

凯工电气
KAIGONG ELECTRIC

■ Motor
■ **Alternator**

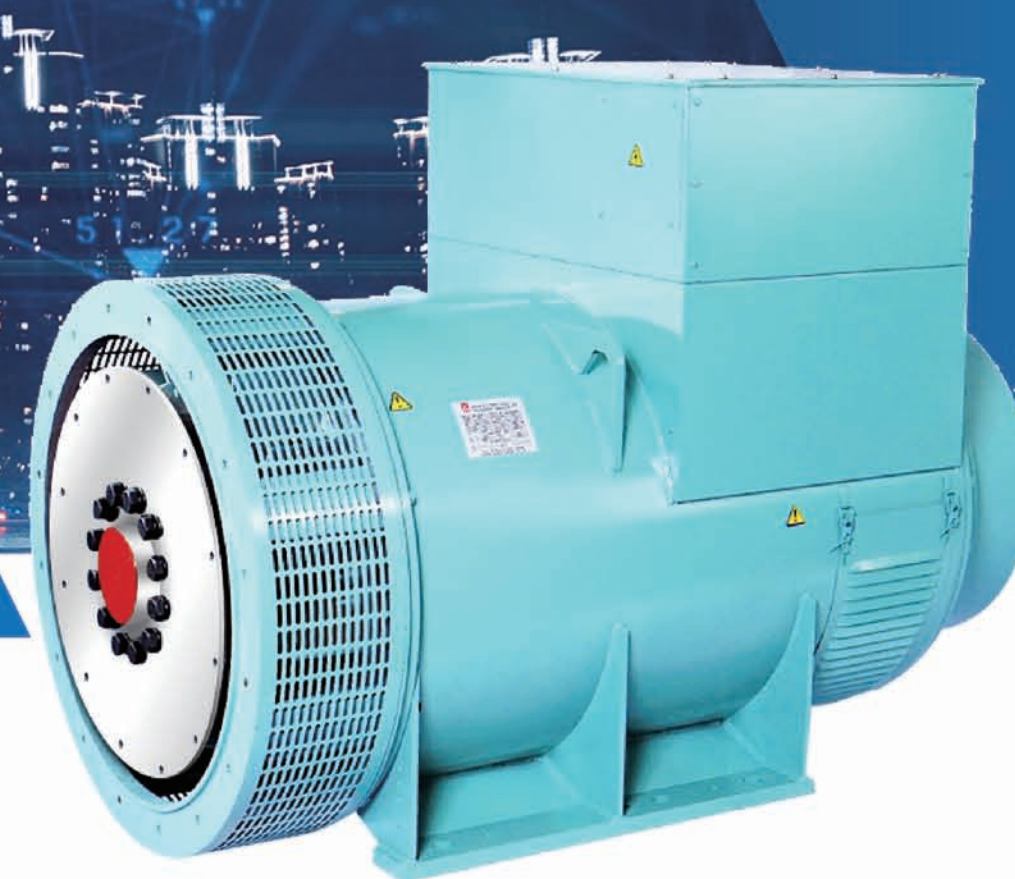
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请注意：本样本之数据仅供参考，因产品不断完善，技术数据可能随时更改，如有疑问，请与我司联系。

Please note: The technical data in this catalogue only for reference, continuous development of our product entitles us to change the specification without notice, if any doubt, please contact with us.

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凯工电气（苏州）有限公司
KAIGONG ELECTRIC(SUZHOU)CO.,LTD.





真诚创造价值
— SINCERITY CREATE VALUE —

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企业简介 Corporate Profile

凯工电气，坐落于中国苏州国家级高新技术产业开发区，是一家专业电机及发电设备制造企业，凭借一流科技创新能力成为中小节能电机及系统、新能源发电设备制造的佼佼者。

多年来，凯工电气始终秉承“真诚创造价值”的理念，以国际化视野追逐智慧与技术的碰撞，在闻名遐迩的“中国中小电机之都”全资投建产品研发生产基地，与高等院校及科研院所建立“产学研”合作模式，拥有现代化机械装备企业科学管理系统，在产品研制与开发上具有雄厚的设备资源和强大的技术力量。借助国内外多项先进的三维和仿真技术，先后设计开发TWGII系列无刷发电机、ST/STC系列有刷发电机、FHW系列永磁发电电焊两用机、Y2/CDF/SDF系列三相异步电动机、YE2/YE3系列高效/超高效率三相异步电动机，MS/MSE2系列铝壳高效三相异步电动机等。

