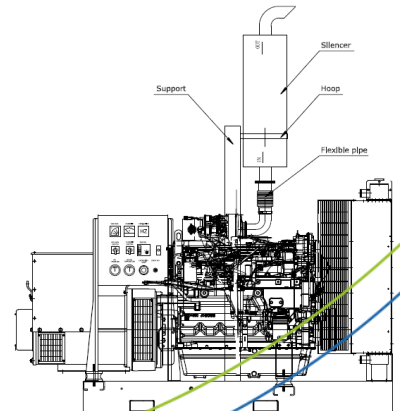


AKSA Power Generation has been producing industrial generator sets with an innovative compact design and excellence in quality for over 30 years. AKSA has been providing reliable power through three main production plants and over 15 branch offices worldwide.



| Alternator (125 °C Rise) | Voltage | Ph | Pf | Hz | Stand-by Ratings | | Prime Ratings | |
|-----------------------------|----------|----|----|----|------------------|-----|---------------|-----|
| | | | | | kW/kVA | Amp | kW/kVA | Amp |
| UCI224F/ AK350M | 240/120V | 1 | 1 | 60 | 60/60 | 250 | 55/55 | 229 |

Rating Definition

Stand-by Power (Maximum): Power available at variable load in the event of main power network failure. **No over load is permitted.**

Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours of operation.

The above ratings represent the engine performance capabilities to conditions specified in accordance with ISO 8528/5 & ISO3046.

Derating may be required for conditions outside of the test conditions.

Codes, Standards & Standard Features

EPA Certified Tier3 engine powered generator set for Emergency Stationary Applications.

The Generator set is designed and manufactured in a facility certified to **ISO9001:2008** standards.

John Deere heavy duty four cycle industrial diesel engine delivers low emission, reliable power, fuel efficiency and fast response to load changes.

Analog control system provides total gen-set system integrated control, protections, metering, automatic starting/stopping with additional key start switch for easy operation.

Aksa Power Generation provides **single source responsibility** for the generator set & accessories.

The generator set, with its components, are **prototype tested** and **production tested**.

Newage Stamford industrial generators meet the requirements of BS EN 60034 and the relevant sections of other international standards such as BS5000, VDE0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359.

Heavy duty base frame with integral pad **vibration isolators** eliminates the need for under unit spring vibration isolators.

POWER YOUR FUTURE

Engine Data

| | |
|------------------------------------------|-------------------|
| Manufacturer | John Deere |
| Model | 4045HF280 |
| Cylinders | 4, In-line |
| Max. power @ rated rpm; kWm (BHP) | 74 (99) |
| Brake mean effective pressure; kPa | 1090 |
| Aspiration & Cooling | Intercooled |
| Total displacement; L (in ³) | 4.5 (275) |
| Bore; in. (mm) | 4.19 (106) |
| Stroke; in. (mm) | 5.0 (127) |
| Compression ratio | 19:1 |
| Governor type | Mechanical |
| Engine crankcase vent system | Open |

Engine Electrical System

| | |
|------------------------------------------------|----------------------|
| Charging alternator | 12V, Negative Ground |
| Starter rolling current @32 °F; (amp) | 780 |
| Min. voltage at ECU during cranking; (dc) | 6 |
| Max. allowable start circuit resistance; (Ohm) | 0.0012 |
| Starter motor rated voltage; (dc) | 12 |
| Battery quantity x rating & CCA | 1 x 60Ah, 640 |

Fuel System

| | |
|-------------------------------------------------------|----------------|
| Combustion system | Unit injection |
| Fuel injection pump | Stanadyne DB4 |
| Governor Type | Mechanical |
| Total fuel flow; lb/hr | 212 |
| Max fuel inlet temp; °C | 80 |
| Max fuel inlet restriction; in.H ₂ O (kPA) | 80 (20) |
| Max. fuel return pressure; in.H ₂ O (kPA) | 80 (20) |

Fuel Consumption (gal/hr)

| | |
|-----------|------|
| 110% Load | 5.11 |
| 100% Load | 4.67 |
| 75% Load | 3.60 |
| 50% Load | 2.55 |

