



Test Run and Commissioning Sheet

| Seria | I Number | | | | |
|-------|----------|---|------|------|--|
| | | | | | |
| 0x15 | Baza | 7 | | | |

| Customer Nama & Address: | WOOLIM PLANT, MO | Harbari, Coass Bazar. |
|--------------------------|------------------|-----------------------|
| Contact No. | Mr. Mehedi | Tel: 01730718163 |
| Contact No: | · | Tel: |

| Gen set: | | | | | | | | |
|----------------------------|----------------------|--------|----------|------------------------|-----------|------------|----------------------------|---------------------|
| Product ID (Plant No.): | 21E | 13680 | F/1 | e user guiz | | y Majarana | reg) | |
| Gon Sets Model | | | KVA | | Details | | | |
| Gen Set: | PL 135 | | 135 | | | | englacia de al filiabilità | SOT. |
| Lowen | Brand | | | Model No Ser | | Serial No | NETHINGSHOUTE SHOW | Agent James Comment |
| Engine: | Pen | kins | | | | PP825 | 760075545F | |
| alles s | Rrand Leroy-Somer | | Model No | | Sarial Na | | | |
| Alternator: | | | | | | 375720038 | | |
| Year of Manufacturing | | | | | | | | |
| ATS Type | Nil | Local | Foreign | Magnetic Contractor | Brand | & Model | Сар | ecity (Amp) |
| Canopy Type | Open | Local | Foreign | Canopy inc | ernoî" | Good | Canopy Sound performance . | Good / Not Good |
| Controller Mo | del | 7120 M | k 11 | Battery | Charger | Connected | Not Connected | V |

| Installation: | COXIS BAZAR | - K | |
|--------------------------|-------------|--------------------------|------------|
| Place Of Installation | 14.10.2021 | Date of Delivery | 1 10/10/21 |
| Date Of Installation | 14/10/21 | Date Of Commissioning | 14.10.2021 |
| Warranty Expiration date | WIO | Free Service Period | WIO |

Load Test:

| Item No | KW | Hz/Speed | | oltage Pha | se-N | | Curre | nt | Oil | Townsvoture |
|---------|-------|-----------|----------------|------------|------|--------|-------|-------------|-----------------|-------------------|
| | edora | | V1-N | V2-N | V3-N | 11 | 12 | 13 | Pressure Bar | Temperature °C |
| 1 | 1 = | 52.3/1570 | 233 | 233 | 233 | Withou | 4 1 | oad General | 5.65 | 76°C |
| 2 | | | | | | test | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | 21 - 1-11 - 11 | | | | | | | |
| 7 | | | | | | | | | 7-10-14 | |
| 8 | | | | | | | | 1 | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

CWG-QM/FORM-0043

Revision No.: 00

Page 1 of 2





Related Documents

| User Manual \ Maintenance/User | | | Electrical Diagram of Gen. Set | Yes | No |
|--------------------------------|-----|-------|--------------------------------------|-----|-----|
| Hand Book | Yes | No of | Electrical Diagram of Foreign ATS | Yes | Nov |

Warranty Dose Not Cover:

- Detects due to users improper maintenance (Not following the maintenance instruction by Manufacturer)
- All Consumable items (Not following the user guide/manual by Manufacturer)
- Normal Wear & Tear
- Alterations or repairs of any parts without prior approval by authorized Manufacturer/Distributor.

Engineer.

For Cross World Group

Md. Al-Mamun

Commissioning Engineer

Date: 14.10.2021

For Customer

21-10-202

The Gen set has been commissioned successfully & handed over without any discrepancy. we understood the operational procedure.

| Response Time | Fast | Slow | Customer observation about product & service | | | | |
|---|------|-----------|--|----------------------|--------------|----------------|--|
| Product Problem Identification | ОК | OK Not Ok | Delighted | Very Satisfactory | Satisfactory | Unsatisfactory | |
| Operation Procedure Explanation | Ok | Not Ok | Remarks (I | | | | |
| Service Engineer Behavior | Ok | Not Ok | | | | | |
| Additional Work / service/Commissioning Done | Ok | Not Ok | | | | | |

