

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

TIC of LV electrical installation

Part - 4: Testing

Section - 1: Basics information

Location Number :	23
Location Name :	42342
Test Engineer Name:	3424
Date:	2021-09-06
Designation:	2342
Company Name:	42342
Details Of Test Instrument:	42342
Continuity:	342432
Insulation Resistance:	42
Impedance:	432342
RCD:	4324324
Earth Electrode Resistance:	23443

Section - 2: Detailed Testing:

Distribution Board Details:	dfdff
Reference (name):	ss
Location:	dsfdfsds
Correct Supply Polarity:	Yes
Number Of Output Circuits - Spare:	sfd
Correct Supply Polarity:	sfds
Number Of Output Circuits In Use:	2
Ratings In Amps:	4545
Ratings In Amps:	67676

Nature of supply parameters	L1-L2	L2-L3	L1-L3	L1-N	L1-N	L3-N	L1-PE	L2-PE	L3-PE
Incoming Voltage	434	3234	NA	NA	NA	324	NA	323	2432
Incoming Zs ()	NA	NA	NA	4234	NA	3423	234	42	34243
Incoming Ipf (Amps)	NA	NA	4323	NA	2432324	324	2342	23	234

Circuite details											
Circuit no	32		Description			NA					
OCPD	Standart No		2								
	Type		NA								
	Rating		NA								
	Breaking capacity		NA								
	Shot circuit setting		NA								
	E and F setting		NA								
Conductor details	Installation reference method		NA								
	Cross sectional area	Phase	2432								
		Neutral	2432								
		PE	2432								
Continuity () Applicable to live conductor in final circuits and protective conductors only		Length	43								
		(R1+R2)	234								
		R2	234								
Polarity			NA								
Parameters			L1-L2	L2-L3	L1-L3	L1-N	L2-N	L3-N	L1-PE	L2-PE	L3-PE
Insulation resistance (M)			234.00	24.00	243.00	342.00	43.00	342.00	234.00	34.00	243.00
Voltage			234.00	24.00	243.00	342.00	43.00	342.00	234.00	34.00	243.00
Fault loop impedance			243.000	NA	NA	NA	NA	NA	NA	NA	NA
Disconnection Time			NA	NA	NA	NA	NA	NA	NA	NA	NA
Actual Short circuit / fault current (Amps)			NA	NA	NA	NA	NA	NA	NA	NA	NA
RCD	Sensitivity		NA								
	Operating time In		NA								
	Operating time 5* In		NA								
	Test button operation		NA								
Remarks		NA									

Circuite details											
Circuit no	432342		Description			NA					
OCPD	Standart No		43								
	Type		NA								
	Rating		NA								
	Breaking capacity		NA								
	Shot circuit setting		NA								
	E and F setting		342								
Conductor details	Installation reference method		NA								
	Cross sectional area	Phase	432								
		Neutral	432								
		PE	43								
Continuity () Applicable to live conductor in final circuits and protective conductors only		Length	243								
		(R1+R2)	234								
		R2	234								
Polarity			NA								
Parameters			L1-L2	L2-L3	L1-L3	L1-N	L2-N	L3-N	L1-PE	L2-PE	L3-PE
Insulation resistance (M)			243.00	3243.00	2.00	432.00	243.00	34.00	23.00	234.00	243.00
Voltage			243.00	3243.00	2.00	432.00	243.00	34.00	23.00	234.00	243.00
Fault loop impedance			23.000	NA	NA	NA	NA	NA	NA	NA	NA
Disconnection Time			NA	NA	NA	NA	NA	NA	NA	NA	NA
Actual Short circuit / fault current (Amps)			NA	NA	NA	NA	NA	NA	NA	NA	NA
RCD	Sensitivity		NA								
	Operating time In		NA								
	Operating time 5* In		NA								
	Test button operation		NA								
Remarks		NA									

Section - 1: Basics information

Location Number :	2323
Location Name :	545
Test Engineer Name:	5454
Date:	2021-09-06
Designation:	454
Company Name:	545
Details Of Test Instrument:	4545
Continuity:	4545
Insulation Resistance:	rtrt
Impedance:	rtrt
RCD:	etretre
Earth Electrode Resistance:	tretert

Section - 2: Detailed Testing:

Distribution Board Details:	erte
Reference (name):	rtertetr
Location:	erterte
Correct Supply Polarity:	Yes
Number Of Output Circuits - Spare:	erete
Correct Supply Polarity:	tretetr
Number Of Output Circuits In Use:	3
Ratings In Amps:	5454545
Ratings In Amps:	4545
Ratings In Amps:	4545

Nature of supply parameters	L1-L2	L2-L3	L1-L3	L1-N	L1-N	L3-N	L1-PE	L2-PE	L3-PE
Incoming Voltage	4545	NA	NA	NA	54	NA	45	45	45
Incoming Zs ()	NA	NA	54	NA	NA	45	NA	NA	45
Incoming Ipf (Amps)	NA	454	NA	54	545	NA	45	45	45

