

Operator Manual

ItemCode: NA

SerialNumber: SrNo-232418 and SrNo-232419

35 Station Mechanical Life Test Setup Control Panel and DUT Mounting Cabinet  
Rev1





#1

Connect both the Plugs in standard Indian 6A socket.



UPS Power



RAW Power

Connect “UPS Power” plug into UPS Supply. This drives Test Bench PC, SMPS and Control Cards. UPS is not included in Test Bench.

Connect “Raw Power” plug in either UPS Supply or utility grid. This drives internal 2 nos of variable power supplies, which eventually drives Relays/ Contactors under test.

Both the Plugs are standard Indian 6A plugs.

If “Raw Power” fails. Test automatically Pause and Resume when “Raw Power” appears.

#2

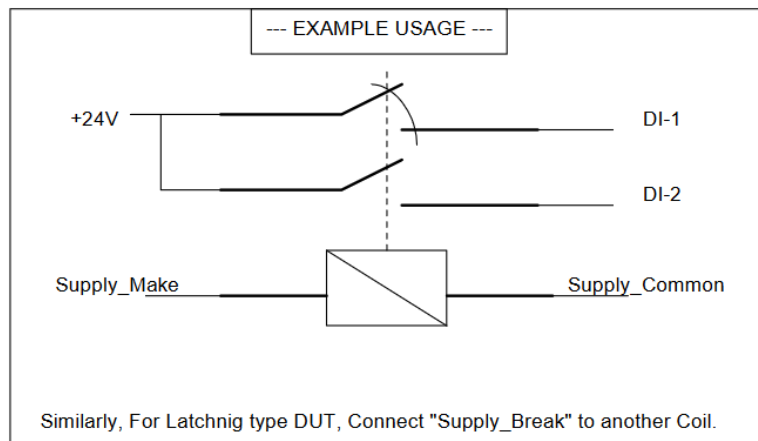
Turn ON Switch “UPS Power” and “Raw Power”.



#3  
Turn ON the CPU.



