Synchronous Alternators

G Plus Line

Synchronous Alternators G Plus Line

Available in models up to 4200 kVA, the alternators of the G Plus line are used mainly in application of diesel or gas generator groups. They are also able to operate with steam or hydraulic turbines. They operate in all configurations of emergency generator groups, peak hours or continuous operation in the areas:

- Industrial
- Commercial
- Naval
- Telecommunication
- Mining
- Homes
- Irrigation
- Hospitals
- Rural areas
- Airports and others.

WEG also has a line of Turbogenerators and Hydrogenerators.

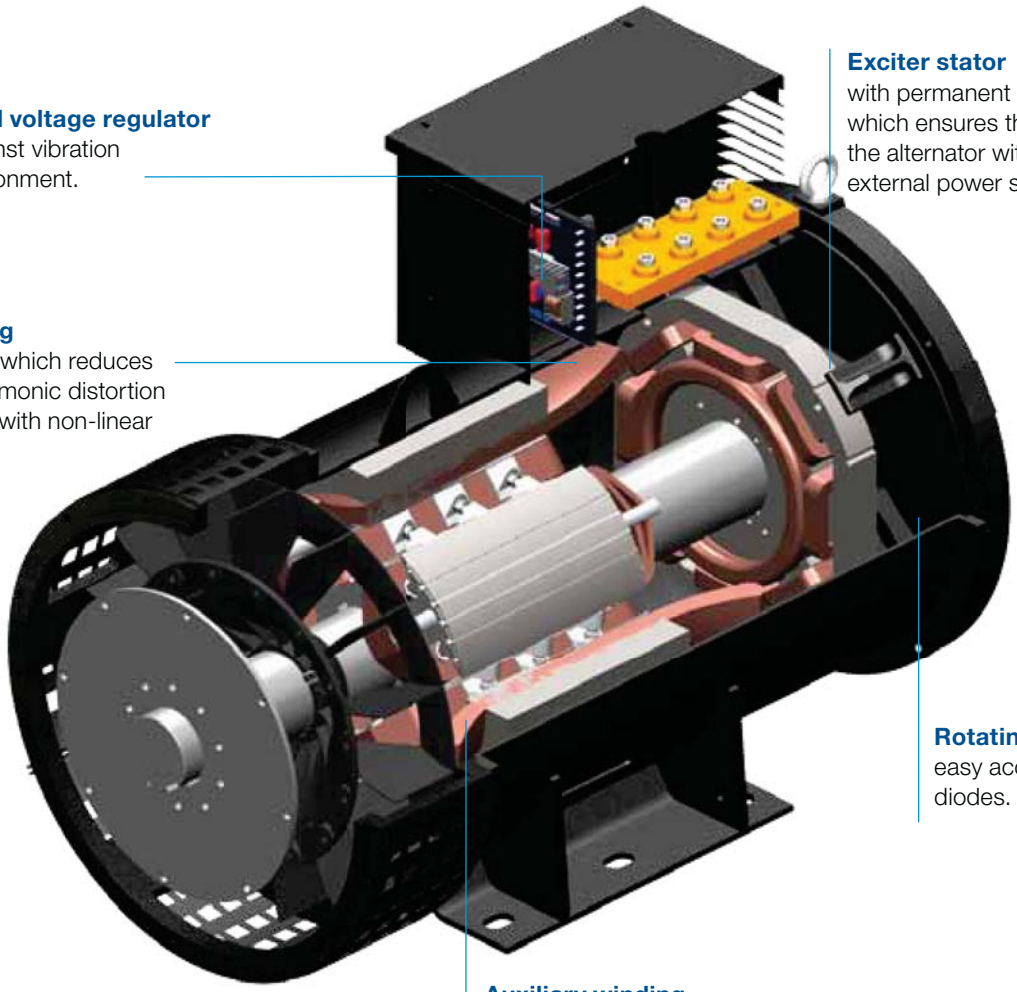
Turbogenerators
- Power up to 62,500 kVA
- Voltages up to 13,800 V

Hydrogenerators
- Power up to 25,000 kVA
- Voltages up to 13,800 V

Certifications

WEG's quality system is certificated as per the requirements of the standard ISO 9001 and ISO 9001/14001. The quality system is audited and certified by the Bureau Veritas Quality Institute. In order to operate in the most demanding markets, the synchronous alternators are certified by important institutions such as C.SA. (CANADIAN STANDARDS ASSOCIATION), C.E. (EUROPEAN COMMUNITY) and UL (UNDERWRITES LABORATORIES).
In the naval version, WEG synchronous alternators can be supplied, under request, with certifications of entities like: Lloyds, Bureau Veritas, ABS, Germanischer Lloyd, DNV and others.

Mounting Features



Encapsulated voltage regulator
protected against vibration and salty environment.

Exciter stator
with permanent magnets which ensures the built-up of the alternator without requiring external power supply.

Stator winding
with 2/3-pitch, which reduces the voltage harmonic distortion in applications with non-linear loads.

Rotating diodes
easy access to diodes.

Auxiliary winding
for power supply of the regulator, without the need of PMG. It keeps the short-circuit current.

Technical Features

- Powers: up to 4200 kVA
- Frames: 160 to 630 (IEC)
- Low voltage: 110 to 690 V
- High voltage: 2300 to 13800 V
- Frequency: 50 to 60 Hz
- Protection rate: IP21 (IP23, IP21W, IP23W, IP44, IP44W, IP54, IP54W, IP55 and IP55W under request)
- Insulation class: 180°C (H) low voltage and 155°C (F) high voltage
- Winding pitch: 2/3
- Number of poles: 4, 6 and 8 poles.

Notes:
1) The three-phase alternators with 12 terminals can operate in voltages of 190/208/220/240/380/440/480 V in 60 Hz and 120/190/208/380/400 V in 50 Hz.
2) The three-phase alternators can be reconnected to supply single-phase voltages of 110 to 480 V.

Operating Conditions

Altitude
The rated power refers to installations up to 1000 meters from sea level. For applications over this altitude, the following power correction factor must be applied:

Altitude (meters from sea level)	1000	1500	2000	2500	3000
K Factor	1	0.94	0.9	0.85	0.8

Ambient temperature
The rated powers refer to installations with ambient temperature of 40ºC. For applications with ambient temperature different from 40ºC, the following power correction factor must be applied:

Ambient temperature (ºC)	30	35	40	45	50	55
K Factor	1	1	1	0.94	0.89	0.85

Abrasive dust
Additional protections are recommended when the alternator is used in environments where abrasive dust can penetrate through the ventilation.
Although the alternator coils are protected against abrasive environments, severe conditions may require additional protections, such as: baffle, closed cabinet, filters and other proper protections. Contact WEG for recommendations

Outdoor applications (weather-exposed)
All alternators for outdoor applications must be covered with a metal shelter with proper openings for ventilation. This protection must be projected to prevent direct contact of the alternator with rain, snow or dust. Space heaters are recommended, depending on the location and application. Contact WEG for recommendations about required protections.

Sea/naval environments
WEG also operated in sea (shore, islands, small vessels, etc.) and naval (medium and large boats, ships, yachts, platforms, military vessels, etc.) applications. For those applications, WEG has special manufacturing process technology.

Insulation class
WEG alternators of G line have default 180°C (H) insulation class. The insulation class defines the highest temperature that the equipment can stand continuously without affecting its useful life.
The temperature limits are defined as per standard NBR7094.

Operation Duty

S1 Duty / continuous / prime (ambient temperature 40ºC)
The alternator operates at rated power for an unlimited time period with the possibility of overload up to 10% for 1 hour every 12 hours, without damage to its insulation system. The S1, also called Continuous or Prime duty is applied mainly where there is not another power source available, such as: groups for rent, groups for irrigation, refrigeration, co-generation and application for peak hours. For continuous duty, it is accepted a temperature raise in the windings of up to 125°C.

Stand-by duty (ambient temperature 40ºC)
The generator group operates as energy backup with variable loads in emergency situations in places supplied by the utility company or another main power source. In this kind of duty, the machine does not accept overloads and operates with variable loads up to the rated power of the stand-by duty (40ºC). A raise in the winding temperature of up to 150°C is accepted (as per standard Nema MG 1 and IEC 60034). However, if that happens, the useful life of the alternator reduces 2 to 6 times. The use of the alternator in stand-by duty is limited to 500 hours a year.

Stand-by duty (ambient temperature 27°C)
This condition is similar to the previous one; however, the maximum ambient temperature accepted is 27°C. In this duty, the alternator can provide more power and a temperature raise of 163°C is accepted. The main application is in the emergency operation where the ambient temperature will not exceed 27°C with limitation of 300 hour a year.

Voltage Regulators

Developed to reach maximum performance due to the refined project and strict component selection, the voltage regulators are encapsulated and can stand high vibration levels, and are installed in the main terminal box. Its performance is guaranteed in a variety of applications, being protected against dust, salt and sand.

Applications and technical features

Model	Voltage regulator			
	WRGA-01	GRT7-TH4 E (5A E9)	GRT7-TH4 PE (7A E9)	WRGA-02/D
GTA 16	P	OIP	OIP	-
GSA 16	-	OIP	OIP	-
GTA 20	P	O	O	-
GSA 20	-	O	O	O
GPA 20	-	-	-	P
GTA 25	-	P	O	-
GSA 25	-	O	O	O
GPA 25	-	-	-	P
GTA 31	-	P	O	-
GSA 31	-	O	O	O
GPA 31	-	-	-	P
GTA 35	-	O	P	-
GSA 35	-	O	O	O
GPA 35	-	-	-	P
GTA 40	-	-	P	-
GSA 40	-	-	O	-
GPA 40	-	-	-	-
GTA 45	-	-	P	-
GSA 45	-	-	O	-
GPA 45	-	-	-	-
GTA 50	-	-	P	-
GSA 50	-	-	O	-
GPA 50	-	-	-	-
GTA 56	-	-	P	-
GSA 56	-	-	O	-
GPA 56	-	-	-	-
Technical features (1)				
Power Supply	single-phase	single-phase	single-phase	three-phase
Sensing voltage connection	single-phase	single-phase	single-phase	three-phase
Operating rated current [A]	7	5	7	5
Peak current (máx 10s) [A]	10	7	10	7
Analog input +/- 9 Vcc	-	Standard	Standard	-
Analog input a 0 a 10 Vcc	-	optional	optional	Standard
Digital input	-	optional	optional	Standard
Droop adjustment for parallel operation	-	Standard	Standard	Standard
Static control	0.5%	0.5%	0.5%	0.5%
Adjustable dynamic response	8 up to 500 ms	8 up to 500 ms	8 up to 500 ms	8 up to 500 ms
Underfrequency protection (U/F)	Standard	Standard	Standard	Standard
Internal voltage adjustment	+/-15%	+/-15%	+/-15%	+/-15%
External voltage adjustment	+/-10%	+/-15%	+/-15%	+/-15%
Parallelism TC signal	-	5A	5A	5A
EMI suppression	Standard	Standard	Standard	Standard

LEGEND

P STANDARD

O OPTIONAL

OIP OPTIONAL, ONLY FOR PANEL INSTALL

(1) Technical features of the standard regulators. Optional items can be ordered. For other technical features, contact WEG.

Manufacturing Processes

Manufacturing resources
WEG has state-of-the-art equipment which is used is all the steps of the manufacturing processes, from the casting and stamping of parts to the enameling of wires and packaging, resulting in efficient products and proven quality.

Machining
WEG has a shaft machining center and a cast part machining center where the highest manufacturing process standards are used, which ensures the quality and precision of the components manufactured.

Impregnation
Developed with the latest technology, the impregnation system by continuous flow is normally used by WEG for low voltage winding, ensuring perfect insulation and protection. Besides the impregnation, the static windings receive a protecting coating as an additional protection against infiltration of humidity, dust, etc.

Dynamic balancing
The rotating part (rotor) is dynamically balanced with greater precision than that required by the standard IEC 60034.14 or ISO 2372, ensuring minimum levels of residual unbalance.

Construction
WEG alternators are made according to the requirements of the standards NBR5117, VDE0530 – part 1, IEC 60034.1. Using the best quality standards during manufacturing, the result is safe operation and great durability.
Mounting styles normally supplied:
- B15T: Single bearing with coupling by means of flanges and flexible disk
- B35T: Double bearing with coupling by means of flange
- B3T: Double bearing without flange

Operating Characteristics

Standard protection rate
The alternators are mechanically protected against finger touch, solid foreign bodies of diameter over 12 mm and against vertical water drops, that is, protection rate IP21 as per standard IEC 60034-5.

Voltage regulator
The automatic voltage regulator (AVR) has a function called U/F which, when properly enabled, protects the alternator against operations below the rated speed, reducing the exciting current. A fuse installed in the terminal box or in the voltage regulator protects the alternator against several abnormal situations during operation, such as:
- Reference loss;
- Connection of the auxiliary coil in short circuit;
- Output connection of the regulator in short circuit;
- Operation in low speed;
- Damages to the voltage regulator.

Excitation with auxiliary coil
A special feature of WEG alternators is the excitation system with auxiliary coil that ensures fast response, optimum stability, sustained short-circuit current of 300% of the rated current for 10 seconds, fast voltage recovery process and excellent performance at the start of induction motors.
The auxiliary coil is responsible for supplying power to the voltage regulator, regardless the voltage in the alternator terminals or load variation during operation.
The auxiliary coil is standard in all power range of the G Plus line (low voltage 4 poles).

Main exciter stator
The main exciter stator features permanent magnets, which ensures the maintenance of the alternator residual voltage, without requiring external supply for built-up after long stops.

Excitation with PMG
As an option, WEG alternators line allows the use of an auxiliary exciter with permanent magnets (PMG).

Accessories/specialties
Depending on the need or specification, accessories that allow greater flexibility in all application fields are optionally available, such as:
- Temperature detectors in the windings and bearings
- Space heaters (dehumidifiers)
- Current transformer
- Double bearing B35T or B3T
- Auxiliary exciter (PMG)
- Protection IP23, IP21W, IP23W, IP44, IP44W, IP54, IP54W, IP55 and IP55W
- Special coating scheme (customer-defined color).

Nomenclature

G T A 16 1 A I SR

ALTERNATOR LINE

G - Synchronous Machine – G Plus Line

EXCITATION CHARACTERISTIC

T - Brushless alternator with auxiliary coil
P - Brushless alternator with auxiliary exciter (PMG)
S - Brushless alternator without auxiliary coil and without auxiliary exciter

COOLING TYPE

A - Open self-ventilation (standard)
F - Closed with air-to-air heat exchanger (on enquiry)
W - Closed with air-to-water heat exchanger (on enquiry)
K - Totally enclosed with fins (on enquiry)

FRAME - IEC

16 - Frame 160
20 - Frame 200 ...