Circuite details											
Circuit no	454		Description			NA					
OCPD	Standart No		5								
	Type		NA								
	Rating		NA								
	Breaking capacity		NA								
	Shot circuit setting		NA								
	E and F setting		NA								
Conductor details	Installation reference method		NA								
	Cross sectional area	Phase	NA								
		Neutral	NA								
		PE	NA								
Continuity () Applicable to live conductor in final circuits and protective conductors only		Length	NA								
		(R1+R2)	NA								
		R2	NA								
Polarity			NA								
Parameters			L1-L2	L2-L3	L1-L3	L1-N	L2-N	L3-N	L1-PE	L2-PE	L3-PE
Insulation resistance (M)			545.00	45.00	45.00	54.00	45.00	54.00	4.00	54.00	5.00
Voltage			545.00	45.00	45.00	54.00	45.00	54.00	4.00	54.00	5.00
Fault loop impedance			45.000	NA	NA	NA	NA	NA	NA	NA	NA
Disconnection Time			NA	NA	NA	NA	NA	NA	NA	NA	NA
Actual Short circuit / fault current (Amps)			NA	NA	NA	NA	NA	NA	NA	NA	NA
RCD	Sensitivity		NA								
	Operating time In		NA								
	Operating time 5* In		NA								
	Test button operation		NA								
Remarks		NA									

Circuite details											
Circuit no	54		Description			NA					
OCPD	Standart No		54								
	Type		NA								
	Rating		NA								
	Breaking capacity		NA								
	Shot circuit setting		NA								
	E and F setting		NA								
Condu ctor details	Installation reference method		NA								
	Cross section al area	Phase	NA								
		Neutral	NA								
		PE	NA								
Continuity () Applicable to live conductor in final circuits and protective conductors only		Length	NA								
		(R1+R 2)	NA								
		R2	NA								
Polarity			NA								
Parameters			L1-L2	L2-L3	L1-L3	L1-N	L2-N	L3-N	L1-PE	L2-PE	L3-PE
Insulation resistance (M)			54.00	54.00	45.00	545.00	45.00	4.00	5.00	54.00	45.00
Voltage			54.00	54.00	45.00	545.00	45.00	4.00	5.00	54.00	45.00
Fault loop impedance			4.000	NA	NA	NA	NA	NA	NA	NA	NA
Disconnection Time			NA	NA	NA	NA	NA	NA	NA	NA	NA
Actual Short circuit / fault current (Amps)			NA	NA	NA	NA	NA	NA	NA	NA	NA
RCD	Sensitivity		NA								
	Operating time In		NA								
	Operating time 5* In		NA								
	Test button operation		NA								
Remarks		NA									

Circuite details											
Circuit no	54		Description			NA					
OCPD	Standart No		54								
	Type		NA								
	Rating		NA								
	Breaking capacity		NA								
	Shot circuit setting		NA								
	E and F setting		NA								
Conductor details	Installation reference method		NA								
	Cross section al area	Phase	NA								
		Neutral	NA								
		PE	NA								
Continuity () Applicable to live conductor in final circuits and protective conductors only		Length	NA								
		(R1+R2)	NA								
		R2	NA								
Polarity			NA								
Parameters			L1-L2	L2-L3	L1-L3	L1-N	L2-N	L3-N	L1-PE	L2-PE	L3-PE
Insulation resistance (M)			54.00	54.00	45.00	45.00	45.00	45.00	45.00	4.00	4545.00
Voltage			54.00	54.00	45.00	45.00	45.00	45.00	45.00	4.00	4545.00
Fault loop impedance			54.000	NA	NA	NA	NA	NA	NA	NA	NA
Disconnection Time			NA	NA	NA	NA	NA	NA	NA	NA	NA
Actual Short circuit / fault current (Amps)			NA	NA	NA	NA	NA	NA	NA	NA	NA
RCD	Sensitivity		NA								
	Operating time In		NA								
	Operating time 5* In		NA								
	Test button operation		NA								
Remarks		NA									

TIC of LV electrical installation

Part - 5: Observations, Recommendations and Summary

Section - 1: Extent and limitations of inspection and testing :

Extent of installation covered by this Report:	323
Agreed limitations including the reasons:	3233
Agreed with:	232
Operational limitations including the reasons:	3232

The inspection and testing detailed in this report have been carried out in accordance with IEC60364. It should be noted that cables concealed within trunk/trench and conduits, under floors which are generally within the fabric of the building or underground, have not been inspected unless it is specifically agreed between the client and inspector prior to the inspection :323

Section - 2: Observations

Referring to attached inspection report and test results and subject to the limitations specified at the extent and limitations of inspection and testing: The following observations are made

Observations	Further actions	Reference number in report	Comment
ewewe	C1 – Danger present. Risk of injury. Immediate remedial action required	23232	2323
2323	C2 – Potentially dangerous – urgent remedial action required	2323232	3232323
23232	C2 – Potentially dangerous – urgent remedial action required	23232	232323
23ewewe	C1 – Danger present. Risk of injury. Immediate remedial action required	2323	2323232

Section - 3: Recommendations

The overall assessment of the suitability of installation for continuous use is stated as unsatisfactory, I/We recommend that any observations that are classified as “danger present” (Code C1) or “potentially dangerous” (Code C2) should be acted upon as a matter of urgency.

Investigation without delay is recommended for observations which are identified as “Required further investigation”. Observations classified as “Improvement recommended” (Code C3) should be given due consideration. Subject to necessary remedial action being taken, I/We recommended that the installations should be further inspected and tested.

Date: 2021-09-06

Section - 4: Summary And Conditions Of The Installation

General condition of the installation in terms of electrical safety: 2323

Overall assessment of the installation in terms of suitability on continuous use: Unsatisfactory

Section - 5:Declaration

I/we being the person responsible for the inspection & testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described in this report, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that information in this report including the observations provides an accurate assessment of condition of electrical installation taking into account the stated extent and limitations in part 5 of this report

Inspected and Tested By		Authorised By	
Name	232323	Name	2323
Company	232	Company	23232
Signature	23	Signature	2323
Position	3232	Position	323
Address	323	Address	2323
Date	2021-09-06	Date	2021-09-06