

## Diesel Generator Set:C500

| Standard Features   |                      |
|---------------------|----------------------|
| MODEL               | C500                 |
| Standby Power(50Hz) | 440KW/550KVA         |
| Prime Power(50Hz)   | 400KW/500KVA         |
| Engine              | CUMMINS KTA19-G3A    |
| Alternator          | LEROYSOMER TAL-A47-C |

- Standard control panel, Including controller, Operation lighting, Emergency stop button, Buzzer
- Main line circuit breaker
- Two 12V free maintenance battery, battery charger, Battery Ract and Battery Switch
- Industrial silencer, Ripple Flex exhaust pipe, Flange
- Fork lift position and lifting position
- With-8 hours Base Fuel Tank; Fuel Tank Capacity: 700L
- Radiator 50°C max, Fans driven by Belt, with safety Guard
- Hand pump special for take out dirty oil



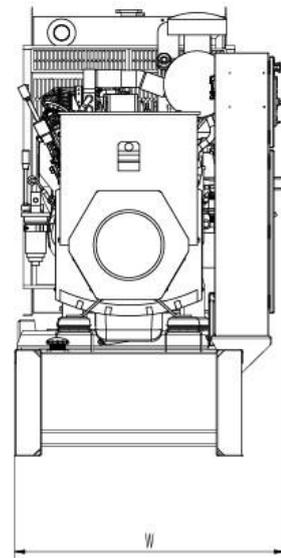
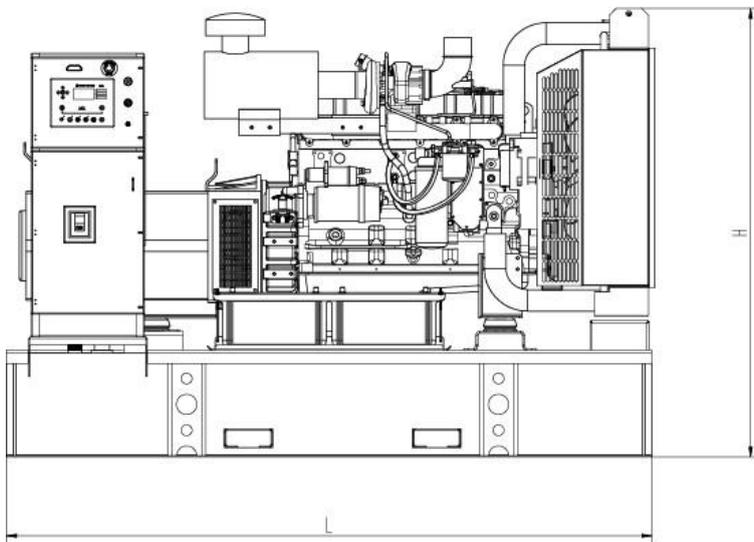
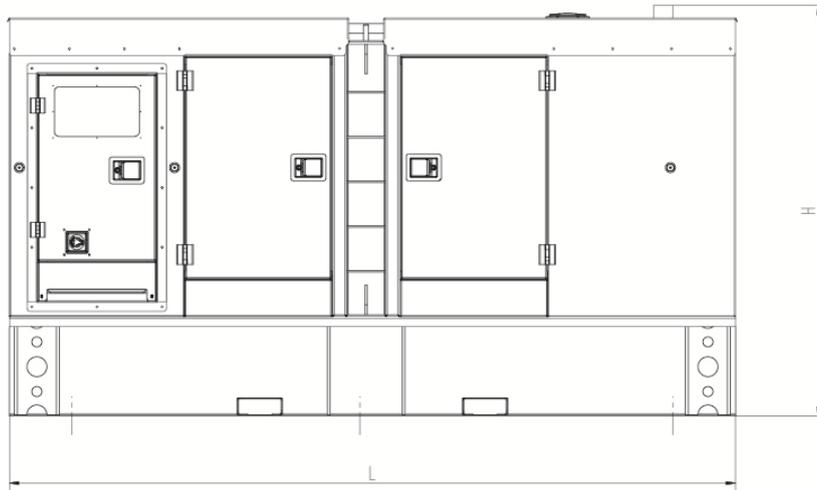
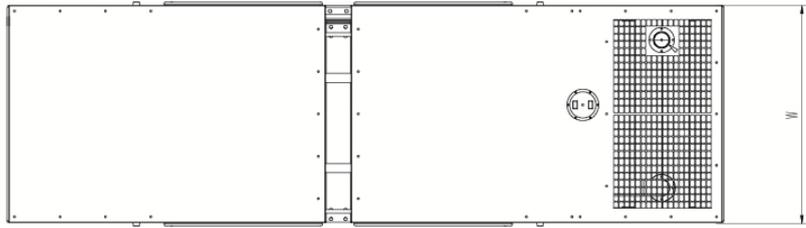
Open Type

