

DIESEL GENERATOR SET

TYPE ADG42D

42 kVA/Prime/50Hz
(46 kVA/LTP/50Hz)



Optional equipment shown. Standard equipment may vary.

BENEFITS

- // Most compact design
- // Air cooled engine – trouble-free cooling system
- // Lowest maintenance cost
- // High user-friendliness

SYSTEM RATINGS^①

Prime (LTP) ^②	ADG42D	ADG42D	ADG42D
Voltage (L-L)	380V	400V	415V
Phase	3	3	3
PF	0.8	0.8	0.8
Hz	50	50	50
kWe	33.6 (36.8)	33.6 (36.8)	33.6 (36.8)
kVA	42 (46)	42 (46)	42 (46)
AMPS	64	61	58
Generator model	ACG-0042-4-400	ACG-0042-4-400	ACG-0042-4-400
Temp rise	125°C (150°C)	125°C (150°C)	125°C (150°C)
Load acceptance	100%	100%	100%

① Power available up to 25°C/100 m

② Technical data for prime power

CERTIFICATIONS AND STANDARDS

- // Engine-generator set is designed and manufactured in facilities certified to standards ISO 9001:2008
- // Performance Assurance Certification (PAC)
 - Engine-generator set tested to ISO 8528-5 for transient response
 - Verified product design, quality and performance integrity
 - All generator sets are type and factory tested
- // Power rating
 - Permissible average power output during 24 hours of operation is approved up to 75% for prime power rating
 - Permissible average power output during 24 hours of operation is approved up to 100% for limited time power rating. Operating hours are limited to 500 hours per year.

STANDARD EQUIPMENT^①

// Engine

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 Air cleaners

 Oil pump

 Oil drain extension & S/O valve

 Full pre-filter with water separator

 Full flow oil filters

 Exhaust manifold – dry

 Blower fan & fan drive

 Electric starting motor – 12V

 Governor – mechanical

 SAE flywheel

 Flexible fuel connectors

// Generator

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 NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor starting

 VDE 0530, IEC 34.1, BS5000, CSA C22.2-100, AS1359

 Self-ventilated

 Superior voltage waveform

 No load to full load regulation

 125°C prime temperature rise (insulation class H)

 1 bearing, sealed

 Full amortisseur windings

 125% rotor balancing

 3-phase voltage sensing

 Automatic voltage regulator $\pm 0,5\%$

^① Represents standard product only. Consult Factory/MTU Onsite Energy distributor for additional configurations.

STANDARD FEATURES^①

- // The generator set complies to G2
- // Engine-generator set tested to ISO 8528-5 for transient response
- // MTU Onsite Energy is a single source supplier
- // Global product support
- // 2 year standard warranty
- // F4L 914 diesel engine – 4-cycle
- // Engine-generator resilient mounted
- // Self-excited generator
 - Brushless, rotating field generator
 - 300% short circuit capability
 - 2/3 pitch windings
- // Cooling system 50°C
 - Integral set-mounted
 - Engine driven fan

APPLICATION DATA

// Engine

Manufacturer	Deutz
Model ^②	F4L 914
Type	4-cycle
Arrangement	4/in-line
Displacement	4.31 l
Bore: cm	10.2
Stroke: cm	13.2
Compression ratio	20.6 :1
Rated RPM (speed)	1,500
Engine governor	Mechanical
Gross power: kWm ^②	43.5 kW
Aspiration	Natural aspiration

// Lubrication System

Oil capacity (sump) min./max.	11 l
Lube oil consumption (in % of fuel cons.)	0.5
Oil pressure min. (warning): bar	1.5
Oil pressure min. (shut-down): bar	1.5
Max. oil temperature: °C	130

// Fuel System

Recommended fuel	see MTU fluids & lubrication spec.
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// Heat Rejection

	PRIME ^②
Engine radiation and convection: kW	approx. 32.8
Heat rejection of generator: kW	approx. 4.8

// Fuel Consumption and Fuel Tank Capacity

	PRIME ^②
At 100% load	9.3 l/h (205 g/kWh)
At 75% load	7.1 l/h (208 g/kWh)
At 50% load	5.2 l/h (230 g/kWh)
At 25% load	3.7 l/h (325 g/kWh)
Capacity of base frame fuel tank (open set)	155 l
Capacity of base frame fuel tank (sound proof)	155 l

// Cooling System

	PRIME ^②
Max. ambient temperature: °C	50
Fan power consumption: kW	0.5
Cooling air flow: m ³ /h	1810
Air pressure loss: mbar	10

// Combustion Air

	PRIME ^②
Combustion air volume: m ³ /h	174
Max. air intake restriction: mbar	20
Air cleaner type	Dry, replaceable element with safety cartridge

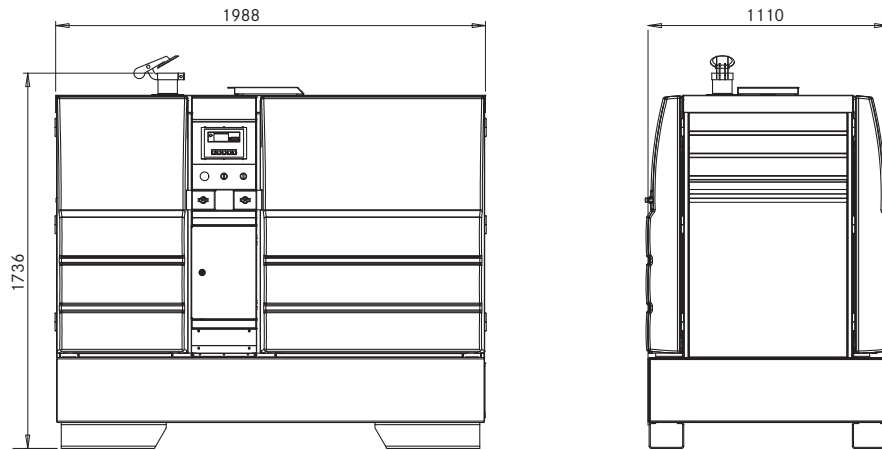
// Exhaust System

	PRIME ^②
Max. exhaust gas temperature: °C	580
Max. exhaust back pressure: mbar	30
Exhaust gas flow: m ³ /h	476

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② Technical data for prime power

WEIGHTS AND DIMENSIONS



Drawing above for illustration purposes only, based on standard sound proof 400 volt engine-generator set. Do not use for installation design. See website for unit specific template drawings.

System	Dimensions (L x W x H)	Weight (dry/less tank)
Sound Proof Unit (SPU)	1988 x 1110 x 1736 mm	approx. 1175 kg

NOISE EMISSION (SOUND PROOF)

Sound power L_{WA} : dB(A)	93
Sound power $L_{PA@1m}$: dB(A)	76
Sound power $L_{PA@7m}$: dB(A)	64

RATING DEFINITIONS AND CONDITIONS

- // Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO 8528-1, ISO 3046-1, BS 5514, AS 2789, and DIN 6271.
- // Limited time power ratings apply to installations served by a reliable utility source. The standby rating is applicable to constant or varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO 8528-1, ISO 3046-1, BS 5514, AS 2789 and DIN 6271.
- // Deration factor:
 - Altitude: Consult your local MTU Onsite Energy distributor for altitude derations.
 - Temperature: Consult your local MTU Onsite Energy distributor for temperature derations.

Materials and specifications subject to change without notice.