## FUJIAN EPOS ELECTRIC MACHINERY CO., LTD





**ENGINE MODEL: YD385D** 

## **EMEAN POWER**

www.emeanpower.com

Email: sale5@fjepos.com

Phone: +86 19890349907

**WHATSAPP** 



**WECHAT** 



| YD385D ENGINE TECHNICAL DATA SHEET          |   |                               |      |  |
|---|---|-------------------------------|------|--|
| 1. Engine Ratings for Generator Application | gine Ratings for Generator Application YD385D |                               |      |  |
| Engine Rated Speed                          | rpm   | 1500                          | 1800 |  |
| Generator set Frequency                     | Hz  | 50                            | 60   |  |
| Engine Standby Power (LTP)                  | kW  | 12.1                          | 14.3 |  |
| Engine Prime Power (PRP)                    | kW  | 11                            | 13   |  |
| Engine Continuous Power (COP)               | kW  | 11                            | 13   |  |
| Cooling Fan Power Consumption (kW)          | kW  | 1.2                           | 1.5  |  |
| Engine Net Standby Output (LTP)             | kW  | 10.4                          | 12.3 |  |
| Engine Net Prime Output (PRP)               | kW  | 9.5                           | 11.2 |  |
| Engine Net Continuous Output (COP)          | kW  | 9.5                           | 11.2 |  |
| 2. General Specification                    |   |                               |      |  |
| Length                                      | mm  | 587                           |      |  |
| Width                                       | mm  | 474                           |      |  |
| Height                                      | mm  | 615                           |      |  |
| Engine Dry Weight w/o Cooling System        | kg  | 175                           |      |  |
| Aspiration Type                             |   | Natural                       |      |  |
| Injection Type                              |   | Direct                        |      |  |
| Configuration                               |   | Vertical                      |      |  |
| No. of Cylinders                            |   | 3                             |      |  |
| Displacement                                | liters  | 1.532                         |      |  |
| Bore  | mm  | 85                            |      |  |
| Stroke                                      | mm  | 90                            |      |  |
| Compression Ratio                           |   | 18                            |      |  |
| Piston Speed                                | m/s   | 4.5/5.4                       |      |  |
| Rotation Direction (from flywheel)          |   | Anti-clockwise Anti-clockwise |      |  |
| Number of Flywheel Teeth                    |   | 115                           |      |  |
| Flywheel House Size                         |   | SAE4                          |      |  |
| 3. Lubrication System                       |   |                               |      |  |
| Lube Oil Specification                      |   | CD 15W-40                     |      |  |
| Oil Capacity                                | liters  | 4.5                           |      |  |
| Max. Permissible Oil Temperature            | °C  | 120                           |      |  |
| Low Oil Pressure Warning                    | kPa   | 100                           |      |  |
| Low Oil Pressure Shutdown                   | kPa   | 80                            |      |  |
| Oil consumption (as % of fuel consumption)  |   | 0.67%                         |      |  |
| 4. Cooling System                           |   |                               |      |  |
| Coolant Capacity for Engine                 | Liters  | 3.5                           |      |  |
| Max. Permissible Temperature                | °C  | 90                            |      |  |
| Max. Coolant Warning Temperature            | °C  | 95                            |      |  |
| Max. Coolant Shutdown Temperature           | °C  | 98                            |      |  |
| Thermostat Open Temperature                 | °C  | 72                            |      |  |
| Radiator Cooling Flow                       | m³/min  | ≥45                           | ≥52  |  |
| Flow of Coolant pump                        | m³/h  | ≥4.8                          | ≥4.8 |  |
| Heat dissipation (engine radiator)          | kW  | 8.25                          | 9.75 |  |
| Heat dissipation (convection)               | kW  | 6.87                          | 7.1  |  |

| 5. Fuel System   |                     |            |      |
|--|---------------------|------------|------|
| Governor Type  |                     | Mechanical |      |
| Fuel Consumption at 25% of generator set prime output        | l/h                 | 1.61       | 2.03 |
| Fuel Consumption at 50% of generator set prime output        | l/h                 | 2.54       | 3.13 |
| Fuel Consumption at 75% of generator set prime output        | l/h                 | 3.12       | 3.67 |
| Fuel Consumption at 100% of generator set prime output       | l/h                 | 3.55       | 4.22 |
| Lowest Fuel Consumption Ratio                                | g/kW.hr             | 255        | 255  |
| 6. Intake & Exhaust System ( On Standby Output )             |                     |            |      |
| Combustion Air Consumption                                   | m³/min              | 0.86       | 1.03 |
| Max. Intake Restriction                                      | kPa                 | 3          |      |
| Max. Exhaust Temperature ( Before Turbo )                    | °C                  | /          | /    |
| Max. Exhaust Temperature ( After Turbo )                     | °C                  | 500        | 500  |
| Max. Exhaust Back Pressure                                   | kPa                 | 6          |      |
| Exhaust Gas Flow   | m³/min              | 2.22       | 2.66 |
| Exhaust Flange Diameter                                      | mm                  | 74         |      |
| 7. Electrical System   |                     |            |      |
| Charging Alternator Voltage                                  | V                   | 14         |      |
| Charging Alternator Capacity                                 | А                   | 25         |      |
| Starting Voltage   | V                   | 12         |      |
| Starting Motor Capacity                                      | KW                  | 3          |      |
| Minimum Battery Capacity                                     | Ah                  | 80         |      |
| Minimum Ambient Temperature for Unaided Cold Start           | °C                  | -10        |      |
| Note :   |                     |            |      |
| 1. All engine parameters are in accordance with ISO3046, ISO | 8528                |            |      |
| 2. All engine parameters are based on 25°C / 100kPa environi | ment condition      |            |      |
| 3. No power decrease with below 40°C environment tempera     | ture and 1500 meter | altitude   |      |

- 4. More than 40°C and 1500m above sea level, decrease 0.5% per 1°C, and 4% per 300m.
- 5. At calorific value 42700 kJ/kg + 5%, density 0,835 kg/dm3 , temperature 280 K
- 6. Above data is only the testing data in our laboratory, it can't used to be the data on all contract

## **EMEAN POWER**

www.emeanpower.com Email: sale5@fjepos.com Phone: +86 19890349907

WHATSAPP

**WECHAT** 