CWG-QM/FORM-0043

Revision No.: 00

Page 2 of 2



Electrical and Mechanical Installation Sheet

| Project I | Name | WOOLIM PLANT | kVA/Model | 135 | /PL 135 |
|--------------------------------------|--|--|-----------|----------------------------|---|
| Address: | | Matarbari, Cox's Bazar | Date | 14. | 10.2021 |
| | | | | | 10 2022 |
| STEP 1 | Check | points when shipment arrive to site | | Helica car | Remarks |
| Engine 8 | & Alterr | nator | | | |
| . 1 | No visu | al damage to engine or generator. | | | NO |
| 2 | 1 comments | damage to engine or generator. | | | NO |
| 3 | - | t Placement (Leveling & bolting) | | | OK |
| f there is | | al damage, please inform concern dept. | | | UK |
| | | | | | |
| Step 2: | | t room /environmental condition | Ok | Not ok | Remarks |
| 1 | | nt space around the generator for movement | OK | | |
| 3 | 1 | light and air inside the room | OK | + 1 | Open Place |
| 3 | IDust br | oof, neat and clean | OK | | 10 pen Place |
| tep 3: | Cable s | selection & termination | Ok | Not ok | Remarks |
| 1 | 7 | the power cable rating and insulation quality | Ok | Notok | |
| 2 | Check t | the control & signal cable | OK | Notok | |
| 0 | Cubic i | عرابي هـ داري | OK | Not ak | |
| 4 | | narking & termination | OF. | NOTOK | has been into |
| 5 | Cable to | rench / tray (If any) | | Notok | load. |
| 6 | Power | cable connections from Alternator - ACB, ACB-ATS, ATS-L | T OK | NOK | |
| 7 | | d are correct (Balanced) | OK. | Notal | Fremarks |
| - 8 | Phase : | Sequence | AD | | |
| | | | | | I I |
| | | or and consequent and consequent | IUA | | |
| tep 4 : | | g System/connection | Ok | Not ok | Remarks |
| tep 4 : | Earthin | or and consequent and consequent | Ok | | |
| - | Earthin Separa | g System/connection | Ok | Not ok | Earth is not |
| 1 | Earthin Separa Earthin | g System/connection te earthing for generator | Ok | Not ok | |
| 1 2 3 | Earthin Separat Earthin | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) | Ok | Not ok | Earth is not |
| 1 2 3 | Earthin Separat Earthin | g System/connection te earthing for generator g result below 1 ohm | Ok | Not ok | Earth is not |
| 1 2 3 | Earthin Separat Earthin Connec | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) | | Not ok Not ok | Egoth is not borning. |
| 1 2 3 | Earthin Separat Earthin Connec | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- | | Not ok Not ok | Egoth is not borning. |
| 1 2 3 tep 5 : | Earthin Separat Earthin Connect Exhaus Mountir Rigid / 1 | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer | | Not ok Not ok | Egoth is not borning. |
| 1 2 3 (tep 5 :) | Earthin Separat Earthin Connec Exhaus Mountir Rigid / 1 | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe | | Not ok Not ok | Egrah is not boring. Remarks |
| 1 2 3 Step 5 : 1 2 3 | Earthin Separat Earthin Connec Exhaus Mountin Rigid / 1 Diamete Support | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer Texible fixing of exhaust pipe er & Length of exhaust pipe * | | Not ok Not ok | Egrath is not borring. Remarks |
| 1 2 3 4 | Earthin Separat Earthin Connec Exhaus Mountin Rigid / 1 Diamete Support | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe t system | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 Step 5: 1 2 3 4 3 | Earthing Separat Earthing Connect Exhaus Mountir Rigid / 1 Diamete Support Rain ca | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) tt/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe * tt system | | Not ok Not ok | Egrath is not borring. Remarks |
| 1 2 3 4 5 6 7 | Earthing Separat Earthing Connect Exhaus Mountir Rigid / 1 Diamete Support LATA IN Rain ca | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) tt/silencer System- ng of Exhaust silencer nexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe * t system Exhibit in required p on & Quality | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 4 5 6 7 8 | Earthing Separate Earthing Connect Exhaus Mountir Rigid / 1 Diamete Support Rain ca Insulatio | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe * t system pon & Quality ent | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 4 5 6 7 8 9 | Earthine Separat Earthine Connect Exhaus Mountir Rigid / 1 Diamete Support Alians Rain ca Insulatir Alignme Drainag | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe * t system SALUTE IN TEQUIPED On & Quality ent te point | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 3 5tep 5: 1 2 3 4 5 6 7 8 9 10 | Earthing Separat Earthing Connect Exhaus Mountir Rigid / 1 Diamete Support Lauran Rain ca Insulatio Alignme Drainag | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe to system continue in required p on & Quality ent te point fiftings and leveling | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 4 5 6 7 8 9 | Earthing Separat Earthing Connect Exhaus Mountir Rigid / 1 Diamete Support Lauran Rain ca Insulatio Alignme Drainag | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe * t system SALUTE IN TEQUIPED On & Quality ent te point | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 4 5 6 7 8 9 10 11 | Earthine Separate Earthine Connect Exhaus Mountir Rigid / 1 Diamete Support Aliamete Alignme Orainag Gasket Bolting, | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) t/silencer System- ng of Exhaust silencer flexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe to system continue in required p on & Quality ent te point fiftings and leveling | | Not ok Not ok | Remarks Adjust Silene |
| 1 2 3 4 5 6 7 8 9 10 11 | Earthine Separate Earthine Connect Exhaus Mountir Rigid / 1 Diamete Support Rain ca Insulation Alignme Drainag Gasket Bolting, | g System/connection te earthing for generator g result below 1 ohm tion from earthing bar to generator/ATS (body & neutral) tt/silencer System- ng of Exhaust silencer dexible fixing of exhaust pipe er & Length of exhaust pipe er & Length of exhaust pipe banker in required p on & Quality ent te point fiftings and leveling tightening & welding | Ok | Not ok Not ok Not ok | Remarks Remarks Adjust Silene Ripes did not u |

