Operator Manual

ItemCode: NA SerialNumber: SrNo-232418 and SrNo-232419 35 Station Mechanical Life Test Setup Control Panel and DUT Mounting Cabinet Rev1





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 (

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.

Connect DUT in the Mounting Cabinet.







Login with appropriate user in software.

🔜 Mechanial Life Test Setup : Navigator			– 🗆 X		
Mechanial Life Test Setup					
User ENGG ~	Auto	Test Master	System Health Check		
Password	Manual	Sample Master	User Management		
Login		Result			
System Locked. Please do System Health Check					
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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	Ν	N	Ν
Test Master	Y	Ν	Y	N	Ν
Sample Master	Y	Ν	Y	Y	Ν
Result	Y	Y	Y	Y	Y
System Health Check	Y	Y	Ν	Ν	Ν

Create Test in "Test Master".

Test Master	
Test Name	
	Write Test Name here.
Relay Type	
×	Select your Relay Type here.
Coil Voltage	
	Coil Voltage (Without Actual Machine feedback)
Make Time (Sec)	
	Range: 0.1 to 5 Seconds in steps of 0.01 Sec.
Delay After Make (Sec)	
	Range: 0.1 to 5 Seconds in steps of 0.01 Sec.
Break Time (Sec)	
	Range: 0.1 to 5 Seconds in steps of 0.01 Sec.
Delay After Break (Sec)	
	Range: 0.1 to 5 Seconds in steps of 0.01 Sec.
Stop When Any One Sample Test is Finished	
~ ~	Whether to Stop When Any One Sample Test is Finished ?
Submit	

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.

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
Submit	

"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.

Go to "Auto" mode.

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

Row 1		0.11/1			. . .		
230Vac Non Latching 3600 Per Hour	\sim	Coll Volta	ge	Ке	lay Type		Lock
		Actual	Target	Fail to Make	Fail to Break	ETF (days)	Status
230Vac-Sample-1	\sim						
230Vac-Sample-2	\sim						
230Vac-Sample-3	\sim						
230Vac-Sample-4	\sim						
230Vac-Sample-5	\sim						
ReadAll(mS) UpdateDb(mS)		Co	ommErrorCo	unt	[Row1 Start	Row1 Stop
Dem 2							

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.

Auto Mode	×
Have you set the Row1 Voltage, 230V AC ?	
Yes <u>N</u> o Cancel	

Similarly, do for all 7 Rows.

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



#11 Start the test.

