

SYNCHRONOUS ALTERNATORS

G Plus Line

AG10 Line

North America



Motors | Automation | Energy | Transmission & Distribution | Coatings



Founded in 1961, WEG is one of the largest manufacturers of alternators and electric motors in the world. Committed to growth on a global scale, WEG continually invests in state of the art manufacturing facilities, processes and the development of new and improved industrial electrical solutions.



Synchronous Alternators

WEG's extensive experience in the manufacturing of alternators in addition to modern design, production capacity and testing facilities, has resulted in a range of brushless synchronous alternators.

Available up to 4,200 KVA, the G Plus and AG10 lines are suitable for all emergency, prime power or continuous operation in the areas:

- Industrial
- Commercial
- Marine
- Telecommunication
- Mining
- Residential
- Irrigation
- Hospitals
- Rural areas
- Airports and others

Technical Features

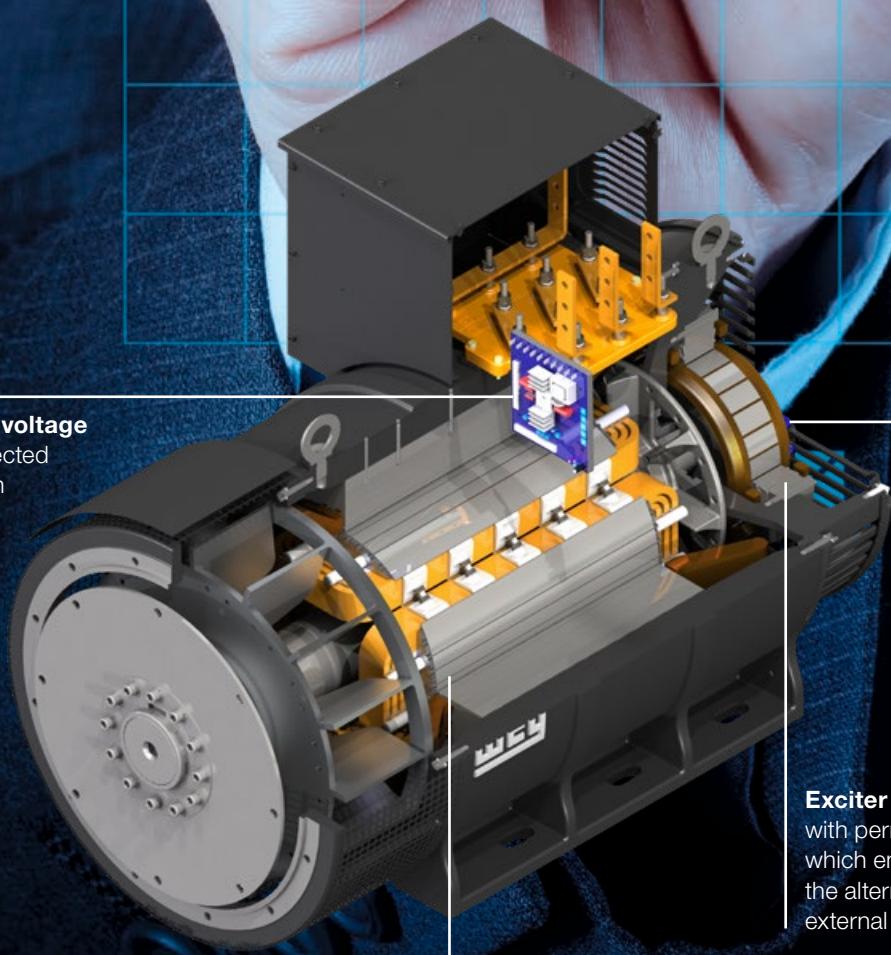
- Output power: up to 2,455 kVA (others upon request)
- Frames: 160 to 400 (IEC)
- Low voltage: 110 to 690 V
- High voltage: 2,300 to 13,800 V (upon request)
- Frequency: 50 to 60 Hz
- Degree of protection: IP23 (standard), IP44 to IP55W (upon request)
- Insulation class: H (180 °C) low voltage and F (180 °C) high voltage
- Winding pitch: 2/3 (160 to 315)
- THD: ≤3% (phase-phase, no load)
- Number of poles: 4 poles (standard), 6 and 8 poles (upon request)
- Leads: 12 or 6 leads

Notes:

- 1) The three-phase alternators with 12 leads can operate in 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 from 110 to 480 V.



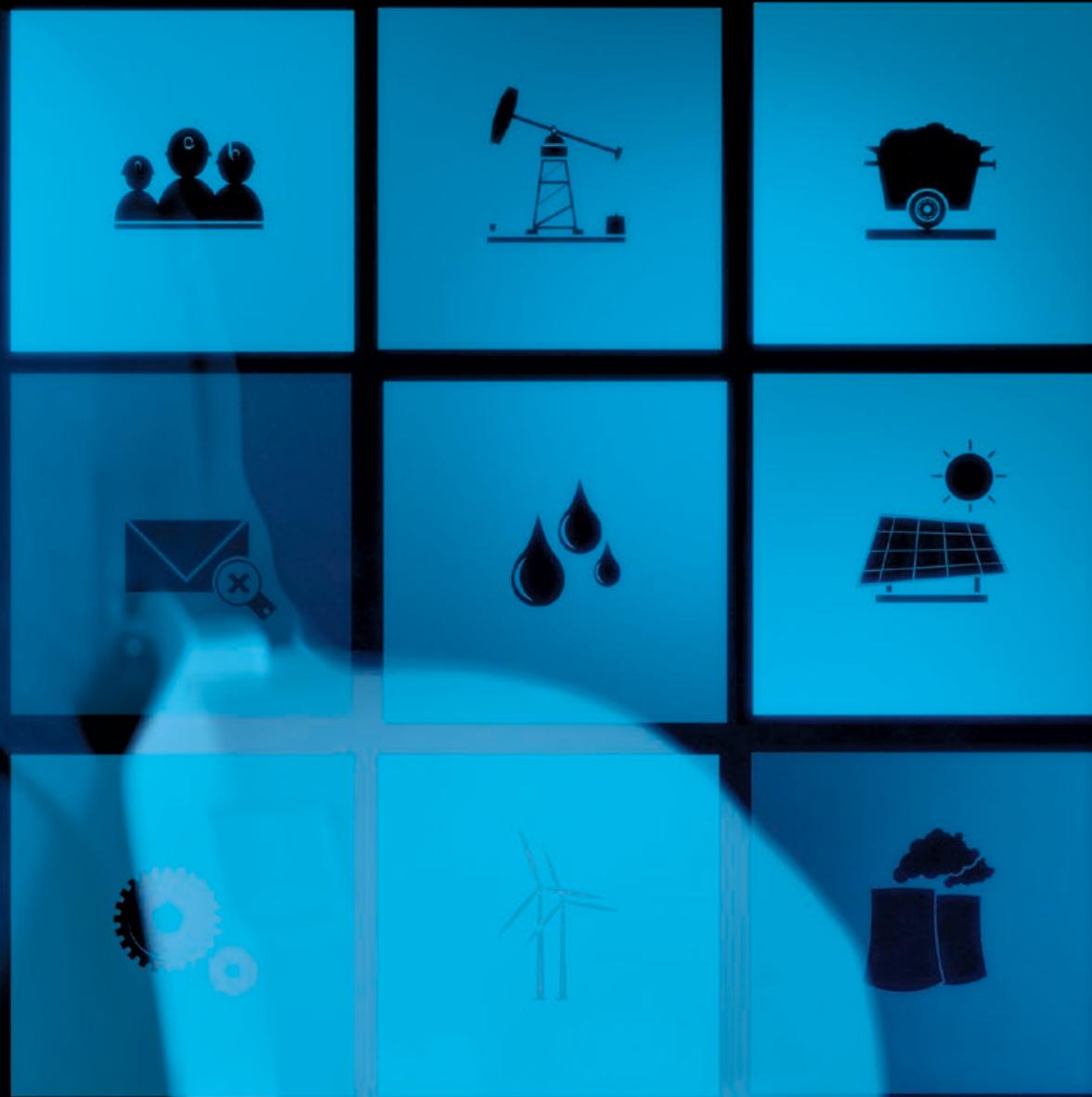
Encapsulated voltage regulator protected against vibration and salty environment.



Rotating diodes
easy access to diodes.

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

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



Operating Conditions

Altitude

The rated power refers to installations up to 1,000 meters above sea level. For applications over this altitude, the following power correction factor must be applied:

Altitude (meters above sea level)	1,000	1,500	2,000	2,500	3,000	3,500	4,000
K factor	1	0.97	0.94	0.90	0.86	0.82	0.80

Ambient Temperature

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

Ambient temperature (°C)	40	45	50	55
K factor	1	0.95	0.92	0.88

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

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/Marine Environments

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

Insulation Class

WEG alternators have default H (180 °C) 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 IEC 60085.

Operation Duty

Continuous Power (COP)

(Ambient Temperature 40 °C / ΔT = 125 °C)

The alternator operates at rated power, in parallel with or independent of the grid, for an unlimited number of hours per year. The possibility of overload in this operation duty is not admissible.

Non Limited-Time Prime Power (PRP)

(Ambient Temperature 40 °C / ΔT = 125 °C)

The alternator operates with variable loads for an unlimited number of hours per year.

The permissible average power output shall not exceed 70% of the Prime Power.

Can operate with overload up to 10% for 1 hour every 12h, limited to 25h maximum per year.

Emergency Standby Power (ESP)

(Ambient Temperature 40 °C / ΔT = 150 °C)

The alternator operates as energy backup with variable loads in emergency situations in places where the energy is supplied by the utility company or another main power source.

The permissible average power output shall not exceed 70% of the Emergency Power and shall respect the maximum number of hours per year as defined by ISO 8528, IEC 60034 and NEMA MG1.

Emergency Standby Power (ESP)

Ambient Temperature 27 °C / ΔT = 163 °C

The condition is similar to the previous one.

However, the maximum ambient temperature accepted is 27 °C.

Manufacturing Processes

Manufacturing Resources

WEG has state-of-the-art equipment which is used in all manufacturing processes, from casting and stamping 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 considered, which ensures the quality and precision of the components manufactured.

Impregnation

Developed with the latest technology, the impregnation system by continuous flow and VPI (Vacuum Pressure Impregnation) are 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

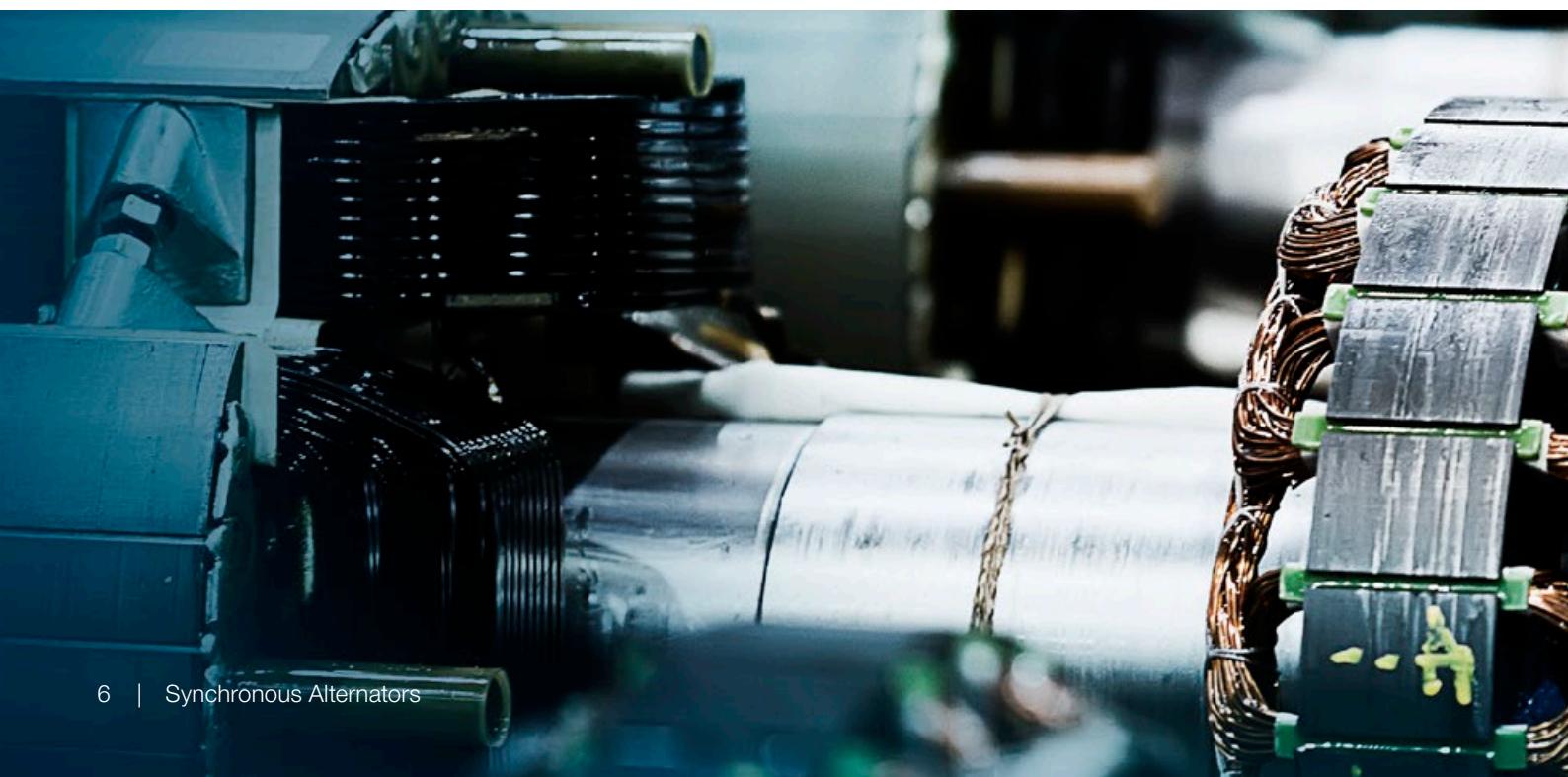
The rotating part (rotor) is dynamically balanced with greater precision than that required by the standard IEC 60034-part 14 or ISO 2372, ensuring minimum levels of residual unbalance.

Construction

WEG alternators are made according to the requirements of the standards NBR 5117, VDE 0530-part 1, IEC 60034-part 1. Using the best quality standards during manufacturing, the result is safe operation and great durability.

Mounting types normally supplied:

- B15T: single bearing with coupling disc and flange
- B35T: double bearing with flange
- B3T: double bearing without flange and coupling disc



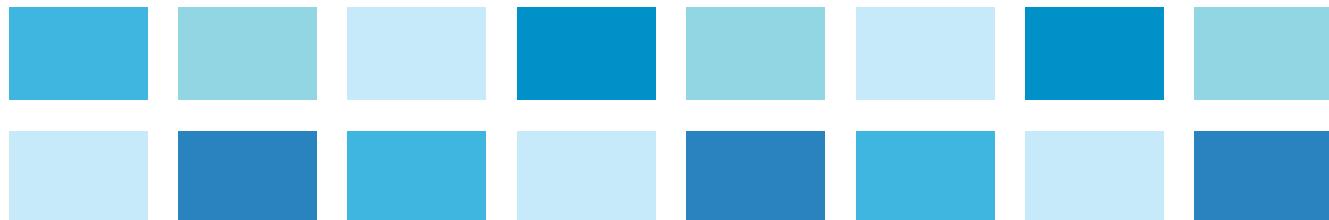
Automatic Voltage Regulators

Developed to reach maximum performance, the voltage regulators are encapsulated and can tolerate high vibration levels. Regulators are installed in the main terminal box and the performance is guaranteed in different applications, being protected against dust, salt and sand.

Applications and Technical Features

Excitation with auxiliary winding - I-PMG				External PMG		
Frame	160 - 200	250 - 315	355 - 400	200 - 355 (G Plus line)	200 - 315 (AG10 line)	355 - 400 (AG10 line)
Technical features ¹⁾						
Power supply	Single-phase	Single-phase	Single-phase	Three-phase	Single-phase	Single-phase
Sensing voltage connection	Single-phase	Single-phase	Single-phase	Three-phase	Single-phase	Single-phase
Operating rated current (A)	7	5	7	5	5	7
Peak current (máx. 10s) (A)	10	7	10	10	7	10
Analog input ±9 V dc	-	Standard	Standard	Standard	Standard	Standard
Analog input 0 up to 10 V dc	-	Optional	Optional	Standard	Standard	Standard
Digital input	-	Optional	Optional	Standard	Standard	Standard
Droop adjustment for parallel operation	-	Standard	Standard	Standard	Standard	Standard
Static control	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Adjustable dynamic response	8 up to 500ms	8 up to 500ms	8 up to 500ms			
Underfrequency protection (U/F)	Standard	Standard	Standard	Standard	Standard	Standard
Internal voltage adjustment	±15%	±15%	±15%	±15%	±15%	±15%
External voltage adjustment	±10%	±10%	±10%	±10%	±10%	±10%
Parallelism TC signal	-	5 A	5 A	5 A	5 A	5 A
EMI suppression	Standard	Standard	Standard	Standard	Standard	Standard

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





Operating Characteristics

Standard Protection Rate

The alternators are mechanically protected against finger touch, solid foreign bodies of diameter over 12 mm and against spraying water which is the protection rate IP23 as per standard IEC 60034-part 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 excitation current. A fuse in series with auxiliary winding installed into terminal box or in the voltage regulator protects the alternator against several abnormal situations during operation, such as:

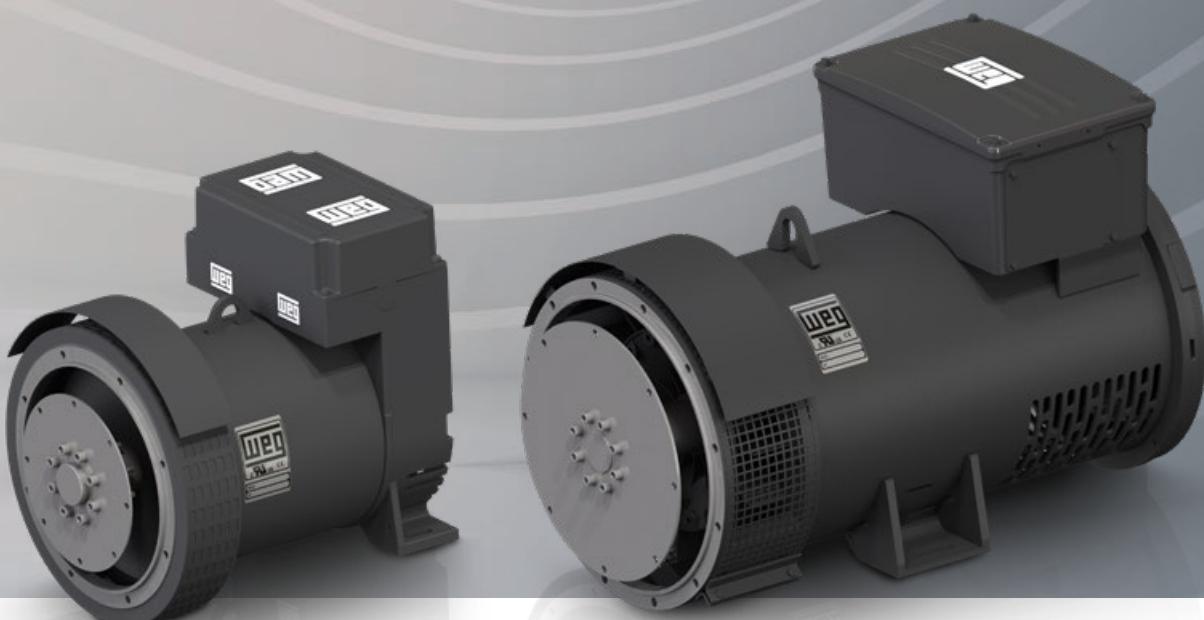
- Reference loss
- Connection of the auxiliary coil in short circuit
- Output connection of the regulator in short circuit
- Operation in low speed
- Damages to the voltage regulator

Excitation with Auxiliary Coil (I-PMG)

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 of voltage in the alternator terminals or load variation during operation.

The auxiliary coil is standard in all power range of the G Plus and AG10 lines (low voltage 4 poles).



