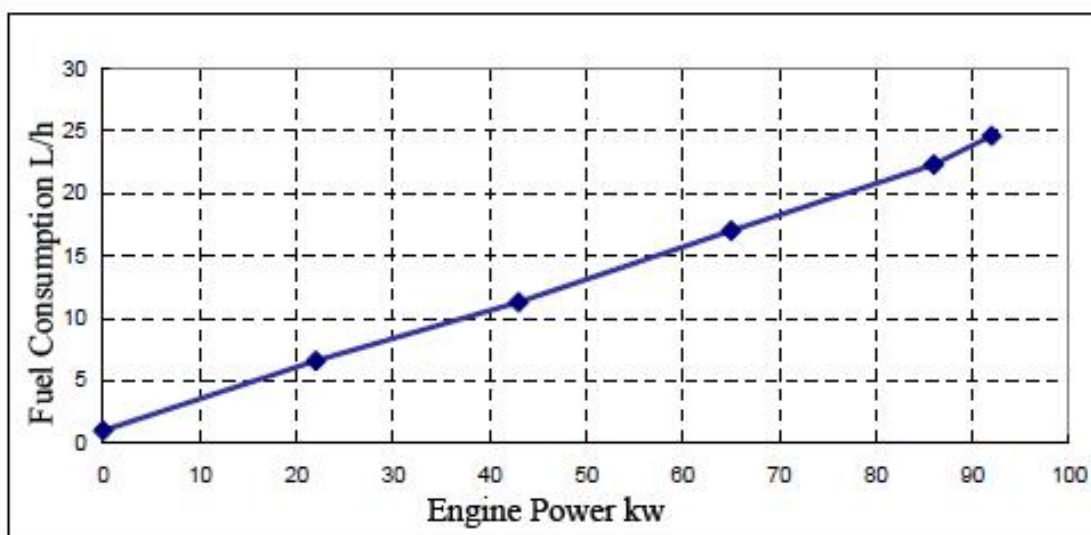


|                                                                                                                                                 |                                              |                                                                                                          |                             |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|
|                                                                | DONGFENG CUMMINS ENGINE<br>PERFORMANCE CURVE | Engine Model<br><b>6BT5.9-G1</b>                                                                         | Curve No.<br><b>FR91589</b> |                        |
|                                                                                                                                                 |                                              | Engine Family<br><b>D40</b>                                                                              | CPL Code<br><b>1189-02</b>  | Date<br><b>12-2005</b> |
| Displacement: 5.9L<br>Bore: 102mm<br>Stroke: 120mm<br>Fuel System:Wuxi WeiFu A Pump, RSV Mechanical Governor<br>Cylinders: 6 Cylinders, in Line |                                              | Advertised Power: 86kW@1500 rpm<br>115HP@1500 rpm<br>Aspiration: Turbocharged<br>Rating Type: Continuous |                             |                        |

| Engine Speed | Standby Power |     | Rated Power |     | Continuous Power |     |
|--------------|---------------|-----|-------------|-----|------------------|-----|
| RPM          | KW            | HP  | KW          | HP  | KW               | HP  |
| 1500         | 92            | 123 | 86          | 115 | N/A              | N/A |

| Output Power            |     |     | Fuel Consumption |     |
|-------------------------|-----|-----|------------------|-----|
| %                       | KW  | HP  | g/kw.h           | L/h |
| <b>Standby Power</b>    |     |     |                  |     |
| 100                     | 92  | 123 | 221              | 25  |
| <b>Rated Power</b>      |     |     |                  |     |
| 100                     | 86  | 115 | 214              | 22  |
| 75                      | 65  | 87  | 216              | 17  |
| 50                      | 43  | 58  | 217              | 11  |
| 25                      | 22  | 29  | 248              | 7   |
| <b>Continuous Power</b> |     |     |                  |     |
| N/A                     | N/A | N/A | N/A              | N/A |



Performance data obtain under normal conditions, according to GB/T18297 test conditions

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## Technical Request

|                                                                   |                       |
|-------------------------------------------------------------------|-----------------------|
| Aspiration.....                                                   | Turbocharged          |
| Net Weight(Dry)-Engine Only.....                                  | 411kg                 |
| Instantaneous inertia at Rotating: (without Flywheel).....        | 0.25kg.m <sup>2</sup> |
| Distance from Center of Gravity to the Front Engine Block.....    | 544mm                 |
| Distance from Center of Gravity to the Crankshaft Centerline..... | 155mm                 |

