



Commercial Marine

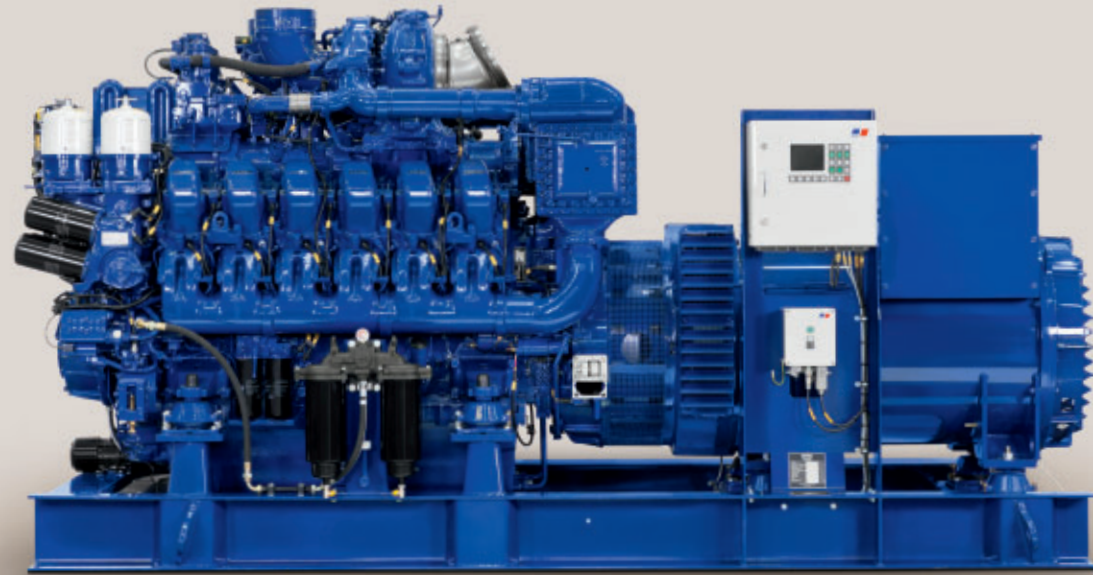
MTU Generator Sets



Power. Passion. Partnership.

MTU Generator Sets

MTU. Generating power.



MTU offers the complete genset portfolio for commercial applications – from 5 to 3000 kWe, available as auxiliary and diesel-electric propulsion systems. The gensets can be obtained as 50/60 Hz versions with numerous options and accessories such as soundshields, control panels, safety switches, PTOs etc.

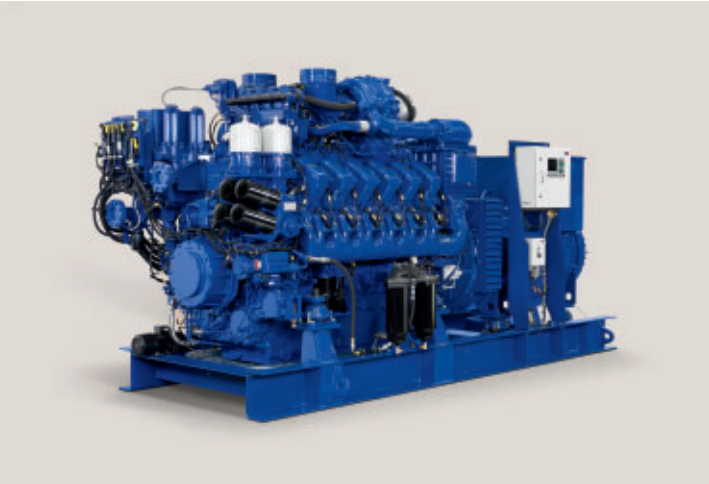
High availability and long TBO of up to 33,000 h ensure continuous operation and reliable performance.