依靠领先行业的雄厚实力和创新发展理念，公司通过全过程、可追溯的全面质量管理，实现了设计建模计算、实验验证、材料选用、工艺控制、产品终端检验等全程系统管控，获得ISO9001质量管理体系认证、ISO14001环境管理体系认证、ISO45001职业健康安全管理体系认证，CCC, CE, GS, SGS等产品认证，先后获得数十项国家专利。旗下“凯捷利”商标作为行业知名品牌，成为国内外众多客户推荐和认可的品牌。产品远销欧美、东南亚、中东、非洲等数十个国家与地区，并直接或间接与中国神华、中国电信，中国石油，中国建设，上柴股份等大型企业建立了长期合作伙伴关系！

踔厉奋发，笃行不怠。未来，凯工电气将继续潜心深耕，专注高能低耗发电机和高效节能电动机的研发与生产，用专业致敬梦想，持续为世界提供更强劲源动力。

Kaigong Electric, located in Suzhou National High tech Industrial Development Zone, China, is a professional motor and power generation equipment manufacturing enterprise. With its first-class scientific and technological innovation ability, it has become a leader in the manufacturing of small and medium-sized energy-saving motors and systems and new energy power generation equipment.

Over the years, Kaigong Electric has always adhered to the concept of "Sincerity Create Value" and pursued the collision between wisdom and technology from an international perspective. It has invested in the construction of a wholly-owned product R & D and production base in the famous "Capital of small and medium-sized motors in China", established a "production university research" cooperation mode with colleges and universities and scientific research institutes, and has a modern mechanical equipment enterprise scientific management system. It has abundant equipment resources and strong technical force in product research and development. With the help of many advanced 3D and simulation technologies at home and abroad, we have successively designed and developed TWGII series brushless generator, ST/STC series brush generator, FHW series permanent magnet power generation and welding machine, Y2/CD-F/SDF series three-phase asynchronous motor, YE2/YE3 series high efficiency / ultra high efficiency three-phase asynchronous motor, MS/MSE2 series aluminum housing high efficiency three-phase asynchronous motor, etc.

Relying on the strong strength of the leading industry and the concept of innovative development, the company has realized the whole process system control of design modeling and calculation, experimental verification, material selection, process control, product terminal inspection, etc. through the whole process and traceable total quality management, and has obtained ISO9001 quality management system certification, ISO14001 EMS certification, ISO45001 OHSMS certification, CCC, CE, GS, SGS and other product certifications. We have obtained dozens of national patents. As a well-known brand in the industry, our "KAIJIELI" brand has become a brand recommended and recognized by many customers at home and abroad. Products are exported to dozens of countries and regions in Europe, America, Southeast Asia, the Middle East, and Africa, and have established long-term partnerships directly or indirectly with large enterprises such as China Shenhua, China Telecom, CNPC, CCTC and ShangChai and other large enterprises!

Work hard and do not slacken off. In the future, Kaigong Electric will continue to devote itself to the R & D and production of high-energy and low consumption generators and high-efficiency and energy-saving motors, salute the dream with professionalism, and continue to provide stronger power for the world.



