

TIC of LV electrical installation

Part - 2: Supply characteristics and earthing arrangement

Section - 1:Mains incoming

System earthing: TN-C
 Brief note (in case of confusion): wewe
 Number and type of live conductors: AC
 Brief note: 54545454
 AC : 1-phase

Nature of supply parameters	R-Y	R-B	Y-B	R-N	Y-N	B-N	R-PE	Y-PE	B-PE
Nominal voltage U/U0 (V)	45.00	45.00	4.00	54.00	5.00	45.00	454.00	545.00	4.00
Nominal Frequency f (HZ)	4.00	5.00	4.00	545.00	454.00	5.00	45.00	4.00	54.00
Prospective fault current Ipfc (kA)	54.00	54.00	5.00	45.00	4.00	5.00	45.00	45.00	54.00
External Loop Impedance Ze (Ω)	5.000	5.000	4.000	5.000	45.000	4.000	54.000	5.000	454.000

Incoming (supply) protective device characteristics

Type of Over Current Protective Device: 5
 Rated current (A): 5
 Current for disconnection with in 0.2 seconds: 5

Section - 2:Alternative source of supply

System earthing: TN-C

Brief note (in case of confusion): wewe

Number and type of live conductors: AC

Brief note: 54545454

Availability of alternate supply: Yes

Number of alternate sources of supply: Yes

Alternate supply no : 212121

Short name of alternate supply: 21

System earthing: TT

Number and type of live conductors: AC

Brief note: 2

AC : 1-phase, 3-wire (LLM)

Nature of supply parameters	R-Y	R-B	Y-B	R-N	Y-N	B-N	R-PE	Y-PE	B-PE
Nominal voltage U/U_0 (V)	655165.00	56.00	56.00	54.00	654.00	65.00	6.00	65.00	6.00
Nominal Frequency f (HZ)	165.00	1.00	651.00	65.00	165.00	16.00	51.00	65.00	16.00
Prospective fault current I_{pfc} (kA)	51.00	65.00	1.00	51.00	5.00	1651.00	651.00	51.00	65.00
External Loop Impedance Z_e (Ω)	65.000	16.000	5.000	651.000	65.000	6.000	NA	6165.000	65.000

InstalledCapacity : 6

Actual Load Current (R,Y,B, N) : 5655,6,655,NA

Incoming (supply) protective device characteristics

Type of Over Current Protective Device: 651

Rated current (A): 651

Current for disconnection with in 0.2 seconds: 656

Brief note (in case of confusion): 565

Alternate supply no :	16
Short name of alternate supply:	5
System earthing:	TN-C
Number and type of live conductors:	AC
Brief note:	6
AC :	1-phase, 3-wire (LLM)

Nature of supply parameters	R-Y	R-B	Y-B	R-N	Y-N	B-N	R-PE	Y-PE	B-PE
Nominal voltage U/U0 (V)	165166 56.00	46.00	54.00	654.00	6.00	6.00	6.00	6.00	65.00
Nominal Frequency f (HZ)	46.00	5.00	66.00	121.00	21.00	21.00	2.00	12.00	12.00
Prospective fault current Ipfc (kA)	2.00	1.00	21.00	21.00	21.00	2.00	12.00	2.00	1.00
External Loop Impedance Ze (Ω)	21.000	21.000	2.000	2.000	1.000	2.000	21.000	2.000	12.000

InstalledCapacity :	12
Actual Load Current (R,Y,B, N) :	2,2,12,1

Incoming (supply) protective device characteristics

Type of Over Current Protective Device:	22
Rated current (A):	1
Current for disconnection with in 0.2 seconds:	22
Brief note (in case of confusion):	121

Section - 3:Particulars of installation referred in the report

Maximum demand kVA:	455
Maximum load:	45
Means of earthing :	Suppliers Facility
Type of earth electrode :	Horizontal
Material of earth electrode :	Copper
No of Locations :	4

Location No	Location Name	Electrode resistance to earth in ()	Electrode resistance to grid ()
4554	54	5	454
545	5	45	4
5	5	4	5
5	4	454	5

Section - 4:Details of main protective conductor

Size of earthing conductor :	44
Material of earthing conductor :	4
Earthing conductor continuity and connection verified :	Yes
Size of main protective bonding conductor :	455
Material of main protective bonding conductor :	45
Main protective bonding conductor continuity and connection verified :	No
Type of joints (impairing safety) :	545
No of joints :	4

Location	Joint No	Joint resistance ()
45	45	45
5	45	4
54	54	54
5	54	4554

Size of main protective earthing conductor:	5
Material of main protective earthing conductor:	4
Main Protective Conductor continuity and connection verified:	Yes
Type of Joints:	545
No of Joints:	4

Location	Joint No	Joint resistance ()
454	54	54
54	54	54
545	4	5454
54	54	5

Section - 5: Details of main switch or circuit breaker

Location:	6464
Type:	ACB
No of poles:	646
Current Rating:	4
Voltage Rating:	5465
Fuse Rating or Settings:	4654
Rated residual operating Current In:	654
Rated residual operating time @In Tn:	5

Location:	5
Type:	ACB
No of poles:	5
Current Rating:	545
Voltage Rating:	45
Fuse Rating or Settings:	465
Rated residual operating Current In:	46
Rated residual operating time @In Tn:	5465