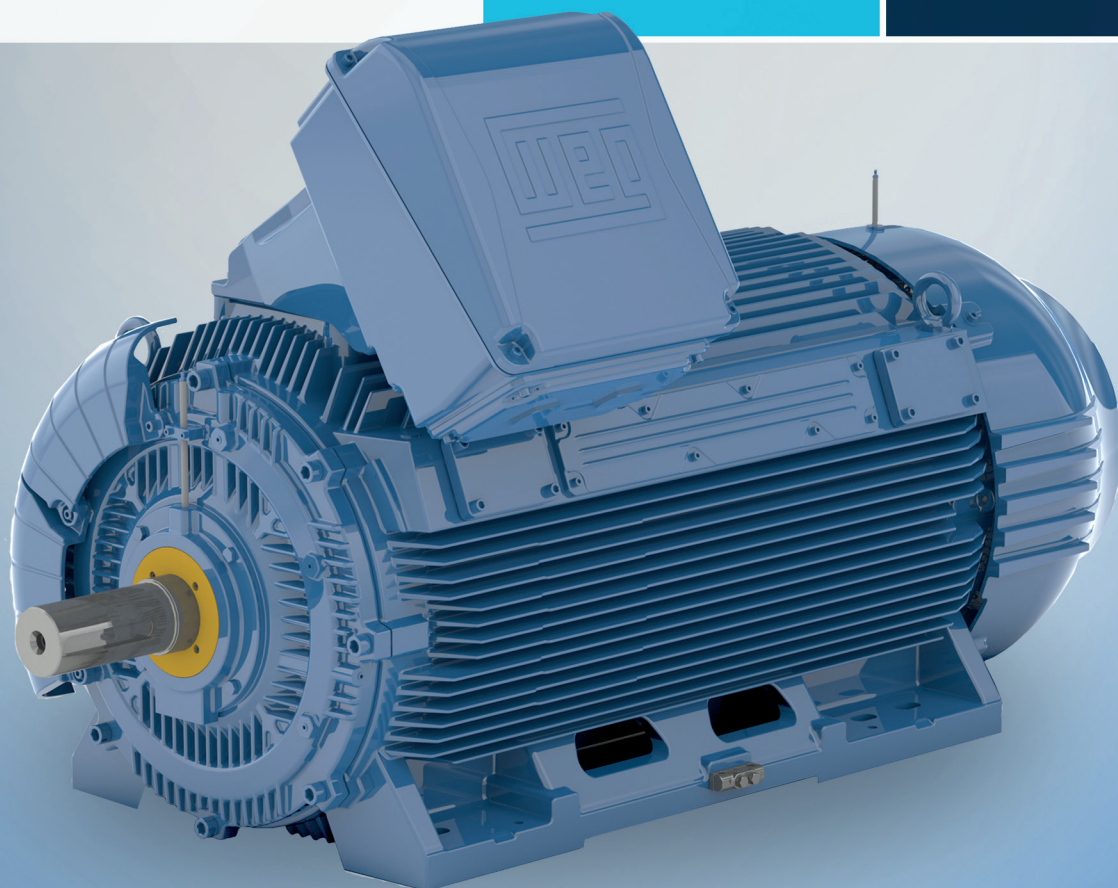


GTK Line Synchronous Alternators

Industrial Motors
Commercial &
Appliance Motors
Automation
Energy
Transmission &
Distribution
Coatings

Reliable
performance in
critical
applications.