As a system supplier, MTU can configure the best possible complete propulsion system for your needs, implementing in your vessel as well MTU generator sets and MTU automation systems. From cost-efficient standardized gensets to high-end customized solutions – MTU's quality and reliability have been proven thousandfold all over the world. Local content requirements for all gensets can be fulfilled via global component sourcing and worldwide manufacturing possibilities.

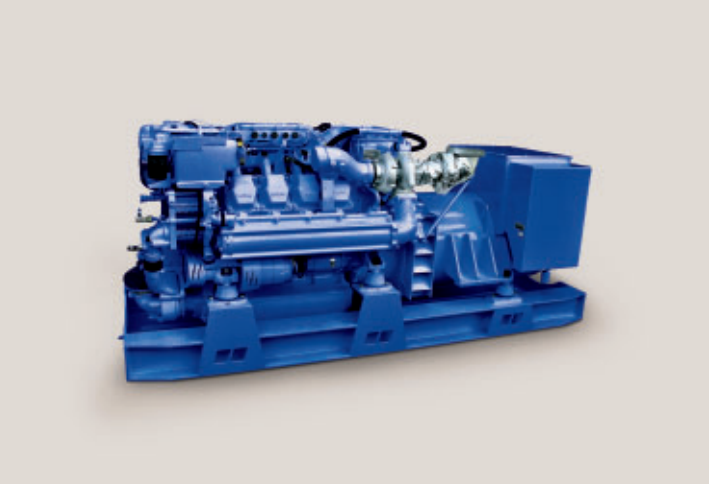
Our customers benefit from MTU's one-stop shopping philosophy and a comprehensive worldwide 24/7 service, guaranteed by a global service network comprising more than 1300 points of contact.



MTU Products at a glance.



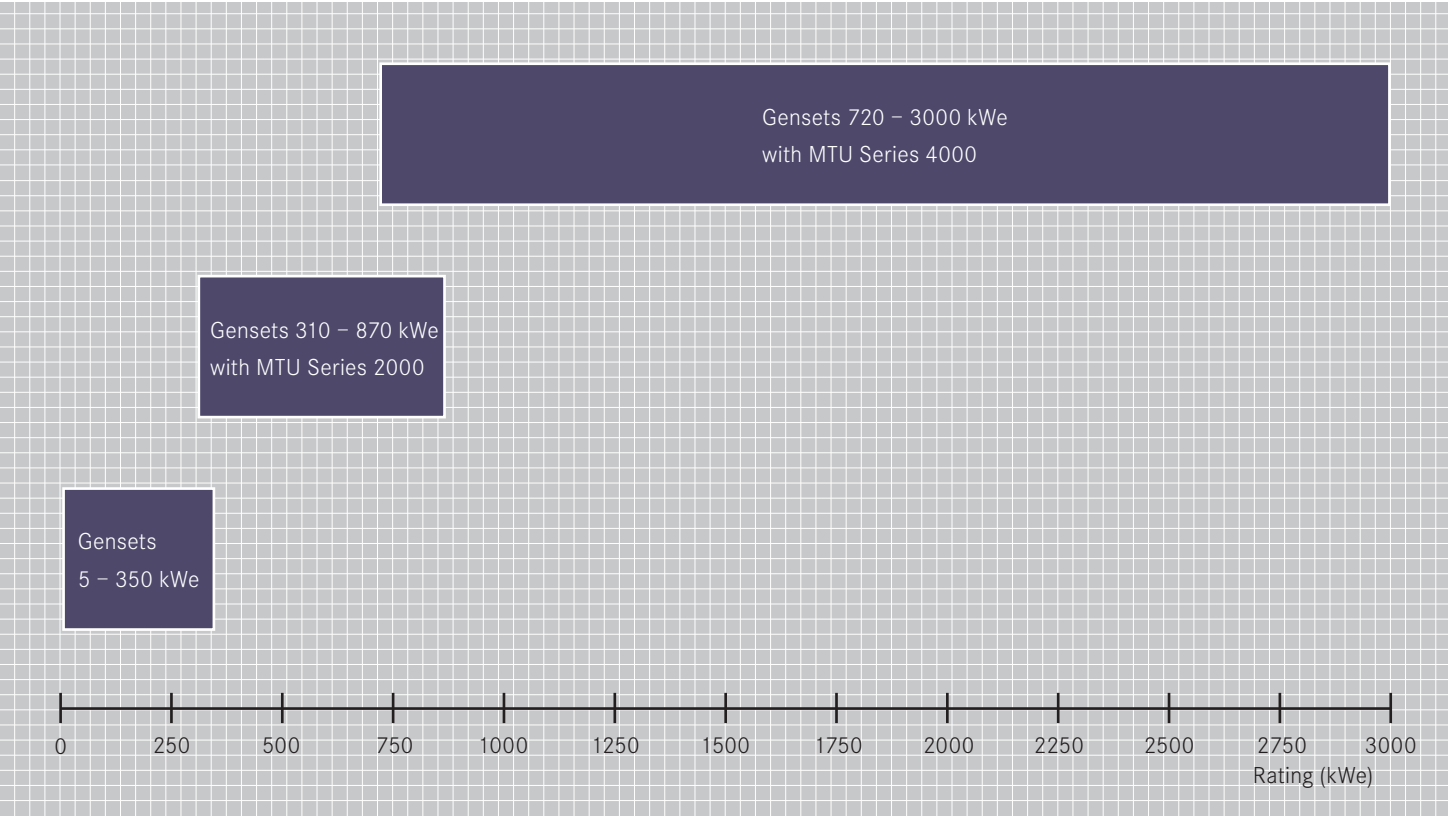
Gensets 720 – 3000 kWe
with MTU Series 4000