Operating Characteristics

Main Exciter Stator

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

Excitation with External PMG

As an option, WEG alternators line allows the use of an auxiliary exciter with permanent magnets (external 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 (anti-condensation)
- Current transformer
- Double bearing B35T or B3T
- Auxiliary exciter (external PMG)
- Protection IP23W, IP44, IP44W, IP54, IP54W, IP55, IP55W
- Special coating scheme (custom color)

Nomenclature G Plus Line

G T A 16 1 A I SR

ALTERNATOR LINE

G - Synchronous Machine – G Plus Line

EXCITATION CHARACTERISTIC

T - Brushless alternator with auxiliary coil (I-PMG)

P - Brushless alternator with auxiliary exciter (PMG)

S - Brushless alternator without auxiliary coil and without auxiliary exciter (Shunt)

COOLING TYPE

A - Open self-ventilation (standard)

F - Closed with air-to-air heat exchanger (upon request)

W - Closed with air-to-water heat exchanger (upon request)

K - Totally enclosed with fins (upon request)

IEC FRAME

16 - Frame 160

20 - Frame 200 ...

FRAME LENGTH

1 - Short frame

2 - Medium frame

3 - Large frame

VOLTAGE

A - Three-phase - 12 leads - 480/240 V - 440/220 V - 380/190 V - 208 V (60 Hz)
400/200 V - 380/190 V (50 Hz)

C - Three-phase - 6 leads - 380 V/60 Hz

D - Three-phase - 6 leads - 440 V/60 Hz or 380 V/50 Hz

E - Three-phase - 6 leads - 480 V/60 Hz or 400 V/50 Hz

F - Three-phase - 6 leads - 600 V/60 Hz or 575 V/60 Hz

G - Three-phase - 6 leads - 208 V/60 Hz

H - Three-phase - 6 leads - 415 V/50 Hz

P - Three-phase - 12 leads - 415/240/208/120 V (50 Hz)

Z - Other voltage

APPLICATION

I - Industrial

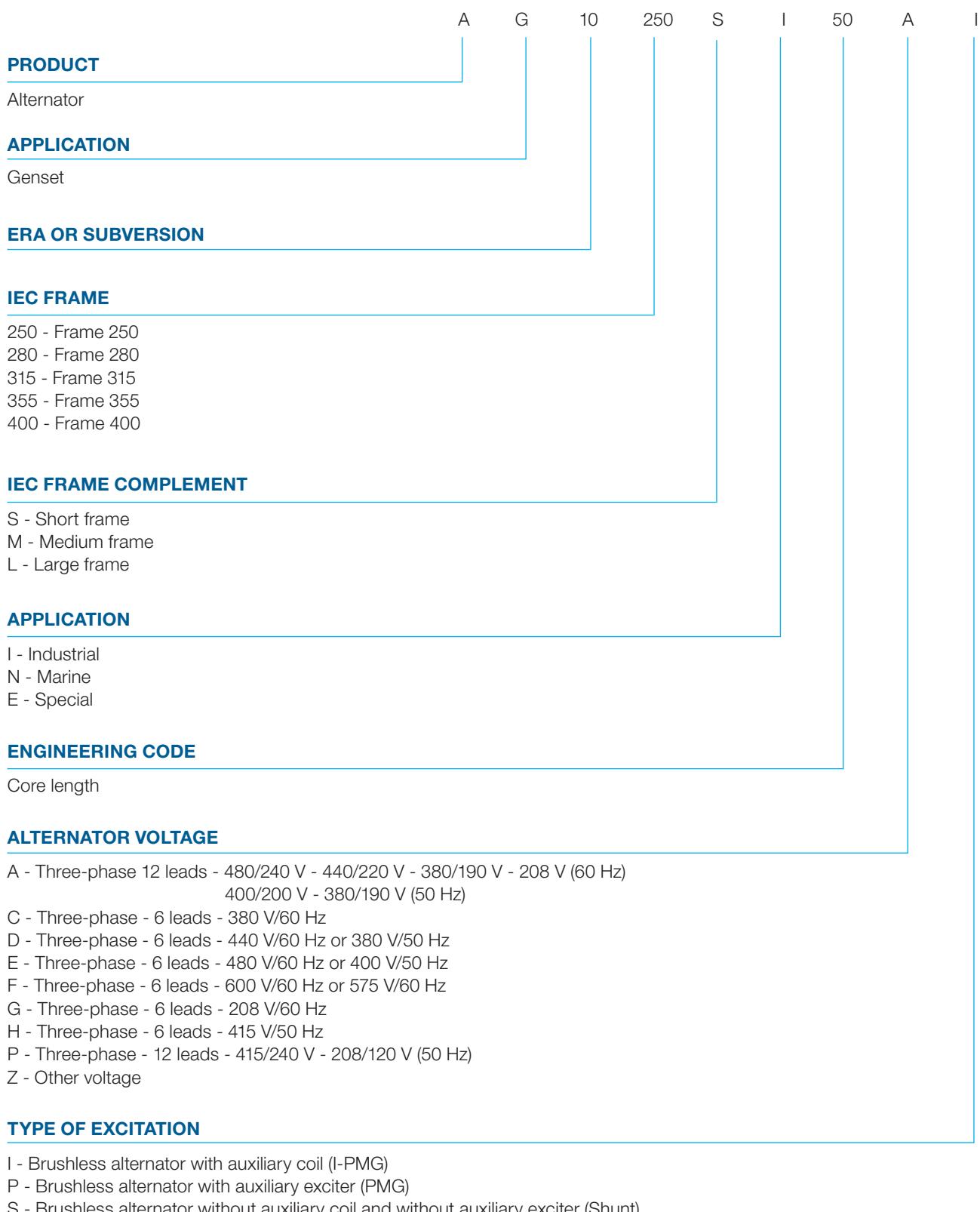
N - Marine

E - Special

COMPLEMENTARY CODE

Core length

Nomenclature AG10 Line



12 Leads / 4 Poles

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

Line	Model	480 V - Y / 240 V - YY					440 V - Y / 220 V - YY					
		ΔT	80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	161AISR	kVA	12.3	14.1	15.4	15.9	15.9	11.0	12.6	13.7	14.7	15.3
		kW	9.8	11.3	12.3	12.7	12.7	8.8	10.1	11.0	11.8	12.2
	161AIHS	kVA	14.6	16.8	18.3	19.6	20.3	14.0	16.0	17.5	18.7	20.0
		kW	11.7	13.4	14.6	15.7	16.2	11.2	12.8	14.0	15.0	16.0
	161AIHH	kVA	16.9	19.4	21.1	22.6	23.5	15.5	17.7	19.3	20.7	21.5
		kW	13.5	15.5	16.9	18.1	18.8	12.4	14.2	15.4	16.6	17.2
	161AIHI	kVA	20.8	23.8	26.0	28.5	29.7	20.2	23.2	25.3	27.1	28.1
		kW	16.6	19.0	20.8	22.8	23.8	16.2	18.6	20.2	21.7	22.5
	161AIHJ	kVA	21.8	25.0	27.3	30.0	31.1	20.1	23.0	27.0	28.0	29.0
		kW	17.4	20.0	21.8	24.0	24.9	16.1	18.4	21.6	22.4	23.2
	162AIVD	kVA	25.9	29.7	42.0	44.0	46.0	29.4	33.7	42.0	44.0	46.0
		kW	20.7	23.8	33.6	35.2	36.8	23.5	27.0	33.6	35.2	36.8
	201AIHS	kVA	43.4	49.7	54.3	59.5	62.0	40.8	46.7	51.0	55.8	58.2
		kW	34.7	39.8	43.4	47.6	49.6	32.6	37.4	40.8	44.6	46.6
	201AIHV	kVA	56.4	64.6	70.5	77.2	81.0	54.5	62.4	68.1	72.8	75.7
		kW	45.1	51.7	56.4	61.8	64.8	43.6	49.9	54.5	58.2	60.6
	201AIHB	kVA	68.5	78.5	85.6	92.2	92.2	60.4	69.2	75.5	80.7	85.0
		kW	54.8	62.8	68.5	73.8	73.8	48.3	55.4	60.4	64.6	68.0
	201AIHE	kVA	66.1	75.7	88.0	95.0	97.0	66.0	75.6	88.0	95.0	97.0
		kW	52.9	60.6	70.4	76.0	77.6	52.8	60.5	70.4	76.0	77.6
	202AIVS	kVA	88.0	101.0	110.0	116.0	120.0	82.0	94.0	103.0	112.0	115.0
		kW	70.4	80.8	88.0	92.8	96.0	65.6	75.2	82.4	89.6	92.0
	202AIVJ	kVA	107.2	122.8	141.0	144.0	150.0	105.4	120.7	141.0	144.0	150.0
		kW	85.8	98.2	112.8	115.2	120.0	84.3	96.6	112.8	115.2	120.0
	251AIHD	kVA	140	161	175	188	189	137	157	171	183	190
		kW	112	129	140	150	151	110	126	137	146	152
	251AIHE	kVA	180	206	225	243	252	171	196	214	230	240
		kW	144	165	180	194	202	137	157	171	184	192
AG10	250SI50AI	kVA	208	238	260	290	295	186	217	233	250	260
		kW	166	190	208	232	236	149	174	186	200	208
	250MI60AI	kVA	250	288	312	345	360	234	268	292	315	330
		kW	200	230	250	276	288	187	214	234	252	264
	250MI70AI	kVA	292	335	365	400	417	256	293	325	347	380
		kW	234	268	292	320	334	205	234	260	278	304
	250MI80AI	kVA	324	371	405	460	470	302	346	377	412	450
		kW	259	297	324	368	376	241	276	302	330	360
	280MI50AI	kVA	378	440	472	517	550	352	403	440	477	505
		kW	302	352	378	414	440	282	323	352	381	404
	280MI60AI	kVA	412	472	515	550	580	380	440	475	515	533
		kW	330	378	412	440	464	304	352	380	412	426
	280MI70AI	kVA	456	510	570	600	650	412	485	515	560	588
		kW	365	408	456	480	520	330	388	412	448	470
	280MI80AI	kVA	484	565	605	650	691	456	520	570	600	650
		kW	387	452	484	520	553	365	416	456	480	520
	315MI50AI	kVA	520	596	650	700	750	480	563	600	645	670
		kW	416	477	520	560	600	384	450	480	516	536
	315MI60AI	kVA	570	650	710	780	825	530	605	660	725	770
		kW	456	520	568	624	660	424	484	528	580	616
	315MI70AI	kVA	642	736	803	875	906	600	700	750	813	844
		kW	514	589	642	700	725	480	560	600	650	675
	315LI80AI	kVA	740	850	925	1010	1056	672	770	840	920	958
		kW	592	680	740	808	845	538	616	672	736	766
	315LI90AI	kVA	832	953	1040	1100	1160	768	880	960	1020	1060
		kW	666	763	832	880	928	614	704	768	816	848
	355MI65AI	kVA	1000	1146	1250	1310	1380	920	1054	1150	1200	1300
		kW	800	917	1000	1048	1104	736	843	920	960	1040
	355MI70AI	kVA	1120	1283	1400	1450	1520	1024	1173	1280	1400	1480
		kW	896	1026	1120	1160	1216	819	938	1024	1120	1184
	355MI80AI	kVA	1280	1466	1600	1660	1720	1168	1338	1460	1600	1670
		kW	1024	1173	1280	1328	1376	934	1070	1168	1280	1336
	355MI90AI	kVA	1440	1650	1800	1950	2000	1336	1531	1670	1790	1850
		kW	1152	1320	1440	1560	1600	1069	1225	1336	1432	1480

Notes: $\Delta T = 163$ °C, ambient temperature = 27 °C. For the other ΔT , ambient temperature = 40 °C.

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

12 Leads / 4 Poles

416 / 208 V (60 Hz) | 380 / 190 V (60 Hz) | 0.8 P.F.

Line	Model	ΔT	416 V - Y / 208 V - YY					380 V - Y / 190 V - YY				
			80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	161AISR	KVA	10.6	12.2	13.2	14.2	14.8	10.1	11.6	12.6	13.5	14.0
		KW	8.5	9.8	10.6	11.4	11.8	8.1	9.3	10.1	10.8	11.2
	61AIHS	KVA	13.2	15.0	16.4	17.6	18.6	12.0	13.7	14.9	16.0	16.6
		KW	10.5	12.0	13.1	14.1	14.9	9.6	11.0	11.9	12.8	13.3
	161AIHH	KVA	14.5	16.6	18.1	19.4	20.2	13.2	15.1	16.5	17.6	18.3
		KW	11.6	13.3	14.5	15.5	16.1	10.6	12.1	13.2	14.1	14.6
	161AIHI	KVA	18.4	21.1	23.0	24.6	25.5	15.9	18.2	19.9	21.3	22.1
		KW	14.7	16.8	18.4	19.7	20.4	12.7	14.6	15.9	17.0	17.7
	161AIHJ	KVA	19.1	21.9	25.3	26.8	27.8	17.7	20.3	23.0	25.0	26.0
		KW	15.3	17.5	20.3	21.4	22.2	14.2	16.2	18.4	20.0	20.8
	162AIVD	KVA	27.7	31.8	41.2	42.4	44.4	25.4	29.1	40.0	40.0	42.0
		KW	22.2	25.4	33.0	33.9	35.5	20.3	23.3	32.0	32.0	33.6
	201AIHS	KVA	38.5	44.0	48.1	52.6	54.9	35.2	40.3	44.0	48.2	50.2
		KW	30.8	35.2	38.5	42.1	43.9	28.2	32.2	35.2	38.6	40.2
	201AIHV	KVA	51.5	59.0	64.3	68.8	73.8	47.3	54.2	59.1	63.2	71.0
		KW	41.2	47.2	51.5	55.0	59.0	37.8	43.4	47.3	50.6	56.8
	201AIHB	KVA	58.9	67.5	73.7	78.7	82.5	56.8	65.1	71.0	75.9	78.9
		KW	47.1	54.0	58.9	63.0	66.0	45.4	52.1	56.8	60.7	63.1
	201AIHE	KVA	64.4	73.8	84.7	90.0	92.6	62.1	71.2	80.0	83.0	86.4
		KW	51.5	59.0	67.8	72.0	74.1	49.7	57.0	64.0	66.4	69.1
	202AIVS	KVA	77.8	89.4	97.6	105.7	108.7	72.0	83.0	90.0	97.0	100.0
		KW	62.3	71.5	78.1	84.6	87.0	57.6	66.4	72.0	77.6	80.0
	202AIVJ	KVA	100.6	115.2	133.5	137.8	144.2	93.8	107.5	123.0	129.0	136.0
		KW	80.5	92.2	106.8	110.2	115.4	75.0	86.0	98.4	103.2	108.8
	251AIHD	KVA	125	144	159	169	176	110	127	142	149	156
		KW	100	115	127	135	141	88	102	114	119	125
	251AIHE	KVA	164	188	205	220	229	154	176	192	205	214
		KW	131	150	164	176	183	123	141	154	164	171
AG10	250SI50AI	KVA	180	206	225	246	255	168	190	210	230	240
		KW	144	165	180	197	204	134	152	168	184	192
	250MI60AI	KVA	223	255	278	298	312	205	235	260	275	290
		KW	178	204	223	239	250	164	188	208	220	232
	250MI70AI	KVA	257	294	321	344	376	244	288	305	330	360
		KW	205	235	257	275	300	195	230	244	264	288
	250MI80AI	KVA	283	324	354	394	416	260	298	325	364	380
		KW	226	259	283	315	332	208	238	260	291	304
	280MI50AI	KVA	329	377	412	461	488	302	350	378	435	460
		KW	264	302	329	369	391	242	280	302	348	368
	280MI60AI	KVA	362	414	452	486	506	336	395	420	450	468
		KW	289	331	362	389	405	269	316	336	360	374
	280MI70AI	KVA	396	453	494	535	565	368	425	460	500	525
		KW	316	363	396	428	452	294	340	368	400	420
	280MI80AI	KVA	431	493	538	582	614	400	450	500	550	571
		KW	345	395	431	465	492	320	360	400	440	457
	315MI50AI	KVA	454	520	568	611	637	420	481	525	565	585
		KW	363	416	454	489	510	336	385	420	452	468
	315MI60AI	KVA	500	573	625	697	728	465	535	580	655	675
		KW	400	458	500	558	582	372	428	464	524	540
	315MI70AI	KVA	582	667	728	794	817	553	633	691	757	773
		KW	466	533	582	635	653	442	507	553	606	618
	315LI80AI	KVA	649	743	811	876	926	608	710	760	810	868
		KW	519	595	649	700	741	486	568	608	648	694
	315LI90AI	KVA	720	825	900	948	990	660	756	825	863	900
		KW	576	660	720	758	792	528	605	660	690	720
	355MI65AI	KVA	869	995	1086	1137	1205	800	917	1000	1050	1100
		KW	695	796	869	910	964	640	734	800	840	880
	355MI70AI	KVA	984	1128	1230	1345	1396	920	1054	1150	1280	1310
		KW	787	902	984	1076	1117	736	843	920	1024	1048
	355MI80AI	KVA	1118	1281	1397	1531	1577	1040	1191	1300	1450	1480
		KW	894	1025	1118	1225	1262	832	953	1040	1160	1184
	355MI90AI	KVA	1240	1421	1550	1687	1757	1128	1292	1410	1550	1630
		KW	992	1137	1240	1350	1406	902	1034	1128	1240	1304

Notes: $\Delta T = 163^{\circ}\text{C}$, ambient temperature = 27°C . For the other ΔT , ambient temperature = 40°C .