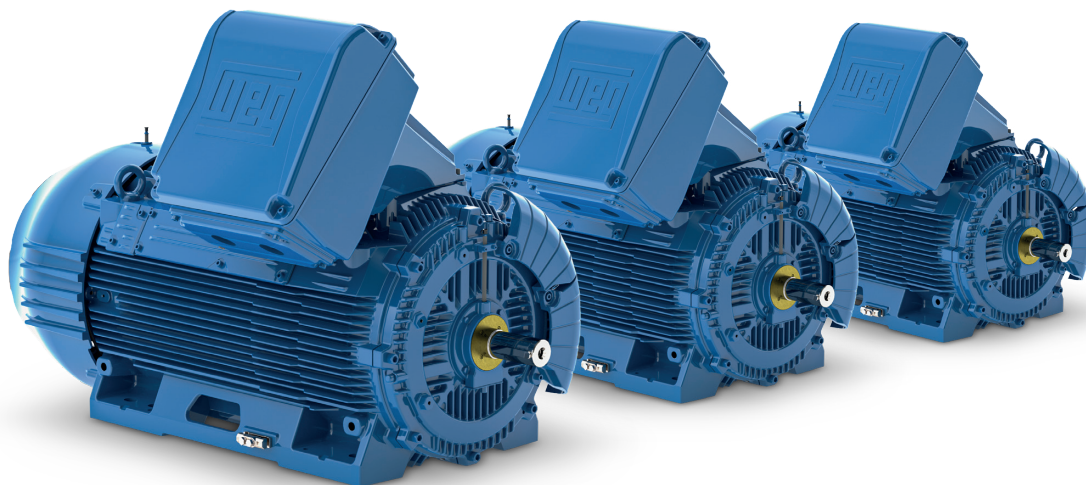


Driving efficiency and sustainability



Developed for demanding industrial environments

These alternators are suitable for industrial applications that demand reliable equipment, capable of operating in harsh environments with high performance requirements.



Typical applications



**HEAVY
METALWORKING
INDUSTRY**

MINING



OIL AND GAS



**OTHER INDUSTRIAL
APPLICATIONS**



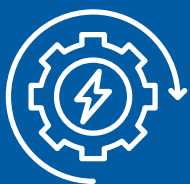
Engineering designed for reliability

The GTK line combines design solutions and electrical performance to meet demanding industrial applications.



RESISTANCE TO HARSH ENVIRONMENTS

Special components, coatings, and windings ensure high resistance to corrosion, oil vapors, salt, humidity, and high temperatures.



EXCELLENT ELECTRICAL PERFORMANCE

Electrical design with high efficiency, reactances suited to the application, and low harmonic distortion.



COMPACT DESIGN

Reduced dimensions facilitate installation, meeting applications with space limitations.



APPLICATION FLEXIBILITY

Line designed to adapt to different project requirements.