Silent Type

| Generator Set Ratings |           |       |                   |                    |                        |                      |
|-----------------------|-----------|-------|-------------------|--------------------|------------------------|----------------------|
| Voltage               | Frequency | Phase | P.F (COS $\phi$ ) | Prime Current Amps | Standby Power (KW/KVA) | Prime Power (KW/KVA) |
| 440/254               | 50        | 3     | 0.8               | 656                | 440/550                | 400/500              |
| 415/240               | 50        | 3     | 0.8               | 696                | 440/550                | 400/500              |
| 400/230               | 50        | 3     | 0.8               | 722                | 440/550                | 400/500              |
| 380/220               | 50        | 3     | 0.8               | 760                | 440/550                | 400/500              |

Prime Power(PRP):Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97(eqvISO8528);10% overload capability is available for a period of 1 hour within a 12-hour period of operation. Standby Power Rating (STP):The standby power rating is applicable for supplying emergency

| Dimension & Weight Of Generator Set   |                |
|---------------------------------------|----------------|
| Dimension(L*W*H)/CM For Open Type     | 340×125×200 CM |
| Net Weight/KG For Open Type           | 4250 KG        |
| Dimension(L*W*H)/CM For Silent Type   | 463×164×230 CM |
| Net Weight/KG For Silent Type         | 5150 KG        |
| Dimension (L*W*H)/MM For Trailer Type |                |
| Net Weight/KG For Trailer Type        |                |



| Specification of Engine    |  |   |
|----------------------------|--|---|
| Basic<br>Specific<br>ation | Engine Model                             | KTA19–G3A                                   |
|                            | Manufacturer                             | CCEC CUMMINS                                |
|                            | Prime Power                              | 448KW/600HP                                 |
|                            | Standby Power                            | 504KW/675HP                                 |
|                            | Engine Configuration                     | 6Cylinder In Line, 4Stroke,Direct Injection |
|                            | Gas Feeding Model                        | Turbo Charged                               |
|                            | Bore × Stroke                            | 159×159(MM)                                 |
|                            | Displacement                             | 18.9L                                       |
|                            | Rated Speed                              | 1500RPM                                     |
|                            | Speed Governor                           | Electric Governor                           |
|                            | Starter Model                            | 24V DC Start                                |
|                            | Cooling System                           | Water Cool                                  |
|                            | Compression Ratio                        | 14.5:1                                      |
|                            | Exhaust<br>System                        | Exhaust Gas Flow                            |
| Exhaust Temperature        |  | 532℃  |
| Max Back Pressure          |  | 10kPa                                       |
| Air<br>Intake<br>System    | Max Intake Restriction                   | 6.23kPa                                     |
|                            | Burning Capacity                         | 532L/S                                      |
|                            | Air Flow                                 | 9800L/S                                     |
| Fuel<br>System             | Fuel Consumption (Prime Power 100%) Load | 97L/H                                       |
|                            | Fuel Consumption (Prime Power 75%) Load  | 73L/H                                       |
|                            | Fuel Tank Capacity                       | 700L  |
| Lubricat<br>ion<br>System  | Oil Capacity                             | 38.6L                                       |
|                            | Oil Consumption                          | ≤0.24L/h                                    |
|                            | Oil Pressure at Rated RPM                | 345-483kPa                                  |
| Cooling<br>System          | Total Coolant Capacity                   | 85L   |
|                            | Thermostat Open Temperature              | 82-93℃                                      |
|                            | Max Coolant Temperature                  | 104℃  |