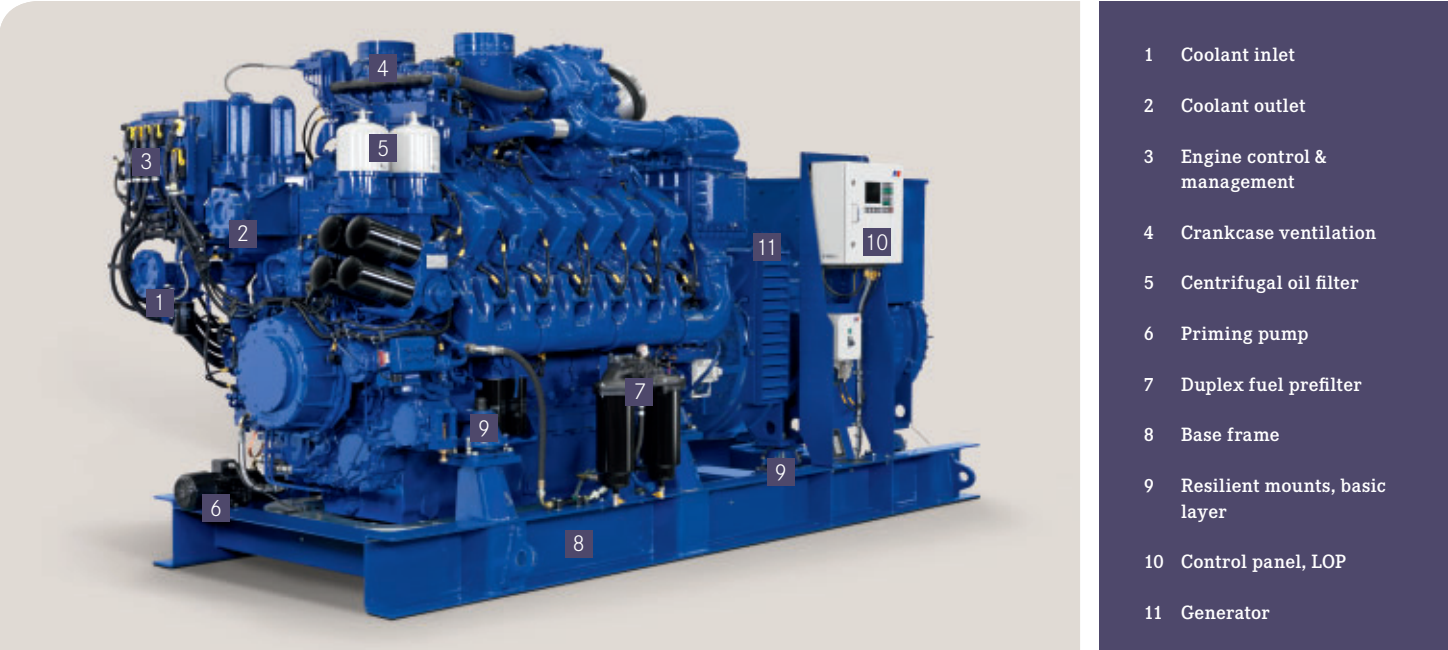


Gensets 310 – 870 kWe
with MTU Series 2000



Gensets 5 – 350 kWe





Description

- MTU gensets up to 3000 kWe for commercial applications, as auxiliary and diesel-electric propulsion

Benefits

- Global MTU service & logistics network comprising more than 1300 points of contact
- MTU proven quality and reliability from cost-efficient standardized gensets to high-end customized solutions
- Global component sourcing and worldwide manufacturing possibility to fulfil local content requirements
- High availability and long TBO of up to 33,000 h

Standard scope of supply and options:

- Engine Series 4000
- Air- or water cooled alternator (50/60 Hz, 400 – 690 V)
- MTU designed baseframe for rigid installation
- Factory approved resilient mounting for engine and alternator
- Factory approved torsional resilient coupling for flange mounted double bearing alternator
- Local operating panel (LOP **genoline**)
- Fuel prefilter with water separator
- Lube oil priming pump with control unit (PPC)
- Certification of all major classification societies
- Available as engine mounted heat exchanger with raw water pump or fresh water cooling system for ship side cooler (box or keel cooling)

Gensets 720 – 3000 kWe with MTU Series 4000

Genset with engine model*	8V 4000 M23F	8V4000M33F	12V 4000 M23F	12V4000 M33F	16V 4000 M23F	16V 4000 M33F
