

Model	DVD220
Prime Power (50Hz)	200kW/250kVA
Standby Power (50Hz)	220kW/275kVA

#### Standard configuration

Vovlo Penta TAD734GE  
50 °C radiator  
ComAp control system MRS10/MRS16/IC-NT  
High quality U-steel base frame, integrated high efficiency Absorber  
DC high-energy start-up lead-acid batteries  
Output circuit breaker  
Industrial muffler, ripple flex exhaust pipe  
Installation and operation instruction manual



Reference only

#### Generator set specification

Rated voltage (V)	400/230
Rated current (A)	360/396
Rated frequency (Hz)	50
Power factor	0.8 (lagging)
Line system	Three-phase four-wire system
Rated speed (r/min)	1500
Voltage adjustment range (%)	95~105
Voltage adjustment rate (%)	≤±0.5 (Stable state) ±15 (Transient state)
Frequency adjustment rate (%)	≤1 (Stable state) ±10 (Transient state)
Voltage fluctuation rate (%)	≤±1
Frequency fluctuation rate (%)	≤0.5
Time for voltage to stabilize (s)	≤1
Time for frequency to stabilize (s)	≤5
Fuel specification and grade	0# light diesel
Fuel consumption rate(g/kw·h)	204(PRP), 205(ESP)
Oil consumption rate(L/h)	0.03
Noise value dB(A)	<105dB 1m at set side
Genset dimension (L×W×H) (mm)	2650×1068×1600 (open type) 3700×1400×1800 (soundproof type)
Net weight (kg)	1600 without coolant and oil (open type) 3330 without coolant and oil (soundproof type)

## Engine specification

Aspiration	Turbocharged, aftercooler
Bore / stroke (mm)	108/130
Displacement (L)	7.15
Cylinder arrangement	6 in line
Compression ratio	18.1:1
Rated speed (RPM)	1500
Maximum output power (kW)	250
Speed control	Electronic

## Exhaust system

Exhaust gas flow (kg/min)	33(PRP),33.4(ESP)
Maximum exhaust gas temp (°C)	495(PRP), 550(ESP)
Maximum back pressure (kPa)	5
<b>Air intake system</b>	
Intake air flow (kg/min)	16.1(PRP), 16.3(ESP)
Max intake air restriction (kPa)	3.5
<b>Cooling system</b>	
Coolant capacity-engine with cooling package (L)	23.8
Maximum coolant temperature (°C)	113
Thermostat adjustment range (°C)	83-95
<b>Lubrication system</b>	
Minimum capacity (L)	20
Maximum oil temperature (°C)	125
<b>Fuel system</b>	
100%standby power (g/kw·h)	205
100%prime power (g/kw·h)	204
75%prime power (g/kw·h)	217
50%prime power (g/kw·h)	233

## Alternator specification


Design standard

Compliance with GB755, EN60034, BS5000, VDE0530, NEMAMG1-32, IEC34 standards

Number of phases	3
Connection type	Y
Bearing	1
Power factor	0.8
Protection grade	IP 23
Insulation class	H

Temperature rise grade	H
Winding pitch	2/3
Excitation type	Brushless self excitation
Excitation control mode	AVR

## Control system

Manufacturer and model		ComAp NT MRS 10
Product description	Functions and protections	 <p>IntelliLite NT MRS 10</p>
1.Controller for Single Genset prime or standby application  2.Support the electronic control engnies  3.Integrated visual design of computer software as configuration / monitoring / control local or remote	1.Over/under voltage 2.Voltage asymmetry and Phase rotation 3.Over/under frequency 4.Overcurrent 5.Overload 6.Power factor 7.Temperature 8.Fuel(Gas) level	
Key features	Basic technical parameters	
1. Automatic or manual start/stop  2.Plug-in expansion, multiple function options (Modbus, network cable, SMS, input/output), one expansion card slot  3.Modify the controller configuration through power supply by the Computer USB output  4.Total have three analog inputs, 6+1 switch input, 6 switch outputs 5.Configurable MODBUS	1. Power supply range: 8 ~ 36VDC 2. Operating temperature: -20 ~ 70℃ 3. Voltage measurement inputs: 3ph-n Gen voltage, 4. 3ph-n Mains voltage Voltage measurement range: 277V Voltage measurement range: 40~70 Hz (accuracy 0.1 Hz) Current measurement range: 5A Display type: Build-in monochromatic 3.2" Display resolution: 132×64px	

IntelliLite NT MRS 10

## Optional accessories

Engine	Control system
<ul style="list-style-type: none"> <li>● Jacket heater</li> <li>● Oil-water separator</li> <li>● Heavyduty air filter</li> <li>● Coolant level sensor</li> </ul>	<ul style="list-style-type: none"> <li>● Moisture-proof heater</li> <li>● Anti-surge protector</li> <li>● ComAp IntelliLite IC-NT</li> </ul>
Alternator	ATS self - switching system
<ul style="list-style-type: none"> <li>● Anti condensation heater</li> <li>● MARATHON/STAMFORD/M generator</li> <li>● PMG</li> <li>● Air filter</li> </ul>	<ul style="list-style-type: none"> <li>● ATS(G+M)*</li> <li>● ATS(G+G)*</li> <li>● ATS(G+G+M) *</li> </ul>

Fuel system	Canopy
<ul style="list-style-type: none"><li>● Baseframe mounted fuel tank</li><li>● Oil-water separator</li><li>● Automatic fuel filling system</li></ul>	<ul style="list-style-type: none"><li>● Soundproof</li><li>● Trailer</li><li>● Truck mounted</li></ul>
Exhaust system	Spare parts
<ul style="list-style-type: none"><li>● Residential muffler</li><li>● Spark extinguisher (instead of the original industrial silencer)</li><li>● Catalyst conversion catalyst for high emission requirements</li></ul>	<ul style="list-style-type: none"><li>● Oil filter</li><li>● Fuel filter</li><li>● Air filter</li><li>● Coolant filter</li><li>● Fan belt</li></ul>

### Power definition

- **Prime Power (PRP):**

According to ISO8528-1, prime power is available for an unlimited number of annual hours in variable load application. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

- **Standby Power (ESP):**

According to ISO8528-1, standby power is defined as the maximum power applicable for supplying emergency power for the duration of a utility power interruption. It is capable of delivering for up to 500hours of operation per year. No overload capability is available at this rating.

### Terms of use

The nominal power assigned by the genset is given for 25 ° C Air Inlet Temperature, of a barometric pressure of 100 kPa (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.