Exhaust System

| | |
|----------------------------------------------|------|
| Exhaust gas flow; (m ³ /min) | 14.4 |
| Max. exhaust restriction; (kPa) | 7.5 |
| Max. exhaust gas temp; (°C) | 545 |
| Max. bending moment on turbo outlet; (lb-ft) | 5.2 |

Cooling System

| | |
|------------------------------------------|----------|
| Radiator ambient temp; °C (°F) | 50 (122) |
| Engine coolant capacity; L | 8.5 |
| Min. coolant fill rate; L/min (gal/min) | 11(3) |
| Thermostat operation range; °C | 82-94 |
| Max top tank temp; °C | 105 |
| Min. air to boil temp; °C | 47 |
| Cooling fan type | Pusher |
| Min. pressure cap; (psi) | 10 |
| Combustion air flow; m ³ /min | 5.4 |
| Intake manifold pressure; (psi) | 10 |
| Engine coolant flow; L/min (gal/min) | 144 (38) |
| Engine heat rejection; BTU/min | 1979 |
| Air cleaner efficiency | 99.9% |

Lubrication System

| | |
|-----------------------------------------------------|---------|
| Oil pressure @rated speed; psi | 50 |
| Oil pressure at low idle; psi | 15 |
| Max. oil carryover in blow by; lb/hr | 0.002 |
| Max. air flow in blow by; gal/min | 26 |
| Max. crankcase pressure; in. H ₂ O (kPa) | 2 (0.5) |

Alternator Data

| | |
|--------------------------------------------------------------|------------------------------------------------------------|
| Manufacturer | Stamford/AKSA |
| Model | |
| Stamford | UCI224F |
| Aksa | AK350M |
| Design | 4 Pole, drip proof rotating field |
| Exciter type | Brushless, self excited P.M.G. option is available |
| Stator | 2/3 winding pitch |
| Rotor | Single bearing, flexible disc |
| Leads | 4 |
| Voltage regulator | Solid state, Volts/Hz |
| Voltage regulation | Self excited 1.5% |
| Insulation | Class H |
| Temp. rise @ 40°C ambient | 125°C Prime 150°C Standby |
| Alternator Cooling | Direct drive Centrifugal Blower |
| Cooling air; m ³ /min | 0.108 |
| Waveform distortion | No load < 1.5% Non-distorting balanced linear load < 5% |
| Max. over-speed; rev/min | 2250 |
| Telephone influence factor (TIF) | < 50 |
| Telephone harmonic factor (THF) | < 2% |
| Sustained short circuit current 10sec with EBS fitted; (amp) | |
| Stamford – w/PMG | 1090 |

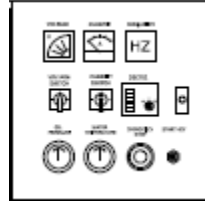
Locked rotor kVA (skVA) @30% voltage dip

| | Self Excited | PMG Excited |
|----------------|--------------|-------------|
| 240/120V - 1ph | 135 | 170 |

Gen-set Dimension & Weight

| | |
|-------------|------|
| L (in.) | 80 |
| W (in.) | 40 |
| H (in.) | 100 |
| Weight (lb) | 2800 |

Control System



Aksa analog control panel with DSE702 manual and auto controller offering an excellent range of engine monitoring and protection features plus a temper proof engine hours counter.

- Manual and auto start selector
- Remote start input
- Engine monitoring and protection
- Oil pressure protection
- Water temperature protection
- Battery voltage alarm
- Charge alternator failure alarm
- Engine over speed protection
- Engine hours counter
- AC ampermeter, voltmeter and frequencymeter
- Engine oil pressure and water temperature gauges
- Emergency stop button

Standard Features & Accessories

- Heavy Duty Steel Base-frame
- Anti-vibration pads
- Residential Grade Silencer w/flex connector
- Flex Fuel Line Set -15ft
- Battery, Battery Rack & Cables
- Battery Charger (6 Amp)
- Jacket Water Heater (120V/1000W)
- Operations Manual
- 2 Years / 2000hours Limited Warranty


Optional Accessories

- Main Line CB
- PMG Excitation system
- ATS Panel
- Fuel Tank

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*Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.