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

12 Leads / 4 Poles

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

Line	Model	400 V - Y / 200 V - YY					380 V - Y / 190 V - YY					
		ΔT	80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	161AISR	kVA	9.0	10.0	11.0	11.3	11.5	9.0	10.0	11.0	11.3	11.5
	161AISR	kW	7.2	8.0	8.8	9.1	9.2	7.2	8.0	8.8	9.1	9.2
	161AIHS	kVA	11.0	13.0	14.0	15.0	15.5	11.0	13.0	14.0	15.0	15.5
	161AIHS	kW	8.8	10.4	11.2	12.0	12.4	8.8	10.4	11.2	12.0	12.4
	161AIHH	kVA	12.5	14.5	16.0	17.0	17.5	12.5	14.5	16.0	17.0	17.5
	161AIHH	kW	10.0	11.6	12.8	13.6	14.0	10.0	11.6	12.8	13.6	14.0
	161AIHI	kVA	14.5	17.0	19.0	19.5	20.5	14.5	17.0	19.0	19.5	20.5
	161AIHI	kW	11.6	13.6	15.2	15.6	16.4	11.6	13.6	15.2	15.6	16.4
	161AIHJ	kVA	16.0	18.0	23.0	23.5	24.0	16.0	18.0	23.0	23.5	24.0
	161AIHJ	kW	12.8	14.4	18.4	18.8	19.2	12.8	14.4	18.4	18.8	19.2
	162AIVD	kVA	21.0	24.0	27.0	29.0	31.0	21.0	24.0	27.0	29.0	31.0
	162AIVD	kW	16.8	19.2	21.6	23.2	24.8	16.8	19.2	21.6	23.2	24.8
	201AIHS	kVA	33.0	37.5	41.0	45.0	47.0	33.0	37.5	41.0	45.0	47.0
	201AIHS	kW	26.4	30.0	32.8	36.0	37.6	26.4	30.0	32.8	36.0	37.6
	201AIHV	kVA	42.0	48.5	53.0	56.0	57.5	42.0	48.5	53.0	56.0	57.5
	201AIHV	kW	33.6	38.8	42.4	44.8	46.0	33.6	38.8	42.4	44.8	46.0
	201AIHB	kVA	48.0	53.0	60.0	62.0	63.0	48.0	53.0	60.0	62.0	63.0
	201AIHB	kW	38.4	42.4	48.0	49.6	50.4	38.4	42.4	48.0	49.6	50.4
	201AIHE	kVA	51.0	59.0	70.0	72.0	74.0	51.0	59.0	70.0	72.0	74.0
	201AIHE	kW	40.8	47.2	56.0	57.6	59.2	40.8	47.2	56.0	57.6	59.2
	202AIVS	kVA	66.0	76.0	83.0	88.0	91.0	66.0	76.0	83.0	88.0	91.0
	202AIVS	kW	52.8	60.8	66.4	70.4	72.8	52.8	60.8	66.4	70.4	72.8
	202AIVJ	kVA	76.0	86.0	100.0	106.0	108.0	76.0	86.0	100.0	106.0	108.0
	202AIVJ	kW	60.8	68.8	80.0	84.8	86.4	60.8	68.8	80.0	84.8	86.4
	251AIHD	kVA	110	126	140	145	150	110	126	140	145	150
	251AIHD	kW	88	101	112	116	120	88	101	112	116	120
	251AIHE	kVA	143	164	180	196	206	128	147	160	165	170
	251AIHE	kW	114	131	144	157	165	102	118	128	132	136
AG10	250SI50AI	kVA	168	192	210	230	240	168	192	210	230	240
	250SI50AI	kW	134	154	168	184	192	134	154	168	184	192
	250MI60AI	kVA	200	229	250	260	277	200	229	250	260	277
	250MI60AI	kW	160	183	200	208	222	160	183	200	208	222
	250MI70AI	kVA	220	252	275	291	300	220	252	275	291	300
	250MI70AI	kW	176	202	220	233	240	176	202	220	233	240
	250MI80AI	kVA	260	298	325	340	350	260	298	325	350	360
	250MI80AI	kW	208	238	260	272	280	208	238	260	280	288
	280MI50AI	kVA	288	330	360	365	370	288	330	360	365	385
	280MI50AI	kW	230	264	288	292	296	230	264	288	292	308
	280MI60AI	kVA	328	376	410	450	470	320	367	400	430	450
	280MI60AI	kW	262	301	328	360	376	256	293	320	344	360
	280MI70AI	kVA	360	412	450	480	500	340	390	425	445	460
	280MI70AI	kW	288	330	360	384	400	272	312	340	356	368
	280MI80AI	kVA	400	458	500	548	571	400	458	500	530	550
	280MI80AI	kW	320	367	400	438	457	320	367	400	424	440
	315MI50AI	kVA	440	504	550	590	610	440	504	550	570	590
	315MI50AI	kW	352	403	440	472	488	352	403	440	456	472
	315MI60AI	kVA	480	550	600	650	685	480	550	600	650	685
	315MI60AI	kW	384	440	480	520	548	384	440	480	520	548
	315MI70AI	kVA	520	596	650	715	740	520	596	650	715	740
	315MI70AI	kW	416	477	520	572	592	416	477	520	572	592
	315LI80AI	kVA	600	687	750	822	856	600	687	750	822	856
	315LI80AI	kW	480	550	600	657	685	480	550	600	657	685
	315LI90AI	kVA	664	761	830	890	920	640	733	800	865	890
	315LI90AI	kW	531	609	664	712	736	512	587	640	692	712
	355MI65AI	kVA	800	917	1000	1050	1100	760	871	950	1000	1050
	355MI65AI	kW	640	734	800	840	880	608	697	760	800	840
	355MI70AI	kVA	880	1008	1100	1150	1200	840	962	1050	1100	1150
	355MI70AI	kW	704	806	880	920	960	672	770	840	880	920
	355MI80AI	kVA	1040	1191	1300	1400	1450	1000	1146	1250	1300	1350
	355MI80AI	kW	832	953	1040	1120	1160	800	917	1000	1040	1080
	355MI90AI	kVA	1184	1356	1480	1600	1650	1120	1283	1400	1500	1550
	355MI90AI	kW	947	1085	1184	1280	1320	896	1026	1120	1200	1240

Notes: $\Delta T = 163^{\circ}\text{C}$, ambient temperature = 27°C . For the other ΔT , ambient temperature = 40°C .

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

Three-Phase Alternators with Single-Phase Connection 12 Leads / 4 Poles

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

Line	Model	ΔT	60 Hz / 200 - 240 V ¹⁾					50 Hz / 190 - 200 V ¹⁾				
			80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	161AISR	kVA	6.5	7.5	8.5	9.0	9.5	4.5	5.5	6.1	6.5	6.5
	161AIHS	kVA	8.0	9.0	10.1	11.0	11.5	6.0	7.0	8.1	8.5	9.0
	161AIHH	kVA	9.0	10.5	11.6	12.5	13.0	7.0	8.0	8.8	9.5	10.0
	161AIHI	kVA	11.0	13.0	14.3	15.5	16.0	8.0	9.5	10.5	11.0	11.5
	161AIHJ	kVA	12.0	13.5	15.0	16.0	17.0	10.0	11.5	12.7	13.5	14.0
	162AIVD	kVA	18.0	21.0	23.1	25.0	26.0	12.0	14.0	15.6	17.0	19.0
	201AIHS	kVA	23.9	27.4	29.9	32.8	34.1	18.9	21.7	23.7	25.9	27.0
	201AIHV	kVA	31.0	35.5	38.8	42.5	44.3	23.3	26.7	29.2	31.9	33.3
	201AIHB	kVA	37.7	43.1	47.1	51.6	53.8	26.4	30.2	33.0	36.1	37.7
	201AIHE	kVA	38.7	44.4	48.4	53.0	55.3	32.3	36.9	40.4	44.3	46.1
	202AIVS	kVA	48.0	55.0	59.0	65.0	66.0	39.3	45.0	47.9	52.0	54.0
	202AIVJ	kVA	62.0	71.1	77.5	85.0	88.6	46.2	52.9	57.7	63.2	65.9
	251AIHD	kVA	77	88	96	105	110	62	71	77	84	88
	251AIHE	kVA	99	113	124	135	141	74	85	92	101	105
AG10	250SI50AI	kVA	108	125	135	144	150	97	111	121	133	139
	250MI60AI	kVA	135	155	169	182	188	115	132	144	150	160
	250MI70AI	kVA	148	169	188	200	219	127	146	159	168	173
	250MI80AI	kVA	174	199	218	238	260	150	172	188	202	208
	280MI50AI	kVA	203	233	254	275	292	166	190	208	211	222
	280MI60AI	kVA	219	254	274	297	308	185	212	231	248	260
	280MI70AI	kVA	238	280	297	323	340	196	225	245	257	266
	280MI80AI	kVA	263	300	329	346	375	231	265	289	306	318
	315MI50AI	kVA	277	325	346	372	387	254	291	318	329	341
	315MI60AI	kVA	306	349	381	419	444	277	317	346	375	396
	315MI70AI	kVA	346	404	433	469	487	300	344	375	413	427
	315LI80AI	kVA	388	445	485	531	553	346	397	433	474	494
	315LI90AI	kVA	443	508	554	589	612	370	423	462	499	514

Notes: 1) Voltages for SINGLE-PHASE ZIGZAG PARALLEL or SINGLE-PHASE DELTA DOUBLE connection.

$\Delta T = 163 \text{ }^{\circ}\text{C}$, ambient temperature = $27 \text{ }^{\circ}\text{C}$. For the other ΔT , ambient temperature = $40 \text{ }^{\circ}\text{C}$.

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

6 Leads / 4 Poles

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

Line	Model	ΔT	380 V - Y / 220 V - Δ				
			80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	201CIHV	kVA	54.5	62.4	68.1	72.8	75.7
		kW	43.6	49.9	54.5	58.2	60.6
	201CIHB	kVA	60.4	69.2	75.5	80.7	85.0
		kW	48.3	55.4	60.4	64.6	68.0
	201CIHE	kVA	66.0	75.6	88.0	95.0	97.0
		kW	52.8	60.5	70.4	76.0	77.6
	202CIVJ	kVA	105.4	120.7	141.0	144.0	150.0
		kW	84.3	96.6	112.8	115.2	120.0
	251CIHD	kVA	137	157	171	183	190
		kW	109	125	137	146	152
	251CIHE	kVA	171	196	214	230	240
		kW	137	157	171	184	192
AG10	250SI50CI	kVA	208	238	260	290	295
		kW	166	191	208	232	236
	250MI60CI	kVA	250	288	312	345	360
		kW	200	230	250	276	288
	250MI70CI	kVA	292	335	365	400	417
		kW	234	268	292	320	334
	250MI80CI	kVA	324	371	405	460	470
		kW	259	297	324	368	376
	280MI50CI	kVA	378	440	472	517	550
		kW	302	346	378	414	440
	280MI60CI	kVA	412	472	515	550	580
		kW	330	378	412	440	464
	280MI70CI	kVA	456	510	570	600	650
		kW	365	408	456	480	520
	280MI80CI	kVA	484	565	605	650	691
		kW	387	452	484	520	553
	315MI50CI	kVA	520	596	650	700	750
		kW	416	477	520	560	600
	315MI60CI	kVA	570	650	710	800	825
		kW	456	520	568	640	660
	315MI70CI	kVA	642	736	803	875	906
		kW	514	589	642	700	725
	315LI80CI	kVA	740	850	925	1010	1056
		kW	592	680	740	808	845
	315LI90CI	kVA	832	953	1040	1100	1160
		kW	666	763	832	880	928
G Plus	352CIZS	kVA	883	1019	1140	1200	1260
		kW	706	815	912	960	1008
	352CIVYS	kVA	968	1118	1250	1265	1319
		kW	774	894	1000	1012	1055
AG10	355MI70CI	kVA	1120	1283	1400	1450	1520
		kW	896	1026	1120	1160	1216
	355MI75CI	kVA	1220	1398	1525	1580	1650
		kW	976	1118	1220	1264	1320
	355MI80CI	kVA	1280	1466	1600	1660	1720
		kW	1024	1173	1280	1328	1376
	355MI90CI	kVA	1440	1650	1800	1950	2000
		kW	1152	1320	1440	1560	1600
	400MI80CI	kVA	1520	1741	1900	2000	2050
		kW	1216	1393	1520	1600	1640
	400MI85CI	kVA	1632	1870	2040	2100	2200
		kW	1306	1496	1632	1680	1760
	400MI90CI	kVA	1720	1971	2150	2355	2455
		kW	1376	1577	1720	1884	1964

Notes: $\Delta T = 163$ °C, ambient temperature = 27 °C. For the other ΔT , ambient temperature = 40 °C.

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

6 Leads / 4 Poles

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

Line	Model	ΔT	60 Hz / 440 V - Y / 254 V - Δ					50 Hz / 380 V - Y / 220 V - Δ				
			80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
AG10	250SI50DI	KVA	208	238	260	290	295	168	192	210	230	240
		KW	166	191	208	232	236	134	154	168	184	192
	250MI60DI	KVA	250	288	312	345	360	200	229	250	260	277
		KW	200	230	250	276	288	160	183	200	208	222
	250MI70DI	KVA	292	335	365	400	417	220	252	275	291	300
		KW	234	268	292	320	334	176	202	220	233	240
	250MI80DI	KVA	324	371	405	460	470	260	298	325	340	350
		KW	259	297	324	368	376	208	238	260	272	280
	280MI50DI	KVA	378	440	472	517	550	288	330	360	365	370
		KW	302	352	378	414	440	230	264	288	292	296
	280MI60DI	KVA	412	472	515	550	580	328	376	410	450	470
		KW	330	378	412	440	464	262	301	328	360	376
	280MI70DI	KVA	456	510	570	600	650	360	412	450	480	500
		KW	365	408	456	480	520	288	330	360	384	400
	280MI80DI	KVA	484	565	605	650	691	400	458	500	548	571
		KW	387	452	484	520	553	320	367	400	438	457
G Plus	315MI50DI	KVA	520	596	650	700	750	440	504	550	590	610
		KW	416	477	520	560	600	352	403	440	472	488
	315MI60DI	KVA	570	650	710	780	825	480	550	600	650	685
		KW	456	520	568	624	660	384	440	480	520	548
	315MI70DI	KVA	642	736	803	875	906	520	596	650	715	740
		KW	514	589	642	700	725	416	477	520	572	592
	315LI80DI	KVA	740	850	925	1010	1056	600	687	750	822	856
		KW	592	680	740	808	845	480	550	600	657	685
	315LI90DI	KVA	832	953	1040	1100	1160	664	761	830	890	920
		KW	666	763	832	880	928	531	609	664	712	736
AG10	352DIZS	KVA	883	1019	1140	1200	1260	729	842	942	949	989
		KW	706	815	912	960	1008	583	674	754	759	791
	352DIYS	KVA	968	1118	1250	1265	1319	787	909	1017	1024	1068
		KW	774	894	1000	1012	1055	630	727	814	819	854
	355MI80DI	KVA	1168	1338	1460	1600	1670	1040	1190	1300	1350	1400
		KW	934	1070	1168	1280	1336	832	952	1040	1080	1120
	355MI90DI	KVA	1320	1512	1650	1790	1850	1120	1283	1400	1450	1500
		KW	1056	1210	1320	1432	1480	896	1026	1120	1160	1200
AG10	400MI75DI	KVA	1400	1604	1750	1800	1900	1160	1329	1450	1500	1550
		KW	1120	1283	1400	1440	1520	928	1063	1160	1200	1240
	400MI80DI	KVA	1520	1741	1900	1950	2000	1200	1375	1500	1550	1600
		KW	1216	1393	1520	1560	1600	960	1100	1200	1240	1280
	400MI85DI	KVA	1560	1787	1950	2050	2150	1240	1421	1550	1600	1680
		KW	1248	1430	1560	1640	1720	992	1137	1240	1280	1344
G Plus	400MI90DI	KVA	1600	1833	2000	2150	2250	1320	1512	1650	1800	1850
		KW	1280	1466	1600	1720	1800	1056	1210	1320	1440	1480

Notes: $\Delta T = 163$ °C, ambient temperature = 27 °C. For the other ΔT , ambient temperature = 40 °C.

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

6 Leads / 4 Poles

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

Line	Model	60 Hz / 480 V - Y					50 Hz / 400 V - Y					
		ΔT	80 °C	105 °C	125 °C	150 °C	163 °C	80 °C	105 °C	125 °C	150 °C	163 °C
A _G 10	250SI50EI	kVA	208	238	260	290	295	168	192	210	230	240
		kW	166	191	208	232	236	134	154	168	184	192
	250MI60EI	kVA	250	288	312	345	360	200	229	250	260	277
		kW	200	230	250	276	288	160	183	200	208	222
	250MI70EI	kVA	292	335	365	400	417	220	252	275	291	300
		kW	234	268	292	320	334	176	202	220	233	240
	250MI80EI	kVA	324	371	405	460	470	260	298	325	340	350
		kW	259	297	324	368	376	208	238	260	272	280
	280MI50EI	kVA	378	440	472	517	550	288	330	360	365	370
		kW	302	352	378	414	440	230	264	288	292	296
	280MI60EI	kVA	412	472	515	550	580	328	376	410	450	470
		kW	330	378	412	440	464	262	301	328	360	376
	280MI70EI	kVA	456	510	570	600	650	360	412	450	480	500
		kW	365	408	456	480	520	288	330	360	384	400
	280MI80EI	kVA	484	565	605	650	691	400	458	500	548	571
		kW	387	452	484	520	553	320	367	400	438	457
	315MI50EI	kVA	520	596	650	700	750	440	504	550	590	610
		kW	416	477	520	560	600	352	403	440	472	488
	315MI60EI	kVA	570	650	710	780	825	480	550	600	650	685
		kW	456	520	568	624	660	384	440	480	520	548
	315MI70EI	kVA	642	736	803	875	906	520	596	650	715	740
		kW	514	589	642	700	725	416	477	520	572	592
	315LI80EI	kVA	740	850	925	1010	1056	600	687	750	822	856
		kW	592	680	740	808	845	480	550	600	657	685
	315LI90EI	kVA	832	953	1040	1100	1160	664	761	830	890	920
		kW	666	763	832	880	928	531	609	664	712	736
G Plus	352EI2S	kVA	883	1019	1140	1200	1260	729	842	942	949	989
		kW	706	815	912	960	1008	583	674	754	759	791
	352EIYS	kVA	968	1118	1250	1265	1319	787	909	1017	1024	1068
A _G 10	355MI70EI	kVA	1120	1283	1400	1450	1520	920	1054	1150	1200	1285
		kW	896	1026	1120	1160	1216	736	843	920	960	1028
	355MI80EI	kVA	1280	1466	1600	1660	1720	1008	1155	1260	1315	1375
		kW	1024	1173	1280	1328	1376	806	924	1008	1052	1100
	355MI90EI	kVA	1440	1650	1800	1950	2000	1200	1375	1500	1600	1650
		kW	1152	1320	1440	1560	1600	960	1100	1200	1280	1320
	400MI80EI	kVA	1520	1741	1900	2000	2050	1240	1421	1550	1615	1660
		kW	1216	1393	1520	1600	1640	992	1137	1240	1292	1328
A _G 10	400MI85EI	kVA	1632	1870	2040	2100	2200	1320	1512	1650	1720	1800
		kW	1306	1496	1632	1680	1760	1056	1210	1320	1376	1440
	400MI90EI	kVA	1720	1971	2150	2355	2455	1400	1604	1750	1900	1950
		kW	1376	1577	1720	1884	1964	1120	1283	1400	1520	1560

Notes: $\Delta T = 163$ °C, ambient temperature = 27 °C. For the other ΔT , ambient temperature = 40 °C.

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Alternators frame 400 are able to operate at 480/440/380 V - 60 Hz and 400/380 V - 50 Hz. Outputs according to datasheets.

Data subject to change without prior notice.

For other voltages, please contact WEG.

6 Leads / 4 Poles

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

Line	Model	600 V - Y / 346 V - Δ					
		ΔT	80 °C	105 °C	125 °C	150 °C	163 °C
G Plus	161FISR	kVA	11.0	12.6	13.7	14.7	15.3
		KW	8.8	10.1	11.0	11.8	12.2
	161FIHS	kVA	14.0	16.0	17.5	18.7	20.0
		KW	11.2	12.8	14.0	15.0	16.0
	161FIHH	kVA	15.5	17.7	19.3	20.7	21.5
		KW	12.4	14.2	15.4	16.6	17.2
	161FIHI	kVA	20.2	23.2	25.3	27.1	28.1
		KW	16.2	18.6	20.2	21.7	22.5
	161FIHJ	kVA	20.1	23.0	27.0	28.0	29.0
		KW	16.1	18.4	21.6	22.4	23.2
	162FIVD	kVA	29.4	33.7	42.0	44.0	46.0
		KW	23.5	27.0	33.6	35.2	36.8
	201FIHS	kVA	41.0	47.0	51.0	56.0	58.0
		KW	32.8	37.6	40.8	44.8	46.4
	201FIHV	kVA	54.5	62.4	68.1	72.8	75.7
		KW	43.6	49.9	54.5	58.2	60.6
	201FIHB	kVA	60.4	69.2	75.5	80.7	85.0
		KW	48.3	55.4	60.4	64.6	68.0
AG10	201FIHE	kVA	66.0	75.6	88.0	95.0	97.0
		KW	52.8	60.5	70.4	76.0	77.6
	202FIVJ	kVA	105.4	120.7	141.0	144.0	150.0
		KW	84.3	96.6	112.8	115.2	120.0
	251FIHD	kVA	137	157	171	183	190
		KW	110	126	137	146	152
	251FIHE	kVA	171	196	214	230	240
		KW	137	157	171	184	192
	250SI50FI	kVA	208	238	260	290	295
		KW	166	191	208	232	236
	250MI60FI	kVA	250	288	312	345	360
		KW	200	230	250	276	288
	250MI70FI	kVA	292	335	365	400	417
		KW	234	268	292	320	334
	250MI80FI	kVA	324	371	405	460	470
		KW	259	297	324	368	376
	280MI50FI	kVA	378	440	472	517	550
		KW	302	352	378	414	440
	280MI60FI	kVA	412	472	515	550	580
		KW	330	378	412	440	464
	280MI70FI	kVA	456	510	570	600	650
		KW	365	408	456	480	520
	280MI80FI	kVA	484	565	605	650	691
		KW	387	452	484	520	553
G Plus	315MI50FI	kVA	520	596	650	700	750
		KW	416	477	520	560	600
	315MI60FI	kVA	570	650	710	780	825
		KW	456	520	568	624	660
	315MI70FI	kVA	642	736	803	875	906
		KW	514	589	642	700	725
	315LI80FI	kVA	740	850	925	1010	1056
		KW	592	680	740	808	845
	315LI90FI	kVA	832	953	1040	1100	1160
		KW	666	763	832	880	928
AG10	352FIZS	kVA	883	1019	1140	1200	1260
		KW	706	815	912	960	1008
	352FIYS	kVA	968	1118	1250	1265	1319
		KW	774	894	1000	1012	1055
AG10	355MI70FI	kVA	1120	1283	1400	1450	1515
		KW	896	1026	1120	1160	1212
	355MI80FI	kVA	1280	1466	1600	1700	1850
		KW	1024	1173	1280	1360	1480
	355MI90FI	kVA	1400	1604	1750	1900	1950
		KW	1120	1283	1400	1520	1560
	400MI80FI	kVA	1520	1741	1900	2000	2050
		KW	1216	1393	1520	1600	1640
400MI85FI	kVA	1680	1925	2100	2275	2500	
		KW	1344	1540	1680	1820	2000
400MI90FI	kVA	1720	1971	2150	2355	2550	
		KW	1376	1577	1720	1884	2040

Notes: $\Delta T = 163^{\circ}\text{C}$, ambient temperature = 27°C . For the other ΔT , ambient temperature = 40°C .

