



PORCELAIN INSULATOR :

Porcelain Insulator (Bushings) with different shed profiles to suit different pollution conditions are used. These Bushings are hollow cylindrical type conforming to IS5621/IEC 815. Bushings with color at both the ends are clamped using M.S. Fabricated Clamp .

Nitrile and Neoprene Gaskets are used at both sides of collar to form flexible joint. This joint can sustain vibrations without damaging bushing. Bushings with cemented Flanges are also used.

TANKS & BASES :

Top tank of the CT having current less than 1200 Amps. are made of MS Sheet. Stainless Steel Tanks are used for CTs with primary current of 1200 Amps and above .Bases are fabricated from MS Plates and Channels. All MS Tanks and Bases are painted with oven baked paint, after cleaning by seven tank process. All surfaces which come in contact with oil are painted with oil Insoluble paint. All MS parts can be supplied with Hot Dip Galvanized on request.

TESTING :

Our Testing laboratory is well equipped with all facilities to conduct Routine Tests on our products. These tests shall be conducted in accordance with relevant Indian and International standard specifications as also inline with specifications committed by us to our customer.

All the CTs pass through a standardized quality assurance plan to ensure requisite top quality at every stage and in the final product.

PACKING & TRANSPORTATION :

All CT's are packed with strong jungle wood to take care of most adverse conditions of transportation all over the country. Special seaworthy packing is done for the CTs for Export.

MAINTENANCE

The CTs do not require maintenance apart from occasional cleaning of Bushings and checking of Nitrogen pressure. For more details refer Manual supplied with the CT.

HOW TO SELECT THE C.T.

It is important to specify correct parameters of CT while ordering for optimum design. Following are main factors for selecting current transformer

1. **SERVICE VOLTAGE:** System voltage in which CT is to be installed e.g. 11kV, 22kV, 33kV, 66 kV, ETC.
2. **INSTALLATION:** Whether OUTDOOR or INDOOR
3. **ATMOSPHERIC CONDITIONS:** Such as condition of Pollution, Altitude Ambient Temperature etc.

4. INSULATION LEVEL:

If insulation level other than associated with service voltage is required, it should be specifically mentioned

5. RATED PRIMARY CURRENT:

Specify rated primary current / currents (if required more than one value). Also indicate if different primary current is required for different cores.

6. CONTINUOUS PRIMARY CURRENT:

Max. Primary current that can be withstood continuously by current transformer e.g. 120% of primary current

7. RATED SECONDARY CURRENT :

Whether 1 Amp. or 5 Amps.

8. SHORT TIME CURRENT & ITS

DURATION : Specify fault current of the system in which CT is to be installed along with its duration. it is most important to specify realistic value of S.T.C. as at lower primary current, higher S.T.C.value necessitates bulky & costlier design. Also specify dynamic current if other than 2.5 times S.T.C. is required.

9. NO. OF CORES THEIR BURDENS, ACCURACY :

Basis of application, No. of cores, their burdens and accuracy class should be specified. It is advisable to specify minimum required Burden for metering core as unnecessary high burden will necessitate bulky and costlier design. Specified accuracy is guaranteed for 100 % to 25% of rated burden only. Current transformer offers minimum error if 75% to 60% burden is connected to secondary, Therefore, ideally rated burden higher than 1.5 time actual burden should be specified. Also, it is important to specify correct burden in context of instrument Security Factor (I.S.F). The I.S.F. indicates the over current as multiple of rated current at which the metering core will saturate, thus limiting the secondary current flowing through meter and protect it from damage. If actual burden connected is half of the rated burden, the I.S.F. will increase two-fold of its rated value.

10. KNEE POINT VOLTAGE, SECONDARY RESISTANCE AND EXCITATION CURRENT :

For differential protection, R.E.F. Protection, Bus Bar Protection, C.T. with accuracy class PS is required. The Knee Point Voltage, Secondary resistance and excitation current should be for this core. It is always better to specify Formula for Knee Point Voltage related to relay used for the protection. This will help designer to optimize the design.



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