FRAME LENGTH

1 - Short frame
2 - Medium frame
3 - Long frame

VOLTAGE

A - Thee-phase - 12 terminals - 480/240 V - 440/220 V - 380/190 V - 208 V (60 Hz)
400/200 V - 380/190 V (50 Hz)
B - Three-phase - 6 terminals - 220 V/60 Hz or 190V/50 Hz
C - Three-phase - 6 terminals - 380 V/60 Hz
D - Three-phase - 6 terminals - 440 V/60 Hz or 380V/50 Hz
E - Three-phase - 6 terminals - 480 V/60 Hz or 400V/50 Hz
F - Three-phase - 6 terminals - 600 V/60 Hz or 575V/60 Hz
G - Three-phase - 6 terminals - 208 V/60 Hz
H - Three-phase - 6 terminals - 415 V/50 Hz
I - Three-phase - 6 terminals - 2300 V/60 Hz
J - Three-phase - 6 terminals - 4160 V/60 Hz
K - Three-phase - 6 terminals - 6600 V/60 Hz
L - Three-phase - 6 terminals - 13800 V/60 Hz
M - Three-phase - 6 terminals - 3300 V/50 Hz
N - Three-phase - 6 terminals - 6000 V/50 Hz
O - Three-phase - 6 terminals - 11000 V/50 Hz
P - Three-phase - 12 terminals - 415/240/208/120 V (50 Hz)
Z - Another voltage

APPLICATION

I - Industrial
M - Marine
T - Telecommunications
N - Naval
E - Special

COMPLEMENTARY CODE

Code referring to the alternator power

12 Terminals / 4 Poles

480 / 240 V (60 Hz) | 440 / 220 V (60 Hz) | 380 / 190 V (60 Hz) | 0.8 P.F.

Model		480V - Y					440V - Y					380V - Y				
		240V - YY					220V - YY					190V - YY				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA161AISR	kVA	12.3	14.1	15.4	15.9	15.9	11	12.6	13.7	14.7	15.3	10.1	11.6	12.6	13.5	14
	kW	9.8	11.3	12.3	12.7	12.7	8.8	10.1	11	11.8	12.2	8.1	9.3	10.1	10.8	11.2
GTA161AIHS	kVA	14.6	16.8	18.3	19.6	20.3	14	16	17.5	18.7	20	12	13.7	14.9	16	16.6
	kW	11.7	13.4	14.6	15.7	16.2	11.2	12.8	14	15	16	9.6	11	11.9	12.8	13.3
GTA161AIHH	kVA	16.9	19.4	21.1	22.6	23.5	15.5	17.7	19.3	20.7	21.5	13.2	15.1	16.5	17.6	18.3
	kW	13.5	15.5	16.9	18.1	18.8	12.4	14.2	15.4	16.6	17.2	10.6	12.1	13.2	14.1	14.6
GTA161AIHI	kVA	20.8	23.8	26	28.5	29.7	20.2	23.2	25.3	27.1	28.1	15.9	18.2	19.9	21.3	22.1
	kW	16.6	19	20.8	22.8	23.8	16.2	18.6	20.2	21.7	22.5	12.7	14.6	15.9	17	17.7
GTA161AIHJ	kVA	21.8	25	27.3	30	31.1	20.1	23	27	28	29	17.7	20.3	23	25	26
	kW	17.4	20	21.8	24	24.9	16.1	18.4	21.6	22.4	23.2	14.2	16.2	18.4	20	20.8
GTA162AIVD	kVA	25.9	29.7	42	44	46	29.4	33.7	42	44	46	25.4	29.1	40	40	42
	kW	20.7	23.8	33.6	35.2	36.8	23.5	27	33.6	35.2	36.8	20.3	23.3	32	32	33.6
GTA201AIHS	kVA	43.4	49.7	54.3	59.5	62	40.8	46.7	51	55.8	58.2	35.2	40.3	44	48.2	50.2
	kW	34.7	39.8	43.4	47.6	49.6	32.6	37.4	40.8	44.6	46.6	28.2	32.2	35.2	38.6	40.2
GTA201AIHV	kVA	56.4	64.6	70.5	77.2	81	54.5	62.4	68.1	72.8	75.7	47.3	54.2	59.1	63.2	71
	kW	45.1	51.7	56.4	61.8	64.8	43.6	49.9	54.5	58.2	60.6	37.8	43.4	47.3	50.6	56.8
GTA201AIHB	kVA	68.5	78.5	85.6	92.2	92.2	60.4	69.2	75.5	80.7	85	56.8	65.1	71	75.9	78.9
	kW	54.8	62.8	68.5	73.8	73.8	48.3	55.4	60.4	64.6	68	45.4	52.1	56.8	60.7	63.1
GTA201AIHE	kVA	66.1	75.7	88	95	97	66	75.6	88	95	97	62.1	71.2	80	83	86.4
	kW	52.9	60.6	70.4	76	77.6	52.8	60.5	70.4	76	77.6	49.7	57	64	66.4	69.1
GTA202AIVJ	kVA	107.2	122.8	141	144	150	105.4	120.7	141	144	150	93.8	107.5	123	129	136
	kW	85.8	98.2	112.8	115.2	120	84.3	96.6	112.8	115.2	120	75	86	98.4	103.2	108.8
GTA251AIHD	kVA	140	161	175	188	189	137	157	171	183	190	110	127	142	149	156
	kW	112	129	140	150	151	110	126	137	146	152	88	102	114	119	125
GTA251AIHE	kVA	180	206	225	243	252	171	196	214	230	240	154	176	192	205	214
	kW	144	165	180	194	202	137	157	171	184	192	123	141	154	164	171
GTA252AIVB	kVA	206	236	258	275	290	186	213	233	250	260	164	188	205	219	230
	kW	165	189	206	220	232	149	170	186	200	208	131	150	164	175	184
GTA252AIII	kVA	249	285	312	336	349	234	268	292	313	325	205	235	256	274	285
	kW	199	228	250	269	279	187	214	234	250	260	164	188	205	219	228
GTA252AIIR	kVA	292	334	365	390	405	282	324	353	377	393	238	273	297	318	331
	kW	234	267	292	312	324	226	259	282	302	314	190	218	238	254	265
GTA311AIVS	kVA	321	368	401	440	463	337	386	421	450	468	295	338	369	395	410
	kW	257	294	321	352	370	270	309	337	360	374	236	270	295	316	328
GTA311AIVI	kVA	377	432	472	517	538	375	430	469	514	535	344	394	430	459	478
	kW	302	346	378	414	430	300	344	375	411	428	275	315	344	367	382
GTA311AIIH	kVA	442	507	553	605	631	446	511	557	610	636	413	474	517	564	587
	kW	354	406	442	484	505	357	409	446	488	509	330	379	414	451	470
GTA312AIIB	kVA	555	636	694	742	771	520	596	650	695	723	453	518	566	620	650
	kW	444	509	555	594	617	416	477	520	556	578	362	414	453	496	520
GTA312AIIG	kVA	481	551	601	658	686	534	612	668	714	757	499	571	623	666	693
	kW	385	441	481	526	549	427	490	534	571	606	399	457	498	533	554
GTA312AIDI	kVA	643	736	803	875	906	591	678	750	813	844	556	637	694	755	785
	kW	514	589	642	700	725	473	542	600	650	675	445	510	555	604	628
GTA352AIDV	kVA	766	885	990	995	1050	707	816	913	923	963	608	703	786	823	858
	kW	613	708	792	796	840	566	653	730	738	770	486	562	629	658	686
GTA352AIDE	kVA	805	930	1040	1085	1150	741	855	957	1000	1055	639	737	825	863	899
	kW	644	744	832	868	920	593	684	766	800	844	511	590	660	690	719
GTA401AIHB	kVA	960	1109	1240	1305	1370	883	1019	1140	1200	1260	741	855	957	1000	1044
	kW	768	887	992	1044	1096	706	815	912	960	1008	593	684	766	800	835
GTA401AIHE	kVA	1053	1216	1360	1380	1430	968	1118	1250	1265	1319	821	948	1061	1110	1158
	kW	842	973	1088	1104	1144	774	894	1000	1012	1055	657	758	849	888	926
GTA403AIVD	kVA	1161	1341	1500	1580	1650	1068	1234	1380	1450	1515	911	1052	1177	1231	1284
	kW	929	1073	1200	1264	1320	854	987	1104	1160	1212	729	842	942	985	1027
GTA403AIVB	kVA	1270	1466	1640	1715	1800	1165	1346	1505	1575	1656	954	1101	1232	1289	1344
	kW	1016	1173	1312	1372	1440	932	1077	1204	1260	1325	763	881	986	1031	1075

ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

12 Terminals / 4 Poles

400 / 200 V (50 Hz) | 380 / 190 V (50 Hz) | 0.8 P.F.

Model		400V - Y					380V - Y				
		200V - YY					190V - YY				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA161AISR	kVA	8.9	10.2	11.1	11.1	12	9.6	11	12	12.2	12.2
	kW	7.1	8.2	8.9	8.9	9.6	7.7	8.8	9.6	9.8	9.8
GTA161AIHS	kVA	11.7	13.5	14.7	16.1	16.3	11.1	12.7	14	14.8	15.4
	kW	9.4	10.8	11.8	12.9	13	8.9	10.2	11.2	11.8	12.3
GTA161AIHH	kVA	12.8	14.7	16	17.1	17.8	12.7	14.5	16	16.9	17.6
	kW	10.2	11.8	12.8	13.7	14.2	10.2	11.6	12.8	13.5	14.1
GTA161AIHI	kVA	14.8	17	19	20.3	21.1	14.8	17	19	19.8	20.6
	kW	11.8	13.6	15.2	16.2	16.9	11.8	13.6	15.2	15.8	16.5
GTA161AIHJ	kVA	15.9	18.3	23	24	25	16.3	18.6	23	24	25
	kW	12.7	14.6	18.4	19.2	20	13	14.9	18.4	19.2	20
GTA162AIVD	kVA	21.3	24.4	31	31	32	23	26.3	31	31.5	32.8
	kW	17	19.5	24.8	24.8	25.6	18.4	21	24.8	25.2	26.2
GTA201AIHS	kVA	34.6	39.6	43.3	47.4	49.4	32.9	37.7	41.1	45.1	47
	kW	27.7	31.7	34.6	37.9	39.5	26.3	30.2	32.9	36.1	37.6
GTA201AIHV	kVA	42.4	48.6	53	57.5	57.5	43.7	50	54.6	58.4	60.7
	kW	33.9	38.9	42.4	46	46	35	40	43.7	46.7	48.6
GTA201AIHB	kVA	48	52.7	60	62	63	51.6	59.1	64.5	68.4	68.4
	kW	38.4	42.2	48	49.6	50.4	41.3	47.3	51.6	54.7	54.7
GTA201AIHE	kVA	55.1	63.1	75	75.5	80	60	68.6	75	82	85.5
	kW	44.1	50.5	60	60.4	64	48	54.9	60	65.6	68.4
GTA202AIVJ	kVA	80.3	91.5	106	106	109	80	91.5	106	106.7	109
	kW	64.2	73.2	84.8	84.8	87.2	64	73.2	84.8	85.4	87.2
GTA251AIHD	kVA	110	126	140	151	158	112	128	140	150	156
	kW	88	101	112	121	126	90	102	112	120	125
GTA251AIHE	kVA	143	164	180	196	196	128	147	160	165	170
	kW	114	131	144	157	157	102	118	128	132	136
GTA252AIVB	kVA	165	189	206	220	229	136	156	170	182	189
	kW	132	151	165	176	183	109	125	136	146	151
GTA252AIII	kVA	180	206	225	250	253	199	228	250	266	277
	kW	144	165	180	200	202	159	182	200	213	221
GTA252AIIR	kVA	225	258	282	304	304	223	255	278	289	289
	kW	180	206	226	243	243	178	204	223	231	231
GTA311AIVS	kVA	246	282	308	337	352	253	289	316	346	361
	kW	197	226	246	270	282	202	232	253	277	288
GTA311AIVI	kVA	278	319	350	381	397	310	355	388	421	440
	kW	222	255	280	305	318	248	284	310	337	352
GTA311AIIH	kVA	323	370	403	442	460	322	369	403	441	460
	kW	258	296	322	354	368	258	295	322	353	368
GTA312AIIB	kVA	431	493	538	590	615	420	481	525	575	599
	kW	345	394	430	472	492	336	385	420	460	479
GTA312AIIG	kVA	338	387	468	508	514	434	497	543	580	594
	kW	270	310	374	406	411	347	398	434	464	475
GTA312AIDI	kVA	491	563	625	673	701	507	581	634	678	705
	kW	393	450	500	538	561	406	465	507	542	564
GTA352AIDV	kVA	633	731	818	850	890	584	674	754	758	791
	kW	506	585	654	680	712	467	539	603	606	633
GTA352AIDE	kVA	663	766	856	860	901	610	704	788	793	827
	kW	530	613	685	688	721	488	563	630	634	662
GTA401AIHB	kVA	769	888	993	1040	1083	707	816	913	956	996
	kW	615	710	794	832	866	566	653	730	765	797
GTA401AIHE	kVA	833	963	1077	1130	1171	766	885	990	1036	1080
	kW	667	770	862	904	937	613	708	792	829	864
GTA403AIVD	kVA	926	1068	1196	1254	1307	852	983	1100	1151	1200
	kW	741	855	957	1003	1046	682	786	880	921	960
GTA403AIVB	kVA	1003	1157	1295	1353	1409	920	1062	1188	1243	1296
	kW	802	925	1036	1083	1127	736	850	950	994	1037

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

Three-phase Alternators with Single-phase Connection
12 Terminals / 4 Poles

200 / 240 V (60 Hz) | 190 / 220 V (50 Hz) | 1.0 P.F.

Model		60 Hz					50 Hz				
		200 - 240 V*					190 - 200 V*				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA161AISR	kVA	6.5	7.5	8.5	9	9.5	4.5	5.5	6.1	6.5	6.5
GTA161AIHS		8	9	10.1	11	11	6	7	8.1	8.5	9
GTA161AIHH		9	10.5	11.6	12.5	13	7	8	8.8	9.5	10
GTA161AIHI		11	13	14.3	15.5	16	8	9.5	10.5	11	11.5
GTA161AIHJ		12	13.5	15	16	17	10	11.5	12.7	13.5	14
GTA162AIVD		18	21	23.1	25	26	13.5	15.5	17.1	18.5	19
GTA201AIHS	kVA	23.9	27.4	29.9	32.8	34.1	19	21.8	23.8	26.1	27.2
GTA201AIHV		31	35.5	38.8	42.5	44.3	23.3	26.7	29.2	31.9	33.3
GTA201AIHB		37.7	43.1	47.1	51.6	53.8	26.4	30.2	33	36.1	37.7
GTA201AIHE		38.7	44.4	48.4	53	55.3	33	37.8	41.3	45.2	47.1
GTA202AIVJ		62	71.1	77.5	85	88.6	46.6	53.4	58.3	63.9	66.6
GTA251AIHD	kVA	77	88	96	105	110	62	71	77	84	88
GTA251AIHE		99	113	124	135	141	79	91	99	108	113
GTA252AIVB		113	130	142	155	162	91	104	113	124	129
GTA252AIII		138	158	172	188	196	99	113	124	136	141
GTA252AIIR		160	184	200	220	229	124	142	155	170	177
GTA311AIVS	kVA	177	202	221	242	252	135	155	169	185	193
GTA311AIVI		207	238	259	284	296	154	176	193	211	220
GTA311AIIH		243	279	304	333	347	177	203	222	243	253
GTA312AIIB		305	350	382	418	436	237	271	296	324	338
GTA312AIIG		264	303	330	362	377	206	236	257	282	294
GTA312AIDI		353	405	442	484	505	275	315	344	377	393

** Voltages for SINGLE-PHASE ZIGZAG PARALLEL or SINGLE-PHASE DELTA DOUBLE connection.*
- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG

6 Terminals / 4 Poles

380 / 220 V (60 Hz) | 0.8 P.F.