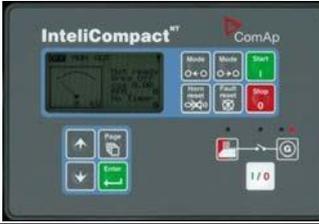
| Specification of Alternator  |   |  |
|--|---|--|
| Basic<br>Specification   | Alternator Model                                | TAL-A47-C                              |
|  | Manufacturer                                    | LEROYSOMER company                     |
|  | Prime Output                                    | 400KW/500KVA                           |
|  | Standby Output                                  | 440KW/550KVA                           |
|  | Excitation Model                                | Brushless, Self-Exciting               |
|  | Cooling Method                                  | Air Cooling                            |
|  | Connection Type                                 | 3 Phase and 12 Wires "Star" Connection |
|  | Power Factor                                    | 0.8                                    |
|  | Protection Class                                | IP23                                   |
|  | Insulation Class                                | H                                      |
|  | Altitude  | ≤ 1000m                                |
|  | Voltage Regulation,<br>Steady State             | ≤ ± 1%                                 |
|  | Telephone<br>Influence Factor                   | < 50                                   |
|  | Sudden Voltage Warp<br>(100% Sudden Reduce)     | ≤ ± 1%                                 |
|  | Sudden Voltage Warp<br>(Sudden Increase)        | ≤ ± 25%                                |
|  | Voltage Stable Time<br>(100% Sudden Reduce)     | ≤ 6S                                   |
|  | Voltage Stable Time<br>(Sudden Increase)        | ≤ 6S                                   |
|  | Frequency Reduce                                | 0-5% adjustable                        |
|  | Frequency Regulation,<br>Stead State            | ≤ 1.5%                                 |
|  | Frequency Waving                                | ≤ 0.8%                                 |
|  | Sudden Frequency Warp<br>(100% Sudden Reduce)   | ≤ +12%                                 |
|  | Sudden Frequency Warp<br>(100% Sudden Increase) | ≤ -10%                                 |
|  | Frequency Recovery Time<br>(100% Sudden Reduce) | ≤ 5S                                   |
| Frequency Recovery Time<br>(Sudden Increase)                                 | ≤ 5S  |  |
| Compliance GB755,BS5000,VDE0530,NEMAMG1-22,IED34-1,CSA22.2 and AS1359 Stands |   |  |

| Control Panel System  |  |
|---|--|
| <b>1.SINGLE SET GEN-SET CONTROLLER</b>  |  |
| SUM : They meet all possible requirements for AMF applications,including modem control,user configuration and full gen-set monitoring and protection. AMF models enable the combination of manual and remote start application with auto mains fail function. |  |
| KEY FEATURES:   |  |
| 1. High water Temperature Shutdown  |    |
| 2. Low Oil Pressure Shutdown  |  |
| 3. Over Speed Shutdown  |  |
| 4. Over Crank Shutdown  |  |
| 5. Function as Emergent Stop  |   |
| 6. Heated Display Option  |  |
| 7. Breaker Control Buttons on Front Fascia  |  |
| 8. Alternative Configuration (50Hz/60Hz)  |  |
| 9.Support ATS Function  |  |
| KEY FEATURES:   |  |
| 1. High Water Temperature Shutdown  |  |
| 2. Low Oil Pressure Shutdown  |  |
| 3. Over Speed Shutdown  |  |
| 4. Over Crank Shutdown  |  |
| 5. Function as Emergent Stop  |  |
| 6. With Remote Teleport Communication RS 485  |  |
| 7. Heated Display Option.   |  |
| 8. Alternative Configuration (50HZ/60HZ)  | c.DSE 7320   |
| 9. Support ATS Function   |  |
| 10. Remote Communications (RS232 & RS485)   |  |
| 11. Fuel Usage Monitor And Low Level Alarms.  |  |
| 12. Engine Specific J1939 for All Major Manufacturers   |  |
| 13. Configurable Display Languages.   |  |
| 14. Load Switching, Load Shedding&Dummy Load Outputs.   |  |
| 15. Alternative Configuration (50Hz/60Hz)   | d.ComAp AMF 25   |

**2.MULTIPLE PARALLELING GEN-SETS WITH INTERNAL LOAD-SHARING CONTROLLER**

SUM: Functionality,optimized for ease of use,installation and configuration,includes built-in synchronization and digital isochronous active and reactive load sharer.Native co-operation of up to 32 gen-sets is a standard feature.