According to standards: IEC 60034-1 - NBR 5117 - NEMA: MG1 VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.

Altitude 1,000 meters above sea level (for all duties).

Data subject to change without prior notice.

For other voltages, please contact WEG.

Characteristic Data

0.8 P.F. / Insulation Class H (180 °C) / 12 Leads

Line	Model	50 Hz				60 Hz				Inertia ¹⁾ J (kgm ²)	Weight ²⁾ (kg)	Gravity center			
		Xd' (%) Full load	Xd" (%) Full load	Efficiency (%) for 200/400 V		Xd' (%) Full load	Xd" (%) Full load	Efficiency (%) for 240/480 V				(mm)			
		200/400 V	200/400 V	% loads		240/480 V	240/480 V	% loads				50	75	100	B15
G Plus	161AISR	12.6	9.0	64.6	70.2	72.5	14.6	10.4	70.6	74.9	76.5	0.2	106	237	199
	161AIHS	15.3	11.1	71.2	73.4	73.1	15.9	11.5	76.4	78.2	77.8	0.2	118	242	204
	161AIHH	13.7	10.1	77.8	78.9	78.1	15.0	11.0	81.0	81.5	80.5	0.2	123	242	205
	161AIHI	14.6	10.9	80.4	80.9	79.8	16.7	12.4	83.3	83.1	81.7	0.2	132	244	209
	161AIHJ	12.3	9.3	84.7	84.3	82.9	12.2	9.2	86.6	86.4	85.3	0.2	145	250	217
	162AIVD	9.7	7.5	81.8	83.7	83.8	11.0	8.5	84.8	86.0	85.8	0.3	181	283	261
	201AIHS	21.6	17.2	87.6	86.2	84.2	22.6	18.0	88.9	87.7	85.9	0.4	231	324	304
	201AIHV	21.7	18.3	89.2	87.5	85.5	24.1	20.3	90.0	88.5	86.7	0.4	245	332	312
	201AIHB	20.1	17.2	88.0	87.5	86.2	23.9	20.4	89.4	88.6	87.1	0.5	267	343	322
	201AIHE	22.8	19.6	81.3	83.2	83.4	22.3	19.1	84.3	86.4	86.9	0.5	281	351	329
	202AIVS	20.2	17.4	88.7	87.8	86.3	22.3	19.2	89.7	88.8	87.4	0.5	311	383	347
	202AIVJ	19.2	16.8	91.5	90.6	89.4	21.3	18.6	92.6	91.5	90.3	0.6	355	406	380
	251AIHD	22.8	15.6	90.3	89.1	87.5	23.7	16.2	91.5	90.4	89.0	1.3	428	383	347
	251AIHE	21.9	15.3	88.4	88.0	86.8	22.8	15.9	89.9	89.6	88.5	1.4	460	403	366
AG10	250SI50AI	14.9	10.7	92.2	91.9	91.2	15.8	11.3	92.6	92.5	92.0	2.6	690	360	327
	250MI60AI	15.9	11.5	92.8	92.4	91.7	16.3	11.7	93.2	93.0	92.5	3.0	787	472	553
	250MI70AI	15.9	10.8	92.9	92.4	91.6	16.6	11.2	93.3	93.1	92.5	3.2	843	497	578
	250MI80AI	11.3	9.1	93.0	92.7	92.1	12.2	9.7	93.4	93.3	92.8	3.5	917	529	611
	280MI50AI	12.9	9.9	94.0	93.7	93.1	13.8	10.5	94.4	94.2	93.8	4.8	1069	520	651
	280MI60AI	14.8	10.7	92.8	93.2	93.0	14.9	10.7	93.5	93.9	93.7	5.2	1128	540	671
	280MI70AI	11.7	9.7	93.5	93.5	93.1	12.4	10.2	94.1	94.2	93.8	5.4	1153	550	681
	280MI80AI	11.6	8.4	92.5	93.1	92.9	12.6	9.1	93.1	93.7	93.7	5.4	1153	550	681
	315MI50AI	13.0	11.1	92.5	92.9	92.5	13.2	11.2	93.4	93.8	93.6	7.2	1381	568	700
	315MI60AI	13.2	11.5	92.7	93.4	93.2	14.0	12.2	93.4	94.1	94.0	7.2	1381	568	702
	315MI70AI	16.1	11.1	93.1	93.4	93.2	17.1	11.8	93.8	94.2	94.0	8.5	1598	633	767
	315LI80AI	13.7	8.9	92.3	93.2	93.3	17.7	11.4	93.0	93.8	94.0	9.4	1925	740	897
	315LI90AI	19.4	12.6	93.8	94.2	94.1	19.4	12.6	94.4	94.9	94.7	10.3	2025	770	933
	355MI65AI	12.3	8.8	92.5	93.7	94.0	12.8	9.2	93.3	94.4	94.7	20.0	2495	755	810
	355MI70AI	13.9	10.0	94.5	95.3	95.5	14.8	10.6	93.8	94.6	94.8	20.7	2542	761	820
	355MI80AI	17.6	12.7	93.6	94.1	94.0	18.1	13.1	94.3	94.8	94.8	21.8	2636	772	834
	355MI90AI	21.3	15.4	94.0	94.2	93.9	21.6	15.6	94.7	94.9	94.7	23.0	2731	783	845

Notes: 1) Inertia for alternators with B15T mounting type.

2) The weight value can change ±10% depending on the flange and disc combination.

Ambient temperature = 40 °C.

Altitude 1,000 meters above sea level (for all duties).

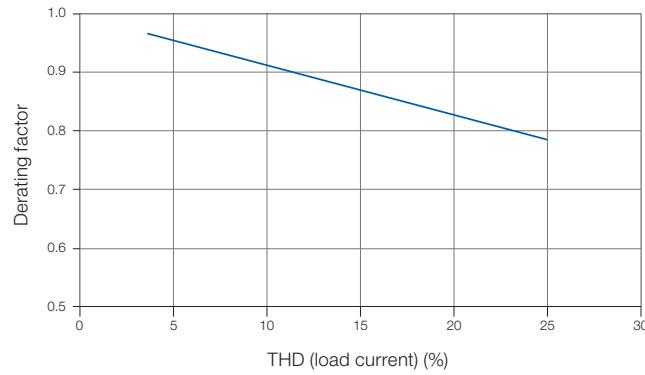
Data subject to change without prior notice.

For other alternator models, please contact WEG.



Power Reduction Factor For Non-Linear Loads

Devices using thyristors or circuits with SCR may insert high-frequency current harmonics that affect the alternator waveform, causing overheating. For these cases, the alternator power must be limited according to the diagram THD x Derating Factor, as follow:



THD = Total Harmonic Distortion

Note: non-linear loads like no-breaks, inverters, etc.

Reactance Conversion

Reactance conversion for synchronous alternators in different applications.

Formula:

$$X_2 = X_1 \times (S_2/S_1) \times (f_2/f_1) \times (V_1/V_2)^2$$

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

$$X_{dr} = \frac{U_n \times 0.3}{\sqrt{3} I_n}$$

Where:

U_n = alternator rated voltage

I_n = alternator rated phase current. It also must be observed:

- a) The coil must have linear characteristic up to $0.3 \times I_n$.
- b) It must be thermally resistant to $0.4 \times I_n$.

Auxiliary Formulary

Alternator Rated Current

$$A = \frac{kVA \times 1000}{(V \times \sqrt{3})}$$

Where:

A = Amps

V = Voltage

kVA = Alternator rated apparent power

Alternator Driving Power

$$CV = \frac{kVA \times \cos\varphi}{0.736 \times \eta}$$

Where:

CV = Alternator driving machine power

kVA = Alternator rated apparent power

$\cos\varphi$ = Power factor (referred to load)

η = Alternator efficiency (%)

Driving Motor Power Given in kW (Reference Power)

$$P_{kW} = P_{cv} \times 0.736$$

Where:

P_{kW} = Power in kW

P_{cv} = Power in HP

Active Power (kW)

$$P_{kW} = P_{kVA} \times \cos\varphi$$

Where:

P_{kVA} = Alternator rated apparent power

P_{kW} = Alternator rated active power

$\cos\varphi$ = Power factor (0.8)

Pulley and Belts Data

Diameter of drive pulley (Dm)		mm
Diameter of driven pulley (Da)		mm
Pulley width (L)		mm
Distance between belt center to shaft shoulder (x)		mm
Distance between centers (Dc)		mm
Which of the figures do correspond to application	1 <input type="checkbox"/>	2 <input type="checkbox"/>
What is value of the angle (beta)		~ deg
Belt type		
Number of belts		

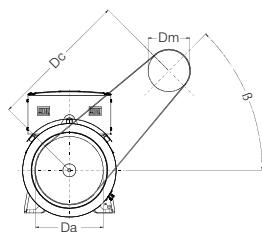
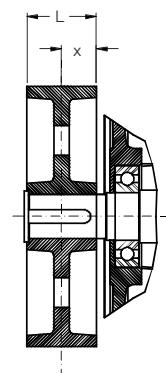


Figure 1

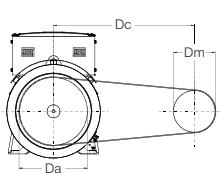


Figure 2

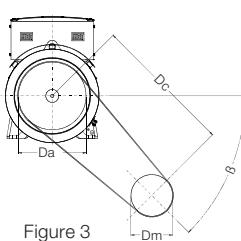
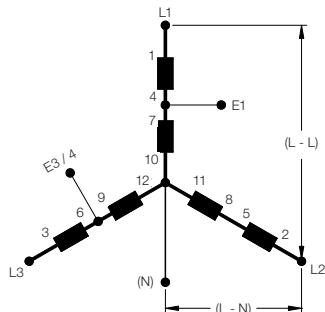


Figure 3

Wiring Diagram

Three-Phase Alternators - 12 Leads

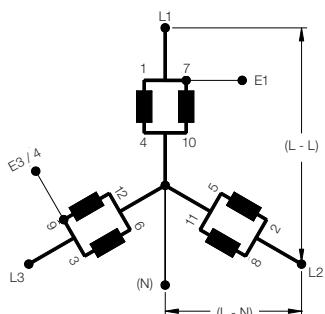


Star Series

Voltage (V) - 60 Hz		
L - L	380 - 416	440
L - N	220 - 240	254
Reference	190 - 208	220
E1 → 7 and E3/4 → 9		240

Voltage (V) - 50 Hz		
L - L	380	400
L - N	220	230
Reference	190	200
E1 → 7 and E3/4 → 9		240

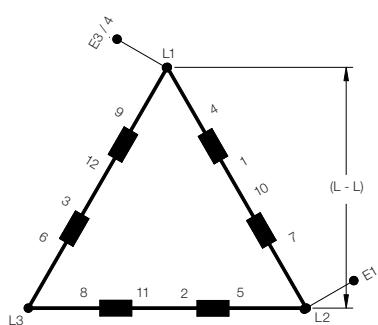
Star Parallel



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

Voltage (V) - 50 Hz		
L - L	190	200
L - N	110	115
Reference	190	200
E1 → 7 and E3/4 → 9		240

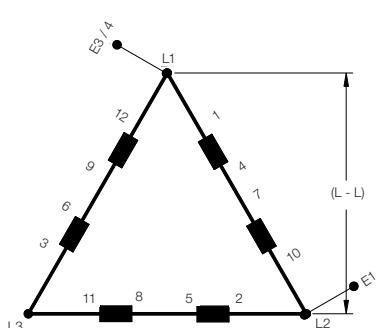
Delta Series 1



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

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

Delta Series 2



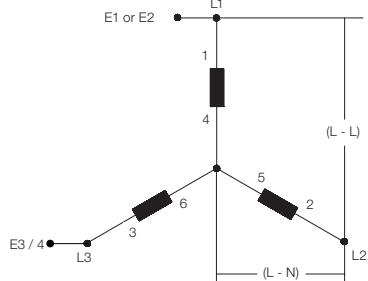
Voltage (V) - 60 Hz		
L - L	220 - 240	220 - 240
Reference	E1 → 2 and E3/4 → 1	

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

Notes: According to standards: IEC 60034-1 - NBR 5117 - NEMA MG1 - VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.
Data subject to change without prior notice.

Wiring Diagram

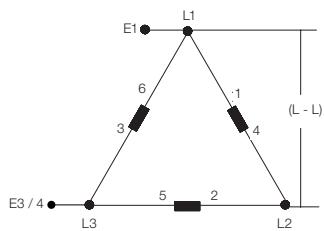
Three-Phase Alternators - 6 Leads



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					

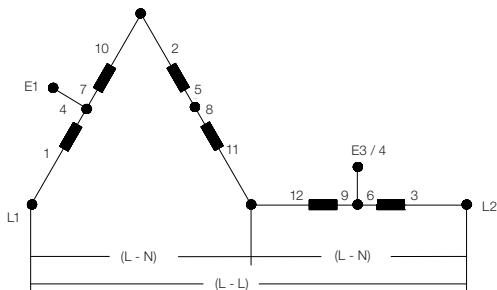


Delta

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					

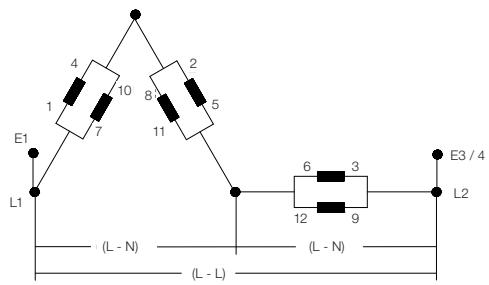
Three-Phase Alternators with Single-Phase Connection



Single-Phase Zigzag Series

Voltage (V) - 60 Hz					
L - L	440 - 480				
L - N	220 - 240				
Reference	290 - 316				
E1 → 7 and E3/4 → 9					

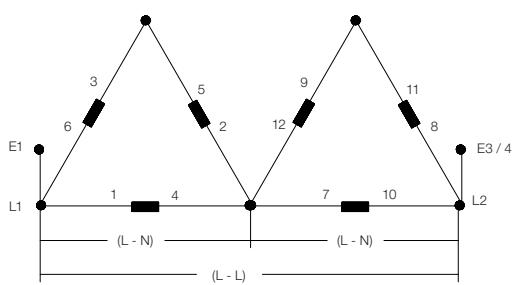
Voltage (V) - 50 Hz					
L - L	380 - 400				
L - N	190 - 200				
Reference	250 - 263				
E1 → 7 and E3/4 → 9					



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					

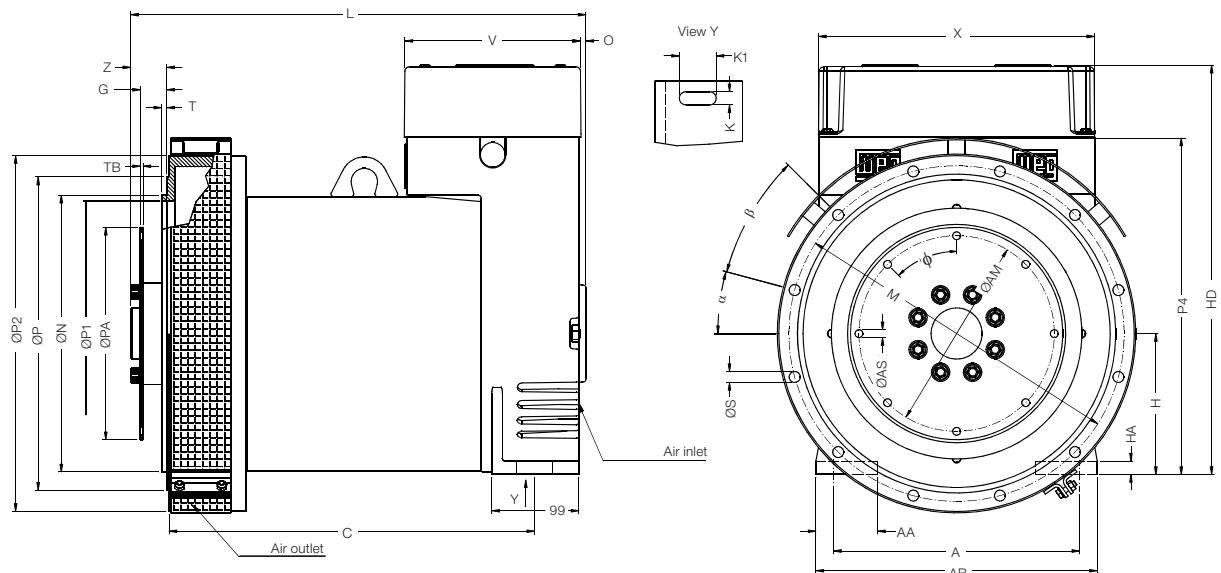
Voltage (V) - 50 Hz					
L - L	190 - 200				
L - N	95 - 100				
Reference	190 - 200				
E1 → 1 and E3/4 → 8					

Notes: According to standards: IEC 60034-1 - NBR 5117 - NEMA MG1 - VDE 530 - ISO 8528 - CSA C22.2 No. 100-04.
Data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

G Plus Line (160 Frame)



Frame	Dimensions (mm/in)													
	A	AB	AA	HA	K	K1	H	HD	X	V	C	Z	O	L
160	280 (11.02")	320 (12.59")	70 (2.75")	15 (0.59")	15 (0.59")	42 (1.65")	160 (6.29")	465 (18.30")	314 (12.36")	201 (7.91")	327 (12.87")	1)	8 (0.31")	1)
161										417 (14.61")				
162										497 (19.56")				

Note: 1) It changes according to the combination between flange and coupling disk (see table below).