Model	380V - Y 220V - Δ					
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC
GTA201CIHV	kVA	54.5	62.4	68.1	72.8	75.7
	kW	43.6	49.9	54.5	58.2	60.6
GTA201CIHB	kVA	60.4	69.2	75.5	80.7	85
	kW	48.3	55.4	60.4	64.6	68
GTA201CIHE	kVA	66	75.6	88	95	97
	kW	52.8	60.5	70.4	76	77.6
GTA202CIVJ	kVA	105.4	120.7	141	144	150
	kW	84.3	96.6	112.8	115.2	120
GTA251CIHD	kVA	137	157	171	183	190
	kW	109	125	137	146	152
GTA251CIHE	kVA	171	196	214	230	240
	kW	137	157	171	184	192
GTA252CIVB	kVA	186	213	233	250	260
	kW	149	171	186	200	208
GTA252CIII	kVA	234	268	292	313	325
	kW	187	214	234	250	260
GTA252CIIR	kVA	282	324	353	377	393
	kW	226	259	282	302	314
GTA311CIVS	kVA	337	386	421	450	468
	kW	269	308	337	360	374
GTA311CIVI	kVA	375	430	469	514	535
	kW	300	344	375	411	428
GTA311CIIH	kVA	446	511	557	610	636
	kW	356	408	446	488	509
GTA312CIIB	kVA	520	596	650	695	723
	kW	416	477	520	556	578
GTA312CIIG	kVA	534	612	668	714	757
	kW	427	490	534	571	606
GTA312CIDI	kVA	591	678	750	813	844
	kW	473	542	600	650	675
GTA351CITV	kVA	628	726	812	861	898
	kW	502	581	650	689	718
GTA351CITE	kVA	707	816	913	923	1000
	kW	566	653	730	738	800
GTA352CIKV	kVA	741	855	957	1000	1055
	kW	593	684	766	800	844
GTA352CIKZ	kVA	774	894	1000	1046	1098
	kW	619	715	800	837	878
GTA352CIWS	kVA	813	939	1050	1098	1145
	kW	650	751	840	878	916
GTA352CIZS	kVA	883	1019	1140	1200	1260
	kW	706	815	912	960	1008
GTA352CIYS	kVA	968	1118	1250	1265	1319
	kW	774	894	1000	1012	1055
GTA402CIHR	kVA	1068	1234	1380	1450	1515
	kW	854	987	1104	1160	1212
GTA402CIVS	kVA	1165	1346	1505	1575	1656
	kW	932	1077	1204	1260	1325
GTA403CIVD	kVA	1231	1422	1590	1675	1735
	kW	985	1138	1272	1340	1388
GTA403CIVJ	kVA	1332	1538	1720	1850	1941
	kW	1066	1230	1376	1480	1553
GTA403CIXD	kVA	1433	1654	1850	1951	2040
	kW	1146	1323	1480	1561	1632
GTA403CIXJ	kVA	1440	1663	1860	1961	2050
	kW	1152	1330	1488	1569	1640
GTA451CIVS	kVA	1597	1845	2063	2188	2308
	kW	1278	1476	1650	1750	1846
GTA452CIVV	kVA	1704	1967	2200	2313	2440
	kW	1363	1574	1760	1850	1952
GTA501CIHR	kVA	1874	2164	2420	2500	2638
	kW	1499	1731	1936	2000	2110
GTA501CIVV	kVA	2130	2459	2750	2875	3000
	kW	1704	1967	2200	2300	2400

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 4 Poles

440 / 254 V (60 Hz) | 380 / 220 V | (50 Hz) | 0.8 P.F.

Model		60Hz					50Hz				
		440V - Y					380V - Y				
		254V - Δ					220V - Δ				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA351DITV	kVA	628	726	812	861	898	508	587	657	662	690
	kW	502	581	650	689	718	406	470	526	530	552
GTA351DITE	kVA	707	816	913	923	1000	584	674	754	758	791
	kW	566	653	730	738	800	467	539	603	606	633
GTA352DIKV	kVA	741	855	957	1000	1055	610	704	788	793	827
	kW	593	684	766	800	844	488	563	630	634	662
GTA352DIKZ	kVA	774	894	1000	1046	1098	639	737	825	863	900
	kW	619	715	800	837	878	511	590	660	690	720
GTA352DIWS	kVA	813	939	1050	1098	1145	658	760	850	883	920
	kW	650	751	840	878	916	526	608	680	706	736
GTA352DIZS	kVA	883	1019	1140	1200	1260	729	842	942	949	989
	kW	706	815	912	960	1008	583	674	754	759	791
GTA352DIYS	kVA	968	1118	1250	1265	1319	787	909	1017	1024	1068
	kW	774	894	1000	1012	1055	630	727	814	819	854
GTA402DIHR	kVA	1068	1234	1380	1450	1515	848	979	1095	1100	1150
	kW	854	987	1104	1160	1212	678	783	876	880	920
GTA402DIVS	kVA	1165	1346	1505	1575	1656	937	1082	1210	1219	1271
	kW	932	1077	1204	1260	1325	750	866	968	975	1017
GTA403DIVD	kVA	1231	1422	1590	1675	1735	1018	1176	1315	1324	1380
	kW	985	1138	1272	1340	1388	814	941	1052	1059	1104
GTA403DIVJ	kVA	1278	1475	1650	1726	1800	1105	1276	1427	1478	1551
	kW	1022	1180	1320	1381	1440	884	1021	1142	1182	1241
GTA403DIXD	kVA	1332	1538	1720	1850	1941	1232	1422	1591	1720	1800
	kW	1066	1230	1376	1480	1553	986	1138	1273	1376	1440
GTA403DIXJ	kVA	1433	1654	1850	1951	2050	N/A	N/A	N/A	N/A	N/A
	kW	1146	1323	1480	1561	1640	N/A	N/A	N/A	N/A	N/A
GTA451DIHG	kVA	1597	1845	2063	2188	2308	1346	1554	1738	1840	1932
	kW	1278	1476	1650	1750	1846	1077	1243	1390	1472	1546
GTA451DIVS	kVA	1704	1967	2200	2313	2440	1394	1609	1800	1850	1943
	kW	1363	1574	1760	1850	1952	1115	1287	1440	1480	1554
GTA501DIHJ	kVA	1874	2164	2420	2500	2638	1549	1788	2000	2100	2205
	kW	1499	1731	1936	2000	2110	1239	1430	1600	1680	1764
GTA501DIVI	kVA	2130	2459	2750	2875	3000	1746	2016	2255	2360	2460
	kW	1704	1967	2200	2300	2400	1397	1613	1804	1888	1968
GTA501DIVB	kVA	2395	2766	3093	3238	3375	1994	2303	2575	2690	2800
	kW	1916	2213	2474	2590	2700	1595	1842	2060	2152	2240

- N/A = Non-applicable
- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 4 Poles

480 V (60 Hz) | 400 V (50 Hz) | 0.8 P.F.

Model		60Hz					50Hz				
		480V - Y					400V - Y				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA351EITV	kVA	628	726	812	861	898	508	587	657	662	690
	kW	502	581	650	689	718	406	470	526	530	552
GTA351EITE	kVA	707	816	913	923	1000	584	674	754	758	791
	kW	566	653	730	738	800	467	539	603	606	633
GTA352EIKV	kVA	741	855	957	1000	1055	610	704	788	793	827
	kW	593	684	766	800	844	488	563	630	634	662
GTA352EIKZ	kVA	774	894	1000	1046	1098	639	737	825	863	900
	kW	619	715	800	837	878	511	590	660	690	720
GTA352EIWS	kVA	813	939	1050	1098	1145	658	760	850	883	920
	kW	650	751	840	878	916	526	608	680	706	736
GTA352EIZS	kVA	883	1019	1140	1200	1260	729	842	942	949	989
	kW	706	815	912	960	1008	583	674	754	759	791
GTA352EIYS	kVA	968	1118	1250	1265	1319	787	909	1017	1024	1068
	kW	774	894	1000	1012	1055	630	727	814	819	854
GTA402EIHR	kVA	1068	1234	1380	1450	1515	848	979	1095	1100	1150
	kW	854	987	1104	1160	1212	678	783	876	880	920
GTA402EIVS	kVA	1165	1346	1505	1575	1656	937	1082	1210	1219	1271
	kW	932	1077	1204	1260	1325	750	866	968	975	1017
GTA403EIVD	kVA	1231	1422	1590	1675	1735	1018	1176	1315	1324	1380
	kW	985	1138	1272	1340	1388	814	941	1052	1059	1104
GTA403EIVJ	kVA	1332	1538	1720	1850	1941	1105	1276	1427	1478	1551
	kW	1066	1230	1376	1480	1553	884	1021	1142	1182	1241
GTA403EIXD	kVA	1433	1654	1850	1951	2040	1232	1422	1591	1720	1800
	kW	1146	1323	1480	1561	1632	986	1138	1273	1376	1440
GTA451EIHG	kVA	1597	1845	2063	2188	2308	1346	1554	1738	1840	1932
	kW	1278	1476	1650	1750	1846	1077	1243	1390	1472	1546
GTA451EIVS	kVA	1704	1967	2200	2313	2440	1394	1609	1800	1850	1943
	kW	1363	1574	1760	1850	1952	1115	1287	1440	1480	1554
GTA501EIHJ	kVA	1874	2164	2420	2500	2638	1549	1788	2000	2100	2205
	kW	1499	1731	1936	2000	2110	1239	1430	1600	1680	1764
GTA501EIVI	kVA	2130	2459	2750	2875	3000	1746	2016	2255	2360	2460
	kW	1704	1967	2200	2300	2400	1397	1613	1804	1888	1968
GTA501EIVB	kVA	2395	2766	3093	3238	3375	1994	2303	2575	2690	2800
	kW	1916	2213	2474	2590	2700	1595	1842	2060	2152	2240
GTA561EIVH	kVA	2664	3076	3440	3595	3750	2215	2558	2860	2990	3120
	kW	2131	2461	2752	2876	3000	1772	2046	2288	2392	2496
GTA561EIVI	kVA	2982	3443	3850	4025	4200	2470	2853	3190	3335	3480
	kW	2386	2754	3080	3220	3360	1976	2282	2552	2668	2784

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 4 Poles

575 / 600 V (60 Hz) | 331 / 346 V (60 Hz) | 0.8 P.F.

Model	600V - Y 346V - Δ									
	80ºC		105ºC		125ºC		150ºC		163ºC	
	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
GTA161FISR	11	8.8	12.6	10.1	13.7	11	14.7	11.8	15.3	12.2
GTA161FIHS	14	11.2	16	12.8	17.5	14	18.7	15	20	16
GTA161FIHH	15.5	12.4	17.7	14.2	19.3	15.4	20.7	16.6	21.5	17.2
GTA161FIHI	20.2	16.2	23.2	18.6	25.3	20.2	27.1	21.7	28.1	22.5
GTA161FIHJ	20.1	16.1	23	18.4	27	21.6	28	22.4	29	23.2
GTA162FIVD	29.4	23.5	33.7	27	42	33.6	44	35.2	46	36.8
GTA201FIHS	41	32.8	47	37.6	51	40.8	56	44.8	58	46.4
GTA201FIHV	54.5	43.6	62.4	49.9	68.1	54.5	72.8	58.2	75.7	60.6
GTA201FIHB	60.4	48.3	69.2	55.4	75.5	60.4	80.7	64.6	85	68
GTA201FIHE	66	52.8	75.6	60.5	88	70.4	95	76	97	77.6
GTA202FIVJ	105.4	84.3	120.7	96.6	141	112.8	144	115.2	150	120
GTA251FIHD	137	110	157	126	171	137	183	146	190	152
GTA251FIHE	171	137	196	157	214	171	230	184	240	192
GTA252FIVB	186	149	213	170	233	186	250	200	260	208
GTA252FIII	234	187	268	214	292	234	313	250	325	260
GTA252FIIR	282	226	324	259	353	282	377	302	393	314
GTA311FIVS	337	270	386	309	421	337	450	360	468	374
GTA311FIVI	375	300	430	344	469	375	514	411	535	428
GTA311FIIH	446	357	511	409	557	446	610	488	636	509
GTA312FIIB	520	416	596	477	650	520	695	556	723	578
GTA312FIIG	534	427	612	490	668	534	714	571	757	606
GTA312FIDI	591	473	678	542	750	600	813	650	844	675
GTA351FITV	628	502	726	581	812	650	861	689	898	718
GTA351FITE	707	566	816	653	913	730	923	738	1000	800
GTA352FIKV	741	593	855	684	957	766	1000	800	1055	844
GTA352FIKZ	774	619	894	715	1000	800	1046	837	1098	878
GTA352FIWS	813	650	939	751	1050	840	1098	878	1145	916
GTA352FIZS	883	706	1019	815	1140	912	1200	960	1260	1008
GTA352FIYS	968	774	1118	894	1250	1000	1265	1012	1319	1055
GTA402FIHR	1068	854	1234	987	1380	1104	1450	1160	1515	1212
GTA402FIVS	1165	932	1346	1077	1505	1204	1575	1260	1656	1325
GTA403FIVD	1231	985	1422	1138	1590	1272	1675	1340	1735	1388
GTA403FIVJ	1332	1066	1538	1230	1720	1376	1850	1480	1941	1553
GTA403FIXD	1433	1146	1654	1323	1850	1480	1951	1561	2040	1632
GTA451FIHG	1597	1278	1845	1476	2063	1650	2188	1750	2308	1846
GTA451FIVS	1704	1363	1967	1574	2200	1760	2313	1850	2440	1952
GTA501FIHJ	1874	1499	2164	1731	2420	1936	2500	2000	2638	2110
GTA501FIVI	2130	1704	2459	1967	2750	2200	2875	2300	3000	2400
GTA501FIVB	2395	1916	2766	2213	3093	2474	3238	2590	3375	2700
GTA561FIVH	2664	2131	3076	2461	3440	2752	3595	2876	3750	3000
GTA561FIVI	2982	2386	3443	2754	3850	3080	4025	3220	4200	3360
GTA561FIVH	2664	2131	3076	2461	3440	2752	3595	2876	3750	3000
GTA561FIVI	2982	2386	3443	2754	3850	3080	4025	3220	4200	3360

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 4 Poles

415 / 240 V (50 Hz) | 0.8 P.F.