Page 1 of 2



| 3 | Canvas cloth fitting | | 1 |
|---|----------------------|-------|-----|
| 4 | Support system | | 1 |
| 5 | Out flow / louver | | + / |
| 6 | Water Orain line | Old | |
| 7 | Coolant Spec | OK | |
| 8 | DM Water | OK OK | |

| EP 7 | : Fuel System | Ok | Not ok | Remarks |
|------|--|-----|--------|-------------|
| 1 | Check fuel day tank placement / capacity * | BV | | 1 |
| 2 | Check fuel reservoir placement / capacity * | Die | TEE | 1N Built |
| 3 | Fuel feed line (MS pipe Diameter) | OV | | 314 170-411 |
| 4 | Fuel return line (MS pipe ,Diameter) | AL | | |
| 5 | Fuel tank height & size/capacity (for 4000 series) | OK | | |

| TEP 8 | 3 : Ventilation System | UK | INOLOK | Remarks |
|-------|---|----|----------|--------------------------------|
| 1 | Check all ventilation blowers are installed as per engine requirement, wiring and its connection to DB/MCC. | +- | Not ok | widhout load Generator Lest |
| 2 | Ducting for ventilation system | OK | s of ska | ra numeratura est u |
| 3 | Check the all how capacity of the ventiliation ian | ok | | |
| 3 | Louver/ ventilation fan placement / condition checking (if necessary) | ok | | 3 |
| 4 | Pre-filtration system for air intake | ok | | 1/200308112811000 |

| EF . | 9 : Miscellaneous | Ok | Not ok | Remarks |
|------|---|----|-----------|----------------------|
| 1 | Breather pipe extension | | | romano |
| 2 | Battery terminal connection and its condition. | OK | | - |
| 3 | Check availability of distilled water, lube oil, coolant and diesel for commissioning as required | ok | | no provincialistical |
| 4 | Check hanging condition of the ATS on the wall. | OK | | |
| 5 | Wood condition of the Campy, 1970, Fact land etc. | OK | | |
| 6 | Lube oil drain line | ok | | |
| 7 | Check and make overall comment on environmental condition to run the generator | OK | Pro Visca | Set. |

We have checked and sertify that the works mentioned above has done as per sur drawing/design/requirements/recommendations.

| Cross world Personnel | Md. Al - Mamun Signed: Date: 14.10.2021 |
|-----------------------|--|
| End user personnel | Md. Melhedi Hushnsigned - 4 gm Date: 21-10-202 |

CWG-QM/FORM-0042

Revision No.: 00

Page 2 of 2



COMPLETION CERTIFICATE

DATE: 14-10-2021

To.