Flange										Coupling disk								
SAE	ØP	P2	P4	ØN	ØP1	ØM	T	ØS	α	β	SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
5	355.6 (14")	404 (15.90")	384 (15.11")	314.3 (12.37")	301 (11.85")	333.4 (13.12")	6 (0.23")	11 (0.43")	22.5°	45°	6.5	215.9 (8.5")	200.0 (7.87")	30.2 (1.18")	9 (0.35")	60°	6	
4	404 (15.90")			361.9 (14.24")	346 (13.62")	381 (15")		12.5 (0.49")	15°	30°	7.5	241.3 (9.5")	222.2 (8.74")			45°	8	
3	450 (17.71")	450 (17.71")	408 (16.06")	409.6 (16.12")	388 (15.27")	428.6 (16.87")					8	263.5 (10.37")	244.5 (9.62")	61.9 (2.43")	3.1 (0.12")	60°	6	

Disk	Dimensions (mm/in)																	
	Flange																	
	3			4			5			Z	L			Z	L			
SAE	Z	L		Z	L		Z	L			160	161	162		160	161	162	
6.5											43 (1.69")	520 (20.47")	600 (23.62")		43 (1.69")	433 (17.04")	520 (20.47")	600 (23.62")
7.5											433 (17.04")	600 (23.62")			66 (2.59")	456 (17.95")	546 (21.12")	623 (24.52")
8											66 (2.59")	543 (21.37")	623 (24.52")					
10	66 (2.59")	456 (17.95")	543 (21.37")	623 (24.52")														
11.5	43 (1.69")	433 (17.04")	520 (20.47")	600 (23.62")														

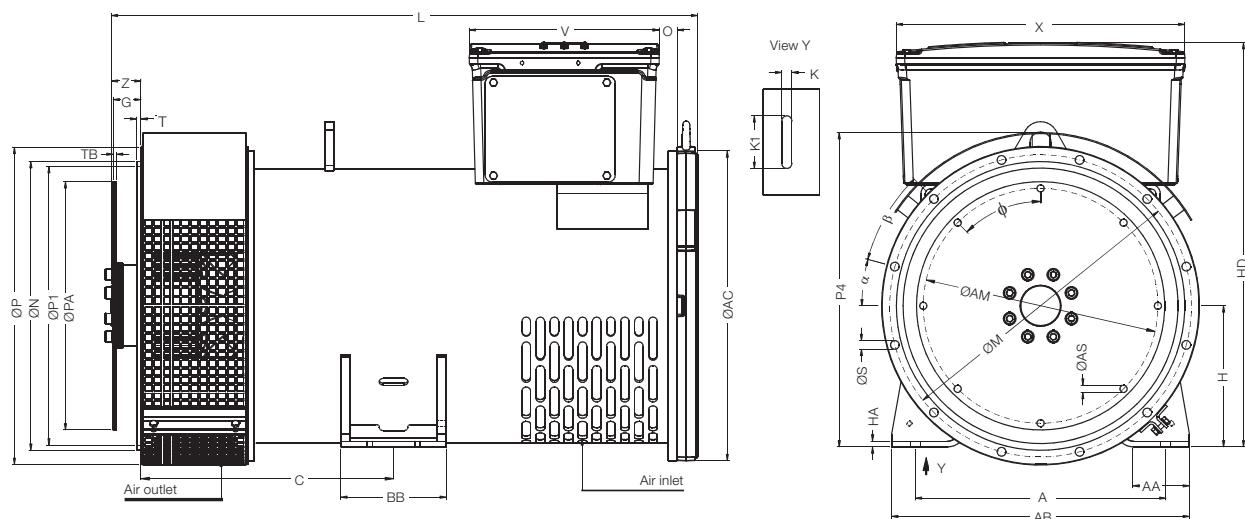
Disk	Connectings		
	Flange		
SAE	3	4	5
6.5			●
7.5	●	●	●
8	●	●	●
10	●	●	
11.5	●		

Note: data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

G Plus Line (200 Frame)



Frame	Dimensions (mm/in)													
	A	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	O	L
201	356 (14.01")	423 (16.56")	150 (5.90")	80 (3.14")	8 (0.31")	14.5 (0.57")	74.5 (2.93")	200 (7.87")	440 (17.32")	311 (12.24")	440 (17.32")	388 (15.27")	30 (1.18")	707 (27.83")
202														837 (32.95")

Note: 1) It changes according to the combination between flange and coupling disk (see table below).

Flange										Coupling disk								
SAE	ØP	P4	ØN	ØP1	ØM	T	ØS	α	β	Holes	SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
5	450 (17.71")	446 (17.55")	314.3 (12.37")	301 (11.85")	333.4 (13.12")	6 (0.23")	11 (0.43")	22.5°	45°	8	7.5	241.3 (9.5")	222.2 (8.74")	30.2 (1.18")	4.6 (0.18")	9 (0.35")	45°	8
4	440 (17.32")	441 (17.36")	361.9 (14.24")	346 (13.62")	381 (15")		12.5 (0.49")	15°	30°	12	8	263.5 (10.37")	244.5 (9.62")	61.9 (2.43")		10.3 (0.40")	60°	6
3	450 (17.71")		409.6 (16.12")	388 (15.27")	428.6 (16.87")						10	314.3 (12.37")	295.3 (11.62")	53.9 (2.12")			45°	8
2	490 (19.29")	446 (17.55")	447.7 (17.62")	410 (16.14")	466.7 (18.37")						11.5	352.3 (13.87")	333.3 (13.21")	39.6 (1.55")				
1	553 (21.77")		511.2 (20.12")	474 (18.66")	530.2 (20.87")													

Disk	Dimensions (mm/in)													
	Flange													
	1		2		3		4		5		C		C	
SAE	Z	C	Z	C	Z	C	Z	C	Z	201	202	Z	201	202
	201	202												
7.5						48.2 (1.89")	285.5 (11.24")	358.5 (14.11")	48.2 (1.89")	285.5 (11.24")	358.5 (14.11")	48.2 (1.89")	285.5 (11.24")	358.5 (14.11")
8						71.8 (2.82")	262 (10.31")	335 (13.18")	71.8 (2.82")	262 (10.31")	335 (13.18")	71.8 (2.82")	262 (10.31")	335 (13.18")
10	71.8 (2.82")	262 (10.31")	335 (13.18")	71.8 (2.82")	262 (10.31")	335 (13.18")								
11.5	48.2 (1.89")	285.5 (11.24")	358.5 (14.11")	48.2 (1.89")	285.5 (11.24")	358.5 (14.11")	48.2 (1.89")	285.5 (11.24")	358.5 (14.11")					

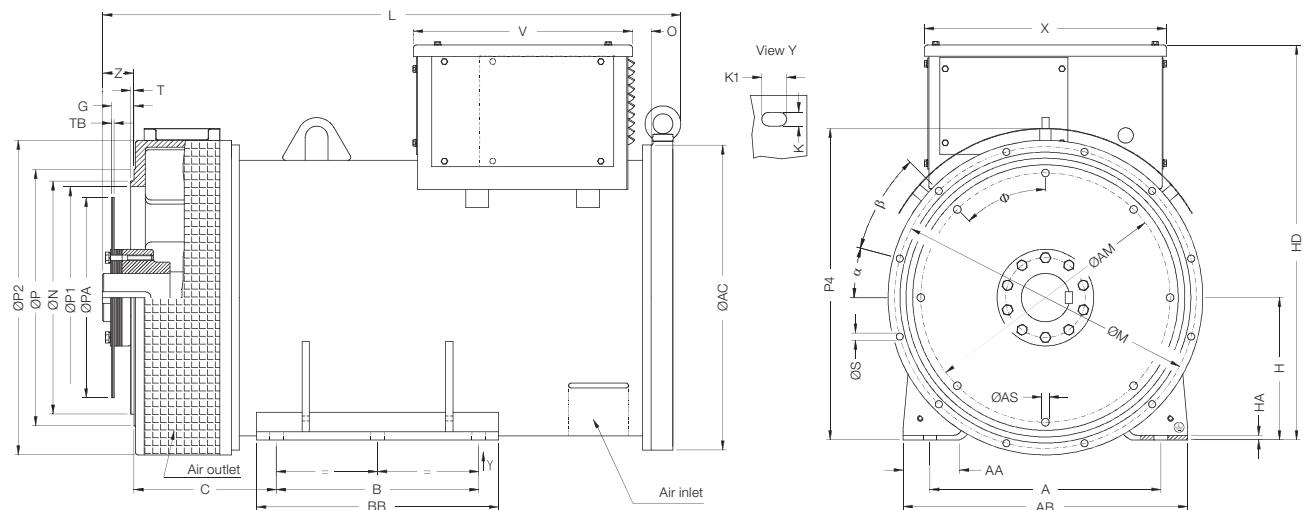
Disk	Connectings				
	Flange				
SAE	1	2	3	4	5
7.5			●	●	●
8			●	●	●
10	●	●	●	●	●
11.5	●	●	●	●	

Note: data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

G Plus Line (250 Frame)



Frame	Dimensions (mm/in)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	Z	O	L
251	406 (15.98")	311 (12.24")	500 (19.68")	380 (14.96")	100 (3.93")	7.9 (0.31")	24 (0.94")	36 (1.41")	250 (9.84")	695 (27.36")	536 (21.10")	425 (16.73")	385 (15.15")	250 (9.84")	55 (2.16")	32.5 (1.27")	866 (34.09")

Flange										
SAE	ØP	ØP2	P4	ØN	ØP1	ØM	T	ØS	α	β
3	450 (17.71")			409.6 (16.12")	390 (15.35")	428.6 (16.87")				
2		553 (21.77")	550 (21.65")	447.7 (17.62")	410 (16.14")	466.7 (18.37")	6 (0.23")	12.5 (0.49")	15°	30°
1	553 (21.77")			511.2 (20.12")	490 (19.29")	530.2 (20.87")				

Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
10	314.3 (12.37")	295.3 (11.62")	53.9 (2.12")				
11.5	352.4 (13.87")	333.3 (13.21")	39.6 (1.55")	4.6 (0.18")	10.3 (0.40")	45°	8
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")		13.5 (0.53")		

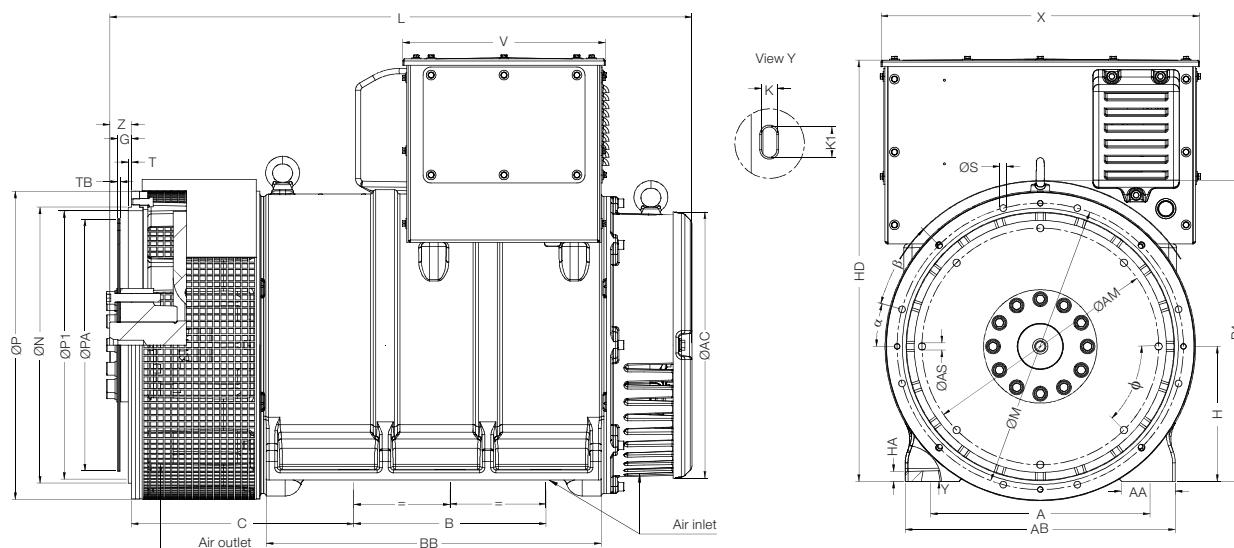
Connectings			
Disk	Flange		
SAE	1	2	3
10		●	●
11.5	●	●	●
14	●		

Note: data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

AG10 Line (250 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	L
250S	406 (15.98")	178 (7.00")	500 (19.68")	470 (18.50")	100 (3.93")	18 (0.70")	28 (1.10")	56 (2.20")	250 (9.84")	780 (30.70")	493 (19.40")	590 (23.22")	375 (14.76")	405 (15.94")	928 (36.53")
		356 (14.01")		620 (24.40")										1078 (42.44")	

Flange									
SAE	ØP	ØN	ØP1	ØM	T	ØS	α	β	Z
3	570 (22.44")	409.6 (16.12")	395.4 (15.55")	428.6 (16.87")	6 (0.23")	12.5 (0.49")	15°	30°	40 (1.57")
		447.7 (17.62")	433.5 (17.06")	466.7 (18.37")					
		511.2 (20.12")	497 (19.56")	530.2 (20.87")					

Connectings			
Disk	Flange		
SAE	1	2	3
11.5	•	•	•
14	•		

Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
11.5	352.4 (13.87")	333.4 (13.12")	39.6 (1.55")	4.6 (0.18")	10.3 (0.40")	45°	8
		438.2 (17.25")	25.4 (1")		13.5 (0.53")		

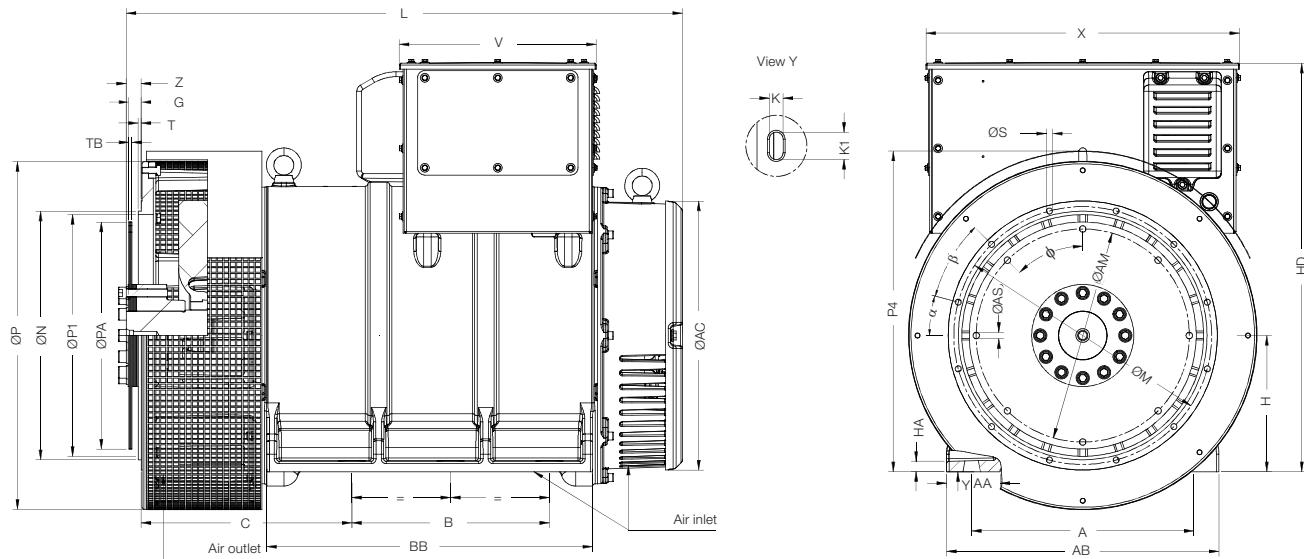
Note: data subject to change without prior notice.



Mechanical Features

Single Bearing - B15T

AG10 Line (280 Frame)



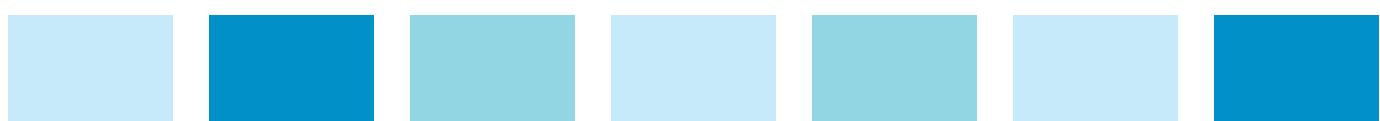
Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	L
280M	457 (17.99")	406 (15.98")	560 (22.04")	670 (26.37")	110 (4.33")	21 (0.82")	28 (1.10")	56 (2.20")	280 (11.02")	840 (33.07")	553 (21.77")	645 (25.39")	405 (15.94")	429 (16.88")	1144 (45.03")

Flange										
SAE	ØP	ØN	ØP1	ØM	T	ØS	α	β	Z	
2	650 (25.59")	447.7 (17.62")	433.5 (17.06")	466.7 (18.37")	6 (0.23")	12.5 (0.49")	15°	30°	40.5 (1.59")	627 (24.69")
1		511.2 (20.12")	497 (19.56")	530.2 (20.87")		14 (0.55")	11.25°	22.5°	30.5 (1.20")	
1/2	715 (28.14")	584.2 (23")	570 (22.44")	619.1 (24.37")	6.2 (0.24")	10.3 (0.40")	45°	8	659 (25.94")	●
0		647.7 (25.5")	633.5 (24.94")	679.5 (26.75")		13.5 (0.53")			18 (0.70")	

Connectings				
Disk	Flange			
SAE	0	1/2	1	2
11.5				●
14	●	●	●	
18	●			

Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	Ø	Holes
11.5	352.4 (13.87")	333.4 (13.12")	39.6 (1.55")	6.2 (0.24")	10.3 (0.40")	45°	8
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")		13.5 (0.53")		
18	571.5 (22.5")	542.9 (21.37")	15.7 (0.61")	6.2 (0.24")	18 (0.70")	60°	6

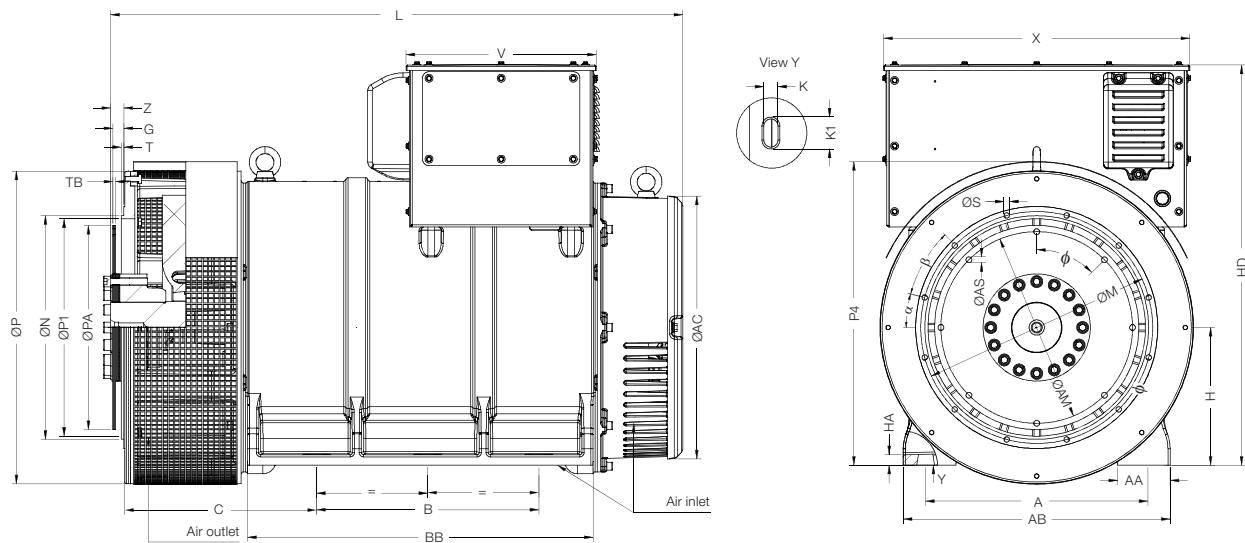
Note: data subject to change without prior notice.