Model	415V - Y 240V - Δ									
	80ºC		105ºC		125ºC		150ºC		163ºC	
	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
GTA161HISR	9.1	7.3	10.4	8.3	11.3	9	12.2	9.8	12.6	10.1
GTA161HIHS	11.6	9.3	13.2	10.6	14.5	11.6	15.5	12.4	16.6	13.3
GTA161HIHH	12.8	10.2	14.6	11.7	16	12.8	17.1	13.7	17.8	14.2
GTA161HIHI	16.7	13.4	19.2	15.4	20.9	16.7	22.4	17.9	23.3	18.6
GTA161HIHJ	16.6	13.3	19	15.2	22.4	17.9	23.2	18.6	24	19.2
GTA162HIVD	24.4	19.5	27.9	22.3	34.8	27.8	36.5	29.2	38.1	30.5
GTA201HIHS	34	27.2	39	31.2	43	34.4	47	37.6	49	39.2
GTA201HIHV	45.2	36.2	51.7	41.4	56.5	45.2	60.4	48.3	62.8	50.2
GTA201HIHB	50.1	40.1	57.4	45.9	62.6	50.1	66.9	53.5	70.5	56.4
GTA201HIHE	54.7	43.8	62.7	50.2	73	58.4	78.8	63	80.5	64.4
GTA202HIVJ	87.4	69.9	100.1	80.1	117	93.6	119.5	95.6	124.5	99.6
GTA251HIHD	113	90	130	104	141	113	151	121	157	126
GTA251HIHE	141	113	162	130	177	142	190	152	199	159
GTA252HIVB	154	123	176	141	193	154	207	166	215	172
GTA252HIII	194	155	222	178	242	194	259	207	269	215
GTA252HIIR	234	187	268	214	292	234	312	250	326	261
GTA311HIVS	279	223	320	256	349	279	373	298	388	310
GTA311HIVI	311	249	356	285	389	311	426	341	444	355
GTA311HIIH	370	296	424	339	462	370	506	405	527	422
GTA312HIIB	431	345	494	395	539	431	576	461	600	480
GTA312HIIG	443	354	507	406	554	443	592	474	628	502
GTA312HIDI	490	392	562	450	625	500	674	539	700	560
GTA351HITV	521	417	602	482	673	538	714	571	745	596
GTA351HITE	586	469	677	542	757	606	766	613	830	664
GTA352HIKV	615	492	709	567	794	635	830	664	875	700
GTA352HIKZ	642	514	742	594	830	664	868	694	911	729
GTA352HIWS	674	539	779	623	871	697	911	729	950	760
GTA352HIZS	732	586	845	676	946	757	996	797	1045	836
GTA352HIYS	803	642	927	742	1037	830	1049	839	1094	875
GTA402HIHR	886	709	1024	819	1145	916	1203	962	1257	1006
GTA402HIVS	966	773	1117	894	1249	999	1307	1046	1374	1099
GTA403HIVD	1021	817	1180	944	1319	1055	1390	1112	1440	1152
GTA403HIVJ	1105	884	1276	1021	1427	1142	1535	1228	1611	1289
GTA403HIXD	1189	951	1372	1098	1535	1228	1619	1295	1693	1354
GTA451HIHG	1325	1060	1531	1225	1712	1370	1816	1453	1915	1532
GTA451HIVS	1414	1131	1632	1306	1826	1461	1919	1535	2025	1620
GTA501HIHJ	1555	1244	1796	1437	2008	1606	2075	1660	2189	1751
GTA501HIVI	1767	1414	2040	1632	2282	1826	2386	1909	2490	1992
GTA501HIVB	1987	1590	2295	1836	2567	2054	2687	2150	2801	2241
GTA561HIVH	2211	1769	2553	2042	2855	2284	2983	2386	3112	2490
GTA561HIVI	2475	1980	2857	2286	3195	2556	3340	2672	3486	2789

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

12 Terminals / 4 Poles / 50 Hz

415 / 208 V (50 Hz) | 240 / 120 V (50 Hz) | 0.8 P.F.

Model	415V - Y / 208V - YY 240V - Δ / 120V - ΔΔ									
	80ºC		105ºC		125ºC		150ºC		163ºC	
	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
GTA161PISR	9.1	7.3	10.4	8.3	11.3	9	12.2	9.8	12.6	10.1
GTA161PIHS	11.6	9.3	13.2	10.6	14.5	11.6	15.5	12.4	16.6	13.3
GTA161PIHH	12.8	10.2	14.6	11.7	16	12.8	17.1	13.7	17.8	14.2
GTA161PIHI	16.7	13.4	19.2	15.4	20.9	16.7	22.4	17.9	23.3	18.6
GTA161PIHJ	16.6	13.3	19	15.2	22.4	17.9	23.2	18.6	24	19.2
GTA162PIVD	24.4	19.5	27.9	22.3	34.8	27.8	36.5	29.2	38.1	30.5
GTA201PIHV	45.2	36.2	51.7	41.4	56.5	45.2	60.4	48.3	62.8	50.2
GTA201PIHB	50.1	40.1	57.4	45.9	62.6	50.1	66.9	53.5	70.5	56.4
GTA201PIHE	54.7	43.8	62.7	50.2	73	58.4	78.8	63	80.5	64.4
GTA202PIVJ	87.4	69.9	100.1	80.1	117	93.6	119.5	95.6	124.5	99.6
GTA251PIHD	113	90	130	104	141	113	151	121	157	126
GTA251PIHE	141	113	162	130	177	142	190	152	199	159
GTA252PIVB	154	123	176	141	193	154	207	166	215	172
GTA252PIII	194	155	222	178	242	194	259	207	269	215
GTA252PIIR	234	187	268	214	292	234	312	250	326	261
GTA311PIVS	279	223	320	256	349	279	373	298	388	310
GTA311PIVI	311	249	356	285	389	311	426	341	444	355
GTA311PIIH	370	296	424	339	462	370	506	405	527	422
GTA312PIIB	431	345	494	395	539	431	576	461	600	480
GTA312PIIG	443	354	507	406	554	443	592	474	628	502
GTA312PIDI	490	392	562	450	625	500	674	539	700	560
GTA351PIIV	458	366	530	424	593	474	629	503	656	525
GTA351PIIE	521	417	602	482	673	538	714	571	745	596
GTA352PIDV	586	469	677	542	757	606	766	613	830	664
GTA352PIDE	615	492	709	567	794	635	830	664	875	700
GTA352PIBS	642	514	742	594	830	664	868	694	911	729
GTA352PIXS	674	539	779	623	871	697	911	729	950	760
GTA401PIHB	732	586	845	676	946	757	996	797	1045	836
GTA401PIHE	803	642	927	742	1037	830	1049	839	1094	875
GTA402PIHR	886	709	1024	819	1145	916	1203	962	1257	1006
GTA402PIVS	966	773	1117	894	1249	999	1307	1046	1374	1099
GTA403PIVD	1021	817	1180	944	1319	1055	1390	1112	1440	1152
GTA403PIVJ	1105	884	1276	1021	1427	1142	1535	1228	1611	1289
GTA403PIXD	1189	951	1372	1098	1535	1228	1619	1295	1693	1354
GTA451PIHG	1325	1060	1531	1225	1712	1370	1816	1453	1915	1532
GTA451PIVS	1414	1131	1632	1306	1826	1461	1919	1535	2025	1620
GTA501PIHJ	1555	1244	1796	1437	2008	1606	2075	1660	2189	1751
GTA501PIVI	1767	1414	2040	1632	2282	1826	2386	1909	2490	1992
GTA501PIVB	1987	1590	2295	1836	2567	2054	2687	2150	2801	2241
GTA561PIVH	2211	1769	2553	2042	2855	2284	2983	2386	3112	2490
GTA561PIVI	2475	1980	2857	2286	3195	2556	3340	2672	3486	2789

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 4 Poles

220 V (60 Hz) | 190 V (50 Hz) | 0.8 P.F.

Model		60Hz					50Hz				
		220V - Y					190V - Y				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
GTA352BIKV	kVA	707	816	913	923	1000	589	680	761	769	833
	kW	566	653	730	738	800	471	544	609	615	666
GTA352BIKZ	kVA	741	855	957	1000	1055	618	713	798	833	879
	kW	593	684	766	800	844	494	570	638	666	703
GTA352BIKE	kVA	883	1019	1140	1200	1260	736	849	950	1000	1050
	kW	706	815	912	960	1008	589	679	760	800	840
GTA401BIHE	kVA	968	1118	1250	1265	1319	807	932	1042	1054	1099
	kW	774	894	1000	1012	1055	646	746	834	843	879
GTA403BIVD	kVA	1068	1234	1380	1450	1515	890	1028	1150	1208	1263
	kW	854	987	1104	1160	1212	712	822	920	966	1010
GTA403BIVB	kVA	1165	1346	1505	1575	1656	971	1122	1254	1313	1380
	kW	932	1077	1204	1260	1325	777	898	1003	1050	1104

- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

6 Terminals / 6 and 8 Poles

480 / 440 V (60 Hz) | 0.8 P.F.

Frame		6 poles - 1200rpm					8 poles - 900rpm				
		480 - 440V - Y					480 - 440V - Y				
	ΔT	80ºC	105ºC	125ºC	150ºC	163ºC	80ºC	105ºC	125ºC	150ºC	163ºC
400	kVA	686	786	858	940	980	422	484	528	578	603
	kW	549	629	686	752	784	338	387	422	463	482
	kVA	748	857	935	1024	1068	484	554	605	663	691
	kW	598	686	748	819	854	387	444	484	530	553
	kVA	880	1008	1100	1205	1256	572	655	715	783	816
	kW	704	807	880	964	1005	458	524	572	627	653
	kVA	N/A	N/A	N/A	N/A	N/A	704	807	880	964	1005
	kW	N/A	N/A	N/A	N/A	N/A	563	645	704	771	804
450	kVA	1100	1260	1375	1506	1570	766	877	957	1048	1093
	kW	880	1008	1100	1205	1256	612	702	766	839	874
	kVA	1276	1462	1595	1747	1821	880	1008	1100	1205	1256
	kW	1021	1169	1276	1398	1457	704	807	880	964	1005
500	kVA	1375	1575	1719	1883	1963	N/A	N/A	N/A	N/A	N/A
	kW	1100	1260	1375	1506	1570	N/A	N/A	N/A	N/A	N/A
	kVA	1408	1613	1760	1928	2010	1100	1260	1375	1506	1570
	kW	1126	1290	1408	1542	1608	880	1008	1100	1205	1256
	kVA	1648	1888	2060	2257	2352	1320	1512	1650	1807	1884
	kW	1318	1510	1648	1805	1882	1056	1210	1320	1446	1507
560	kVA	1760	2016	2200	2410	2512	N/A	N/A	N/A	N/A	N/A
	kW	1408	1613	1760	1928	2010	N/A	N/A	N/A	N/A	N/A
	kVA	1936	2218	2420	2651	2763	1648	1888	2060	2257	2352
	kW	1549	1774	1936	2121	2211	1318	1510	1648	1805	1882
	kVA	2200	2520	2750	3012	3140	1760	2016	2200	2410	2512
	kW	1760	2016	2200	2410	2512	1408	1613	1760	1928	2010

- N/A = Non-applicable
- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG

6 Terminals / 4, 6 and 8 Poles

4160 V (60 Hz) | 0.8 P.F.

Frame		4 poles - 1800rpm			6 poles - 1200rpm			8 poles - 900rpm		
		4160V - Y			4160V - Y			4160V - Y		
	ΔT	80ºC	105ºC	125ºC	80ºC	105ºC	125ºC	80ºC	105ºC	125ºC
400	kVA	N/A	N/A	N/A	601	688	751	N/A	N/A	N/A
	kW	N/A	N/A	N/A	480	550	601	N/A	N/A	N/A
	kVA	720	825	900	720	825	900	432	495	540
	kW	576	660	720	576	660	720	346	396	432
	kVA	960	1100	1200	841	963	1051	557	638	696
	kW	768	880	960	672	770	841	446	510	557
450	kVA	1200	1375	1500	960	1100	1200	605	693	756
	kW	960	1100	1200	768	880	960	484	554	605
	kVA	1500	1719	1876	1081	1238	1351	768	880	960
	kW	1200	1375	1500	864	990	1081	615	704	768
500	kVA	1801	2063	2251	1200	1375	1500	960	1100	1200
	kW	1441	1650	1801	960	1100	1200	768	880	960
	kVA	2101	2407	2626	1500	1719	1876	1104	1265	1380
	kW	1681	1926	2101	1200	1375	1500	883	1012	1104
560	kVA	2160	2475	2700	N/A	N/A	N/A	1200	1375	1500
	kW	1728	1980	2160	N/A	N/A	N/A	960	1100	1200
	kVA	2702	3096	3378	1801	2063	2251	1440	1650	1800
	kW	2162	2477	2702	1441	1650	1801	1152	1320	1440
	kVA	2880	3300	3601	1920	2200	2400	1728	1980	2160
	kW	2304	2640	2880	1536	1760	1920	1383	1584	1728

- N/A = Non-applicable
- ΔT = 163ºC, ambient temperature = 27ºC. For the other ΔT, ambient temperature = 40ºC
- According to Standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE530 - ISO8528 - CSA
- Altitude 1000 (meters from sea level) (for all duties)
- Values subject to modifications without previous notice
- For other voltages, contact WEG.

Characteristic Data

0.8 P.F. / Insulation class H (180°C) - 60 Hz

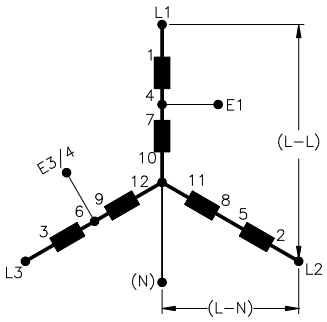
Model	Xd' (%) Saturated	Xd" (%) Unsaturated	Effciency (%) for 220/440 V			Inertia*	Mass (kg)
	220/440 V	220/440 V	% Loads			J	
			50	75	100	(kgm2)	
GTA161AISR	15.43	10.26	68.70	73.40	75.10	0.198	114
GTA161AIHS	17.9	13.06	75.60	77.10	76.50	0.208	124
GTA161AIHH	16.08	12.01	80.20	80.70	79.60	0.208	126
GTA161AIHI	19.12	14.39	82.60	82	80.30	0.218	132
GTA161AIHJ	14.08	10.79	86.30	85.60	84.10	0.254	142
GTA162AIVD	12.75	10.12	84.60	85.40	84.90	0.304	174
GTA201AIHS	24.52	20.08	88.77	87.43	85.38	0.37	234
GTA201AIHV	26.19	23.29	90	88.10	86	0.41	244
GTA201AIHB	23.81	21.40	89.40	88.50	87.10	0.46	264
GTA201AIHE	25.16	22.72	83.20	84.40	84.10	0.49	276
GTA202AIVJ	23.82	22.11	92.40	91.10	89.60	0.63	350
GTA251AIHD	26.74	18.84	91.20	89.90	88.20	1.76	430
GTA251AIHE	25.02	17.97	89.60	89	87.80	1.87	460
GTA252AIVB	19.21	14.15	93.90	93	91.90	2.22	642
GTA252AIII	16.14	12.18	91	91.60	91.30	2.54	660
GTA252AIIR	14.78	11.38	94.70	94.20	93.50	2.73	690
GTA311AIVS	27.78	21.71	92.80	92.10	91	3.48	985
GTA311AIVI	21.92	17.33	94.30	93.40	92.20	3.77	995
GTA311AIIH	22.60	18.54	90.70	91.80	91.80	5.40	1075
GTA312AIIB	19.12	15.41	94.40	93.90	93	4.95	1215
GTA312AIIG	24.85	20.80	93.70	94	93.80	5.34	1265
GTA312AIDI	17.82	14.73	94.90	94.60	93.90	7.13	1375
GTA352AIDV	16.75	12.24	94.1	94.9	95	11.64	2050
GTA352AIDE	19.26	13.91	93.9	94.7	94.8	12.52	2300
GTA401AIHB	22.44	15.78	92.90	93.90	94.10	17.96	2270
GTA401AIHE	26.84	18.74	93.80	94.30	94.20	20.57	2414
GTA403AIVD	18.23	13.92	92	93.60	94.20	25.79	2880
GTA403AIVB	20.45	15.18	92.70	93.90	94.30	26.39	2941

** Inertia for alternators with B15T mounting style*
- Ambient temperature = 40ºC
- Altitude 1000 (meters from sea level)
- Values subject to modifications without previous notice
- For other alternator models, contact WEG.