	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
	400 V/690 V	400 V/690 V	400 V/690 V	400 V/690 V	400 V/690 V	400 V/690 V
Rated power ICXN kWe ¹⁾ (@cosphi 0.8)	720	830	1080	1260	1460	1680
Rated power ICXN kVA ¹⁾ (@cosphi 0.8)	900	1037	1350	1575	1825	2100
Speed rpm	1500	1500	1500	1500	1500	1500
Exhaust optimization ²⁾	IMO II	IMO II	IMO II	IMO II	IMO II	IMO II

Genset with engine model*	8V 4000 M23S	8V4000M33S	12V 4000 M23S	12V4000 M33S	16V 4000 M23S	16V 4000 M33S	16V 4000 M43S
	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
	450 V/690 V	450 V/690 V	450 V/690 V	450 V/690 V	450 V/690 V	450 V/690 V	450 V/690 V
Rated power ICXN kWe ¹⁾ (@cosphi 0.8)	870	990	1320	1480	1760	2000	2140
Rated power ICXN kVA ¹⁾ (@cosphi 0.8)	1087	1237	1650	1850	2200	2500	2675
Speed rpm	1800	1800	1800	1800	1800	1800	1800
Exhaust optimization ²⁾	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2

Genset with engine model	8V 4000 M23F	8V4000M33F	12V 4000 M23F	12V4000 M33F	16V 4000 M23F	16V 4000 M33F	
	8V 4000 M23S	8V4000M33S	12V 4000 M23S	12V4000 M33S	16V 4000 M23S	16V 4000 M33S	16V 4000 M43S
Dimensions and masses							
Length	mm	3700	3800	4400	4500	5400	5500
Width	mm	1850	1850	1850	1850	1990	1990
Height	mm	2200	2185	2285	2285	2285	2285
Mass, dry	kg	9500	10000	12000	12500	15000	16000

