Data sheet

Type AS35BU

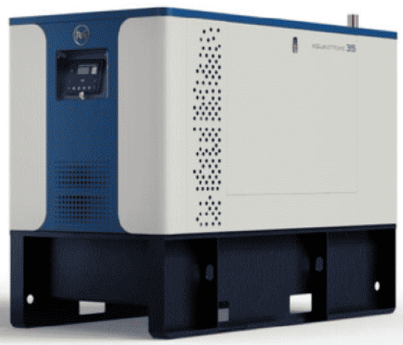
AQUASTROKE GENERATOR - 35KW BACKUP POWER

IDEAL USE

Designed to provide clean and reliable standby backup power that activates only when the grid fails, ensuring operation of essential electrical systems with reduced emissions.

APPLICATIONS

- **Standby Backup Power Supply:** Operates only during utility grid outages to keep essential systems running.
- **Automatic Backup During Power Interruption:** Starts automatically when the grid drops to support key electrical loads until power is restored.
- **Standby Use (≤500 operating hours/year):** Intended for short-duration operation during grid failure; not for continuous or daily use.
- **Ideal for Commercial, Residential & Light-Industrial Use:** Suitable for offices, buildings, telecom sites, data rooms, retail, residential complexes, and similar applications requiring reliable grid-backup support.
  Not intended for continuous, prime, or life-critical power applications.



ELECTRIC

			Stand-by		
Frequency (Hz)	Phases	Voltage (V)	kVA	kW	Nominal speed (rpm)
50	3	400/230V	44	35	1500

POWER FACTOR

3 phase	0.8
1 phase	1

QUALIFICATIONS

Standby: Standby power (ESP) is the maximum available power, for a maximum of 500 hours per year, where the load does not exceed 70% of the standby power.

ENCLOSURE

- Integrated panel viewing window
- Integrated forklift pockets
- Integrated lifting eyes
- Drip tray with leak detection
- 4 point tie down
- Open-cell acoustic foam in general areas; foil-faced, heat-rated acoustic foam only at hot zones; all foams self-extinguishing and flame-retardant
- Powder-coating:
  - White paint: RAL 9016 fine texture
  - Blue paint RAL 5007 fine texture
- Integrated rain deflectors
- Galvannealed steel casing

ALTERNATOR ECP32 - 1M4C

Poles	4
Connection of the windings	Star
Insulation	Class H
Casing	IP23
Excitation system	Self-regulating, brushless
Voltage regulator	AVR
Stable voltage regulation	+/- 1%
Bearing	One-sided closed bearing
Coupling	Flexible disc
Cooling	Direct-driven centrifugal fan

MOTOR

Rated Load @ 50hz	35 kW
Peak Transient Load Acceptance @ 50hz	43 kW
Manufacturer and Model	MMFF AS 2.3
Engine Speed	1500 RPM
Fuel	MayMaan 70/30 Water/Ethanol Blend
Injection Type	Direct Injection
Aspiration	Turbo Charged / Intercooled
Cylinders	Inline 4
Bore and Stroke	83.6 x 102 mm
Displacement	2.3 Liters
Compression Ratio	13.5:01
Engine Oil Specification	MayMaan 5w-30 Only
Engine Oil Capacity	11.2 Liters Total Dry Fill
Coolant Capacity	4.8 Liters
Speed Control	Electronic
Air Filter Engine	Dual Element Filter, Cellulose Media
Oil Consumption	<0.08% of the Fuel Consumed
Exhaust Gas After-treatment	2 Way Catalyst

Data sheet

Type AS35BU

ELECTRICAL PROPERTIES

- AVR DSR
- Winding Protection Total +
- 4-Pole Circuit Breaker
- Preparation for Earthing Pole
- External Emergency Stop Button

MECHANICAL PROPERTIES

- Cooling package
- Air filter
- Electronic controller
- Low oil pressure sensor
- Coolant temperature sensor
- Protection from hot parts
- Manual oil drain
- Fuel level sensor
- Internal fuel fill point
- Exhaust system with heat blanket
- Water oil separator filter system with water collection tank
- Internal carbon canister
- Non pressurized main fuel tank equipped with integrated vapor barrier
- Engine equipped with belt guard
- Utility-fed auxiliary outlet for internal accessories (charger/heater)

WEIGHT AND DIMENSIONS

Length	2036	mm
Width	939	mm
Height	1552	mm
Dry weight	830	kg
Wet weight	1225	kg

TYPICAL NOISE LEVEL

LpA (1 m)	71.3	dB(A)

START SYSTEM

Battery capacity	50 - 55	Ah
Number of batteries	1	
Battery voltage	12	V

FUEL SYSTEM

Main fuel tank capacity	393	L
Cold startup fuel tank capacity	15	L

AIR SYSTEM

Intake air flow 100% standby	15.7	m³/min
Air flow radiator cooling	2.4	m³/s

ACCU

Battery switch	
Battery type	Sealed lead acid
Battery charger	

EXHAUST SYSTEM

Maximum temperature	450 °C
Maximum permitted back pressure	20 kPa
Exhaust discharge diameter	57.1 mm

COMMUNICATION AND OPERATION

DSE 7320 MKII

FUEL CONSUMPTION

100% Load	54.4 L/h
75% Load	43.7 L/h
50% Load	35.0 L/h
25% Load	27.8 L/h

CE PACKAGE

Directive 2006/42/EC relating to Machinery
Directive 2014/30/EC relating to Electromagnetic Compatibility
Directive 2000/14/EC relating to Outdoor Noise Directive