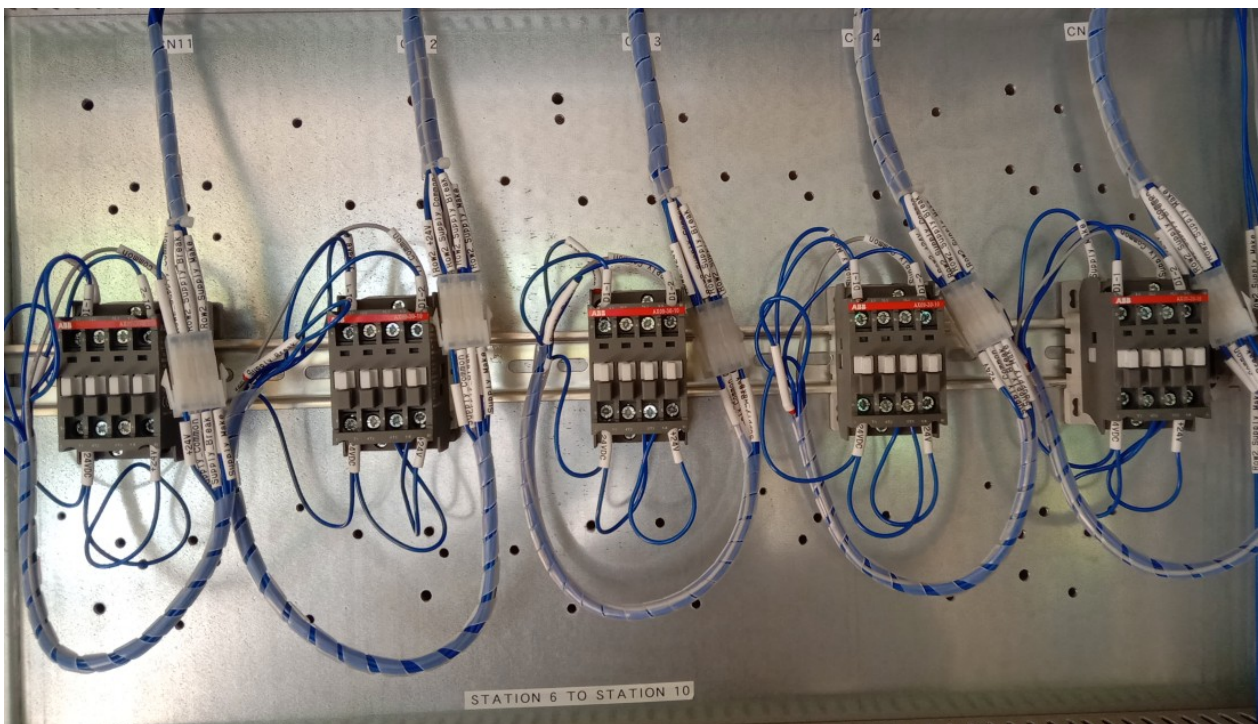
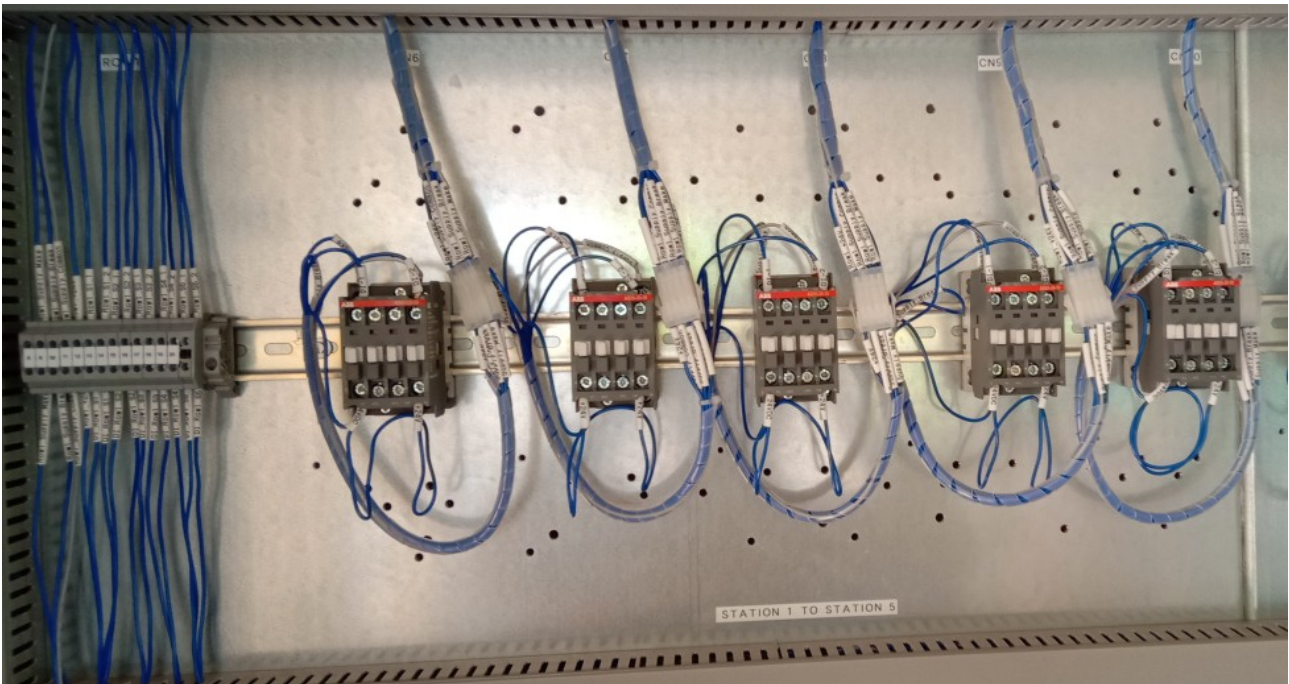
#4  
Connect the Cable Harness to DUT Relay/ Contactor.  
1302241242 ; 8 pin Male Cable Harness at DUT/Contactor side



For more information, you can refer drawing of ItemCode: 1302241242.  
Also, Always connect Surge Suppressors across Contactor Coils. And If you are using AC Coils,  
Prefer to disconnect AC-DC converter Bridge rectifier in Control Panel.