Wiring Diagram

Three-phase alternator - 12 terminals

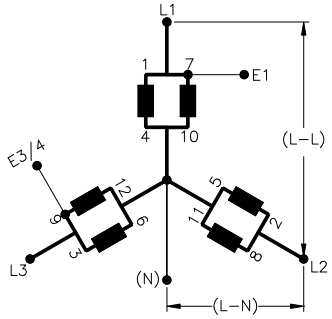
STAR SERIES



Voltage (V) - 60 Hz			
L - L	380 - 415	440	480
L - N	220 - 240	254	277
Reference	190 - 208	220	240
	E1 → 7 and E3/4 → 9		

Voltage (V) - 50 Hz		
L - L	380	400
L - N	220	230
Reference	190	200
	E1 → 7 and E3/4 → 9	

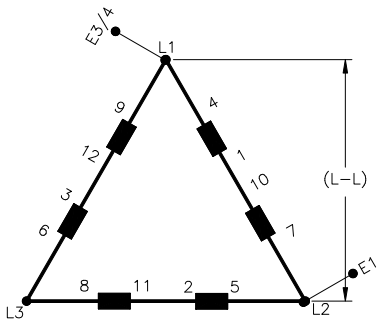
STAR PARALLEL



Voltage (V) - 60 Hz			
L - L	190 - 208	220	240
L - N	110 - 120	127	139
Reference	190 - 208	220	240
	E1 → 7 and E3/4 → 9		

Voltage (V) - 50 Hz		
L - L	190	200
L - N	110	115
Reference	190	200
	E1 → 7 and E3/4 → 9	

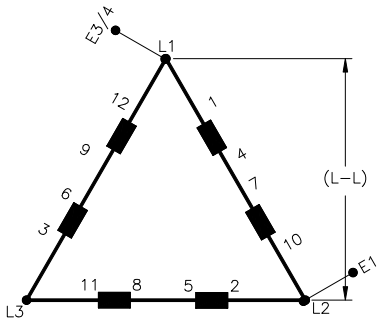
DELTA SERIES 1



Voltage (V) - 60 Hz	
L - L	220 - 240
Reference	220 - 240
	E1→7 and E3/4 → 9

Voltage (V) - 50 Hz	
L - L	200 - 220
Reference	200 - 220
	E1 → 7 and E3/4 → 9

DELTA SERIES 2



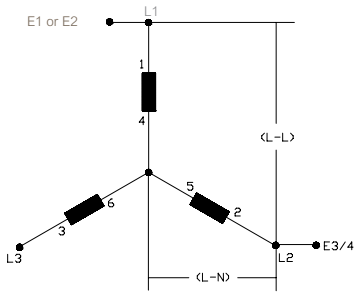
Voltage (V) - 60 Hz	
L - L	220 - 240
Reference	220 - 240
	E1 → 7 and E3/4 → 9

Voltage (V) - 50 Hz	
L - L	200 - 220
Reference	200 - 220
	E1 → 2 and E3/4 → 1

According to Standards: IEC 60034-1 - NBR 5117 - NEMA MG1 - VDE530 - ISO8528 - CSA
The values informed are typical and subject to modifications without previous notice

Wiring Diagram

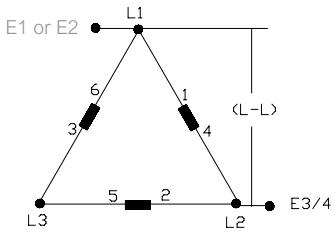
Three-phase alternator - 6 terminals



STAR

Voltage (V) - 60 Hz					
L - L	220	380	440	480	600
L - N	127	220	254	277	346
Reference	220	380	440	480	600
	E1 → 1	E2 → 1			
	E3/4 → 2				

Voltage (V) - 50 Hz				
L - L	190	380	400	415
L - N	110	220	230	240
Reference	190	380	400	415
	E1 → 1	E2 → 1		
	E3/4 → 2			

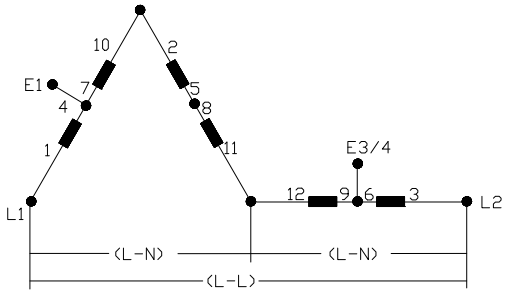


DELTA

Voltage (V) - 60 Hz					
L - L	127	220	254	277	346
Reference	127	220	254	277	346
	E1 → 1				E2 → 1
	E3/4 → 2				

Voltage (V) - 50 Hz				
L - L	110	220	230	240
Reference	110	220	230	240
	E1 → 1 and E3/4 → 2			

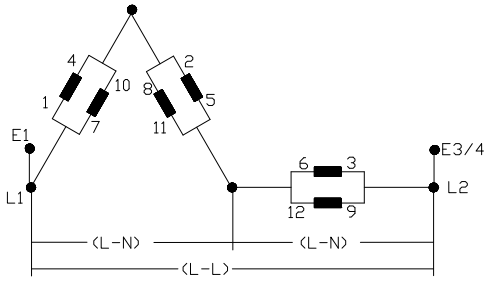
Three-phase alternators with single-phase connection



SINGLE-PHASE ZIGZAG SERIES

Voltage (V) - 60 Hz	
L - L	440 - 480
L - N	220 - 240
Reference	220 - 240
	E1 → 7 and E3/4 → 9

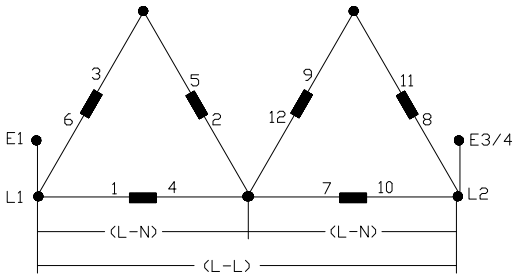
Voltage (V) - 50 Hz	
L - L	380 - 400
L - N	190 - 200
Reference	190 - 200
	E1 → 7 and E3/4 → 9



SINGLE-PHASE ZIGZAG PARALLEL

Voltage (V) - 60 Hz	
L - L	200 - 240
L - N	100 - 120
Reference	200 - 240
	E1 → 7 and E3/4 → 9

Voltage (V) - 50 Hz	
L - L	190 - 200
L - N	95 - 100
Reference	190 - 200
	E1 → 7 and E3/4 → 9



SINGLE-PHASE DELTA

Voltage (V) - 60 Hz	
L - L	220 - 240
L - N	100 - 120
Reference	220 - 240
	E1 → 1 and E3/4 → 8

Voltage (V) - 50 Hz	
L - L	190 - 200
L - N	95 - 100
Reference	190 - 200
	E1 → 1 and E3/4 → 8

According to Standards: IEC 60034-1 - NBR 5117 - NEMA MG1 - VDE530 - ISO8528 - CSA
The values informed are typical and subject to modifications without previous notice.

Reactance Conversion

Reactance conversion for synchronous alternators in different applications
Formula:

$X2 = X1 . (S2/S1) . (f2/f1) . (V1/V2)^2$

Where:
X1 = Known reactance
X2 = Required reactance
S1 = Known power
S2 = Required power
f1 = Known frequency
f2 = Required frequency
V1 = Known voltage
V2 = Required voltage

Calculation of the Grounding Coil

When we connect single-phase loads to three-phase alternators, especially if those loads are unbalanced, there will be a considerable influence of the third harmonics. Consequently, there will be circulation of zero-sequence current through the circuit. In order to eliminate or lessen this effect, a current limit reactance must be used in the grounded neutral of the alternator.

This reactance can be calculated as follows:

$$Xdr = \frac{Un}{\sqrt{3}\,In} . 0,3$$

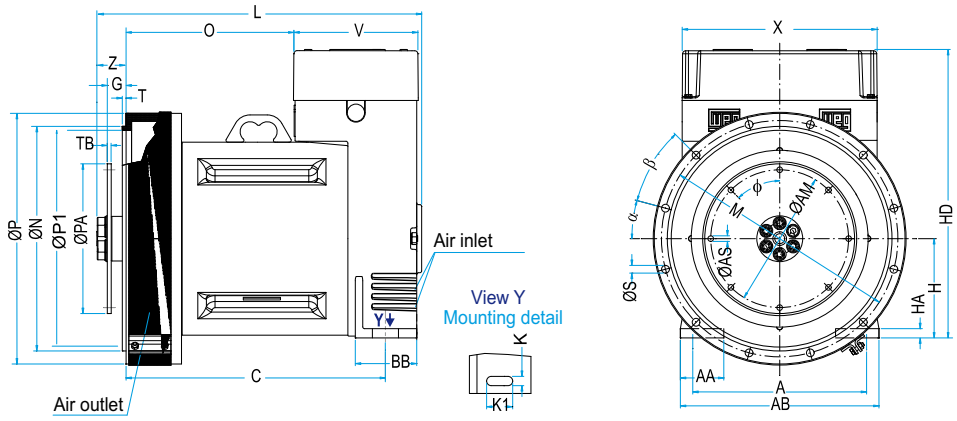
Where:
Un = alternator rated voltage
In = alternator rated phase current

It also must be observed:

a) The coil must have linear characteristic up to 0.3 x In.
b) It must be thermally resistant to 0.4 x In.

Mechanical Features
Single Bearing - B15T

Frame 160

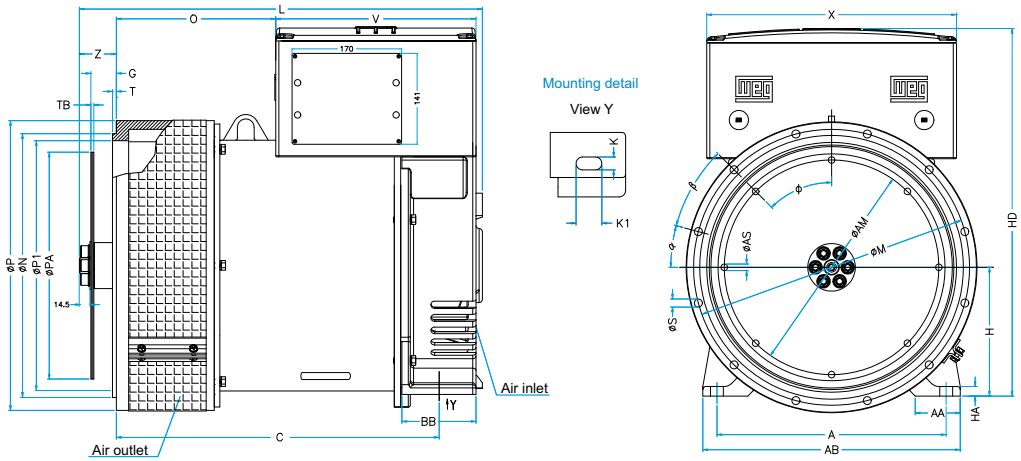


Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	AC	X	V	C	Z	O	L
161	280	-	320	99	70	15	15	42	160	465	-	314	201	417	47	270	523
162														497		352	603

Flange								
SAE	ϕP	ϕN	ϕP1	ϕM	T	ϕS	α	β
5	355,6	314,3	301	333,4	6	11	22,5º	45º
4	404	361,9	346	381		12,5	15º	30º
3	450	409,6	388	428,6		12,5		

Coupling Disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
7,5	241,3	222,2	30,2	3,1	9	45º	8
8	263,5	244,5	61,9		10,3	60º	6
10	314,3	295,3	53,9		10,3	45º	8
11,5	352,4	333,3	39,6		10,3	45º	8

Frame 200



Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	AC	X	V	C	Z	O	L
201	356	-	400	115	70	15	20	40	200	571	-	388	311	591,5	57,4	337,5	716
202														721,5		467,5	846

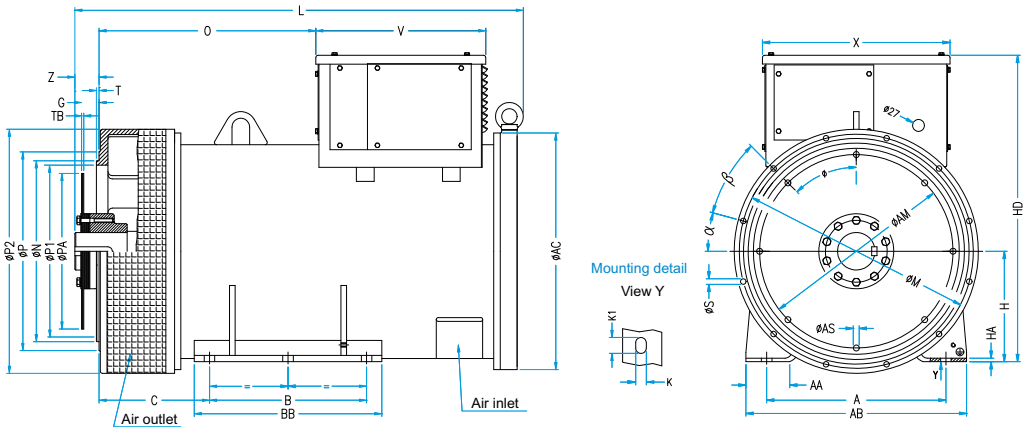
Flange								
SAE	ϕP	ϕN	ϕP1	ϕM	T	ϕS	α	β
5	450	314,3	301	333,4	5	11	22,5º	45º
4	440	361,9	346	381	6	12,5	15º	30º
3	450	409,6	388	428,6				
2	490	447,7	410	466,7				
1	553	511,2	474	530,2				

Coupling Disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
7,5	241,3	222,2	30,2	4,6	9	45º	8
8	263,5	244,5	61,9		10,3	60º	6
10	314,3	295,3	53,9			45º	8
11,5	352,4	333,3	39,6				

Note: Values subject to modifications without previous notice.

