

Annexure C3.2

SCOPE OF WORK

Important to note – the successful supplier must submit a safety file and attend induction before the work commences

DESCRIPTION OF THE WORKS

1. Supply and deliver new generator to RW (Zoekfontein) Control Works, as per the Specification below
2. Decommission the existing generator and remove.
3. Prepare site for the new generator to be installed.
4. Install new generator and reroute the existing cables.
5. Test and commission generator.
6. Supply all maintenance documents including OEM training manual.
7. Transport the old generator to RW - Zuikerbosch site.

Note: Zoekfontein is approximately 23km from Zuikerbosch and is a gravel road.

You will need to make provision in your quote for a truck mounted crane for the on/off loading of the generator.

FEATURES & BENEFITS

- 220kVA standby power at 230/400v @ 50Hz 1500rpm
- High-quality and reliable six-cylinder 7.15l turbocharged diesel engine
- Ideal for home and business applications
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger included
- H-specification insulation, brushless alternator with AVR provides stable output
- High-temperature and oil pressure sensor to protect against engine damage
- Easy to use digital controller with auto/manual start options
- All sets undergo a comprehensive testing/pre-delivery inspection prior to delivery
- Peace of mind of earlier of one year/1000 hour warranty



Engine

Engine make	Volvo
Engine model	TAD733GE
Displacement	7.15L
Cylinder bore/Stroke	108mm x 130mm
Fuel system	In-line fuel injection pump
Governor	Electrical
Cylinders	Six cylinders water cooled
Engine output power (1500rpm)	177kW
Turbocharged/normally aspirated	Turbocharged
Cycle	Four stroke
Combustion system	Direct injection
Compression ratio	18.1:1
Fuel tank capacity	670L

Fuel consumption 75%	33.38 l/h
Fuel consumption 50%	22.86 l/h
Fuel consumption 25%	12.01 l/h
Oil type	CD-15W-40
Engine oil capacity	34l
Cooling method	Water-cooled radiator/fan
Coolant capacity (including radiator)	37.1L
Starter	24v DC charge alternator
Engine speed	1500rpm
Filters	Replaceable fuel filter/oil filter/dry element air filter
Battery	Maintenance-free battery including rack and cables
Silencer	Exhaust silencer

Alternator

Alternator make	StromerPower
Standby power output	220kVA
Prime power output	200kVA
Insulation class	Class-H with circuit breaker protection
Type	Brushless
Phase and connection	Three phase/four wire
AVR	Included
AVR model	SX460
Voltage regulation	± 1%
Voltage	230/400v
Rated frequency	50Hz
Voltage regulate change	≤ ±10% UN
Phase change rate	± 1%

Protection class	IP23 standard/screen protected/drip-proof
Stator	2/3 pitch
Rotor	Single bearing
Excitation	Self-exciting
Regulation	Self-regulating

General

Structure type	Silent weather resistant enclosure
Dimensions Length x Width x Height	3400mm x 1400mm x 2150mm
Dry weight	3000kg
ATS unit included	Included
Four-way protection system included	Included

Annexure 4

SITE INFORMATION

Non Compulsory Site Briefing 30.05.2023 @ 09:00

We will meet at Rand Water Zuikerbosch, Risk Control Parking Area –

Vischgat Road, Three Rivers East, Vereeniging

S26 41 520 E28 00 061

From Zuikerbosch we will be traveling to Zoekfontein. Please wear safety shoes as we will be entering the plant. You will not be allowed to enter the plant without safety shoes.