#5

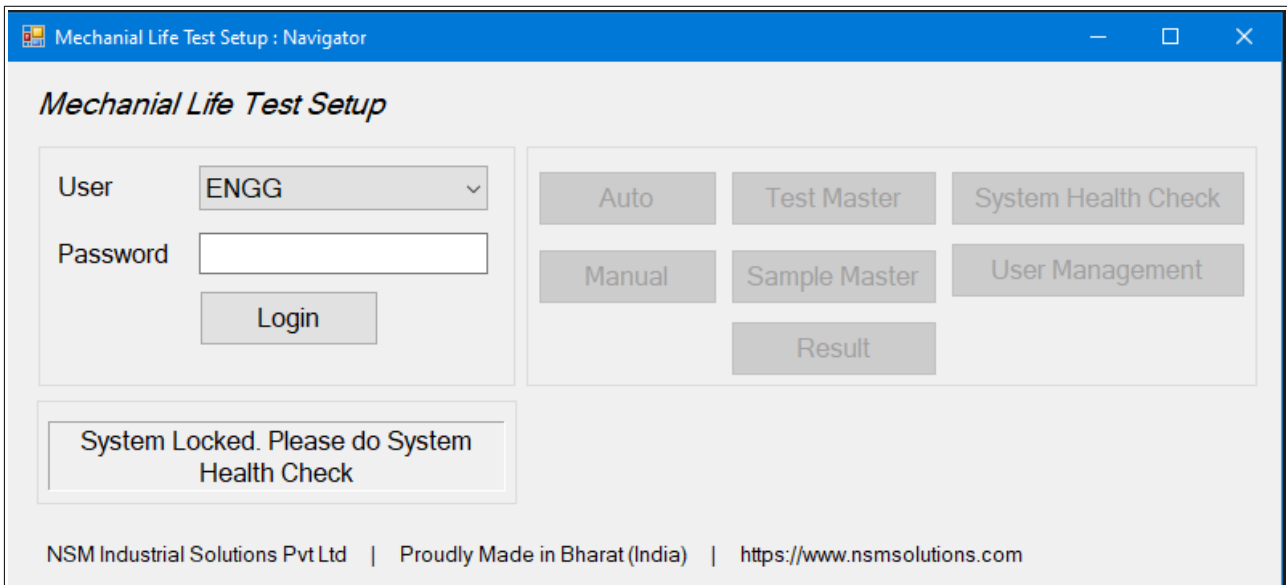
Connect DUT in the Mounting Cabinet.





#6

Login with appropriate user in software.



There are several “Users” and their “Roles” in the software. Each “User” has a definite “Role”. And based on its “Role”, Access to different modules in the software is defined.

Role and Authority Matrix is as below.

| Module/ Role        | Engineering | Maintenance | Quality | Production | Operator |
|---------------------|-------------|-------------|---------|------------|----------|
| Auto Mode           | Y           | Y           | Y       | Y          | Y        |
| Manual Mode         | Y           | Y           | N       | N          | N        |
| Test Master         | Y           | N           | Y       | N          | N        |
| Sample Master       | Y           | N           | Y       | Y          | N        |
| Result              | Y           | Y           | Y       | Y          | Y        |
| System Health Check | Y           | Y           | N       | N          | N        |

#7

Create Test in “Test Master”.

### Test Master

|   |                      |  |
|---|----------------------|--|
| Test Name                                 | <input type="text"/> | Write Test Name here.                                  |
| Relay Type                                | <input type="text"/> | Select your Relay Type here.                           |
| Coil Voltage                              | <input type="text"/> | Coil Voltage (Without Actual Machine feedback)         |
| Make Time (Sec)                           | <input type="text"/> | Range: 0.1 to 5 Seconds in steps of 0.01 Sec.          |
| Delay After Make (Sec)                    | <input type="text"/> | Range: 0.1 to 5 Seconds in steps of 0.01 Sec.          |
| Break Time (Sec)                          | <input type="text"/> | Range: 0.1 to 5 Seconds in steps of 0.01 Sec.          |
| Delay After Break (Sec)                   | <input type="text"/> | Range: 0.1 to 5 Seconds in steps of 0.01 Sec.          |
| Stop When Any One Sample Test is Finished | <input type="text"/> | Whether to Stop When Any One Sample Test is Finished ? |

In “Relay Type”, You have to select “Latching” or “Non-Latching”.

If Relay Type is “Non-Latching”, then parameters are “Break Time” and “Delay After Break” are not used. These fields are compulsory but they are not used. However, in “Latching”, there are used.

Time Related parameters have least count of 0.01 Sec. However, actual ON/OFF time of Voltage is subject to Mechanical ON/OFF time of potential free Electro-Mechanical Relays used in the Control Panel. Hence, User’s discretion is required.

Rest all parameters are self explanatory.



#8

Create Samples in “Sample Master” as per your configuration.

### Sample Master

Sample Identifier  
 Write Unique Sample Identifier here.

DI-1 Type  
 Choose the Configuration of the Digital Input - 1.

DI-2 Type  
 Choose the Configuration of the Digital Input - 2.

