

Test Run and Commissioning Sheet

Serial Number

| customer: | er nærskelskelskelskelskelskelskelskelskelskel | | ares recognision to seek the | | | | | - | | |
|--|--|---------------------|------------------------------|------------------------|---|---------------------------------------|---------|-------------|---------------|------------------------------|
| Customer Nai Address: | me & | Mox | Hos | PITAL, | Char | ai navo | byen | j. | | |
| Address. | | Md. | Nurb | in morb | | | Tel: | 01318 | 3 18 900 | <u>.</u> |
| Contact No: | | 100 | | | | | Tel: | 01319 | 33200 | 51 |
| der de la company de grande de grande de la company de | | | | | | | | | | |
| Gen set: | e pame a comme | N OF REAL PROPERTY. | | | management of the court of the | · · · · · · · · · · · · · · · · · · · | | | | |
| Product ID (Plant No.): | 1 | 9E13 | 346C | 11 | | | | | 5 | |
| | | Model - | KVA Details | | | | | | | |
| Gen set. | n Set: PS 200 | | | 200 | | | | | | |
| Engine: | | Brand | | Model N | 0 | Serial No | 3519 | BU067 | 056D | |
| | | Brand | | Model N | 0 | Serial No | | | | |
| Alternator: | | nford | | | | C181 | F 24 | 9698 | | acity (Amp) Good / Not Good |
| Year of | | | | | | | | | | |
| Manufacturin | g | | | | | | · | | | |
| ATS Type | Nil | Local | Foreign | Magnetic Contractor | Brand | & Model | | Ca | apacity (Amp) | Ti |
| | | | F | Canopy in | ternal | Good/Not | Canop | y Sound | Good | / Not Good |
| Canopy Type | Open | Local | Foreign | insulation | | Good | perfor | mance | | |
| Controller Mo | odel | 7320 M | .ku | Batter | y Charger | Connected | | Not Connect | ed | |
| Installation: Place Of Instal | lation | Chapa | i Nous | lalgry | Date of Del | ivery | 1 | 8.01,9 | | |
| | | | 3/21 | 1.0 | Date Of | | . 2 | 7.03. | 2021 | |
| Date Of Install | | 1210 | | | Commission | mild | | | | *** |
| Warranty Expi date | ration | | | | Free Service | e Period | | | | |
| | | 365 | DA Y | /1-00 | u wel | ichon | 01 | Come | first a | frem 7 C |
| | | 1 A | 1 | mi C | Swin. | 1 | 70 to 1 | | · 1 | |
| Load Test: | KW | Hz/Speed | | /oltage Pha | Se-N | 101 | Curren | t | Oil | 1 |
| Item No | KVV | nz/speed | V1-N | V2-N | '/3-N | l1 | 12 | 13 | | |
| 1 | | 50 | 232 | 232 | 232 | | | | | 72°C |
| 2 | - | | | | | 9 | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | • | | | | | | <u> </u> |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | 1 | | | | | ļ | | | _ | ļ |
| 10 | | | | | | | | | | <u> </u> |

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Related Documents

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

Warranty Dose Not Cover:

- Defects due to users improper maintenance (Not following the maintenance instruction by Manufacturer)
- ❸ All Consumable items (Not following the user guide/manual by Manufacturer)
- Normal Wear & Tear
- ❸Alterations or repairs of any parts without prior approval by authorized Manufacturer/Distributor.
- Not Following written Instruction/Comments/Recommendation given by Commissioning Manager / Engineer.

For Cross World Group

Md. Mohmudus Rahmon

Md. Novem Nabi 01318320051

Commissioning Engineer

Date: 6 27,03.2021

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

| Response Time | Fast | Slow | C | ustomer observ | ation about product & service | | |
|--|------|--------|------------|----------------------|-------------------------------|----------------|--|
| Product Problem Identification | ОК | Not Ok | Delighted | Very Satisfactory | Satisfactory | Unsatisfactory | |
| Operation Procedure Explanation | Ok | Not Ok | Remarks (I | f any): | | | |
| Service Engineer Behavior | Ok | Not Ok | | | | | |
| Additional Work / service/Commissioning Done | Ok · | Not Ok | | | | | |

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COMPLETION CERTIFICATE

DATE:

27.03.2021

To,

Max Hospital Project Name:

COMPLETION CERTIFICATE OF DIESEL GENERATING SET PLANT ID: 19E 19376 C/1

Dear Sir,

We have since completed installation, testing and commissioning of above generating set with model PM/PS 200 and tested it as per ALLAM's manual on the Date 27 03-21 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 the next 12 (Twelve) months from the date of its delivery, as per ALLAM's terms and conditions of sales.

If you disagree with us and have any other query, please inform us as soon 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.

For and on behalf of

received the Plant in Good order & condition.