1) Rated power depends on ambient conditions and alternator specification
2) Other emissions, including EPA Tier 3 for 8 – 16V 4000, available on request

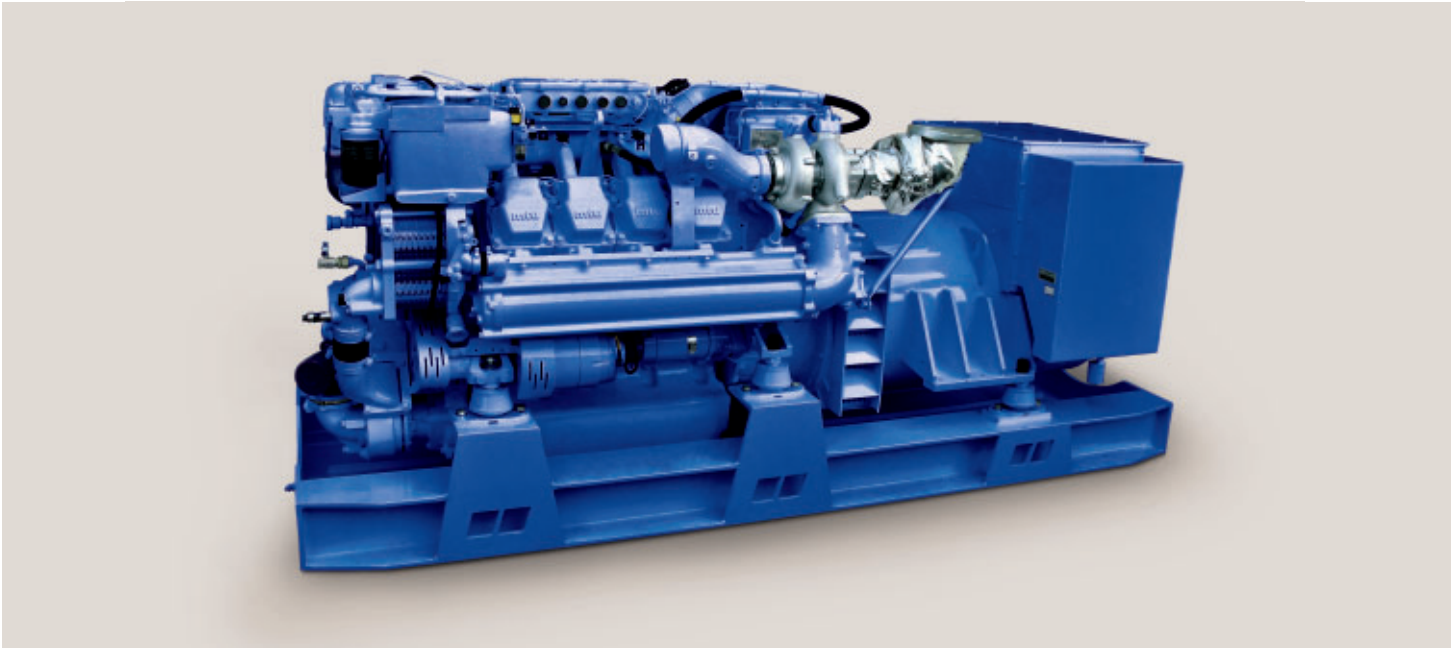
* Generator sets also available with engines up to 3000 kWe on request

Gensets 310 – 870 kW

with MTU Series 2000

Standard scope of supply and options:

- Engine Series 2000
 - Air- or water-cooled alternator (50/60 Hz, 400 – 690 V)
 - MTU designed baseframe for rigid installation
 - Factory approved resilient mounting for engine and alternator
 - Factory approved torsional resilient coupling for flange mounted double bearing alternator
- Local operating panel (LOP **genoline**)
 - Fuel prefilter with water separator
 - Lube oil priming pump with control unit (PPC)
 - Certification of all major classification societies
 - Available as engine mounted heat exchanger with raw water pump or fresh water cooling system for ship side cooler (box or keel cooling)



