| | PROJECT NAME & LOGOS | |
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| | | |
| CHECK LIST FOR: | | |
| UPS System Testi | ing and Commissioning | Form No: |
| (Testing and Co | ommissioning Report) | Rev. No: 0 |
| SUBCONTRACTOR X | CONTRACTOR | Page : 1 of 4 |
| SECTION OF WORK: Electrical | LOCATION: | 1 |
| LEVEL: | WIR No.: | |

A- Start Up & Commissioning

| STAGE | ITEM | Che | cked by | Checked by | Date |
|---------------|--|-----|---------|------------|------|
| | | s/c | CONT | CONS. | • |
| | 1. Check the Approved shop drawings approval. | | | | |
| gu | 2. UPS room must be large enough. | | | | |
| Commissioning | 3. UPS location should have a non-flammable floor. | | | | |
| ımis | 4. UPS Location should be dry, clean and dust-free. | | | | |
| જ | 5. UPS Location should be with Air condition 20-25C. AC air circulation in the room should be sufficient to ensure a constant temperature to the UPS and to the batteries. | | | | |
| Start Up | 6. All Power & Network Cables are tested. | | | | |
| Sta | 7. Installation of I/P & O/P Power Cables. | | | | |
| | 8. For netvision, Each UPS System IP to connect it to the Local Network. 'if Applicable' | | | | |

1. Testing

Functional test.

- UPS System is working without any alarms or any fault and the switches in correct position... and two units are working.

'Normal Operation': Rectifier is charging the batteries and supplying the inverter which provides a pure sinusoid wave with stabilized O/P voltage& frequency.

(Egymatec will calibrate the Units by checking the UPS setting & configuration using Expert software).

| For S/C QA/QC: | Date: | FOR CONTRACTOR QA/QC: | Date: | For CONS. Rep.: | Date: |
|----------------|-------|-----------------------|-------|-----------------|-------|
| Name: | Sign: | Name: | Sign: | Name: | Sign: |

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| CHECK LIST FOR: | | 1 |
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| SECTION OF WORK: Electrical | LOCATION: | |
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No load test (provide this test between 5 to 10min).

- Putting '0' Zero load.
- Take measurement.
- Fill format no. (1).

Load Test: Provide a load. 'customer Load'

A- System Load Test (_____% load) 'Provide this test between 10 to 15min'.

- Putting ____Kwatt. 'by connect the load '.
- Take measurement.
- Fill format no. (1).

Format 1

| Load Test | • | Excepting Value | Reading |
|--------------------|----|---------------------|---------|
| Load rating | | Existing Load | |
| I/P Voltage: Ph-Ph | | 400 ±15% / ± 20% | |
| I/P Voltage: | L1 | Depend on mains | |
| | L2 | Depend on mains | |
| | L3 | Depend on mains | |
| I/P Current: | I1 | Depend on load | |
| | I2 | Depend on load | |
| | I3 | Depend on load | |
| I/P Frequency | | 45Hz – 65Hz | |
| I/P Power | | | |
| O/P Voltage: | L1 | 400 V <u>+</u> 1% | |
| | L2 | 400 V <u>+</u> 1% | |
| | L3 | 400 V <u>+</u> 1% | |
| O/P Current: | I1 | Depend on load | |
| | I2 | Depend on load | |
| | I3 | Depend on load | |
| O/P Frequency | | 50 Hz <u>+</u> 0.1% | |
| O/P Power | | | |
| Comments: | | · | |
| Approved/ Retest: | | | |

| For S/C QA/QC: | Date: | FOR CONTRACTOR QA/QC: | Date: | For CONS. Rep.: | Date: |
|----------------|-------|-----------------------|-------|-----------------|-------|
| Name: | Sign: | Name: | Sign: | Name: | Sign: |

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| LEVEL: | WIR No.: | |

B- Battery discharge test.

- With same load and same position.
- Cut off the Input mains from UPS.
- Take measurement.
- Fill format no. (2).

Format 2

Battery Discharge test at % load:

| Measuremen | | 0 min | 10min | 20min | 30min | 40min | 50min | 60min |
|-------------------|----|-------|-------|-------|-------|-------|-------|-------|
| Battery capacity: | | | | | | | | |
| Active power out | | | | | | | | |
| O/P Voltage: | L1 | | | | | | | |
| | L2 | | | | | | | |
| | L3 | | | | | | | |
| O/P Frequency: | | | | | | | | |
| O/P current: | I1 | | | | | | | |
| | I2 | | | | | | | |
| | 13 | | | | | | | |
| Temperature: | | | | | | | | |
| | | Comme | ents: | · | | · | | |
| | | | | | | | | |

| For S/C QA/QC: | Date: | FOR CONTRACTOR QA/QC: | Date: | For CONS. Rep.: | Date: |
|----------------|-------|-----------------------|-------|-----------------|-------|
| Name: | Sign: | Name: | Sign: | Name: | Sign: |

| PROJ | ECT NAME & LOGOS | | |
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| CHECK LIST FOR: | | | |
| UPS System Testing and C | Commissioning | Fe | orm No: |
| (Testing and Commission | | R | ev. No : 0 |
| SUBCONTRACTOR X | CONTRACTOR | Pa | age : 4 of 4 |
| SECTION OF WORK: Electrical | LOCATION: | | |
| LEVEL: | WIR No.: | | |

C- Return to Normal Operation. - Return the Input mains to UPS.

| Transfer Test | Describe | OK/ Not OK |
|---------------|-------------------------------------|------------|
| Automatic | Load transfer to bypass Circuit. | |
| Manual | Load transfer to Manual bypass. | |
| Normal | Load transfer from Manual bypass to | |
| | Normal. | |

E- Noise

| Noise Level Test | Value | Measurement 'dBA' |
|-------------------------------|-------|-------------------|
| - UPS with 100% load. | '1' | |
| Measure the noise level @ | | |
| 1meter | | |
| - UPS with 0% load. | '2' | |
| Measure the noise level @ | | |
| 1meter | | |
| UPS Noise level = '1' - '2' = | '3' | |

| For S/C QA/QC: | Date: | FOR CONTRACTOR QA/QC: | Date: | For CONS. Rep.: | Date: |
|----------------|-------|-----------------------|-------|-----------------|-------|
| Name: | Sign: | Name: | Sign: | Name: | Sign: |