Mechanical Features

Single Bearing - B15T

AG10 Line (315 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	L
315M	508 (20")	508 (20")	610 (24.01")	790 (31.10")	120 (4.72")	24 (0.94")	32 (1.25")	64 (2.51")	315 (12.40")	915 (36.02")	601 (23.66")	700 (27.55")	435 (17.12")	435 (17.12")	1308 (51.49")
315L														615 (24.21")	1488 (58.58")

Flange										
SAE	ØP	ØN	ØP1	ØM	T	ØS	α	β	Z	P4
1	715 (28.14")	511.2 (20.12")	497 (19.56")	530.2 (20.87")	6 (0.23")	12.5 (0.49")	15°	30°	30.5 (1.20")	694 (27.32")
1/2		584.2 (23")	570 (22.44")	619.1 (24.37")		14 (0.55")				
0		647.7 (25.5")	633.5 (24.94")	679.5 (26.75")		11.25°		22.5°		

Connectings			
Disk	Flange		
SAE	0	1/2	1
14	●	●	●
18	●		

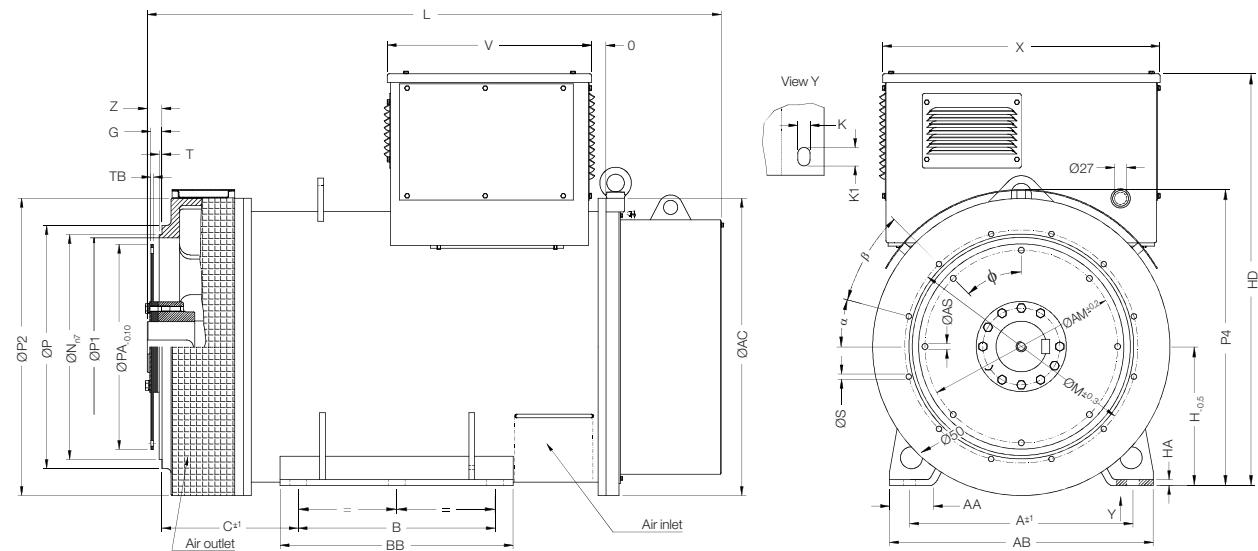
Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")	6.2 (0.24")	13.5 (0.53")	45°	8
18	571.5 (22.5")	542.9 (21.37")	15.7 (0.61")		18 (0.70")	60°	6

Note: data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

G Plus Line (355 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	O	L
352	528 (20.78")	550 (21.65")	660 (25.98")	740 (29.13")	130 (5.11")	16 (0.62")	28 (1.10")	42 (1.65")	355 (13.97")	1053 (41.45")	780 (30.70")	635 (25")	465 (18.30")	400 (15.74")	36 (1.41")	1482 (58.34")

Flange											
SAE	ØP	ØP2	P4	ØN	ØP1	ØM	T	ØS	α	β	Z
1	553 (21.77")	780 (30.70")	768 (30.23")	511.2 (20.12")	496 (19.52")	530.2 (20.87")		12.5 (0.49")	15°	30°	
0	714 (28.11")		647.7 (25.5")	610 (24.01")	679.5 (26.75")		6 (0.23")	14 (0.55")	11.15°	22.30°	16.8 (0.66")
00	883 (34.76")	798 (31.41")	787.4 (30.88")	760 (29.92")	851 (33.50")						

Connectings			
Disk	Flange		
SAE	0	1	00
14	•	•	
18	•		
21			•

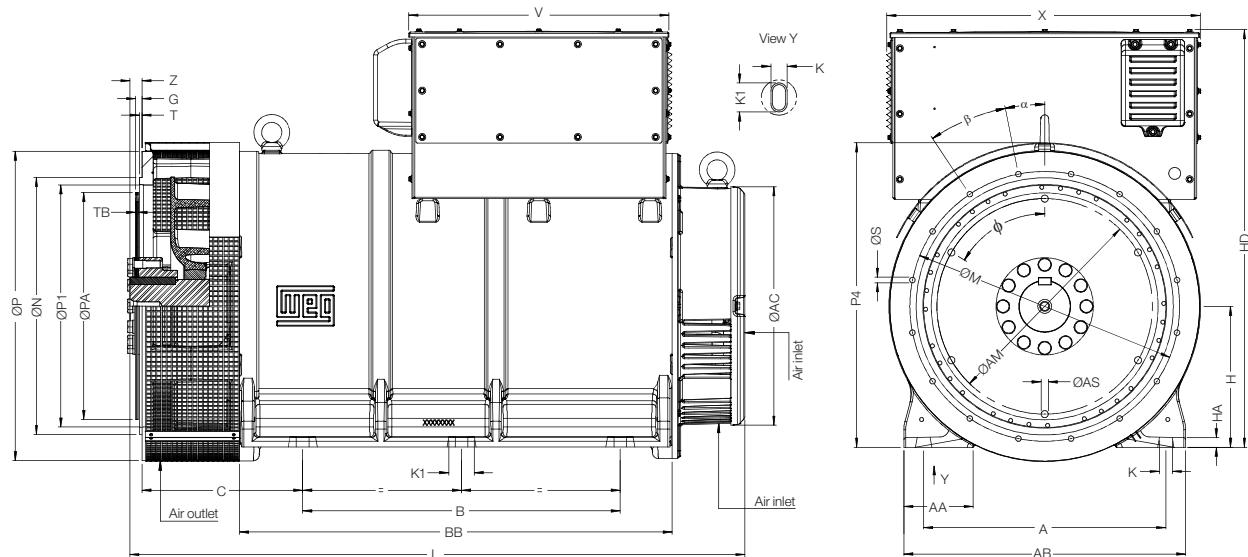
Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	ϕ	Holes
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")		13.5 (0.53")	45°	8
18	571.5 (22.5")	542.9 (21.37")	15.7 (0.61")	5.85 (0.23")	18 (0.70")	60°	6
21	673.1 (26.5")	641.4 (25.25")	0				

Note: data subject to change without prior notice.

Mechanical Features

Single Bearing - B15T

AG10 Line (355 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	L
355	610 (24.01")	800 (31.49")	710 (27.95")	1090 (42.91")	175 (6.88")	24 (0.94")	32 (1.25")	64 (2.51")	355 (13.97")	1052 (41.41")	601 (23.66")	789 (31.06")	655 (25.78")	405 (15.94")	1550 (61.02")

Flange										
SAE	ØP	ØN	ØP1	ØM	T	ØS	α	β	Z	P4
0	780 (30.70")	647.7 (25.5")	610 (24.01")	679.5 (26.75")	6 (0.23")	14 (0.55")	11.25°	22.5°	30.3 (1.19")	767 (30.19")
1/2		584.2 (23")	540 (21.25")	619.1 (24.37")		15°	30°			
1		511.2 (20.12")	496 (15.52")	530.2 (20.87")		12.5 (0.49")				

Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	ϕ	
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")	5.85 (0.23")	13.5 (0.53")	45°	
18	571.5 (22.5")	542.9 (21.37")	15.7 (0.61")		18 (0.70")		60°

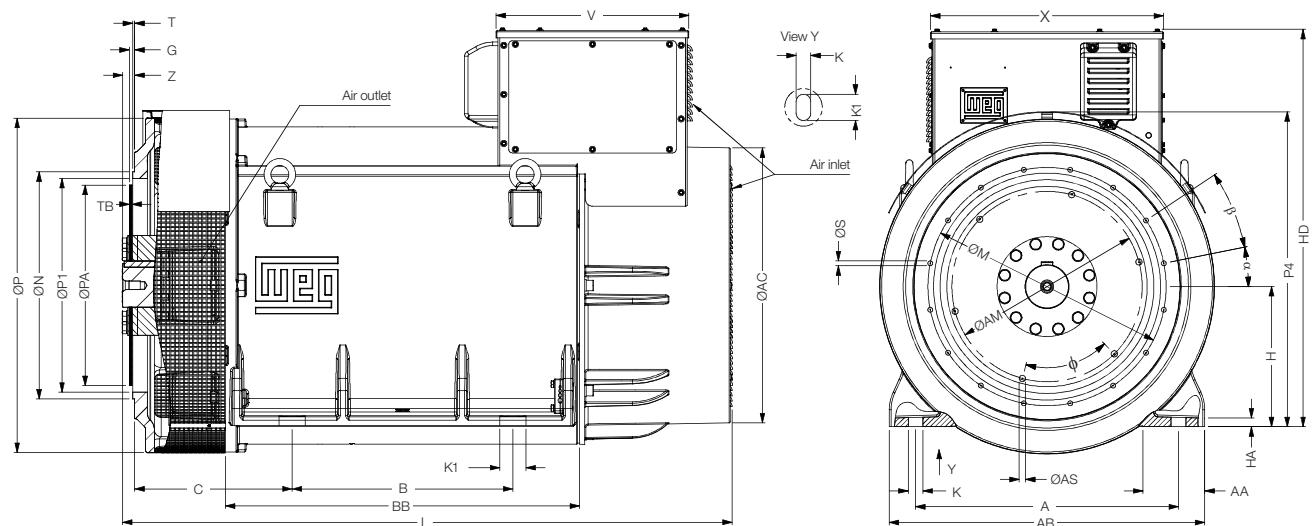
Note: data subject to change without prior notice.



Mechanical Features

Single Bearing - B15T

AG10 Line (400 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	L
400	750 (29.52")	630 (24.80")	900 (35.43")	1010 (39.73")	176 (6.29")	25 (0.98")	42 (1.65")	75 (2.95")	400 (15.74")	1134 (44.64")	784 (30.88")	665 (26.18")	550 (21.65")	449 (17.67")	1739 (68.46")

Flange									
SAE	ØP	ØN	ØP1	ØM	T	ØS	α	β	Z
0	954 (37.55")	647.7 (25.5")	610 (24.01")	679.5 (26.75")	6 (0.23")	14 (0.55")	11.25°	22.5°	34.7 (1.36")
00	1000 (39.37")	787.4 (31")	760 (29.92")	851 (33.50")					899 (35.39")

Coupling disk							
SAE	ØPA	ØAM	G	TB	ØAS	Ø	
14	466.7 (18.37")	438.2 (17.25")	25.4 (1")		13.5 (0.53")	45°	
18	571.5 (22.5")	542.9 (21.37")	15.7 (0.61")	7.8 (0.30")	18 (0.70")	60°	
21	673.1 (26.5")	641.4 (25.25")	0			30°	

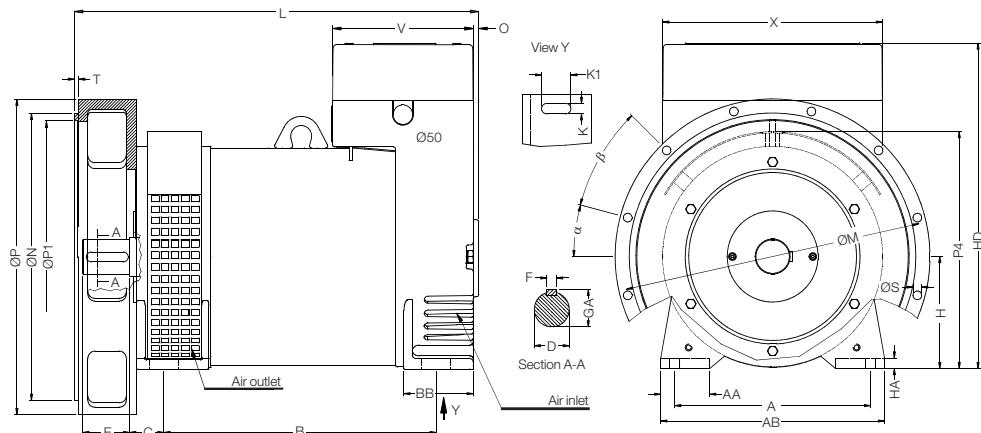
Note: data subject to change without prior notice.



Mechanical Features

Double Bearing with Flange - B35T

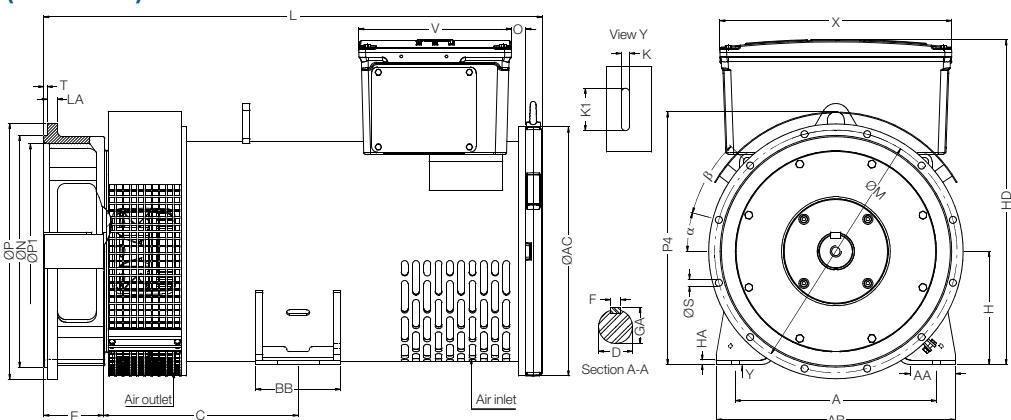
G Plus Line (160 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	HD	X	V	C	O	L
160		299 (11.77")													488 (19.21")
161		280 (11.02")	320 (12.59")	99 (3.89")	70 (2.75")	15 (0.59")	15 (0.59")	42 (1.65")	160 (6.29")	465 (18.30")	314 (12.36")	201 (7.91")	49 (1.92")	8 (0.31")	578 (22.75")
162		389 (15.31")													658 (25.90")
		469 (18.46")													

Flange										Shaft end			
SA	ØP	P4	ØN	ØP1	ØM	T	ØS	α	β	D	GA	F	E
5	404 (15.90")	340 (13.38")	314.3 (12.37")	301 (11.85")	333.4 (13.12")	6 (0.23")	12.5 (0.49")	15°	30°	50 (1.96")	53.5 (2.10")	14 (0.55")	67 (2.63")
4			361.9 (14.24")	346 (13.62")	381 (15")		11 (0.43")	22.5°	45°				
3			409.6 (16.12")	388 (15.27")	428.6 (16.87")								

G Plus Line (200 Frame)



Frame	Dimensions (mm/in)															L
	A	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	O		
201	356 (14.01")	423 (16.56")	150 (5.90")	80 (3.14")	8 (0.31")	14.5 (0.57")	74.5 (2.93")	200 (7.87")	440 (17.32")	311 (12.24")	572 (22.51")	388 (15.27")	30 (1.18")	271.5 (10.68")	750 (29.52")	
202														344.5 (13.56")	880 (34.64")	

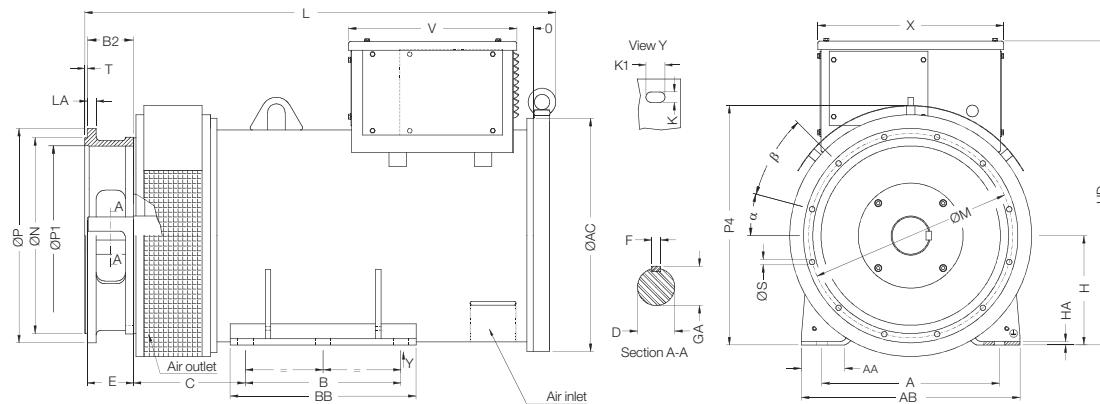
Flange										Shaft end				
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β	D	GA	F	E
3	452 (17.79")	442 (17.40")	409.6 (16.12")	388 (15.27")	428.6 (16.87")	18 (0.70")	6 (0.23")	12.5 (0.49")	15°	30°	60 (2.36")	64 (2.51")	18 (0.70")	105 (4.13")
2			447.7 (17.62")	410 (16.14")	466.7 (18.37")	15 (0.59")								

Note: data subject to change without prior notice.

Mechanical Features

Double Bearing with Flange - B35T

G Plus Line (250 Frame)

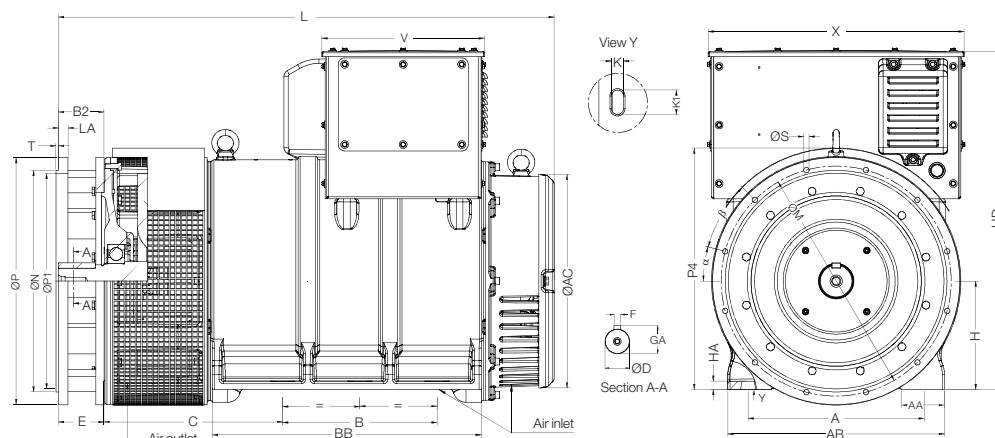


Frame	Dimensions (mm/in)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	B2	O	L
251	406 (15.98")	311 (12.24")	500 (19.68")	380 (14.96")	100 (3.93")	7.9 (0.31")	24 (0.94")	36 (1.41")	250 (9.84")	695 (27.36")	536 (21.10")	425 (16.73")	385 (15.15")	250 (9.84")	105 (4.13")	32.5 (1.27")	925 (36.41")
252	356 (14.01")	425 (16.73")														1077 (42.40")	

Flange										
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β
3	450 (17.71")		409.6 (16.12")	390 (15.35")	428.6 (16.87")					
2	490 (19.29")	550 (21.65")	447.7 (17.62")	410 (16.14")	466.7 (18.37")	20 (0.78")	6 (0.23")	12.5 (0.49")	15°	30°
1	560 (22.04")		511.2 (20.12")	470 (18.50")	530.2 (20.87")					

Shaft end			
D	GA	F	E
85 (3.34")	89.5 (3.52")	20 (0.78")	105 (4.13")

AG10 Line (250 Frame)



Frame	Dimensions (mm/in)																
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	B2	L
250S	406 (15.98")	178 (7.00")	500 (19.68")	470 (18.50")	100 (3.93")	18 (0.70")	28 (1.10")	56 (2.20")	250 (9.84")	493 (19.40")	375 (14.76")	780 (30.70")	590 (23.22")	405 (15.94")	557 (21.92")	105 (4.13")	993 (39.09")
250M	356 (14.01")		620 (24.40")													1143 (45")	

Flange										
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β
3	490 (19.29")		409.6 (16.12")	395.4 (15.55")	428.6 (16.87")					
2	490 (19.29")	557 (21.92")	447.7 (17.62")	433.5 (17.06")	466.7 (18.37")	20 (0.78")	6 (0.23")	12.5 (0.49")	15°	30°
1	570 (22.44")		511.2 (20.12")	497 (19.56")	530.2 (20.87")					

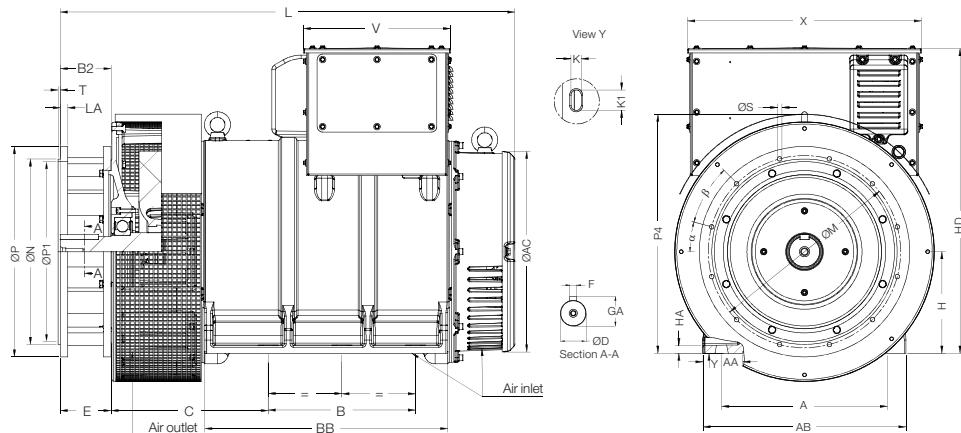
Shaft end			
D	GA	F	E
75 (2.95")	79.5 (3.12")	20 (0.78")	105 (4.13")

Note: data subject to change without prior notice.