OPERATIONAL RELIABILITY

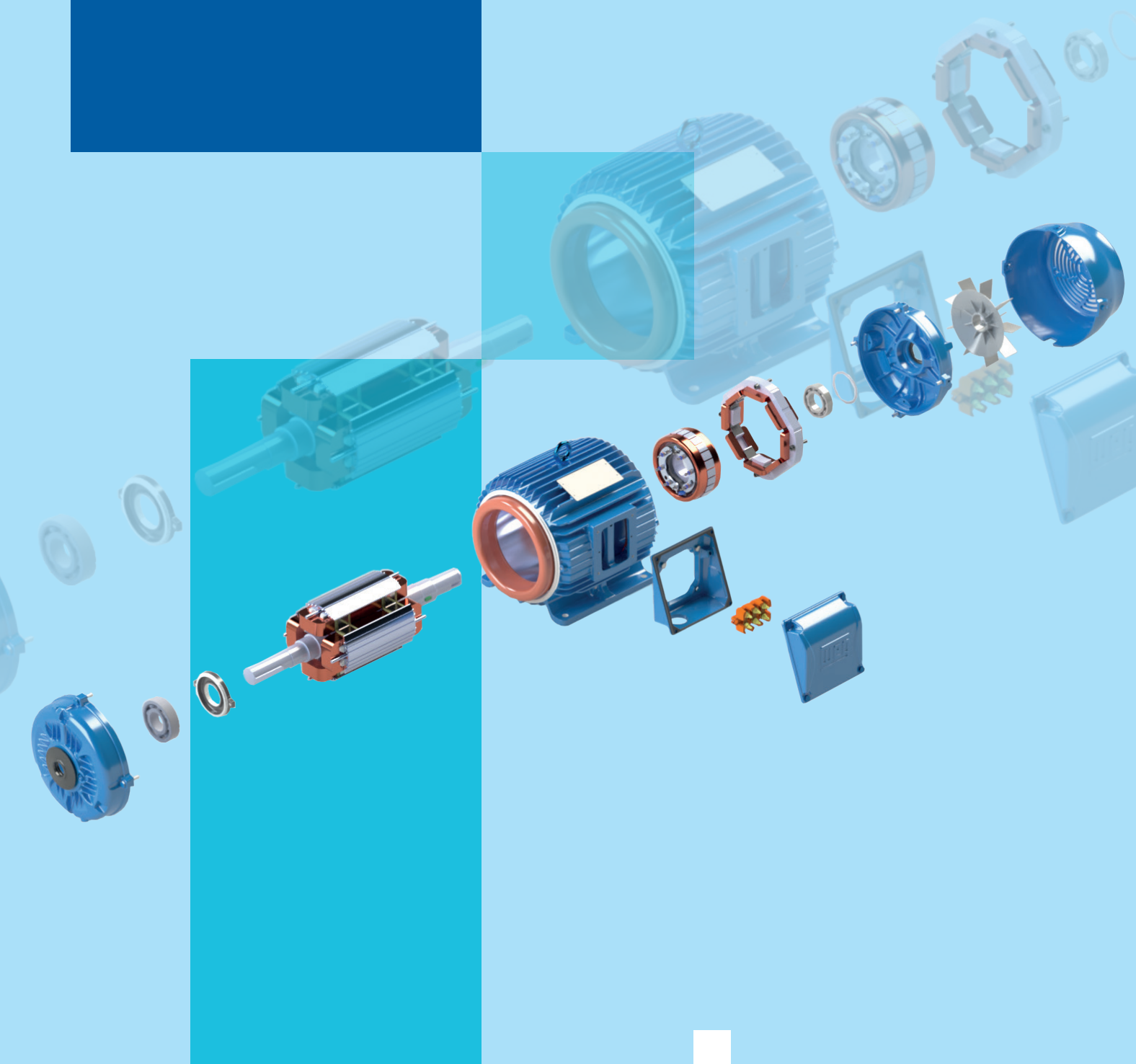
Electromechanical features that ensure robustness, durability, and mechanical strength.

Accessories / Special features

Depending on requirements or specifications, accessories are available to provide greater flexibility in all application fields, such as:

- Digital AVR
- Temperature detectors in windings and bearings
- Current transformer (to be installed in the customer's panel)
- Special paint system (color defined by the customer)

Main GTK line specifications



Electrical performance by frame

The GTK line combines structural design solutions and electrical performance to meet demanding industrial applications.

Power by frame – 60 Hz – 4 poles						
Model	480 V ¹					
	ΔT	Class B 80 °C	Class F 105 °C	Class H 125 °C	Stand-by 150 °C	Stand-by 163 °C
GTK160EIHR	kVA	10.5	11.5	13.0	14.0	14.5
	kW	8.4	9.2	10.4	11.2	11.6
GTK200EIVJ	kVA	22.5	25.5	28.0	30.0	31.0
	kW	18.0	20.4	22.4	24.0	24.8
GTK250EIVJ	kVA	28.0	32.0	35.0	38.5	40.0
	kW	22.4	25.6	28.0	30.8	32.0
GTK250EIVG	kVA	40.0	46.0	50.0	55.0	57.0
	kW	32.0	36.8	40.0	44.0	45.6
GTK250EIV	kVA	60.0	68.5	75.0	82.0	85.5
	kW	48.0	54.8	60.0	65.6	68.4
GTK315EIVS	kVA	80	92	100	109	114
	kW	64	73	80	87	91
GTK315EIVB	kVA	112	128	140	153	160
	kW	89	102	112	122	128
GTK315EIH	kVA	144	165	180	197	205
	kW	115	132	144	157	164
GTK355EIDS	kVA	200	229	250	274	285
	kW	160	183	200	219	228
GTK355EIDR	kVA	255	293	320	350	365
	kW	204	234	256	280	292