WOOLIM PLANT Engineering and construct.

Project Name: 1200 MW VIARA Super critical coal power pland, Matarbari, Cox's Bazar.

COMPLETION CERTIFICATE OF DIESEL GENERATING SET PLANT ID: 21F13680F/1_MODEL # PL 135

Dear Sir,

We have since completed installation, testing and commissioning of above generating set with model place and tested it as per **ALLAM's** manual on the Date (4.10.2) in presence of your representative/operator and found satisfactory performance in all respect and handed over its key and all the relevant standard accessories, equipment and manuals to your representative.

We have also explained your operator how to conduct daily, weekly, monthly as well as all other inspections/services as called for in the **ALLAM**'s manual for smooth and trouble free operation of this generator. We shall cover warranty for next 02 Years/3000 Hours from the date of delivery which come first, as per **ALLAM**'s terms and conditions of sales.

If you disagree with us and have any other query, please inform us as seen as possible. If we do not hear from you within next 7 (seven) days, contrary to what we have stated above, we shall consider that the plant has been received by you in a satisfactory condition.

Yours faithfully
Cross World Power Ltd.

Md. Al-Mamun

received the Plant in Good order & condition.

470-2021

For and on behalf of

Note: - Lube oil Lilter, Air tilter, Fuel tilter, Lube oil and engine genune partise must be used. It engine work ettierency will be good. It you do not have an engine problem. (Lube oil Provided Customer super Dynamic 15 w-40)

CWG-QM/FORM-0044A

Revision No.: 00

Page 1 of 2



DATE: 14-10-2021

TO, WOOLIM PLANT Engineering and construct.

Matarbari, Cox's Bazar.

Dear Sir,

We would like to express our heartfelt gratitude for providing us the appertunity to some you with our generator. The KVA Tempest brand diesel generator has been commissioned and is presently running properly.

The product that Cross World supplies are of highest quality and would definitely outlive any generator that you have used in the past provided the generators are maintained properly. And to achieve that there is no alternative to routine servicing of the generators.

It is essential that the new generator must undergo routine servicing for the first time after running for 120 hours, followed by routine servicing after every 200 hours of running. During each routine servicing basically lube oil filter, fuel the standard rule, but if the generator is in dusty environment then the air filter may require changing at every 200 or less hours of running.

Saline water in the radiator would eventually damage the engine block, resulting in seizure of the engine. We suggest you to avoid using normal tap water in the radiator as well. Our recommendation is to use distilled water in the radiators. The radiator must also be serviced once every 400 hours of running if not earlier. Basically, if the above rules are followed strictly, your generators will have a service life of over 10 years without hassie.

All diesel generators are used as per their application (Prime/Stand By/Base load) recommended in ISO 8528. It is also recommended that the generators depending on the usage should follow the instruction as per $\cup \& M$ / User Manual and maintain a recommended ventilation system inside engine room.

There is another critical issue that is often overlooked by our clients. It is the air circulation within the generator room. The fresh cold air flow into the room is sucked in by the engine for combustion. To keep the ambient temperature to a minimum, a continuous in-flow and out-Flow of air is a must. Otherwise, if the ambient temperature reaches over 45°C, the engine temperature should be about the continuous in-flow and out-Flow of air is a must. Otherwise, if the ambient temperature reaches over 45°C,

We believe it is our prerogative to keep each of our customers aware of the critical issues regarding the products that we supply and we can only request you to instruct the persons responsible for maintenance of the gen set to inform us to perform routine servicing upon completion of the running hours mentioned above. In any case, we would have our engineers proactively contact your maintenance department time to time.

We hope the above information would be helpful for your maintenance team.

Thank you once again for extending your support.

Sincerely yours,
Cross World Group

MAD

CWG-QM/FORM-0044A

Revision No.: 00

Page 2 of 2