🖳 Auto Mode		
Row 1 Row 5		
230Vac Non Latching 3600 Per Hour Col Voltage 230V AC Relay Type Non-Latching Unlock 230Vac Non Latching 3600 Per Hour Col Voltage 230VAC Relay Type Non-	n-Latching	Unlock
Actual Target Fail to Make Fail to Break ETF (days) Status Actual Target Fail to Make Fail to Break	ETF (days)	Status
230Vac-Sample-1 V 328 10000 0 0 0.1 Testing 230Vac-Sample-21 V 111 10000 0 0	0.1	Testing
230Vac-Sample-2 v 328 10000 0 0 0.1 Testing 230Vac-Sample-22 v 111 10000 0 0 0	0.1	Testing
230Vac-Sample-3 V 328 10000 0 0 0.1 Testing 230Vac-Sample-23 V 111 10000 0 0	0.1	Testing
230Vac-Sample-4 V 328 10000 0 0 0.1 Testing 230Vac-Sample-24 V 111 10000 0 0	0.1	Testing
230Vac-Sample-5 V 328 10000 0 0.1 Testing 230Vac-Sample-25 V 111 10000 0 0	0.1	Testing
ReadAllimS) 247 UpdateDb(mS) 775 CommErrorCount 3 Row1 Start Row1 Stop ReadAllimS) 312 UpdateDb(mS) 917 CommErrorCount 0	Row5 Start	Row5 Stop
Row 2 Row 6		
230Vac Non Latching 3600 Per Hour Coll Voltage 230V AC Relay Type Non-Latching Unlock 230Vac Non Latching 3600 Per Hour Coll Voltage 230VAC Relay Type No	on-Latching	Unlock
Actual Target Fail to Make Fail to Break ETF (days) Status Actual Target Fail to Make Fail to Break	ETF (days)	Status
230Vac-Sample-6 V 303 10000 0 V 0.1 Testing 230Vac-Sample-26 V 40 10000 0 0	0.1	Testing
230Vac-Sample-7 v 303 10000 0 0 0.1 Testing 230Vac-Sample-27 v 40 10000 0 0 0	0.1	Testing
230Vac-Sample-8 🛛 303 10000 0 0 0.1 Testing 230Vac-Sample-28 🖓 40 10000 0 0	0.1	Testing
230Vac-Sample-9 < 303 10000 0 0 0.1 Testing 230Vac-Sample-29 < 40 10000 0 0 0	0.1	Testing
230Vac-Sample-10	0.1	Testing
ReadAllimS) 313 UpdateDb(mS) 922 CommEmorCount 0 Row2 Start Row2 Stop ReadAll(mS) 250 UpdateDb(mS) 644 CommEmorCount 0	Row6 Start	Row6 Stop
Row 3 Row 7		
230/vac Non Latching 3600 Per Hour Coll Voltage 230V AC Helay Type Non-Latching Unlock Coll Voltage Helay Type		Lock
Actual Target Fail to Make Fail to Break ETF (days) Status Actual Target Fail to Make Fail to Break	ETF (days)	Status
230Vac-Sample-11 259 10000 0 0 0.1 Testing ~		
230Vac-Sample-12 259 10000 0 0 0.1 Testing ~		
230Vac-Sample-13 V 259 10000 0 0 0.1 Testing V		
230Vac-Sample-14 V 259 10000 0 0 0.1 Testing V		
230Vac-Sample-15 259 10000 0 0 0.1 Testing		
ReadAllimS) 248 UpdateDb(mS) 744 CommErrorCount 0 Row3 Start Row3 Stop ReadAllimS) UpdateDb(mS) CommErrorCount	Row7 Start	Row7 Stop
Row 4		
230Vac Non Latching 3600 Per Hour Coil Votage 230V AC Relay Type Non-Latching Unlock		
Actual Target Fail to Break ETF (days) Status		
230Vac-Sample-16 V 168 10000 0 0 0.1 Testing		
230Viac-Sample-17 V 168 10000 0 0.1 Testing		
230Vpc-Sample-18 v 168 10000 0 0 0.1 Testing		
230Vac-Sample-19 😪 168 10000 0 0 0.1 Testing		
230Vac-Sample-20 < 168 10000 0 0 0.1 Testing		
ReadAllimS) [249 UpdateDb(mS) [627 CommErrorCount 0 Row4 Start Row4 Stop		

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.

627 2 626 2	230Vdc-Sample-31	Actual Operations	larget Operations	Fail to Make L ollator		1 1 1 1 1 1 1 1 1
626 2		2001	10000		0	Ready
	230Vac-Sample-30	9998	10000	10000	0	Ready
625 2	230Vac-Sample-29	10000	10000	5	0	Finished
624 2	230Vac-Sample-28	10000	10000	0	0	Finished
623 2	230Vac-Sample-27	10000	10000	0	0	Finished
622 2	230Vac-Sample-26	10000	10000	0	0	Finished
621 2	230Vac-Sample-25	10000	10000	0	0	Finished
620 2	230Vac-Sample-24	10000	10000	0	0	Finished
619 2	230Vac-Sample-23	10000	10000	0	0	Finished
618 2	230Vac-Sample-22	10000	10000	13	0	Finished
617 2	230Vac-Sample-21	10000	10000	0	0	Finished
616 2	230Vac-Sample-20	10000	10000	3	0	Finished
615 2	230Vac-Sample-19	10000	10000	3	0	Finished
614 2	230Vac-Sample-18	10000	10000	8	0	Finished
613 2	230Vac-Sample-17	10000	10000	0	0	Finished

For Result, Click on "Result" and below screen will appear.

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.

