCHEDULE OF GUARANTEED PARTICULARS FOR OUTDOOR RMU PART 1

01.	Manufacturer's Name and Country of origin	
02.	Manufacturer's Design/Type/Model	
03.	Material used for making the body of the RMU	
04.	Standards of manufacturing	
05.	Whether painting for RMU is done as per standards	
06.	Whether the enclosure is anti-corrosive	
07.	Whether RMU metal clad has sufficient space for integration of: <ul style="list-style-type: none"> ▪ Minimum 2 numbers of Load Break Switches and 1 to 3 numbers of SF6/Vacuum Circuit breaker ▪ Sufficient space for inspection, testing, etc. ▪ Earthing arrangements ▪ Terminal output points for automation ▪ Sufficient arrangement for future extension with Circuit Breakers 	
08.	Maximum withstanding ambient temperature s	
09.	Spacing between live parts to earth	
10.	Whether RMU are designed to withstand all weather conditions including chemical industry and polluted areas	
11.	Period of guarantee of the RMU	
12.	Over all dimensions of the RMU (L x W x H)	
13.	Material & Gauge of material used for fabrication of the RMU	
14.	Whether RMU is manufactured as per IEC/IS standards to hold SF6 gas without leakage	
15.	Whether RMU has provision for sensors for temperature compensated pressure measurement in the relevant gas compartment to monitor the pressure of SF6 gas	
16.	Whether RMU is sealed pressure system	
17.	Weight of RMU complete with operating mechanism	
18.	RMU is provided with necessary take off terminals for automation	
19.	Whether gas chamber is made of stainless steel/metalised cast resin	

**SCHEDULE OF GUARANTEED PARTICULARS FOR BREAKER
PART 2**

01.	Manufacturer's Name and Country of origin	
02.	Manufacturer's Design / Type ref/Model.	
03.	Material used for making the body of the breaker	
04.	Standards of manufacturing	
05.	Whether the breakers are manufactured as per IEC/IS standards Please give Standards no.	
06.	Maximum temperature withstand of the breakers	
07.	1)Spacing between live part to Earth inside the breaker 2)Spacing between poles	
08.	Period of guarantee of the breaker	
09.	Rated frequency	
10.	Rated voltage	
11.	Highest system voltage	
12.	Rated current	
13.	Short time current rating with duration	
14.	Certificate or report of short circuit type test	
15.	Rated operating duty cycle	
16.	Short circuit breaking current (a)Symmetrical (b)Symmetrical at rated voltage (c)Asymmetrical at rated voltage (i)Per Phase (ii)Average (d)DC Component	
17.	Arcing time (At rated breaking current) in ms.	
18.	Opening time	
19.	Total break time in milli sec. (a)At 10% rated interrupting capacity (b)At rated interrupting capacity	
20.	Breaking Current (a)Rated out of phase current (b)Rated cable charging current (c)Rated fault level MVA (d)Rated capacitor breaking current	
21.	Make time in ms.	
22.	Maximum temperature rise over ambient (a)Main contacts Terminals	

23.	Rated restriking voltage at 100% and 50% rated capacity. (a)Amplitude factor (b)Phase factor (c)Natural frequency (d)R.R.R.V.(Volts/micro sec.)	
24.	Dry 1 minute power frequency withstand test voltage (a)Between line terminal and earth KV RMS (b)Between terminals with breaker contacts open KV RMS.	
25.	1.2/50 full wave impulse withstand test voltage (a)Between line terminal and earth KVp. (b)Between terminals with breaker contacts open KVp.	
26.	SF6 /VCB interrupter make	
27.	Contact separation distance	
28.	Type of main contacts	
29.	Contact pressure	
30.	Contact resistance	
31.	Life of the interrupter (in number of operations) (i)Tripping at rated current (ii)Tripping at maximum fault current. (Allowable maximum erosion 3 mm) (iii)Mechanical operations.	
32.	Details of main contacts making contact with the breaker truck with the panel	
33.	Control circuit voltage AC/DC.	
34.	Whether trip free or not	
35.	Whether all the interlocks provided	

**SCHEDULE OF GUARANTEED PARTICULARS FOR LOAD BREAK SWITCHES
AND ASSOCIATED ISOLATORS (EARTHING SWITCHERS)
PART 3**

Sl.No.	Description	Load Break Switch	Isolator (Earthing Switch)
01.	Manufacturer's Name and Country of origin		
02.	Manufacturer's Design / Type ref/Model.		
03.	Material used for making the body of the isolators .		
04.	Standards of manufacturing		
05.	Whether the isolators & earth positions are manufactured as per IEC/IS standards		
06.	Maximum temperature withstand of the isolators & earth switches		
07.	1)Spacing between live part to Earth 2)Spacing between fixed and moving contacts in the open position.		
08.	Period of guarantee of the isolators		
09.	Rated frequency		
10.	Rated voltage		
11.	Highest system voltage		
12.	Rated current		
13.	Short time current rating with duration		
14.	Certificate or report of short circuit type test		
15.	Rated operating duty cycle		
16.	Short circuit breaking current		
17.	Arcing time (At rated breaking current) in ms.		
18.	Opening time		
19	Whether all the interlocks provided		
20	Whether Sufficient arrangements are made to operate the isolators through DAS.		
21	Fault passage indicator 1)Type/Model 2)Self powered Yes/No 3)Current readings 4)Fault currents 5)Phase currents		

**SCHEDULE OF GUARANTEED PARTICULARS FOR CURRENT
TRANSFORMERS
PART 4**

01.	Manufacturer's Name and country of origin	
02.	Manufacturer's design ref / model	
03.	Applicable Standards	
04.	1)Type of CT 2)Ratio	
05.	Rated Primary current	
06.	Rated secondary current	
07.	Rated frequency	
08.	Transformation ratio	
09.	Number of cores	
10.	Rated output (a) For Core-I	
11.	Class of insulation	
12.	Class of accuracy For Protection	
13.	Short time current rating and its duration	
14.	Secondary resistance at 70 Deg °C	
15.	Continuous over load (percentage)	
16.	One minute power frequency dry withstand voltage	
17.	1.2/50 micro sec. impulse withstand test voltage	
18.	One minute power frequency withstand test voltage on secondary	
19.	Instrument safety factor	
20.	Type of primary winding	
21.	Literature/leaflets pamphlets about the current transformer offered	
22.	Period of guarantee	

**SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS FOR SELF
POWERED MICRO-PROCESSOR BASED NUMERICAL RELAYS
PART 5**

01.	Manufacturer's Name and Country of origin		
02.	Manufacturer's design / Ref. Type		
03.	Applicable Standards		
04.	Current Setting range for (a) Over current relay (b) Earth fault Element	IDMT Definite Time	
05.	Whether the relay has the in-built facilities of IDMT, OL, EL		
06.	Details of IDMT Characteristics		
07.	Accuracy for different settings and limits of errors		
08.	Whether Alpha numeric / LED display		
09.	Whether compatible for 1 A CT Secondary		
10.	Whether draw out type		
11.	Types of case		
12.	Reset time		
13.	Burden of relay		
14.	Maximum and Minimum, operating ambient air temp.		
15.	Whether technical literature pamphlets about the relay offered.		
16.	Period of guarantee.		
17.	Certificate of Proof for Electro Magnetic Interference.		
18.	Communications port – RS 232		
19.	Communication Protocol – MODBUS		

NOTE:- Any other information intimated later to be furnished as per applicable IS.