Genset with engine model	8V 2000 M51A	8V2000M41A	12V 2000 M51A	12V2000 M41A	16V 2000 M51A	16V 2000 M41A
	50 Hz 400 V/690 V	50 Hz 400 V/690 V	50 Hz 400 V/690 V	50 Hz 400 V/690 V	50 Hz 400 V/690 V	50 Hz 400 V/690 V
Rated power ICXN (@cosphi 0.8)	320	370	470	550	630	740
Rated power ICXN (@cosphi 0.8)	400	460	590	690	790	930
Speed	1500	1500	1500	1500	1500	1500
Exhaust optimization ²⁾	IMO II	IMO II	IMO II	IMO II	IMO II	IMO II

Genset with engine model	8V 2000 M51B	8V2000M41B	12V 2000 M51B	12V 2000 M41B	16V 2000 M51B	16V 2000M41B
	60 Hz 450 V/690 V	60 Hz 450 V/690 V	60 Hz 450 V/690 V	60 Hz 450 V/690 V	60 Hz 450 V/690 V	60 Hz 450 V/690 V
Rated power ICXN (@cosphi 0.8)	380	440	570	660	770	890
Rated power ICXN (@cosphi 0.8)	480	550	710	830	960	1110
Speed	1800	1800	1800	1800	1800	1800
Exhaust optimization ²⁾	IMO II	IMO II	IMO II	IMO II	IMO II	IMO II

Genset with engine model	8V	12V	12V
Dimensions and masses			
Length	mm	3000	4000
Width	mm	1600	1850
Height	mm	1500	1500
Mass, dry	kg	3500	5020

1) Rated power depends on ambient conditions and alternator specification
2) Other emissions on request



Gensets 5 – 350 kW_e

Genset with engine model	S60	S60	S60	S60	S60	S60
	50 Hz	50 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Rated power ICXN kW _e ¹⁾ (@cosphi 0.8)	305	330	257	283	305	348
Rated power ICXN kVA ¹⁾ (@cosphi 0.8)	381	413	321	353	381	435
Speed rpm	1500	1500	1800	1800	1800	1800
Exhaust optimization ²⁾	IMO I	IMO I	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2

Genset with engine model	S60
Dimensions and masses	
Length mm	2850
Width mm	1250
Height mm	1450
Mass, dry kg	3000

1) Rated power depends on ambient conditions and alternator specification
2) Other emissions on request

Standard scope of supply and options:

- Large, cast iron expansion tank (40 – 99 kW_e) or solid, fabricated expansion tank (150 kW_e)
 - Jacket-water cooled, cast iron exhaust manifold with two pass coolant flow
 - Jacket-water cooled turbocharger for safety
 - Welded steel base frame
- Closed loop crankcase vent to keep oil vapors in the engine for a cleaner engine room
 - Clamp style fuel filter(s) with vent and drain
 - Service side lube oil fill
 - Center bonded vibration isolation mounts

Gensets 20 – 150 kW _e *	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Rated power ICXN kW _e ¹⁾ (@cosphi 0.8)	20	30	40	55	65	99	150
Rated power ICXN kVA ¹⁾ (@cosphi 0.8)	25	38	50	69	81	124	188
Speed rpm	1800	1800	1800	1800	1800	1800	1800
Exhaust optimization	IMO II/EPA 3	IMO II/EPA 3	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2	IMO II/EPA 2

Gensets 20 – 150 kW _e *							
Dimensions and masses							
Length mm	1093	1319	1633	1723	1769	2094	2100
Width mm	525	610	699	822	822	699	858
Height mm	833	785	1004	953	953	999	1056
Mass, dry kg	405	569	822	891	941	1134	1612

1) Rated power depends on ambient conditions and alternator specification

* Other ratings from 5 – 250 kW_e and 50 Hz/1500 rpm available on request

