

05e27 – PLUG DISCHARGE
Suitable for IEC 60950 and 60335, IEC 60065 and 61010
Proficiency Testing Program
AGREEMENT

We, «Name» of «Address», prior to commencement of the above program, have been made aware of the following requirements, and agree that:

1. The sample will be shipped to the participant laboratory on the understanding that the sample remains the property of IFM and is to be **returned to IFM**.
2. The parcel will contain one sample and a Return Pack for return shipment to IFM. The Return Pack will consist of a self-addressed envelope and a Customs Declaration.
3. The sample is to be handled with care and the instructions provided are to be followed throughout the testing procedure to prevent any damage.
4. Should any damage be caused to the sample by our laboratory during testing, which would deem the sample unsuitable for testing by other participant laboratories, it is our laboratory's responsibility to advise and compensate IFM for the damage incurred.
5. Testing should commence as soon as possible as IFM will be requesting results three weeks after shipment of the sample to initiate collection by TOLL courier.
6. There must not be any delays as this will hinder the process of completion of the entire program.
7. Upon completion of testing, our laboratory will suitably re-package the sample using the Return Pack provided. The Customs Declaration will need to be signed and dated. You will be given an Airwaybill number by the TOLL courier on collection of the sample and that will need to be written on the Customs Declaration.
8. IFM Quality Services Pty Ltd will advise TOLL of the collection date.
9. We acknowledge that IFM Quality Services Pty Ltd has requested that the timetable for completion of testing and return of sample be strictly adhered.

Contact Name: _____

For and on behalf of

Laboratory Name: «Name»

Signature

Date

IFM Quality Services Pty Ltd 05e27 Proficiency Testing Program - Plug Discharge Test

A note about this program:

This proficiency testing program has applicability to many testing standards. (Including the following IEC standards: 60335-1, 60950-1, 61010, 60065)

Using the 2 configurations on the testing sample (marked "Test A" and "Test B"), determine the maximum voltage (V_{max}) of the electrical discharge after disconnecting the circuit.

The 4 time intervals to be investigated after circuit disconnection are **1, 2, 5 and 10 seconds**.

Please report answers for as many of the specified time intervals as possible, even if your laboratory does not routinely measure at all the time intervals. The information will be used to investigate equipment reliability and consistency, and will be reported in general terms only in the final report. You have the opportunity to nominate whether each test configuration passes or fails with respect to the standards that could be applicable to this program.

Please complete pass / fail information only for standards within your scope of operations.

Laboratory Name

Assigned Code Number

Identity of Unit (see Label on Box):

Type of laboratory

Initials of Technician performing this test

For the technician performing this test, which standard would you say was your technical speciality?

How is the voltage generated for this test?

How is the power supply regulated?

What controls are in place to ensure that the test voltage supply is regular?

How often is the supply mains checked:

for voltage spikes
for consistency of sinusoidal waveform

The equipment used for this test is

other (specify)

The impedance of the probe used within this equipment is

Mohm

Please describe the equipment used to perform this test (For example: Herro model DX49J power supply, "plesby" oscilloscope, JH voltmeter backup..)

Attach a photograph of your test set-up when you submit your results

Determination of Discharge Voltage

The specified input for this sample is 230V AC

Connect the equipment and complete the fields below

If you perform the test by measuring the voltage at a set time interval after disconnection, please perform the test 10 times, and enter your individual results in the tables. V_{max} will be automatically generated. All entries are assumed to be VOLTS. Do not enter units. This spreadsheet accepts

points (".") to indicate decimal places. **DO NOT use commas.**

Alternatively, if your equipment **automatically** determines V_{max} , please enter the result in the corresponding squares framed in green.

Note: If you report by using BOTH methods, the MANUAL system results will be used.

| Test A | | | | |
|-----------|----------------------|----------------------|----------------------|----------------------|
| | T=1 second | T=2 seconds | T=5 seconds | T=10 seconds |
| result 1 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 2 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 3 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 4 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 5 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 6 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 7 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 8 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 9 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 10 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Vmax | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| | VOLTS | VOLTS | VOLTS | VOLTS |

| | | | | |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|
| Result from automated equipment | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| | VOLTS | VOLTS | VOLTS | VOLTS |

Concentrating on the test recording the discharge at 1 second:

| | | |
|---|----------------------|-------|
| During the test, peak voltage supplied was | <input type="text"/> | Volts |
| During the test, the minimum supply voltage was | <input type="text"/> | Volts |
| During the test, the average supply voltage was | <input type="text"/> | Volts |

If you have any additional information, comments of concerns about any aspect of the program, please write here:

| Test B | | | | |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | T=1 second | T=2 seconds | T=5 seconds | T=10 seconds |
| result 1 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 2 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 3 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 4 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 5 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 6 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 7 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 8 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 9 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| result 10 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Vmax | <input type="text"/> VOLTS | <input type="text"/> VOLTS | <input type="text"/> VOLTS | <input type="text"/> VOLTS |
| Result from automated equipment | <input type="text"/> VOLTS | <input type="text"/> VOLTS | <input type="text"/> VOLTS | <input type="text"/> VOLTS |

Determining Pass / Fail of Samples

Using the results you have generated, indicate whether the testing configurations pass or fail with respect to the applicable standards. (Only where applicable to your scope.)

| Test A | | |
|-------------|----------------------|--|
| IEC 60335-1 | <input type="text"/> | |
| IEC 60950-1 | <input type="text"/> | |
| IEC 61010 | <input type="text"/> | |
| IEC 60065 | <input type="text"/> | |

| Test B | | |
|-------------|----------------------|--|
| IEC 60335-1 | <input type="text"/> | |
| IEC 60950-1 | <input type="text"/> | |
| IEC 61010 | <input type="text"/> | |
| IEC 60065 | <input type="text"/> | |

Send the completed results sheet to: [Results return](#)

Please Note: The sample needs to be returned. Please pack into the materials provided and await collection.