Mechanical Features

Double Bearing with Flange - B35T

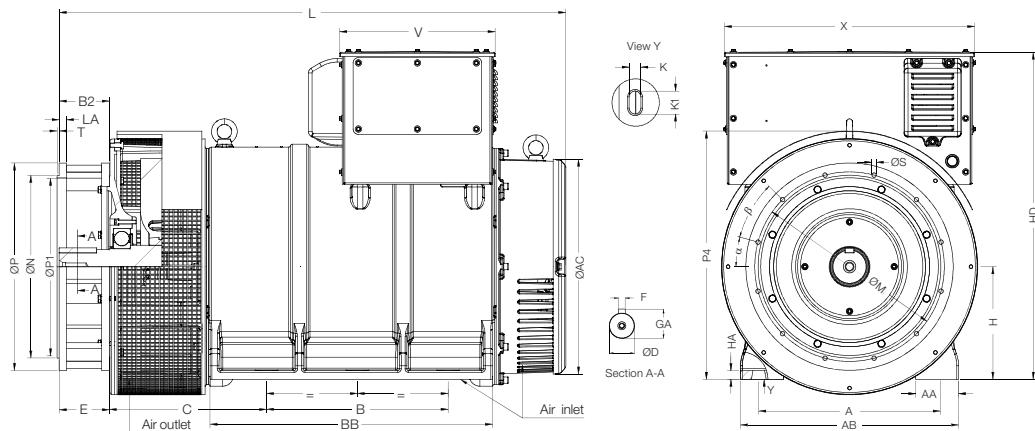
AG10 Line (280 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	B2	L
280M	457 (17.99")	406 (15.98")	560 (22.04")	670 (26.37")	110 (4.33")	21 (0.82")	28 (1.10")	56 (2.20")	280 (11.02")	553 (21.77")	405 (15.94")	840 (33.07")	645 (25.39")	429 (16.88")	140 (5.51")	1254 (49.37")

Flange										Shaft end				
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β	D	GA	F	E
1	580 (22.83")	627 (24.69")	511.2 (20.12")	497 (19.56")	530.2 (20.87")	20 (0.78")	6 (0.23")	12.5 (0.49")	15°	30°	85 (3.34")	90 (3.54")	25 (0.98")	140 (5.51")
	650 (25.59")		584.2 (23")	570 (22.44")	619.1 (24.37")			14 (0.55")	11.25°	22.5°				
	714 (28.11")		647.7 (25.5")	633.5 (24.94")	679.5 (26.75")									

AG10 Line (315 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	B2	L
315M	508 (20")	508 (20")	610 (24.01")	790 (31.10")	120 (4.72")	24 (0.94")	32 (1.25")	64 (2.51")	315 (12.40")	601 (23.66")	435 (17.12")	915 (36.02")	700 (27.55")	435 (17.12")	140 (5.51")	1417 (55.78")
315L														615 (24.21")	1597 (62.87")	

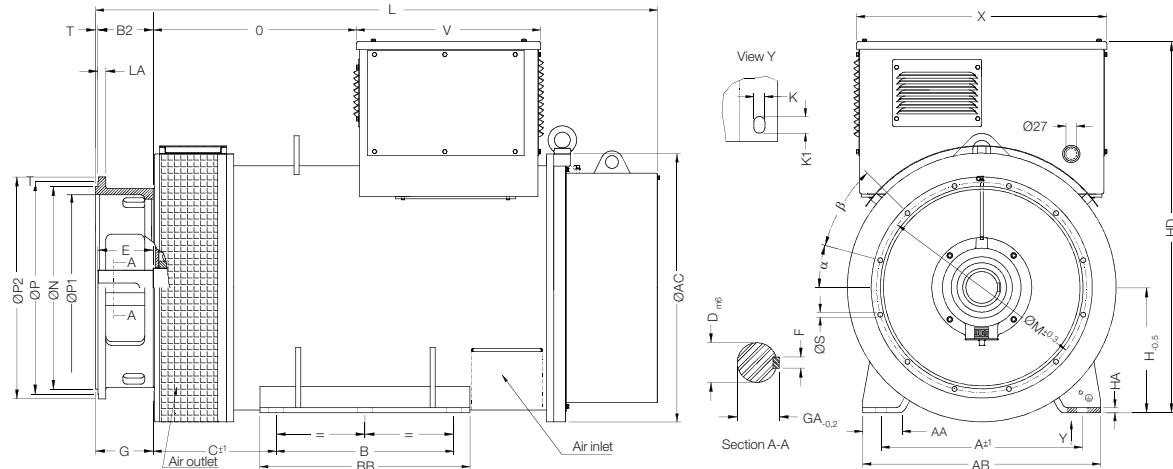
Flange										Shaft end				
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β	D	GA	F	E
1	580 (22.83")	694 (27.32")	511.2 (20.12")	497 (19.56")	530.2 (20.87")	20 (0.78")	6 (0.23")	12.5 (0.49")	15°	30°	95 (3.74")	100 (3.93")	25 (0.98")	140 (5.51")
	650 (25.59")		584.2 (23")	570 (22.44")	619.1 (24.37")			14 (0.55")	11.25°	22.5°				
	714 (28.11")		647.7 (25.5")	633.5 (24.94")	679.5 (26.75")									

Note: data subject to change without prior notice.

Mechanical Features

Double Bearing with Flange - B35T

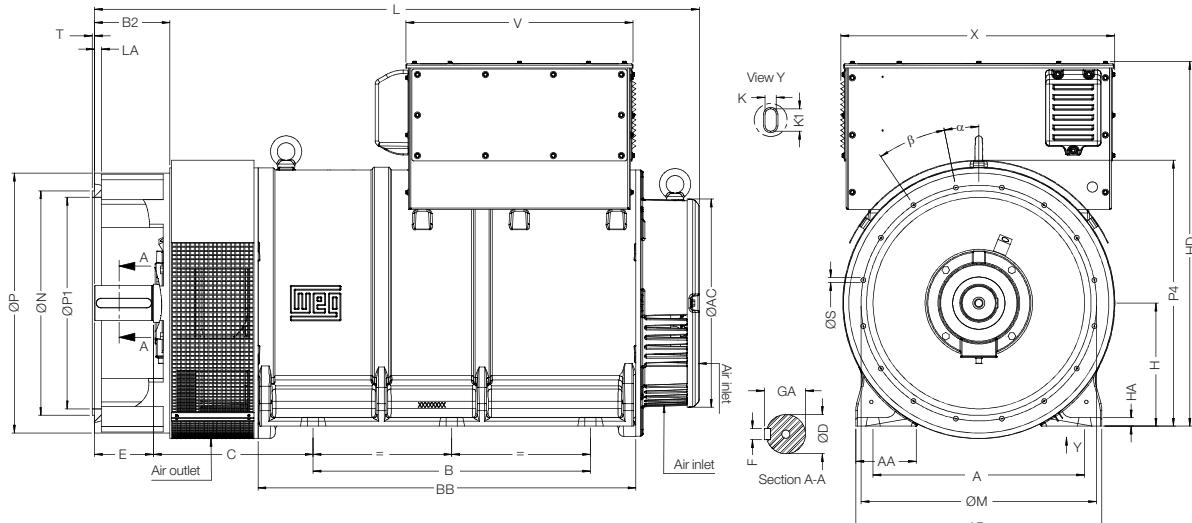
G Plus Line (355 Frame)



Frame	Dimensions (mm/in)																
	A	B	AB	BB	AA	HA	K	K1	H	HD	ØAC	X	V	C	G	O	L
352	528 (20.78")	550 (21.65")	660 (25.98")	740 (29.13")	130 (5.11")	16 (0.62")	28 (1.10")	42 (1.65")	355 (13.97")	1053 (41.45")	780 (30.70")	635 (25")	465 (18.30")	410 (16.14")	176 (6.92")	628 (24.72")	1637 (64.44")

SAE	Flange											Shaft end			
	ØP	ØP2	P3	ØN	ØP1	ØM	LA	T	ØS	α	β	D	GA	F	E
1	553 (21.77")	780	860	511.2 (20.12")	496 (19.52")	530.2 (20.87")	28	6 (0.23")	12.5 (0.49")	15°	30°	100 (3.93")	106 (4.17")	28 (1.10")	170 (6.69")
0	714 (28.11")	30.70"	33.85"	647.7 (25.5")	610 (24.01")	679.5 (26.75")			14 (0.55")	11.15°	22.30°				

AG10 Line (355 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	L	
355	610 (24")	800 (31.49")	710 (27.95")	1090 (42.91")	175 (6.88")	24 (0.94")	32 (1.25")	64 (2.51")	355 (13.97")	601 (23.66")	655 (25.78")	1052 (41.41")	789 (31.06")	461 (18.14")	1745 (68.7")	

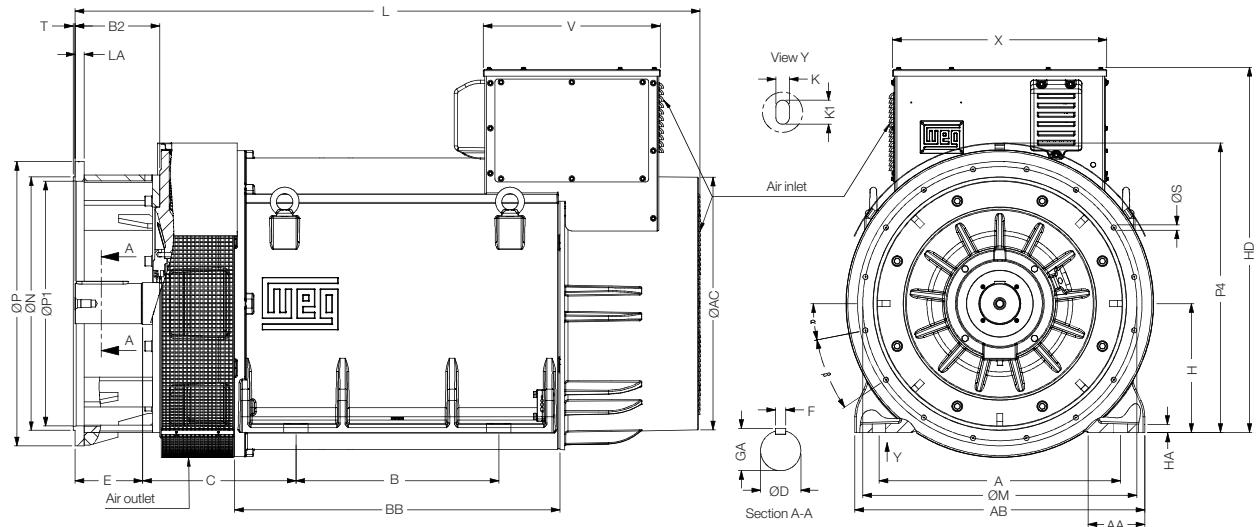
SAE	Flange											Shaft end			
	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β	B2	D	GA	F	E
0	750 (29.52")	767 (30.19")	647.7 (25.5")	610 (24.01")	679.5 (26.75")	20 (0.78")	6 (0.23")	14 (0.55")	11.25°	22.50°	218 (8.58")				
1			511.2 (20.12")	496 (19.52")	530.2 (20.87")	26 (1.02")		12.5 (0.49")	15°	30°		100 (3.93")	105 (4.13")	28 (1.10")	170 (6.69")

Note: data subject to change without prior notice.

Mechanical Features

Double Bearing with Flange - B35T

AG10 Line (400 Frame)



Frame	Dimensions (mm/in)														
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	L
400	750 (29.52")	630 (24.80")	900 (35.43")	1010 (39.76")	176 (6.29")	25 (0.98")	42 (1.65")	75 (2.95")	400 (15.74")	784 (30.86")	550 (21.65")	1134 (44.64")	665 (26.18")	476 (18.74")	1941 (76.41")

Flange										Shaft end					
SAE	ØP	P4	ØN	ØP1	ØM	LA	T	ØS	α	β	B2	D	GA	F	E
0	714 (28.11")	899	647.7 (25.5")	610 (24.01")	679.5 (26.75")	20.5 (0.80")	6 (0.23")	14 (0.55")	11.25°	22.50°	263 (10.63")	125 (4.92")	132 (5.19")	32 (1.25")	210 (8.26")
00	883 (34.76")	(35.39")	787.4 (31")	760 (29.92")	851 (33.50")	28.5 (1.12")		16 (0.62")							

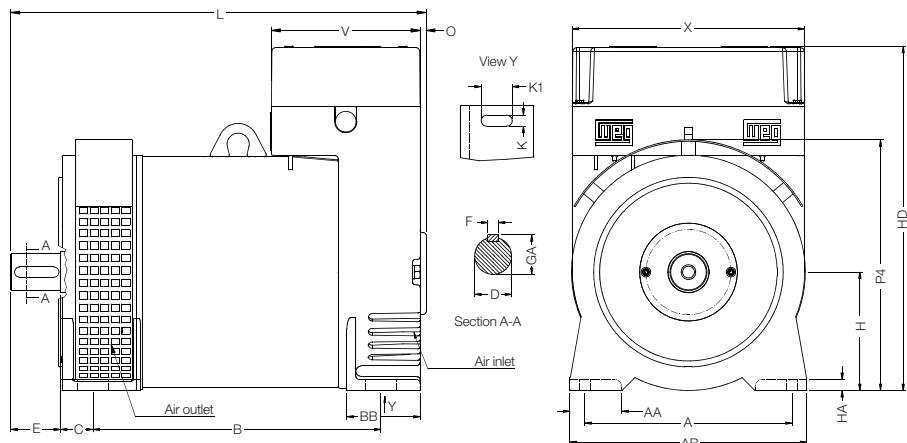
Note: data subject to change without prior notice.



Mechanical Features

Double Bearing - B3T

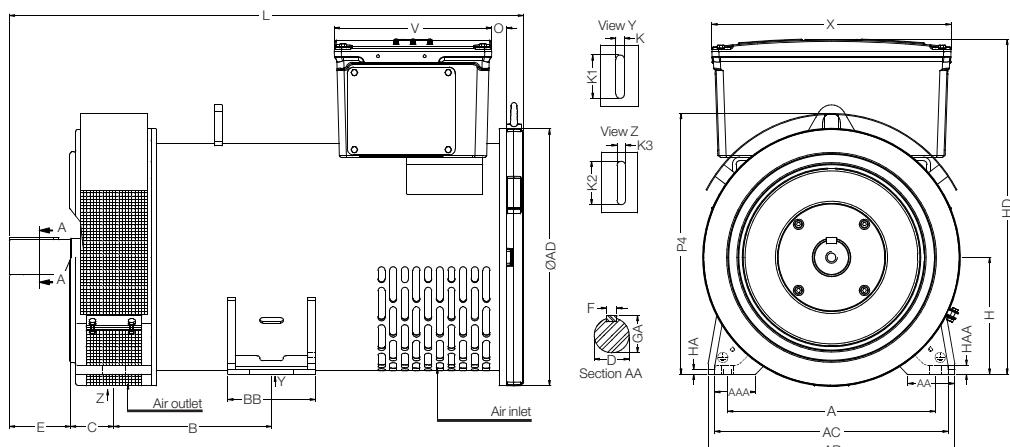
G Plus Line (160 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	HD	X	V	C	O	P4	L
160	299 (11.77")														476 (18.74")	
161	280 (11.02")	389 (15.31")	320 (12.59")	99 (3.89")	70 (2.75")	15 (0.59")	15 (0.59")	42 (1.65")	160 (6.29")	465 (18.30")	314 (12.36")	201 (7.91")	49 (1.92")	8 (0.31")	340 (13.38")	566 (22.28")
162	469 (18.46")														646 (25.43")	

Shaft end			
D	GA	F	E
50 (1.96")	53.5 (2.10")	14 (0.55")	67 (2.63")

G Plus Line (200 Frame)



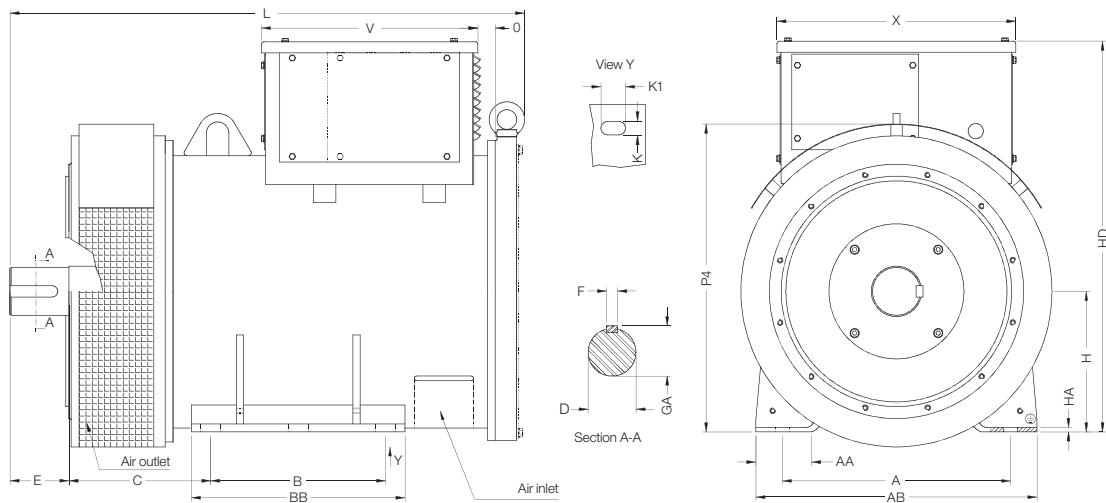
Frame	Dimensions (mm/in)																
	A	B	AB	AC	BB	AA	HA	K	K1	H	ØAC	V	HD	X	O	C	P4
201	187.5 (7.38")	423 (16.56")	400 (15.74")	150 (5.90")	80 (3.14")	8 (0.31")	14.5 (0.57")	74.5 (2.93")	200 (7.87")	440 (17.32")	311 (12.24")	572 (22.51")	388 (15.27")	30 (1.18")	271.5 (10.68")	442 (17.40")	750 (29.52")
202	356 (14.01")	260.5 (10.25")													344.5 (13.56")	880 (34.64")	

Shaft end			
D	GA	F	E
60 (2.36")	64 (2.51")	18 (0.70")	105 (4.13")

Notes: Data subject to change without prior notice.
When the alternator is driven by pulley and belt, WEG must be contacted.