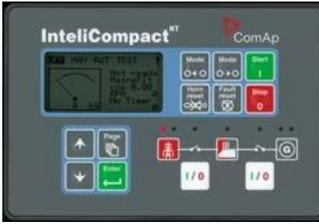
**KEY FEATURES:**

|   |  |
|---|--|
| 1. The Most up to 32-set Synchronization  |  |
| 2. Wide Range of Communication Interfaces - RS232,RS485, USB, Modbus, GSM/Analog Modem,GPRS, Ethernet |  |
| 3. Direct Governor & AVR Control  |  |
| 4. kW & kV Ar Load Sharing  |  |
| 5. Advanced Power Management Function   |  |
| Load Dependent Start/Stop   |  |
| Load Demand Swap  |  |
| Running Hours Equalization  |  |
| 6. Support of Electronic Controlled Engines (J1939,Modbus)  | b.ComAp IC-NT NINT   |

**3.SINGLE GEN-SET IN PARALLEL TO MAINS CONTROLLER**

SUM: They are integrated controllers combining AMF and paralleling functions for single gen-sets. This combination allows the gen-set with interrupt-free transfers as well as in continuous parallel-to -mains mode.

**KEY FEATURES:**

|  |  |
|--|--|
| 1. Mains (Utility) Failure Detection, Mains (Utility) Power Monitoring (kW, kV Ar, kV A & pf) Monitoring, Mains (Utility) Decoupling Protection, Mains (utility) kW Export Protection. |  |
| 2. Remote Communications (RS232, RS485 x2, Ethernet)   |  |
| 3. High Tariff Avoidance, Peak Shaving, Peak Lopping   |  |
| 4. Synchronization of MCB (Reverse Synchronization)  |  |
| 5. Support of Electronic Controlled Engines (J1939, Modbus)  |  |
| 6. Wide Range of Communication Interfaces - RS232, RS485, USB, Modbus, GSM/Analog Modem, GPRS, Ethernet  | b.ComAp IC-NT SPtM   |

| Generator Set Options and Accessories   |                          |   |                          |
|---|--------------------------|---|--------------------------|
| <b>Generator Set Design</b>             |                          | <b>Control System</b>                   |                          |
| Open Type                               | <input type="checkbox"/> | AMF( Automatic Management Function)     | <input type="checkbox"/> |
| Silent Type                             | <input type="checkbox"/> | ATS( Automatic Transfer System)         | <input type="checkbox"/> |
| Super Silent Type                       | <input type="checkbox"/> | ASS( Automatics Synchronization System) | <input type="checkbox"/> |
| Trailer Type                            | <input type="checkbox"/> | Remote Control Puma                     | <input type="checkbox"/> |
| <b>Fuel System</b>                      |                          | <b>Alternator</b>                       |                          |
| 12 Hour Base Tank(single wall)          | <input type="checkbox"/> | PMG(EBS) Excitation                     | <input type="checkbox"/> |
| 24 Hour Base Tank(single wall)          | <input type="checkbox"/> | Space Heater                            | <input type="checkbox"/> |
| Dual Wall Base Fuel Tank                | <input type="checkbox"/> | <b>Preheater System</b>                 |                          |
| Outside Fuel Tank                       | <input type="checkbox"/> | Coolant Preheater                       | <input type="checkbox"/> |
| Automatic Refueling Compensation System | <input type="checkbox"/> | Oil Preheater                           | <input type="checkbox"/> |
| <b>Exhaust System</b>                   |                          | Battery Preheater                       | <input type="checkbox"/> |
| Residential Exhaust Silencer            | <input type="checkbox"/> |   |                          |
| <b>Circuit Breaker Brand</b>            |                          |   |                          |
| CHNT                                    | <input type="checkbox"/> |   |                          |
| ABB                                     | <input type="checkbox"/> |   |                          |