REFERENCE STANDARDS

The following Type A Harmonized Standards and normative references were complied with:

- EN ISO 121000:2010	*Safety of machinery - General principles for design - Risk assessment and risk reduction*

The following Type B Harmonized Standards and normative references were complied with:

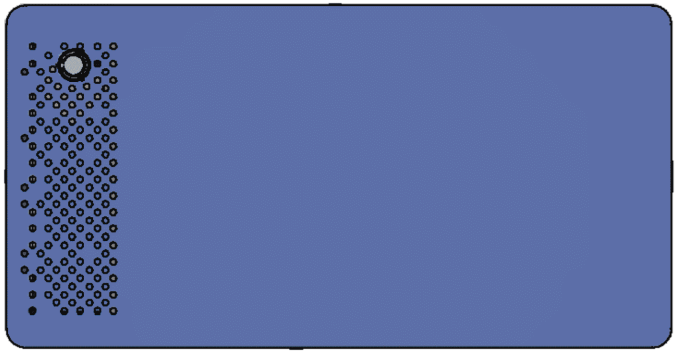
- EN ISO 11201:2010	*Acoustics - Noise emitted by machinery and equipment*
- EN ISO 13732-1:2008	*Ergonomics of the thermal environment. - Hot surfaces*
- EN ISO 13849-1:2023	*Safety of machinery - Safety related parts of control systems - Part 1: General principles for design*
- EN ISO 13849-2:2012	*Safety of machinery - Safety related parts of control systems – Part 2: Validation and Verification*
- EN ISO 13850:2015	*Safety of machinery – Emergency stop equipment, functional aspects – Principles for design*
- EN ISO 13857:2019	*Safety of Machinery – Safety distances to prevent danger zones from being reached by upper/lower limbs*
- EN ISO 14118:2018	*Safety of machinery - Prevention of unexpected start-up*
- EN ISO 14120:2015	*Safety of machinery - General requirements for the design and construction of fixed and movable guards*
- EN 60204-1:2018	*Safety of machinery – Electrical equipment of machine Part 1: General requirements*

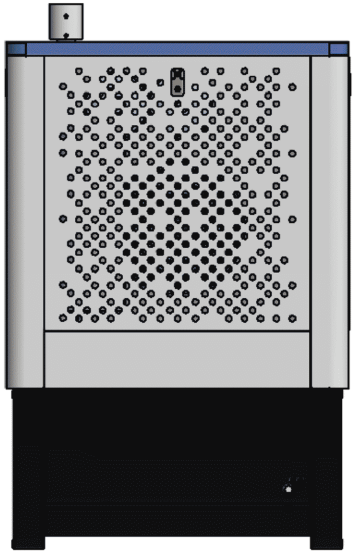
The following Type C Harmonized Standards and normative references were complied with:

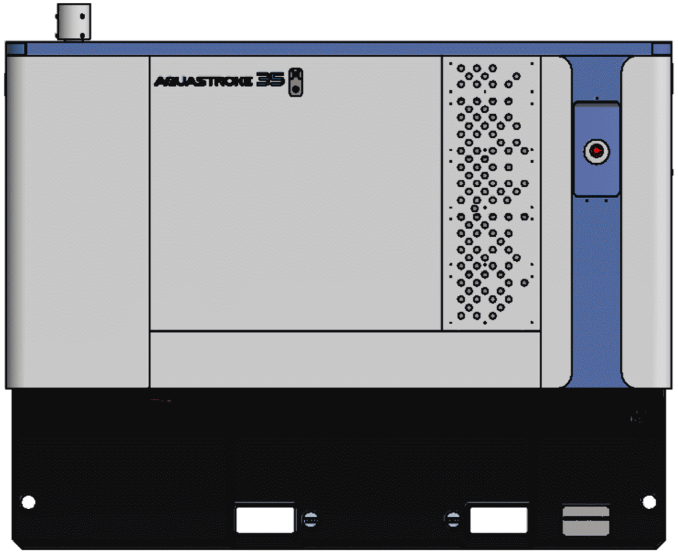
- EN ISO 8528-13:2016	*Reciprocating internal combustion engine driven alternating current generating sets-Safety*

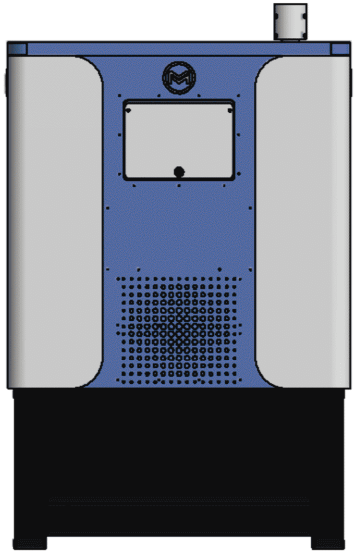
The following Harmonized Standards, and normative references were used as guidance:

- EN 55011:2016/A2:2021	*Radio-frequency disturbance characteristics*
- EN 61000-6-2:2019	*Immunity standard for industrial environments*
- EN 61000-6-3:2021	*Emission standard for equipment in residential environments*
- EN 61000-6-4:2019	*Emission standard for industrial environments*
- EN ISO 11201:2010	*Acoustics - Noise emitted by machinery and equipment*






AQUASTROKE 35



Sizes are in millimeters