Mechanical Features Double Bearing - B3T

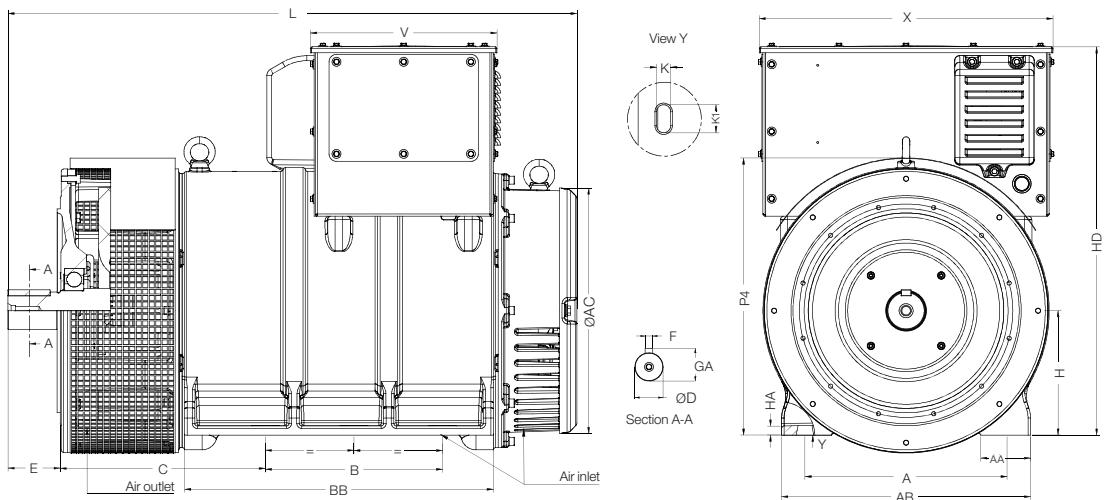
G Plus Line (250 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	V	HD	X	C	O	P4	L
251	406 (15.98")	311 (12.24")	500 (19.68")	380 (14.96")	100 (3.93")	7.9 (0.31")	24	36 (1.41")	250 (9.84")	695 (27.36")	425 (16.73")	385 (15.15")	252 (9.92")	32.5 (1.27")	550 (21.65")	915 (36.02")

Shaft end			
D	GA	F	E
85 (3.34")	89.5 (3.52")	20 (0.78")	105 (4.13")

AG10 Line (250 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	L
250S	406 (15.98")	178 (7.00")	500 (19.68")	470 (18.50")	100 (3.93")	18 (0.70")	28 (1.10")	56 (2.20")	250 (9.84")	493 (19.40")	375 (14.76")	780 (30.70")	590 (23.22")	405 (15.94")	557 (21.92")	993 (39.09")
250M	356 (14.01")	356 (14.01")	620 (24.40")													1143 (45")

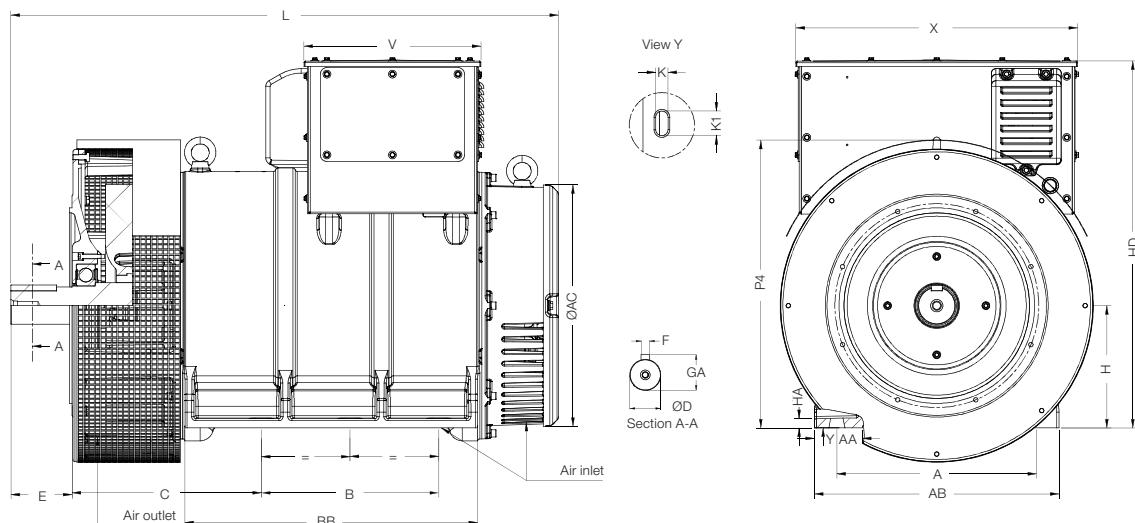
Shaft end			
D	GA	F	E
75 (2.95")	79.5 (3.12")	20 (0.78")	105 (4.13")

Notes: Data subject to change without prior notice.
When the alternator is driven by pulley and belt, WEG must be contacted.

Mechanical Features

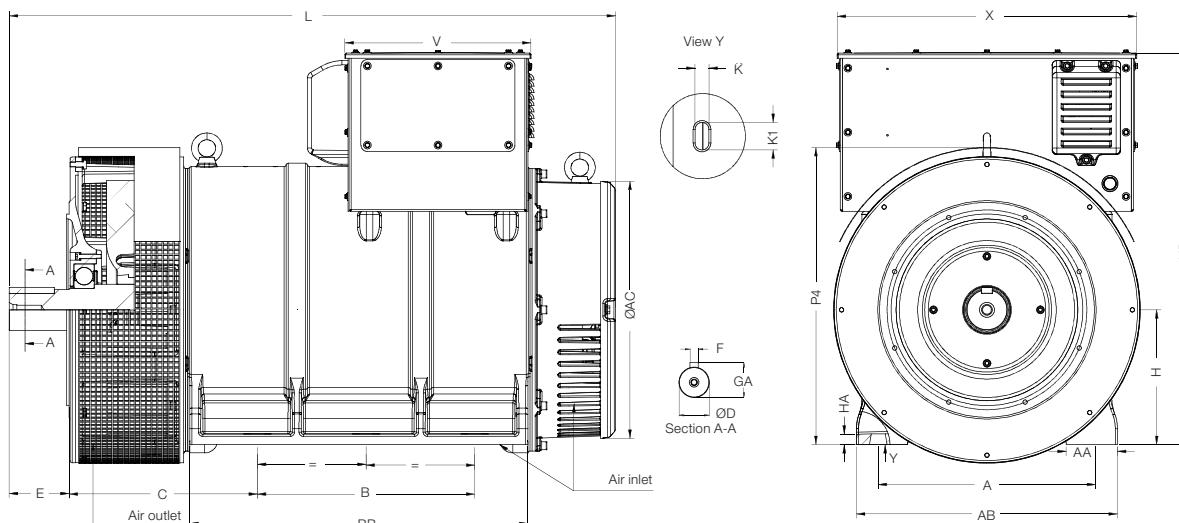
Double Bearing - B3T

AG10 Line (280 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	L
280M	457 (17.99")	406 (15.98")	560 (22.04")	670 (26.37")	110 (4.33")	21 (0.82")	28 (1.10")	56 (2.20")	280 (11.02")	553 (21.77")	405 (15.94")	840 (33.07")	645 (25.39")	429 (16.88")	627 (24.69")	1254 (49.37")
Shaft end																
	D	GA	F	E												
	85 (3.34")	90 (3.54")	25 (0.98")	140 (5.51")												

AG10 Line (315 Frame)



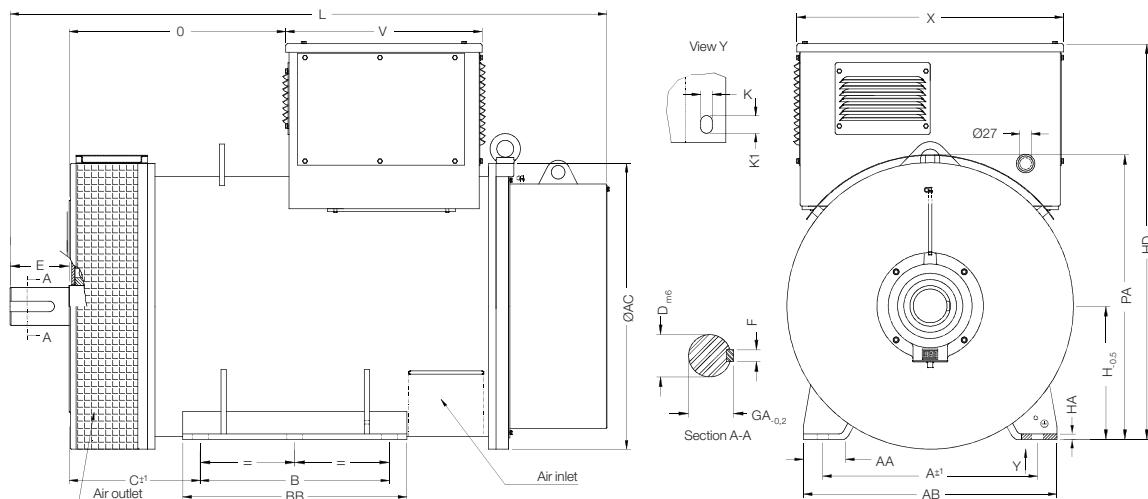
Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	L
315M	508 (20")	508 (20")	610 (24.01")	790 (31.10")	120 (4.72")	24 (0.94")	32 (1.25")	64 (2.51")	315 (12.40")	601 (23.66")	435 (17.12")	915 (36.02")	700 (27.55")	435 (17.12")	694 (27.32")	1417 (55.78")
315L																
Shaft end																
	D	GA	F	E												
	95 (3.74")	100 (3.93")	25 (0.98")	140 (5.51")												

Notes: Data subject to change without prior notice.

When the alternator is driven by pulley and belt, WEG must be contacted.

Mechanical Features Double Bearing - B3T

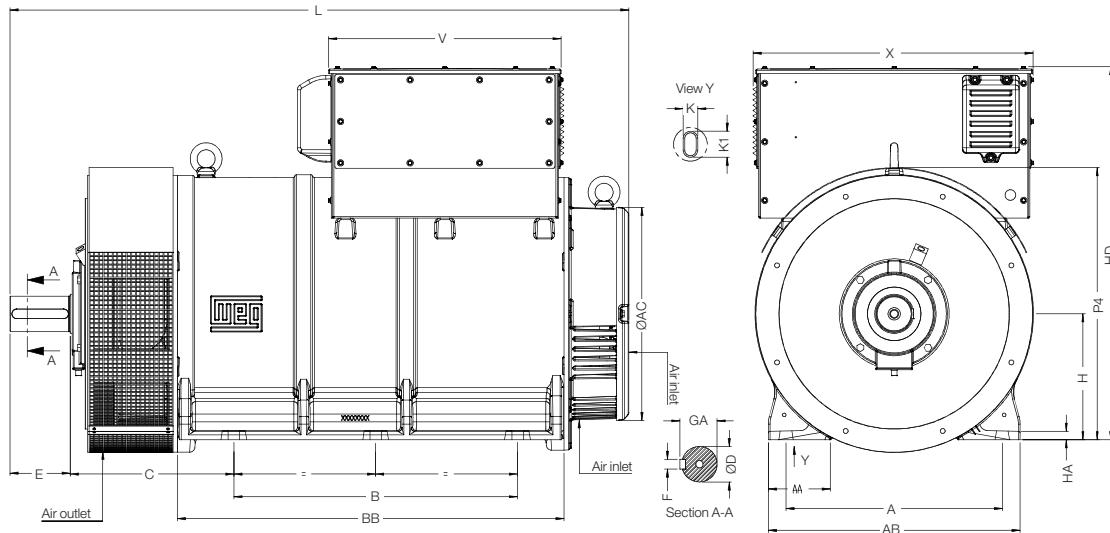
G Plus Line (355 Frame)



Frame	Dimensions (mm/in)															L	
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	PA	O	
352	528 (20.78")	550 (21.65")	660 (25.98")	740 (29.13")	130 (5.11")	16 (0.62")	28 (1.10")	42 (1.65")	355 (13.97")	1053 (41.45")	780 (30.70")	635 (25")	465 (18.30")	410 (16.14")	675 (26.57")	628 (24.72")	1637 (64.44")

Shaft end			
D	GA	F	E
100 (3.93")	106 (4.17")	28 (1.10")	170 (6.69")

AG10 Line (355 Frame)



Frame	Dimensions (mm/in)															L
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	
355	610 (24.01")	800 (31.49")	710 (27.95")	1090 (42.91")	175 (6.88")	24 (0.94")	32 (1.25")	64 (2.51")	355 (13.97")	601 (23.66")	655 (25.78")	1052 (41.41")	789 (31.06")	461 (18.14")	767 (30.19")	1745 (68.70")

Shaft end			
D	GA	F	E
100 (3.93")	105 (4.13")	28 (1.10")	170 (6.69")

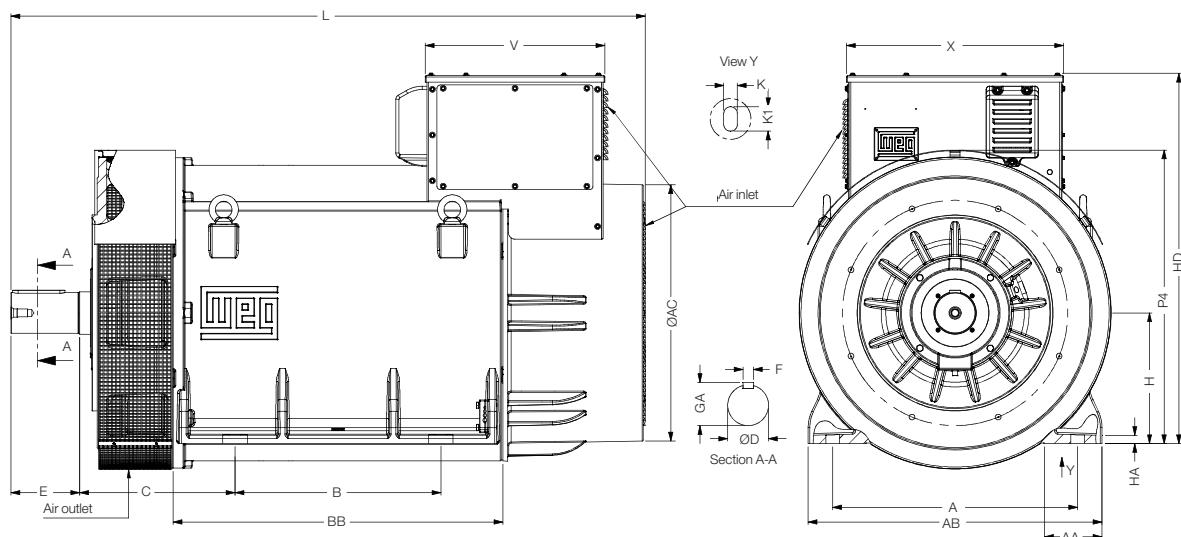
Notes: Data subject to change without prior notice.

When the alternator is driven by pulley and belt, WEG must be contacted.

Mechanical Features

Double Bearing - B3T

AG10 Line (400 Frame)



Frame	Dimensions (mm/in)															
	A	B	AB	BB	AA	HA	K	K1	H	ØAC	V	HD	X	C	P4	L
400	750 (29.52")	630 (24.80")	900 (35.43")	1010 (39.76")	176 (6.92")	25 (0.98")	42 (1.65")	75 (2.95")	400 (15.74")	784 (30.86")	550 (21.65")	1134 (44.64")	665 (26.18")	476 (18.74")	899 (35.39")	1941 (76.41")

Shaft end			
D	GA	F	E
125 (4.92")	132 (5.19")	32 (1.25")	210 (8.26")

Notes: Data subject to change without prior notice.

When the alternator is driven by pulley and belt, WEG must be contacted.



Genuine WEG Parts and Components

After years of operation, the alternators may need to be serviced, for this we would recommend the use of WEG genuine service parts.

WEG's team can provide immediate support for the proper component identification.

Contact: parts_wm@weg.net.

Technical Assistance

WEG offers technical assistance services, responsible for all after sale support. Those services include support to general questions and service on the field, including diagnostics, machine commissioning and operation 24x7. WEG's technical assistance network is present worldwide. The technical assistance offers a qualified and experienced team, able to perform in different situation on the field and give remote support, using state of the art equipment, providing reliability to the results.

Services

WEG, 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
- Alternators
- Three-phase induction motors (squirrel cage or slip rings, low, medium and high voltage)
- Synchronous motors (with or without brushes, low, medium and high voltage)
- Turbogenerators
- Hydrogenerators



Warranty

These products, when operated under the conditions stipulated by WEG in the operating manual for such product, are warranted against defects in workmanship and materials for twelve (12) months from start-up date or eighteen (18) months from manufacturer shipment date, whichever occurs first.

Certifications

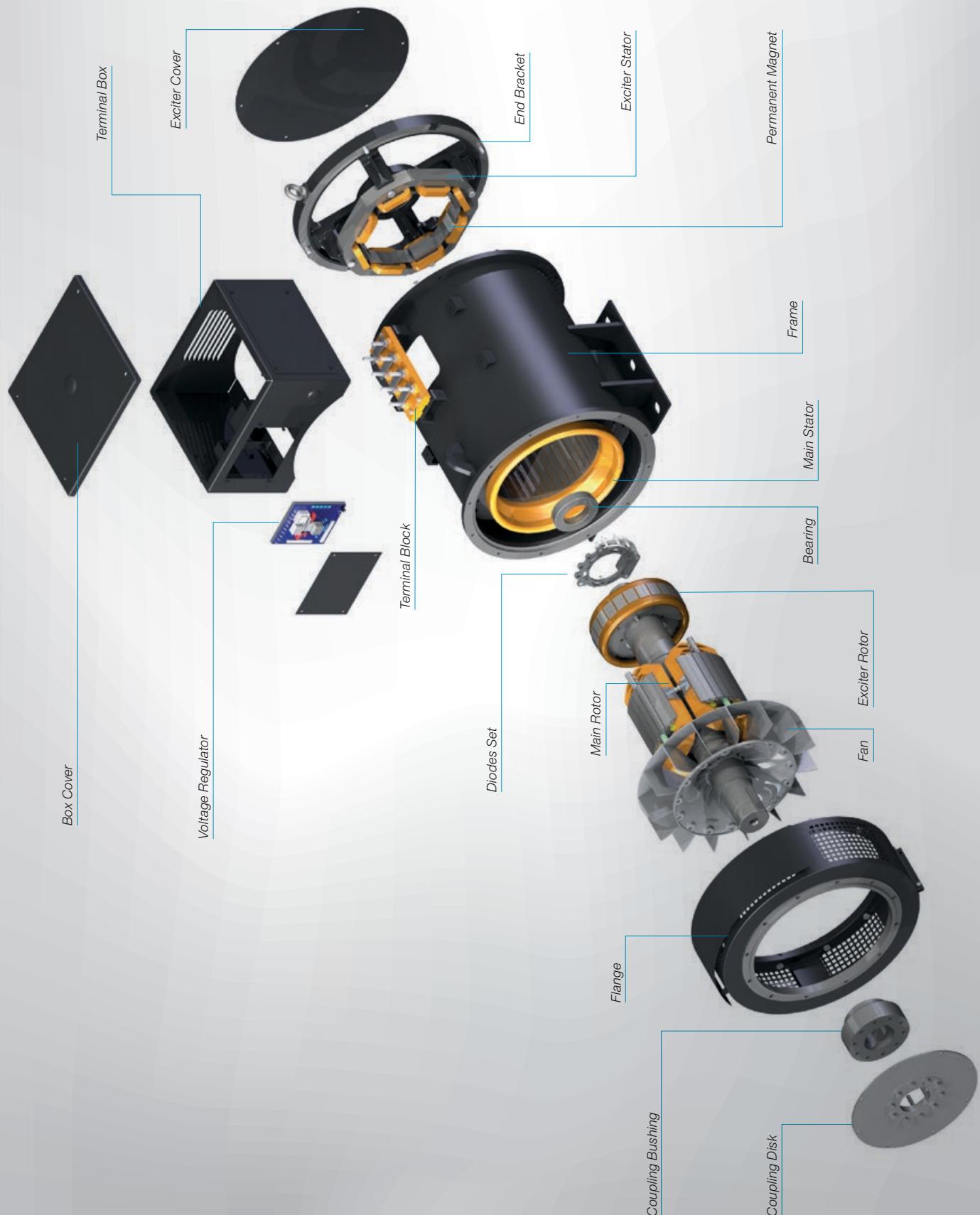
WEG's quality system is certificated as per the requirements of the standard ISO 9001 and ISO 9001/14001. The quality system is audited and certified by the Bureau Veritas Quality Institute. In order to operate in the most demanding markets, the synchronous alternators are certified by important institutions such as C.E. (European Community) and UL (Underwriters Laboratories).

In the marine version, WEG synchronous alternators can be supplied, under request, with certifications of entities like: Lloyds, Bureau Veritas, ABS, Germanischer Lloyd, DNV and others.



Components G Plus Line

Exploding View Drawing



Components AG10 Line

Exploding View Drawing



For WEG's worldwide
operations visit our website



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Cod: 50074626 | Rev: 03 | Date (m/y): 07/2022.

The values shown are subject to change without prior notice.

The information contained is reference values.