Power by frame – 50 Hz – 4 poles						
Model	400 V ¹					
	ΔT	Class B 80 °C	Class F 105 °C	Class H 125 °C	Stand-by 150 °C	Stand-by 163 °C
GTK160EIHR	kVA	8,5	9,5	10,5	11,5	12,0
	kW	6,8	7,6	8,4	9,2	9,6
GTK200EIVJ	kVA	18,5	21,0	23,0	25,0	26,0
	kW	14,8	16,8	18,4	20,0	20,8
GTK250EIVJ	kVA	24,0	27,5	30,0	33,0	34,5
	kW	19,2	22,0	24,0	26,4	27,6
GTK250EIVG	kVA	32,0	37,0	40,0	44,0	46,0
	kW	25,6	29,6	32,0	35,2	36,8
GTK250EIV	kVA	49,5	57,0	62,0	68,0	71,0
	kW	39,6	45,6	49,6	54,4	56,8
GTK315EIVS	kVA	68	78	85	93	97
	kW	54	62	68	74	77
GTK315EIVB	kVA	92	105	115	126	131
	kW	73	84	92	101	105
GTK315EIH	kVA	120	137	150	164	171
	kW	96	110	120	131	137
GTK355EIDS	kVA	168	192	210	230	240
	kW	134	154	168	184	192
GTK355EIDR	kVA	210	245	265	290	302
	kW	168	196	212	232	242

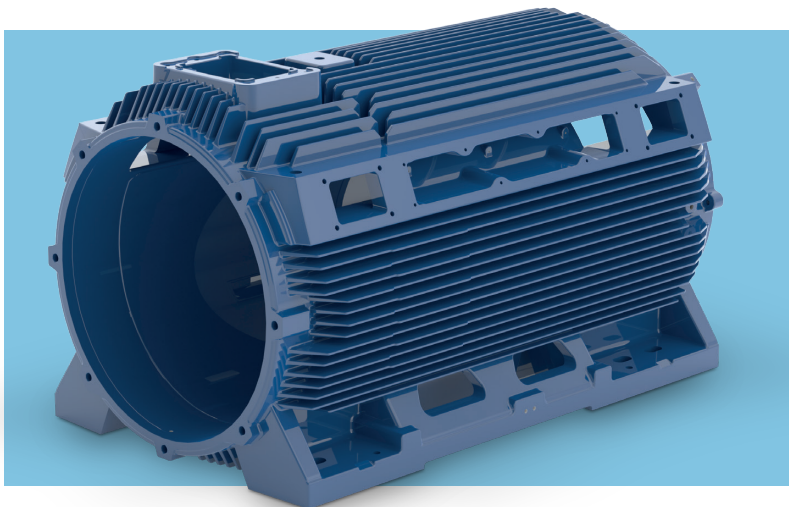
Note: 1) other voltages available upon request.

Robust construction for severe applications

GTK line alternators feature construction solutions designed to ensure resistance, reliability, and operational stability in demanding industrial environments.