## Engine Mounting

|                                                            |          |
|------------------------------------------------------------|----------|
| Maximum (Static) Bending Moment at Rear Face of Block..... | 1356 N.m |
|------------------------------------------------------------|----------|

## Exhaust System

|                            |         |
|----------------------------|---------|
| Maximum Back Pressure..... | 76 mmHg |
|----------------------------|---------|

## Air Intake System

Maximum Intake Air Restriction:

|                                                                 |                        |
|-----------------------------------------------------------------|------------------------|
| — with Dirty Filter Element.....                                | 635 mmH <sub>2</sub> O |
| — with Normal Clean Air Filter and Clean Filter Element.....    | 254 mmH <sub>2</sub> O |
| —with Heavy-duty Clean Air Filter and Clean Filter Element..... | 381 mmH <sub>2</sub> O |

## Lubrication System

Normal Operating Oil Pressure Range:

|                        |         |
|------------------------|---------|
| — at Idle Speed.....   | 207 kPa |
| — at Rated Speed ..... | 345 kPa |

|                                   |        |
|-----------------------------------|--------|
| Maximum Sump Oil Temperature..... | 121 °C |
|-----------------------------------|--------|

|                                                              |                 |
|--------------------------------------------------------------|-----------------|
| Angularity of Standard Oil Pan: Oil Capacity(Max.-Min.)..... | 14.2-12.3 litre |
|--------------------------------------------------------------|-----------------|

|                                                                |            |
|----------------------------------------------------------------|------------|
| Minimum Required Lube System Capacity - Sump plus Filters..... | 16.4 litre |
|----------------------------------------------------------------|------------|

Angularity of Standard Oil Pan:

|                     |      |
|---------------------|------|
| — Front Down.....   | 40 ° |
| — Front Up.....     | 40°  |
| — Side to Side..... | 40°  |

## Fuel System

|                                                                |                                         |
|----------------------------------------------------------------|-----------------------------------------|
| Type of Fuel System.....                                       | Weifu A Type Direct Fuel Injection Pump |
| The Maximum Resistance of Fuel Pump When Use Clean Filter..... | 102mmHg                                 |
| Maximum Fuel Return Oil Resistance.....                        | 254mmHg                                 |
| Return Fuel in Total(Constant Load).....                       | 30litre/hr                              |

## Cooling System

|                                                                           |          |
|---------------------------------------------------------------------------|----------|
| Coolant Capacity - Engine Only.....                                       | 9.9 L    |
| Maximum Engine Cooling Circuit External Resistance.....                   | 28kPa    |
| Minimum Pump Inlet Pressure with Open Thermostat and no Pressure Cap..... | 14m      |
| Standard (modulating) Thermostat Range.....                               | 82-95 °C |
| Minimum Pressure Cap.....                                                 | 69 kPa   |

The Highest Coolant Temperature(Standby/Rated Power)..... 104/100 °C

#### Electrical System

|                                                        |          |        |
|--------------------------------------------------------|----------|--------|
| Starter Motor.....                                     | 12V      | 24V    |
| Battery Charging System(Polarity Negative Ground)..... | 63amp    | 40amp  |
| Maximum Resistance of Starting Circuit.....            | 0.00075Ω | 0.002Ω |

#### Specification Data:

|                                     |
|-------------------------------------|
| Engine Speed.....rpm                |
| Output Power.....kw                 |
| Torque.....N.m                      |
| Idle Speed.....rpm                  |
| Frictional Loss Power.....kw        |
| Piston Speed.....m/s                |
| Coolant Flow.....l/s                |
| Air Intake Flow..... l/s            |
| Air Exhaust Flow..... l/s           |
| Exhaust Temperature..... °C         |
| Heat Loss in The Environment.....kw |
| Coolant Heat Loss.....kw            |
| Fuel Heat Loss.....kw               |

| Rated Power | Standby Power |
|-------------|---------------|
| 1500        | 1500rpm       |
| 86          | 92            |
| 548         | 586           |
| 950-1050    | 950-1050      |
| 12.7        | 12.7          |
| 6.0         | 6.0           |
| 2.0         | 2.0           |
| 100         | 108           |
| 250         | 280           |
| 526         | 565           |
| N/A         | N/A           |
| 49          | 55            |
| N/A         | N/A           |

*ALL DATA CERTIFIED WITHIN 5%*

*TBD = To Be Decided N/A = Not Applicable N.A. = Not Available*

*All data is subject to change without notice, sorry for inform.*