Target Operations  
 Range: 1 to 5,00,00,000

Consecutive Fail to Make Limit  
 Range: 1 to 5,00,00,000

Total Fail to Make Limit  
 Range: 1 to 5,00,00,000

Consecutive Fail to Break Limit  
 Range: 1 to 5,00,00,000

Total Fail to Break Limit  
 Range: 1 to 5,00,00,000

“DI-1 Type” and “DI-2 Type” are to be either “NO (Normally Open)”, “NC (Normally Closed)” or “Bypass/ Ignore”.

Rest all parameters are self explanatory.

#9

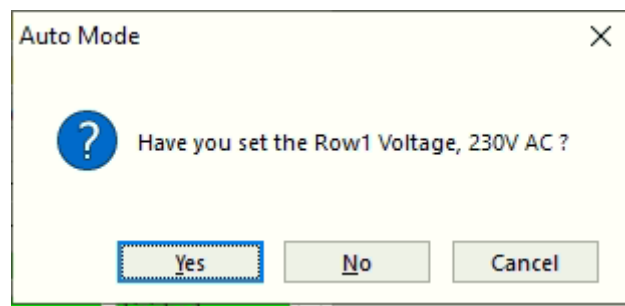
Go to “Auto” mode.

You shall see 7 Rows Configurations. You have to select appropriate “Test” and “Samples” in their respective DropDowns.

| Actual | Target | Fail to Make | Fail to Break | ETF (days) | Status |
|--------|--------|--------------|---------------|------------|--------|
|        |        |              |               |            |        |
|        |        |              |               |            |        |
|        |        |              |               |            |        |
|        |        |              |               |            |        |
|        |        |              |               |            |        |

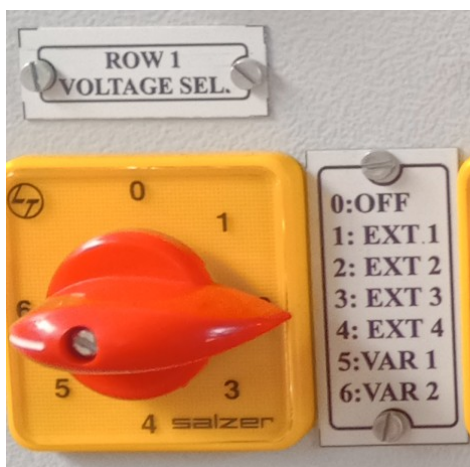
If any Station Sample is not selected in DropDown. Make sure that its connector is disconnected in DUT Cabinet.

Click on “Lock Button”. Below message will pop up.



Basically, It is for your confirmation, that whether you have selected appropriate voltage for that particular Row or not.?

Basically, For Each Row, You have 6 Voltage Options.



- EXT1: External-1
- EXT2: External-2
- EXT3: External-3
- EXT4: External-4
- VAR 1: Variable-1 (Internal)
- VAR 2: Variable-2 (Internal)

“External-x” are basically external Voltage Sources you can connect to Control Panel.

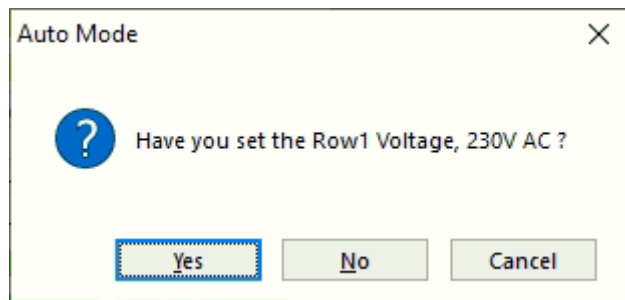
And “VAR-x” are basically internal voltage Sources 0-600V AC or DC.

“DC” is full wave rectified waveform.





So, Now, when you have set appropriate Voltages and selected appropriate voltages sources to all rows, Click “Yes”, in below pop up message.



Similarly, do for all 7 Rows.