Mechanical Features
Single Bearing - B15T

Frame 250

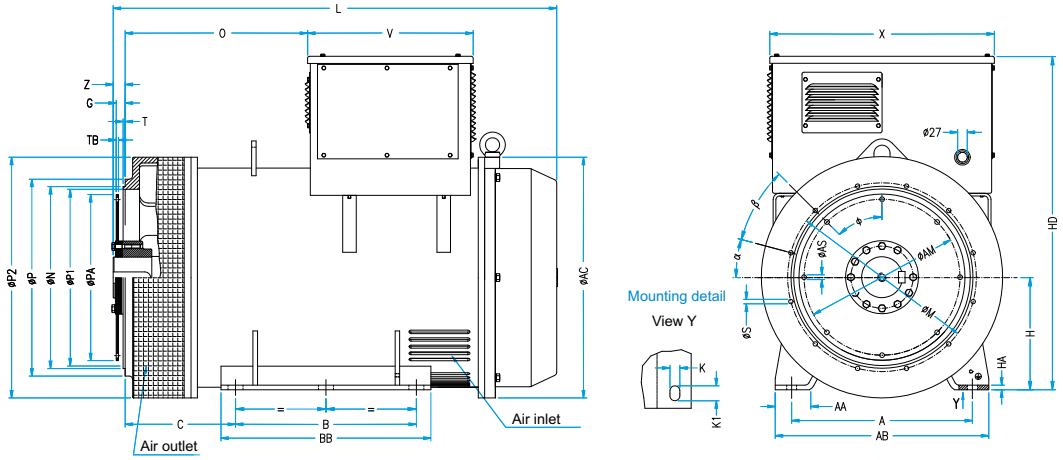


Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	Z	O	L
251	406	311	500	380	100	7,9	24	36	250	695	536	425	385	250	55	341	866
252		356		425												491	1016

Flange								
SAE	ϕP	ϕP1	ϕP2	ϕN	ϕM	T	ϕS	α	β
3	450	390	553	409,6	428,6	6	12,5	15º	30º
2	553	410		447,7	466,7				
1		490		511,2	530,2				

Coupling Disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
10	314,3	295,3	53,9	4,6	10,3	45º	8
11,5	352,4	333,3	39,6		10,3		
14	466,7	438,2	25,4		13,5		

Frame 315



Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	AC	X	V	C	Z	O	L
311	508	406	600	490	96	13	28	42	315	936*	676	631*	465	310	34	342,5	1076
312		508		590												492,5	1226,5

**Dimension valid for alternator with 12 terminals. For alternators with 6 terminals HD = 868 and X = 454*

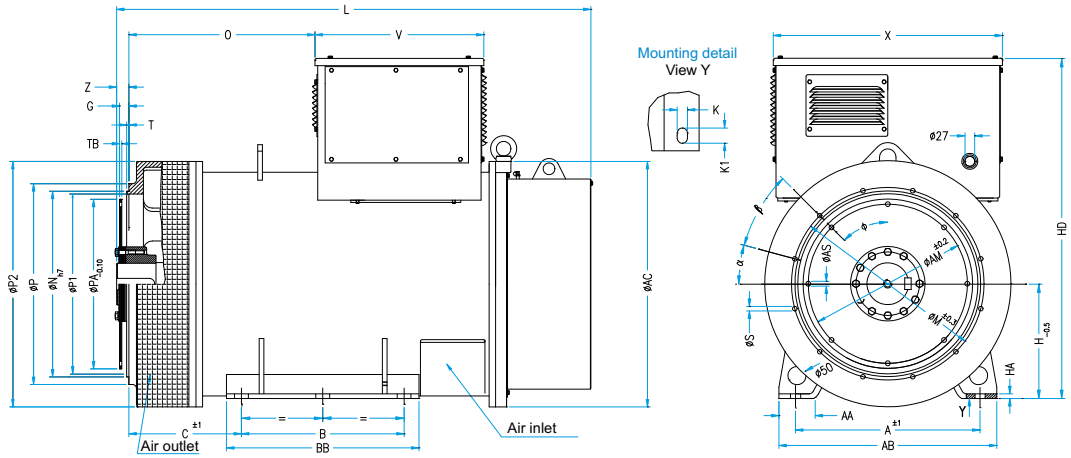
Flange									
SAE	ϕP	ϕP1	ϕP2	ϕN	ϕM	T	ϕS	α	β
2	490	410	676	447,7	466,7	6	12,5	15º	30º
1	553	496		511,2	530,2				
1/2	676	540		584,2	619,1		14		
0	714	610	714	647,7	679,5			11º15'	22º30'

Coupling disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
14	466,7	438,2	25,4	6,2	13,5	45º	8
18	571,5	542,9	15,7		18	60º	6

Note: Values subject to modifications without previous notice.

Mechanical Features
Single Bearing - B15T

Frame 355

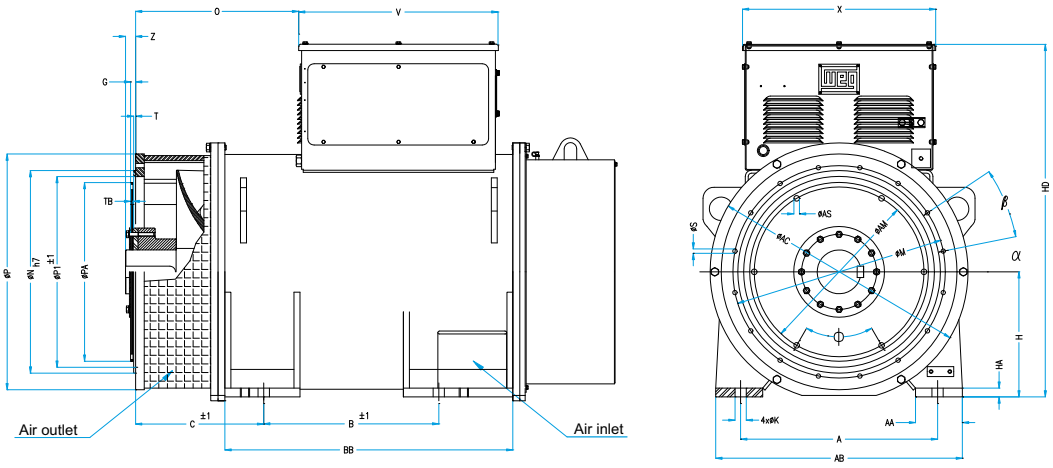


Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	Z	O	L
351	528	410	660	600	130	16	28	42	355	1053	780	635	465	400	16.8	628	1451
352		550		740												666	1637

Flange								
SAE	ϕP	ϕP1	ϕP2	ϕN	ϕM	T	ϕS	α	β
1	553	496	780	511.2	530.2	6	12.5	15°	30°
0	714	610	780	647.7	679.5		14	11°15'	22°30'
00	-	760	883	787.4	851				

Coupling disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
14	466.7	438.2	25.4	6.2	13.5	45°	8
18	571.5	542.9	15.7		18	60°	6
21	673.1	641.4	0	5.85			

Frame 400



Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	ϕK	H	HD	ϕAC	X	V		C	Z	O		L
401	630	560	789	921	150	28	36	400	1135	825	618	638	855*	410	32,5	521	304*	1580
402		630		1026												626	409*	1685
403		710		1206												801	584*	1865

Flange								
SAE	ϕP	ϕN	ϕP1	ϕM	T	ϕS	α	β
1/2	754	584.2	540	619.1	6	14	15°	30°
0		647.7	610	679.5			11°15'	22°30'
00	883	787.4	760	851				

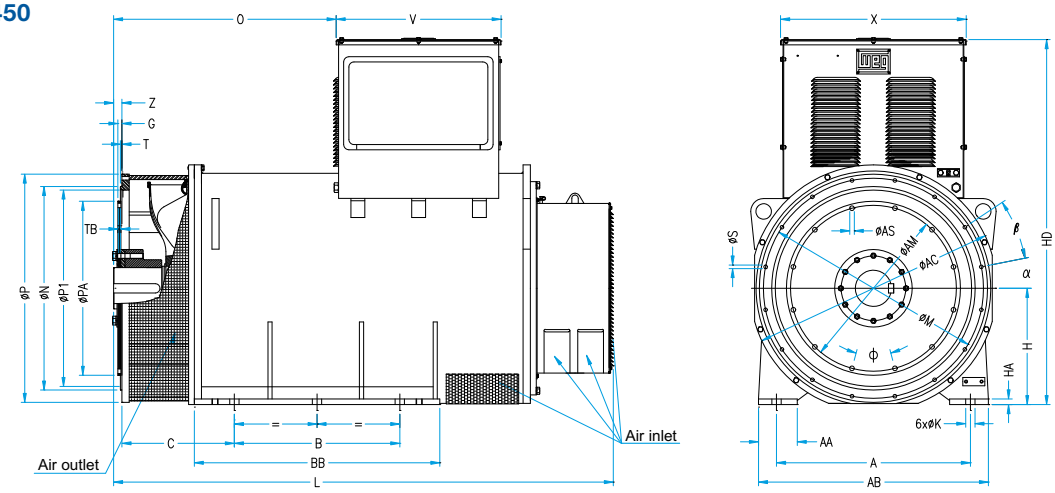
Coupling disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
14	466.6	438.2	25.4	7.8	14	45°	8
16	517.5	489	15.7				
18	571.4	542.9			18	60°	6
21	673.1	641.4	0			30°	12

**Only for high voltage*

Note: Values subject to modifications without previous notice.

Mechanical Features
Single Bearing - B15T

Frame 450

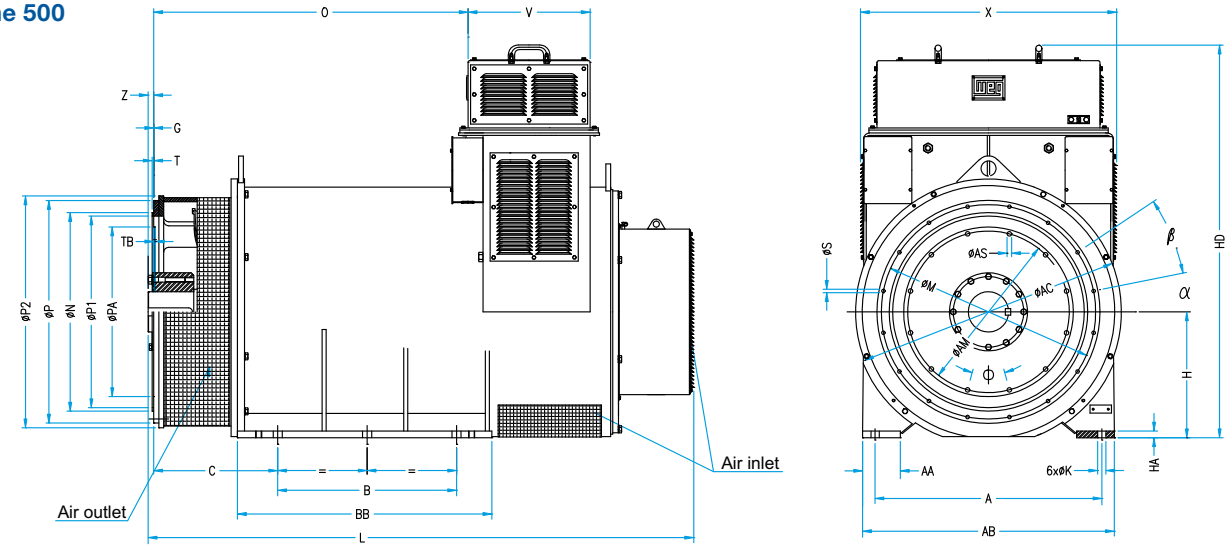


Frame	Dimensions (mm)																	
	A	B	AB	BB	AA	HA	ϕK	H	HD	ϕAC	X	V		C	Z	O		L
451	750	630	890	850	150	22	36	450	1412	955	718	638	855*	435	32,5	747	530*	1734
452		640		950												947	730*	1934

Flange								
SAE	ϕP	ϕN	ϕP1	ϕM	T	ϕS	α	β
1	560	511.2	470	530.2	6	12.5	15º	30º
0	754	647.7	610	679.5		14	11º15'	22º30'
00	883	787.4	760	851				

Coupling disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
14	466.7	438.2	25.4	11.7	14	45º	8
16	517.5	489	15.7		13.5		
18	571.5	542.9			18	60º	6
21	673.1	641.4	0			30º	12

Frame 500



Frame	Dimensions (mm)																	
	A	B	AB	BB	AA	HA	ϕK	H	HD	ϕAC	X	V		C	Z	O		L
501	900	710	1000	1010	150	27	33	500	1560	1055	1017	485	800*	492	32.5	1248	933*	2166

Flange									
SAE	ϕP2	ϕP	ϕPN	ϕP1	T	ϕM	ϕS	α	β
00	920	883	787.4	760	6	851	14	11º15'	22º30'

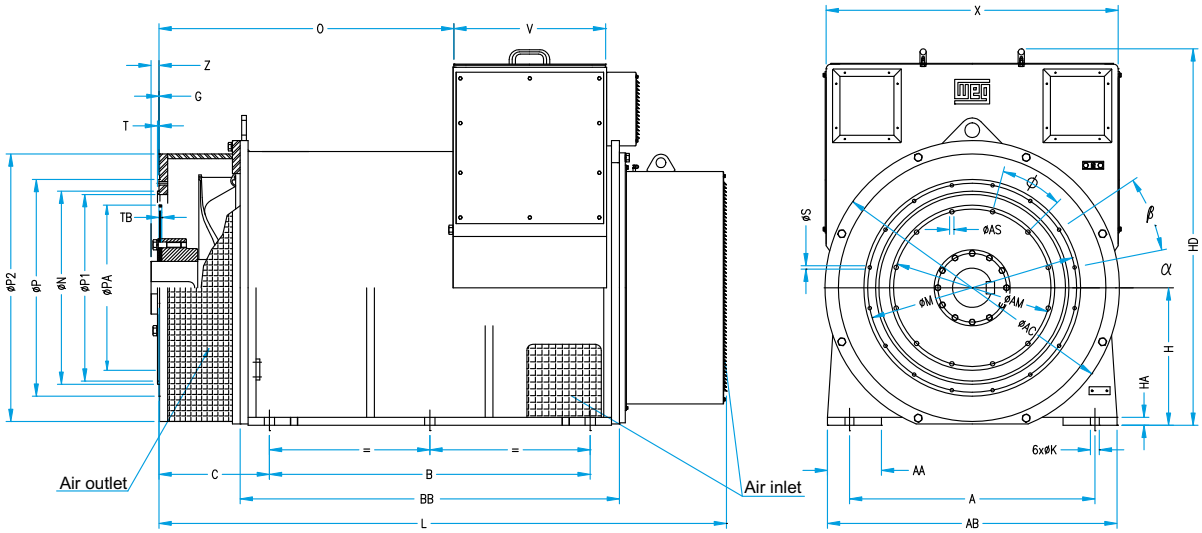
Coupling DISK							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
21	673.1	641.4	0	11.7	18	30º	12

**Only for high voltage*

Note: Values subject to modifications without previous notice.