1.03.21



DATE:

27.03.2021

To,

Project Name: Max Hospital

Dear Sir,

We would like to express our heartfelt gratitude for providing us the opportunity to serve you with our generator. The 200 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 filter, coolant and lube oil needs to be changed. Air filter needs to be changed after every 400 hours of running. This is 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 hassle.

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 O & 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 shoots up, resulting in premature shutdown.

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

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Electrical and Mechanical Installation Sheet

| | | | L., | |
|-------------|---|---------|-------------|--|
| roject Nar | me Max Hospital KVA | \/Model | 200 | KVA |
| | Charles C | Date | 27. | 03,2021 |
| ddress: | Conta | | | |
| TEP 1 : C | Check points when shipment arrive to site | | | Remarks |
| | Alternator | | | |
| | lo visual damage to engine or generator. | | | |
| | risual damage to engine or generator. | | | 7 |
| | Gen set Placement (Leveling & bolting) | | | |
| | y visual damage, please inform concern dept. | | | |
| | | , Ok | Not ok | Remarks |
| Step 2 : Ge | en set room /er.vironmental condition | OK | NOLOK | rtemann |
| 1S | Sufficient space around the generator for movement Proper light and air inside the room | enk. | | |
| | Dust proof, neat and clean | en | | |
| | | Ok | Not ok | Remarks |
| | able selection & termination | OK OK | 1.5.0. | |
| 1 C | Check the power cable rating and insulation quality | on | | |
| | Check the control & signal cable | CK | | |
| | Cable laying & dressing | OK | | |
| | Cable marking & termination Cable trench / tray (If any) | OK | | |
| 5 0 | Power cable connections from Alternator - ACB, ACB-ATS,ATS-LT | CK | | |
| | LT/Load are correct (Balanced) | or | | |
| | Phase Sequence | OL | | |
| | | | | D |
| Step 4 : Ea | arthing System/connection | Ok | Not ok | Remarks |
| | Separate earthing for generator | OK | - | |
| 2 F | Farthing result below 1 ohm | OK | ļ | |
| 3 | Connection from earthing bar to generator/ATS (body & neutral) | or | | |
| | | Ok | Not ok | Remarks |
| | xhaust/silencer System- | OK OK | HOLON | |
| | Mounting of Exhaust silencer | OK | | |
| | Rigid / flexible fixing of exhaust pipe | | | |
| 3 | Diameter & Length of exhaust pipe * | OK | | |
| 4 | Support system | OK | | |
| 1 | Extra flexible if required | ax | | |
| | Rain cap | en | | |
| | Insulation & Quality | or | | |
| | Alignment | OK | | |
| | Drainage point | a | | |
| 10.000 | Gasket fittings and leveling | OK | | |
| | Bolting, tightening & welding | CK | | |
| 11. | 0.000 | | T | Domorks |
| | Radiator System | Ok | Not ok | Remarks |
| CTED 6. | Addition of other | | | The state of the s |
| | | AK | | |
| 291 | Ducting Dimension Opening area of ducting | OK OK | | |

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| 3 | Canvas cloth fitting | 671 | |
|---|----------------------|------|--|
| 4 | Support system | 00 | |
| 5 | Out flow / louver * | AL . | |
| 0 | Water Drain line | or | |
| 7 | Coolant Spec | AL | |
| 8 | DM Water | RL | |

| STEP 7 | : Fuel System | Ok | Not ok | Remarks |
|--------|---|-----|--------|---------|
| 1 | Check fuel day tank placement / capacity • | OK | | |
| 2 | Check fuel reservoir placement / capacity · | | | |
| 3 | Fuel feed line (MS pipe Diameter) | 10 | | |
| 4 | Fuel return line (MS pipe ,Diameter) | | | |
| 5 | Fuel tank height & size/capacity (for 4000 series) | (6) | | |

| TEP 8 | : Ventilation System | OK | Not ok | Remarks |
|-------|---|----|--------|---------|
| 1 | Check all ventilation blowers are installed as per engine requirement, wiring and its connection to DB/MCC. | OK | | |
| 2 | Ducting for ventilation system | OK | | |
| 3 | Check the air flow/capacity of the ventilation fain | OK | | |
| 3 | Louver/ ventilation fan placement / condition checking (if necessary) | OK | | |
| 4 | Pre-filtration system for air intake | OL | | |

| EP : | 9 : Miscellaneous | Ok | Not ok | Remarks |
|------|---|----|--------|---------|
| 1 | Breather pipe extension | OK | | |
| 2 | Battery terminal connection and its condition. | OK | | |
| 3 | Check availability of distilled water, lube oil, coolant and diesel for commissioning as required | ox | | |
| 4 | Check hanging condition of the ATS on the wall. | OK | | A) |
| 5 | Visual condition of the Canopy, ATS, Fuel tank etc. | OK | | |
| 6 | Lube oil drain line | OK | | |
| 7 | Check and make overall comment on environmental condition to run the generator | OK | | |

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

Cross world Personnel

Md. Mahmudur Rahman Signed :

End user personnel

Md. Novem Nabi

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