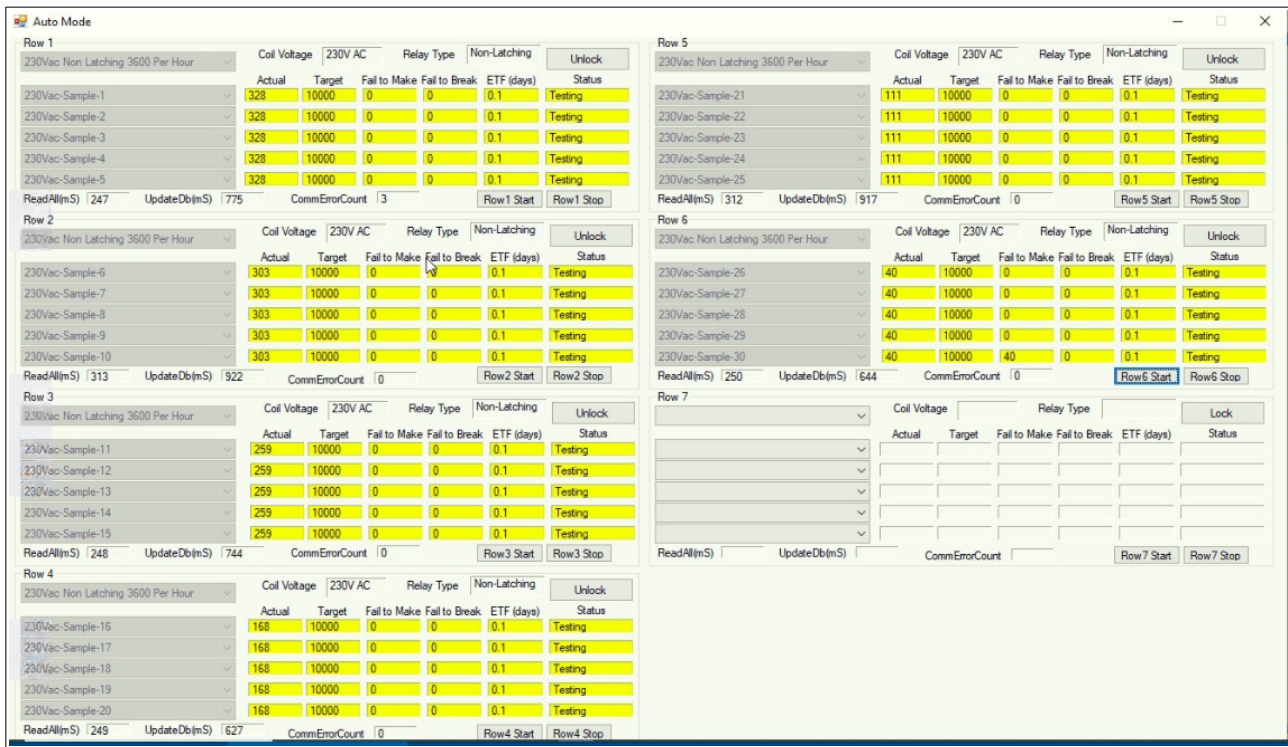
#10

Make sure all Safety Indicators are glowing and Press “Control ON” Push button.



#11

Start the test.



Below is the Tower Lamp Indications and their meaning.

|              |  |
|--------------|--|
| Green Light  | Atleast one Row is Idle and not in use.          |
| Yellow Light | Atleast one Row is busy and testing is going on. |
| Red Light    | Atleast one Row is in Fault or Alarm.            |

#12

For Result, Click on “Result” and below screen will appear.

| Result |                   |                   |                   |                      |                       |          |  |
|--------|-------------------|-------------------|-------------------|----------------------|-----------------------|----------|--|
| ID     | Sample Identifier | Actual Operations | Target Operations | Fail to Make Counter | Fail to Break Counter | Status   |  |
| 627    | 230Vdc-Sample-31  | 2881              | 10000             | 0                    | 0                     | Ready    |  |
| 626    | 230Vac-Sample-30  | 9998              | 10000             | 10000                | 0                     | Ready    |  |
| 625    | 230Vac-Sample-29  | 10000             | 10000             | 5                    | 0                     | Finished |  |
| 624    | 230Vac-Sample-28  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 623    | 230Vac-Sample-27  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 622    | 230Vac-Sample-26  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 621    | 230Vac-Sample-25  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 620    | 230Vac-Sample-24  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 619    | 230Vac-Sample-23  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 618    | 230Vac-Sample-22  | 10000             | 10000             | 13                   | 0                     | Finished |  |
| 617    | 230Vac-Sample-21  | 10000             | 10000             | 0                    | 0                     | Finished |  |
| 616    | 230Vac-Sample-20  | 10000             | 10000             | 3                    | 0                     | Finished |  |
| 615    | 230Vac-Sample-19  | 10000             | 10000             | 3                    | 0                     | Finished |  |
| 614    | 230Vac-Sample-18  | 10000             | 10000             | 8                    | 0                     | Finished |  |
| 613    | 230Vac-Sample-17  | 10000             | 10000             | 0                    | 0                     | Finished |  |

Showing Record 0 to 24, out of 31. To see all records, Use 'Export to CSV' option.

You can click on “Export to CSV” to get the all result in a file which you can later open in Excel or equivalent software.

For more information or Support, Please contact us and share below information to our support staff.