Mechanical Features
Single Bearing - B15T

Frame 560



Frame	Dimensions (mm)																
	A	B	AB	BB	AA	HA	ϕK	H	HD	ϕAC	X	V		C	Z	O		L
561	1000	1307	1180	1545	220	32	42	560	1560	1200	1190	620	1000*	450	32.5	1200	820*	2312

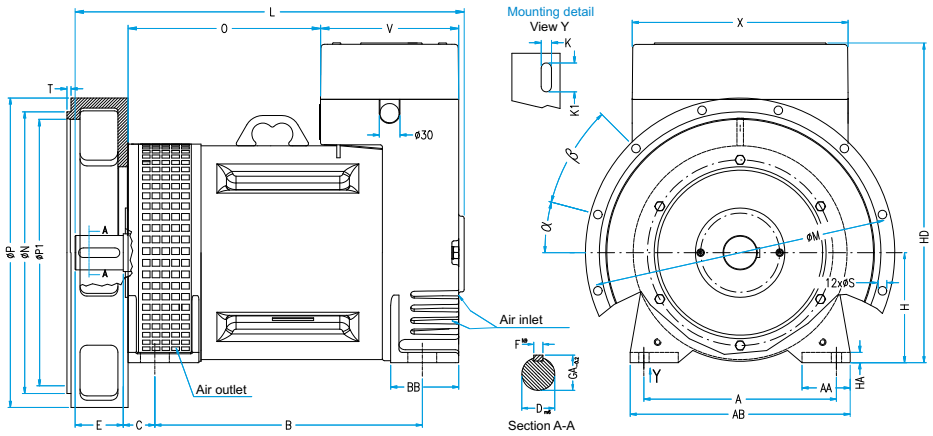
Flange									
SAE	ϕP	ϕP2	ϕN	ϕP1	ϕM	T	ϕS	α	β
00	940	1090	787.4	760	851	6	14	11°15'	22°30'

Coupling Disk							
SAE	ϕPA	ϕAM	G	TB	ϕAS	ϕ	Holes
21	673.1	641.4	0	11.7	18	30°	12
24	733.3	692.2			21		

**Only for high voltage*
Note: Values subject to modifications without previous notice.

Mechanical Features
Double Bearing with Flange - B35T

Frame 160

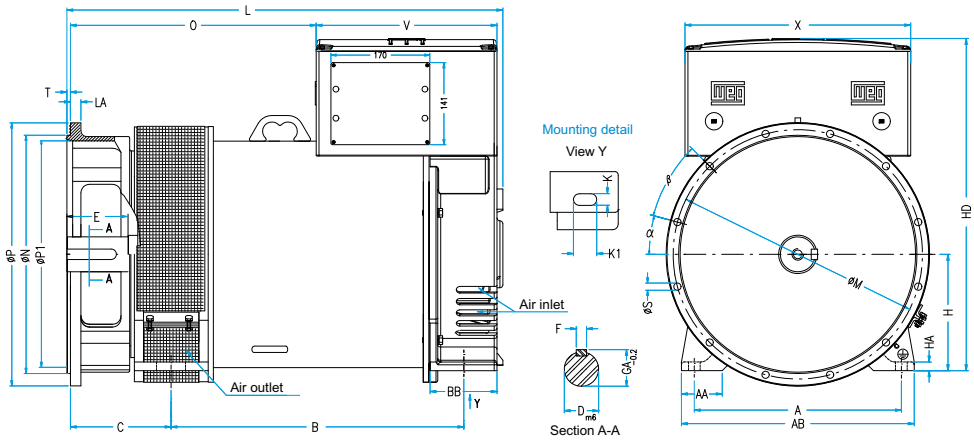


Frame	Dimensions (mm)														
	A	B	AB	BB	AA	K	K1	H	HA	HD	X	V	C	O	L
161	280	389	320	99	70	15	42	160	15	465	314	201	46	284	566
162		469												364	646

Flange								
SAE	ϕP	ϕN	ϕP1	ϕM	T	ϕS	α	β
3	450	409,6	388	428,6	6	12,5	15°	30°
4	404	361,9	346	381				
5		314,3	301	333,4		11	22,5°	45°

Frame	Shaft End			
	D	GA	F	E
161	50	53.5	14	70
162				

Frame 200



Frame	Dimensions (mm)														
	A	B	AB	BB	AA	K	K1	H	HD	HA	X	V	C	O	L
201	356	503,5	400	115	70	20	40	200	571	15	388	311	173	422,5	749,5
202		633,5												552,5	879,5

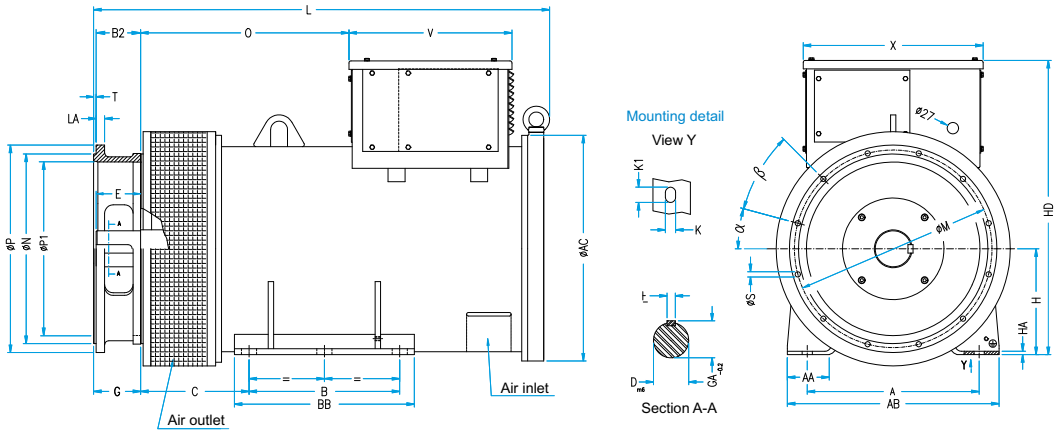
Flange									
SAE	ϕP	ϕN	ϕP1	ϕM	LA	T	ϕS	α	β
3	452	409,6	390	428,6	18	6	12,5	15°	30°
2	495	447,7	410	466,7	15				

Frame	Shaft End			
	D	GA	F	E
201	60	64	18	105
202				

Note: Values subject to modifications without previous notice.

Mechanical Features
Double Bearing with Flange - B35T

Frame 250

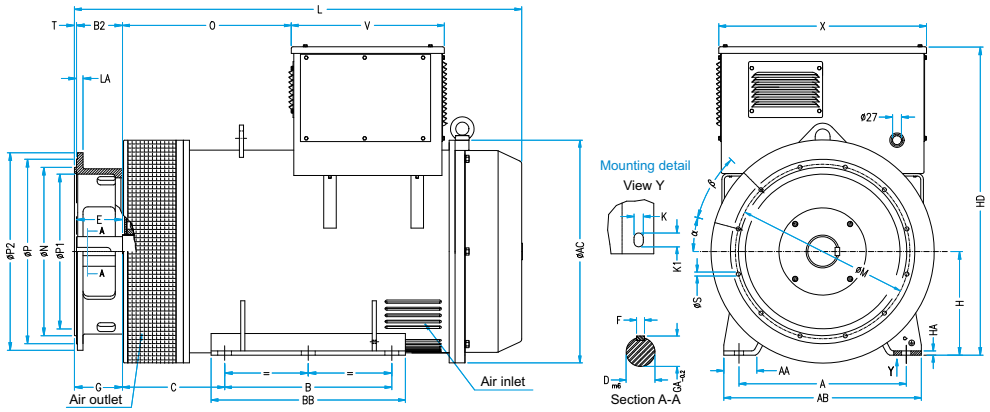


Frame	Dimensions (mm)																	
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	G	B2	O	L
251	406	311	500	380	100	7.9	24	36	250	695	536	425	385	250	111	105	342	925
252		356		425													486	1077

Flange										
SAE	ϕP2	ϕP	ϕN	ϕP1	ϕM	LA	T	ϕS	α	β
3	553	450	409,6	390	428,6	20	6	12,5	15º	30º
2		490	447,7	410	466,7					
1		560	511,2	470	530,2					

Frame	Shaft End			
	D	GA	F	E
251	85	89.5	20	105
252				

Frame 315



Frame	Dimensions (mm)																	
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	G	B2	O	L
311	508	406	600	490	96	13	28	42	315	936*	676	631*	465	310	146	140	342.5	1188,5
312		508		590													492.5	1338,5

**Dimension valid for alternator with 12 terminals. For alternators with 6 terminals HD = 868 and X = 454*

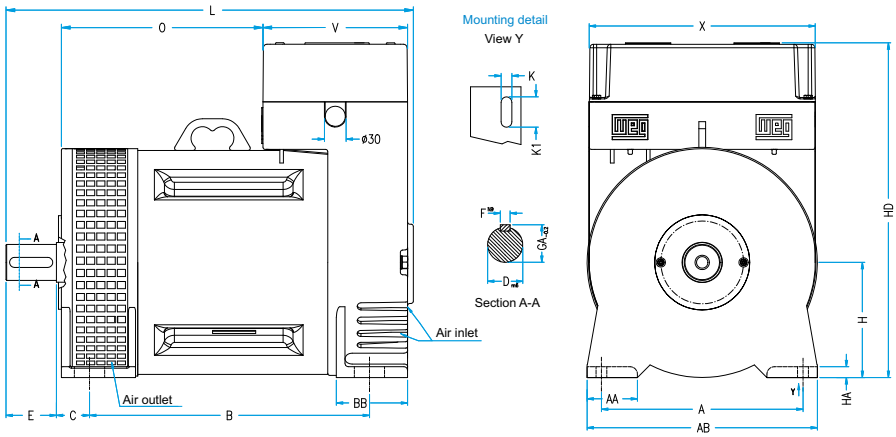
Flange										
SAE	ϕP	ϕP2	ϕN	ϕP1	ϕM	LA	T	ϕS	α	β
2	490	540	447,7	410	466,7	20	6	12,5	15º	30º
1	560	560	511,2	470	530,2					
0	714	714	647,7	610	679,5			14	11º 15'	22º 30'

Frame	Shaft End			
	D	GA	F	E
311	98	103	25	140
312				

Note: Values subject to modifications without previous notice.

Mechanical Features
Double Bearing - B3T

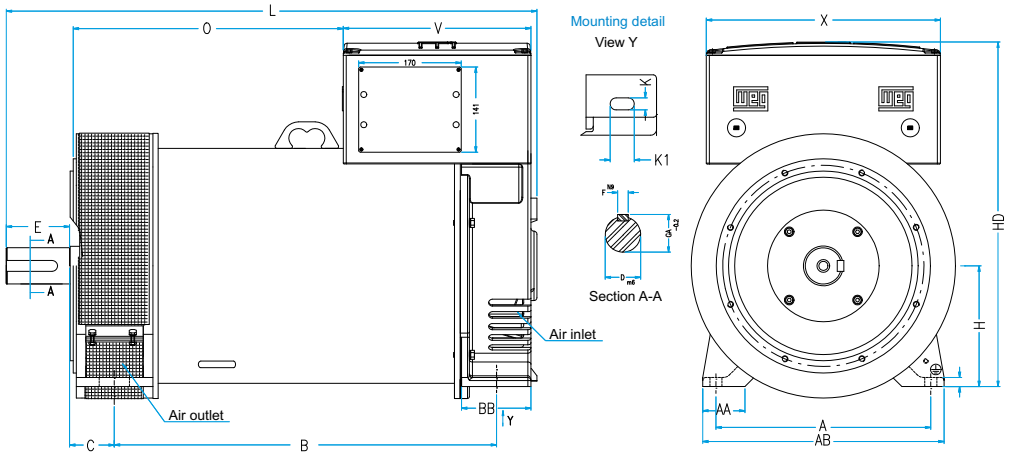
Frame 160



Frame	Dimensions (mm)														
	A	B	AB	BB	AA	K	K1	H	HA	HD	X	V	C	O	L
161	280	389	320	99	70	15	42	160	15	465	314	201	46	284	566
162		469												364	646

Flange	Shaft End			
	D	GA	F	E
161	50	53.5	14	70
162				

Frame 200



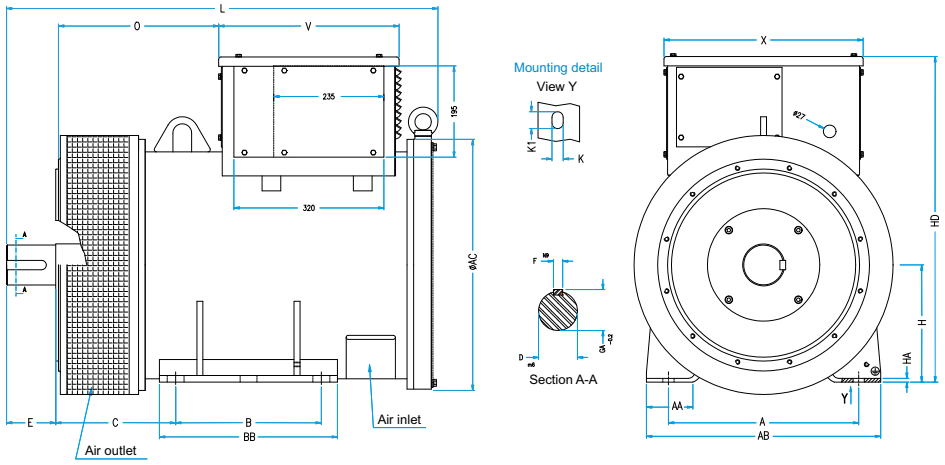
Frame	Dimensions (mm)														
	A	B	AB	BB	AA	K	K1	H	HD	HA	X	V	C	O	L
201	356	503,5	400	115	70	20	40	200	571	15	388	311	74	317,5	749,5
202		633,5												447,5	879,5

Frame	Shaft End			
	D	GA	F	E
201	60	64	18	105
202				

Note: Values subject to modifications without previous notice.

Mechanical Features
Double Bearing - B3T

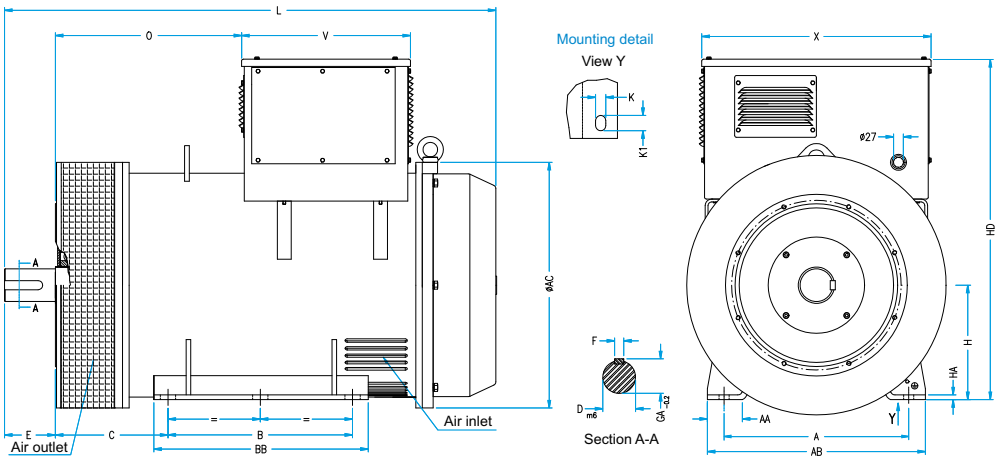
Frame 250



Frame	Dimensions (mm)															
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	O	L
251	406	311	500	380	100	7.9	24	36	250	695	536	425	385	250	342	921
252		356		425											492	1071

Frame	Shaft End			
	D	GA	F	E
251	85	89.5	20	105
252				

Frame 315



Frame	Dimensions (mm)															
	A	B	AB	BB	AA	HA	K	K1	H	HD	ϕAC	X	V	C	O	L
311	508	406	600	490	96	13	28	42	315	936*	676	631*	465	310	342.5	1182,5
312		508		590											492.5	1332,5

**Dimension valid for alternator with 12 terminals. For alternators with 6 terminals HD = 868 and X = 454*

Frame	Shaft End			
	D	GA	F	E
311	98	103	25	140
312				

Note: Values subject to modifications without previous notice.

Technical Assistance

WEG offers its customers technical assistance services, responsible for all the post-sale support. Those services include support to general questions and service in the field, including diagnostics, machine commissioning and operation 24x7. WEG's technical assistance network is present worldwide. The manuals supplied with the equipment provide fast and precise information regarding safety instructions, installation and maintenance. The technical assistance offers a qualified and experienced team, able to perform in different situation in the field and give remote support, using state-of-the-art equipment, providing reliability to the results.