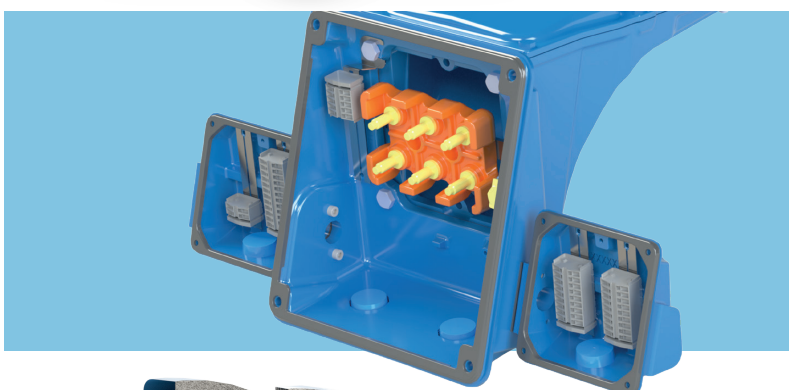
Frame

WEG GTK three-phase alternators feature a finned cast iron frame, with protection degree IP56 and technical characteristics developed for severe applications. The totally enclosed construction provides greater robustness and protection in harsh environments.



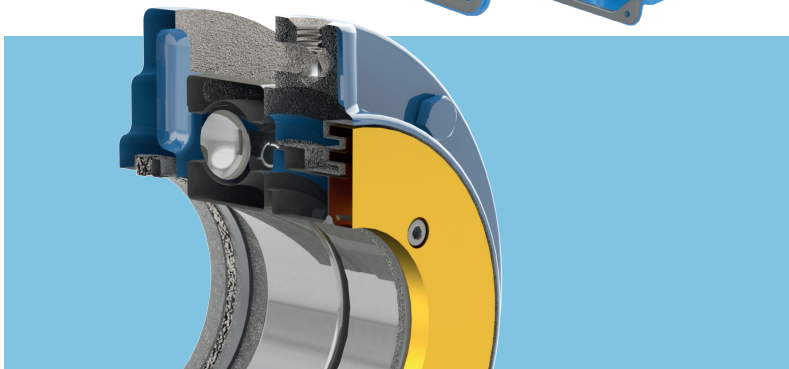
Terminal box

The cast iron terminal box can be positioned on the side or top of the frame, accommodating load terminals, neutral, and excitation terminals.



Bearings

Grease-lubricated rolling bearings, designed for an L10h service life of 20,000 hours.



Voltage regulator

The automatic voltage regulator includes a U/F function, protecting the alternator from operating below rated speed by reducing excitation current. A fuse installed in the terminal box or regulator protects against abnormal operating conditions:

- Loss of reference
- Short circuit in the auxiliary winding
- Short circuit at the regulator output
- Low-speed operation
- Damage to the voltage regulator



Technical assistance

WEG offers complete technical assistance services, providing full after-sales support. Available services include:

- Field technical support
- Diagnostics and machine commissioning
- Technical consulting
- 24/7 on-call service

WEG also has an authorized technical assistance network present in Brazil and worldwide.

Services

For the refurbishment of medium- and large-size electrical machines, the WEG services team uses the same technology applied in the manufacturing of motors and generators. Services can be performed:

On-site (at the customer)

At WEG plants in Jaraguá do Sul/SC, Sertãozinho/SP, and São Bernardo do Campo/SP

Available services for:

- DC motors and generators
- Three-phase induction motors
- Synchronous motors
- Synchronous condensers
- Turbogenerators
- Hydrogenerators
- Wind generators
- Steam turbines
- Hydraulic turbines
- Alternators

Certifications

WEG's quality system is certified according to ISO 9001 and ISO 14001 standards.

The quality system is audited and certified by the Bureau Veritas Certification Institute. To meet the most demanding markets, synchronous alternators are certified by major certification bodies such as UL (Underwriters Laboratories) and also carry CE marking (European Conformity).

For marine applications, WEG synchronous alternators can be supplied, upon request, with certifications from classification societies such as Lloyd's Register, Bureau Veritas, ABS, DNV, among others.



Alternators designed for hazardous areas (hazardous areas): – Ex e IIA T3 Gc

Zone 2 – ATEX certification with self-declaration of conformity (issued by WEG) or third-party certification (depending on the model).



The scope of WEG Group solutions
is not limited to products and solutions
presented in this catalogue.
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**For WEG's worldwide
operations visit our website**



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