Services

WEG, leader on the motor and generator market, offers checkup, restore and repowering services in medium and large electric machines, executed at the factory or in the field, including other brands, as follows:

- Direct current motors and generators up to 10,000 kW;
- Three-phase induction motors (squirrel cage or slip rings) up to 50,000 kW (low, medium and high voltage);
- Synchronous motors (with or without brushes) up to 50,000 kW (low, medium and high voltage);
- Turbogenerators up to 62,500 kVA;
- Hydrogenerators up to 25,000 kVA.

Parts and Components

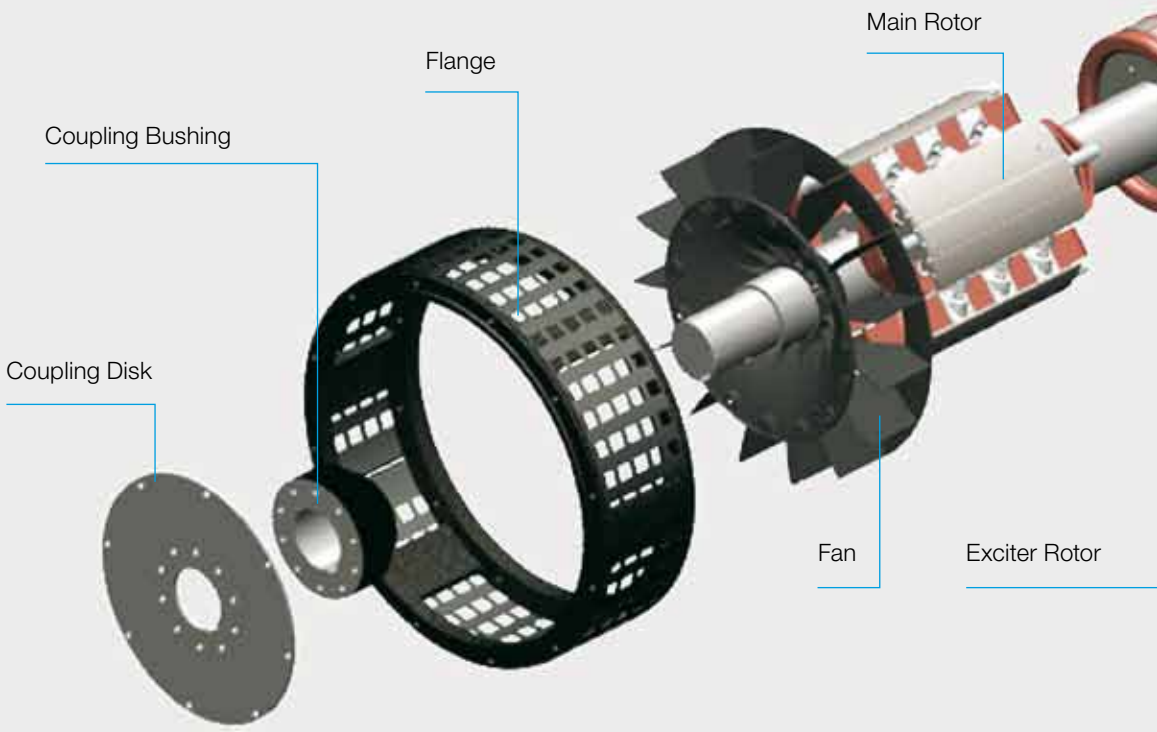
To serve the customer and the technical assistance, WEG has a part and component sales force that operates worldwide.

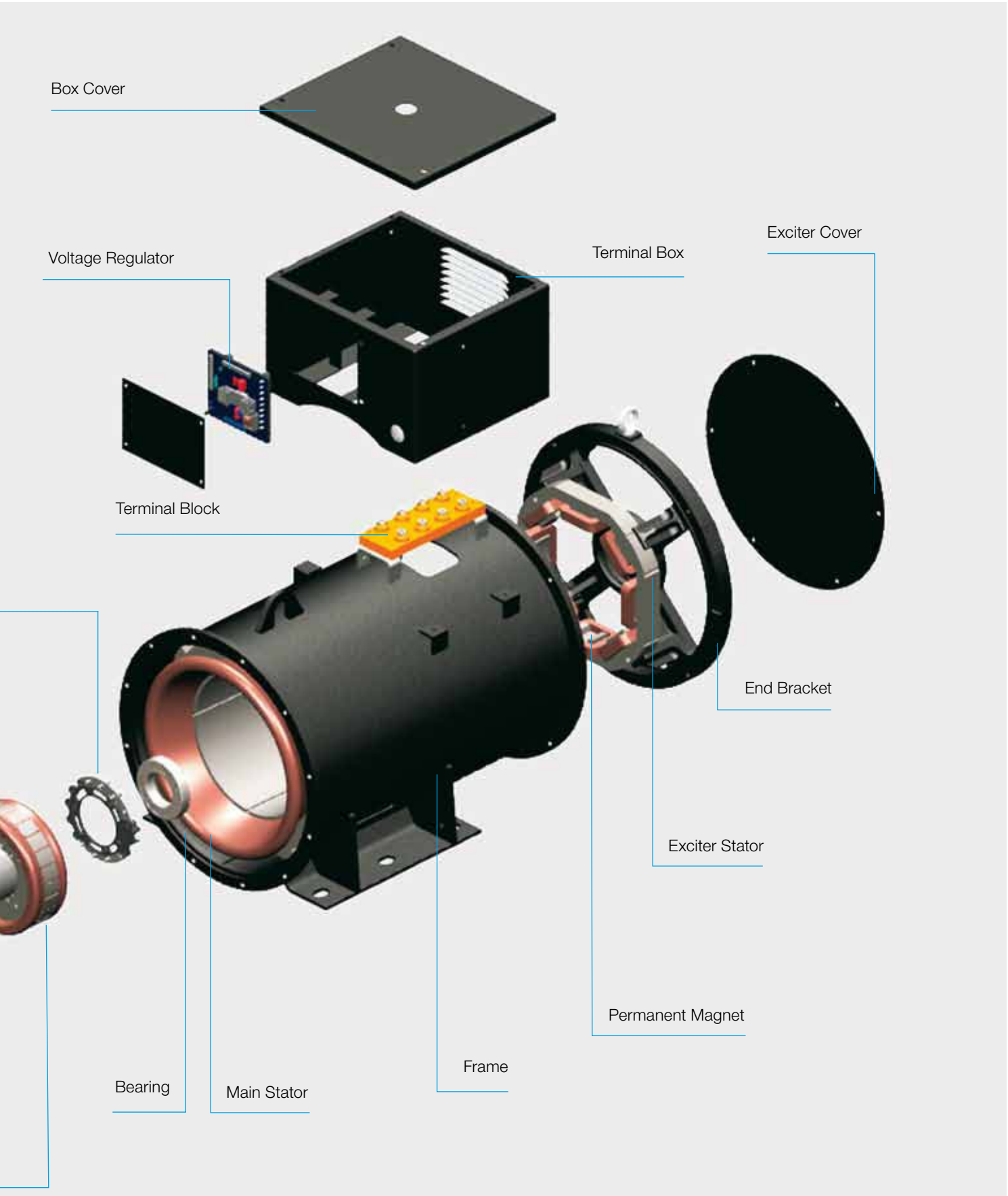
Warranty

WEG warrants its products against defects in material and workmanship for a period of 12 (twelve) months from the issue date of the factory invoice. In case of products purchased through retailers/distributors/manufacturers, the warranty will be of 12 (twelve) months from the issue date of the retailer/distributors/manufacturer invoice, limited to 18 (eighteen) months from the manufacturing date.

Components

Guiding drawing




Box Cover
Voltage Regulator
Terminal Box
Exciter Cover
Terminal Block
End Bracket
Exciter Stator
Permanent Magnet
Frame
Bearing
Main Stator

WEG Worldwide Operations

ARGENTINA
WEG EQUIPAMIENTOS ELECTRICOS S.A.
(Headquarters San Francisco-Cordoba)
Sgo. Pampiglione 4849
Parque Industrial San Francisco
2400 - San Francisco
Phone: +54 (3564) 421484
Fax: +54 (3564) 421459
info-ar@weg.net
www.weg.net/ar

AUSTRALIA
WEG AUSTRALIA PTY. LTD.
14 Lakeview Drive Caribbean Gardens Industrial Estate
Scoresby Vic 3179 Victoria
Phone: 61 (3) 9765 4600
Fax: 61 (3) 9753 2088
info-au@weg.net
www.weg.net/au

BELGIUM
WEG BENELUX S.A.
Rue de l'Industrie 30 D,
1400 Nivelles
Phone: + 32 (67) 88-8420
Fax: + 32 (67) 84-1748
info-be@weg.net
www.weg.net/be

CHILE
WEG CHILE S.A.
Los Canteros 8600
La Reina - Santiago
Phone: (56-2) 784 8900
Fax: (56-2) 784 8950
info-cl@weg.net
www.weg.net/cl

CHINA
WEG (NANTONG) ELECTRIC MOTOR MANUFACTURING CO., LTD.
No. 128# - Xinkai South Road,
Nantong Economic &
Technical Development Zone,
Nantong, Jiangsu Province.
Phone: (86) 0513-85989333
Fax: (86) 0513-85922161
info-cn@weg.net
www.weg.net/cn

COLOMBIA
WEG COLOMBIA LTDA
Calle 46A N82 - 54
Portería II - Bodega 7 - San Cayetano II - Bogotá
Phone: (57 1) 416 0166
Fax: (57 1) 416 2077
info-co@weg.net
www.weg.net/co

DENMARK
WEG SCANDINAVIA DENMARK
Sales Office of WEG Scandinavia AB
Anelysparken 43B
True
8381 Tilst – Denmark
Phone: +45 86 24 22 00
Fax : +45 86 24 56 88
info-se@weg.net
www.weg.net/se

FRANCE
WEG FRANCE SAS
ZI de Chenes – Le Loup
13 Rue du Morellon – BP 738
38297 Saint Quentin Fallavier
Phone: +33 (0) 4 74 99 11 35
Fax: +33 (0) 4 74 99 11 44
info-fr@weg.net
www.weg.net/fr

GERMANY
WEG GERMANY GmbH
Industriegebiet Türnich 3
Geigerstraße 7
50169 Kerpen-Türnich
Phone: +49 (0)2237/9291-0
Fax: +49 (0)2237/9292-200
info-de@weg.net
www.weg.net/de

GHANA
ZEST ELECTRIC GHANA LIMITED - WEG Group
15, Third Close Street Airport Residential Area, Accra PMB CT 175, Cantonments
Phone: 233 30 27 664 90
Fax: 233 30 27 664 93
info@zestghana.com.gh
www.zestghana.com.gh

INDIA
WEG ELECTRIC (INDIA) PVT. LTD.
#38, Ground Floor, 1st Main Road, Lower Palace Orchards,
Bangalore – 560 003
Phone(s): +91-80-4128 2007
+91-80-4128 2006
Fax: +91-80-2336 7624
info-in@weg.net
www.weg.net/in

ITALY
WEG ITALIA S.R.L.
V.le Brianza 20 - 20092 - Cinisello Balsamo - Milano
Phone: (39) 02 6129-3535
Fax: (39) 02 6601-3738
info-it@weg.net
www.weg.net/it

JAPAN
WEG ELECTRIC MOTORS JAPAN CO., LTD.
Yokohama Sky Building 20F,
2-19-12 Takashima,
Nishi-ku, Yokohama City,
Kanagawa, Japan 220-001
Phone: (81) 45 440 6063
info-jp@weg.net
www.weg.net/jp

MEXICO
WEG MEXICO, S.A. DE C.V.
Carretera Jorobas-Tula Km. 3.5,
Manzana 5, Lote 1
Fraccionamiento Parque Industrial - Huehuetoca,
Estado de México - C.P. 54680
Phone: + 52 (55) 5321 4275
Fax: + 52 (55) 5321 4262
info-mx@weg.net
www.weg.net/mx

NETHERLANDS
WEG NETHERLANDS
Sales Office of
WEG Benelux S.A.
Hanzepoort 23C
7575 DB Oldenzaal
Phone: +31 (0) 541-571080
Fax: +31 (0) 541-571090
info-nl@weg.net
www.weg.net/nl

PORTUGAL
WEG EURO - INDÚSTRIA ELÉCTRICA, S.A.
Rua Eng. Frederico Ulrich
Apartado 6074
4476-908 - Maia
Phone: +351 229 477 705
Fax: +351 229 477 792
info-pt@weg.net
www.weg.net/pt

RUSSIA
WEG RUSSIA
Russia, 194292, St. Petersburg,
Prospekt Kultury 44, Office 419
Phone: +7(812)363-21-72
Fax: +7(812)363-21-73
info-ru@weg.net
www.weg.net/ru

SOUTH AFRICA
ZEST ELECTRIC MOTORS (PTY) LTD. WEG Group
47 Galaxy Avenue, Linbro Business Park - Gauteng Private Bag X10011 - Sandton, 2146
Johannesburg
Phone: (27-11) 723-6000
Fax: (27-11) 723-6001
info@zest.co.za
www.zest.co.za

SPAIN
WEG IBERIA S.L.
Avenida de la Industria,25
28823 Coslada - Madrid
Phone: (34) 916 553 008
Fax : (34) 916 553 058
info-es@weg.net
www.weg.net/es

SINGAPORE
WEG SINGAPORE PTE LTD
159, Kampong Ampat,
#06-02A KA PLACE.
Singapore 368328.
Phone: +65 6858 9081
Fax: +65 6858 1081
info-sg@weg.net
www.weg.net/sg

SWEDEN
WEG SCANDINAVIA AB
Box 10196
Verkstadgatan 9
434 22 Kungsbacka
Phone: (46) 300 73400
Fax: (46) 300 70264
info-se@weg.net
www.weg.net/se

UK
WEG ELECTRIC MOTORS (U.K.) LTD.
28/29 Walkers Road
Manorside Industrial Estate
North Moons Moat - Redditch
Worcestershire B98 9HE
Phone: 44 (0)1527 596-748
Fax: 44 (0)1527 591-133
info-uk@weg.net
www.weg.net/uk

UNITED ARAB EMIRATES
WEG MIDDLE EAST FZE
JAFZA – JEBEL ALI FREE ZONE
Tower 18, 19th Floor,
Office LB 18 1905
P.O. Box 262508 - Dubai
Phone: +971 (4) 8130800
Fax: +971 (4) 8130811
info-ae@weg.net
www.weg.net/ae

USA
WEG ELECTRIC CORP.
6655 Sugarloaf Parkway,
Duluth, GA 30097
Phone: 1-678-249-2000
Fax: 1-770-338-1632
info-us@weg.net
www.weg.net/us

VENEZUELA
WEG INDUSTRIAS VENEZUELA C.A.
Avenida 138-A
Edificio Torre Banco Occidental de Descuento, Piso 6 Oficina 6-12
Urbanizacion San Jose de Tarbes
Zona Postal 2001
Valencia, Edo. Carabobo
Phone(s): (58) 241 8210582
(58) 241 8210799
(58) 241 8211457
Fax: (58) 241 8210966
info-ve@weg.net
www.weg.net/ve

WEG Equipamentos Elétricos S.A.
International Division
Av. Prefeito Waldemar Grubba, 3000
89256-900 - Jaraguá do Sul - SC - Brazil
Phone: 55 (47) 3276-4002
Fax: 55 (47) 3276-4060
www.weg.net

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The values shown are subject to change without prior notice.