TWG II

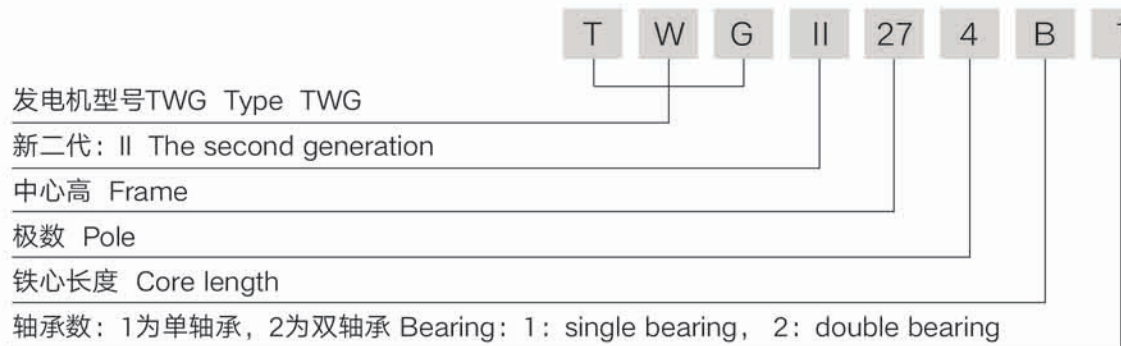
SERIES BRUSHLESS
SYNCHRONOUS GENERATOR



简介 INTRODUCTION:

TWG II 系列三相交流无刷同步发电机是我公司在原TWG系列的基础上，结合国内外先进无刷发电机系列的设计和制造技术而自行开发的新一代发电机。该系列发电机体积小、重量轻、外观精致、可靠性高，电气性能达到国际先进水平。TWG II 系列三相交流无刷同步发电机符合IEC国际电工委员会和GB755等相关标准，适用于与柴油机配套组成柴油发电机组或移动电站，使用于陆地、舰船、列车、宾馆等需要工频电源的场合。

TwGII series three-phase brushless synchronous generators, by introducing and developing foreign and domestic advanced technology and design, are newly designed by our company on basis of our primary TWG series. It possesses following features: small-size, light-weight, delicate appearance, reliable operation, the electrical performance of our product can reach up to the international advanced level. TwGII series three-phase brushless synchronous generators are in conformity with IEC, GB755 and relevant standard. It is suitable to match with the diesel engine to be genset and mobile power station used in land, boat, train, hotel and the occasion where industry power needed.



注: 如果没有标注轴承数量, 则默认为是单轴承, 如TWG II 274B默认为是单轴。
REMARK: If the number of bearing is not marked, it is single bearing by default, EG. TWG II 274B is single bearing by default.

主要性能参数 MAIN PERFORMANCE INDEX:

- | | |
|------------------------------------|--|
| 01.防滴漏结构 (IP22防护等级) | 01.Drip-leak-proof structure: (IP22 protection class) |
| 02.H级绝缘 | 02.Instulation class H |
| 03.额定电压400V | 03.Rated voltage 400V |
| 04.三相四线制 | 04.Three phase four threads |
| 05.稳态电压调整率 $\leq \pm 1\%$ | 05.Adjusting rate of stable voltage $\leq \pm 1\%$ |
| 06.瞬态电压调整率 $\leq -15\% \sim +20\%$ | 06.Transient state voltage $\leq -15\% \sim +20\%$ |
| 07.电压波形畸变率THD $\leq 3\%$ | 07.Wave aberration rate of voltage THD $\leq 3\%$ |
| 08.电话谐波系数THF $\leq 2\%$ | 08.Telephone harmony wave factor of thlephone THF $\leq 2\%$ |
| 09.电话影响系数TIF ≤ 50 | 09.Telephone eff.ective factor of telephone TIF ≤ 50 |
| 10.其它电压范围的发电机要根据用户需要制造 | 10.Voltage of other range depends on the costumers request |

使用环境 ENVIRONMENT CONDITIONS:

在下列环境下, 发电机能够额定运行

- 1.拔不超过1000米
- 2.冷却空气温度258~313K (-15°C~40°C)
- 3.相对湿度不超过90%

Under the following environment, the generator could running continuously:

- 1.Altitude: not exceed 1000m
- 2.Cooling air temperature: 258~313k (-15°C~40°C)
- 3.Relative air humidity: not exceed 90%

修正系数 Correction Factor:

海拔高度 (m) Altitude(m)	冷却介质温度 Cooling air temperature (°C)					
	<30	30~40	40~45	45~50	50~55	55~60
< 1000	1.04	1.00	0.97	0.94	0.90	0.85
1000~1500	1.01	0.97	0.94	0.91	0.87	0.82
1500~2000	0.98	0.94	0.91	0.88	0.84	0.79
2000~2500	0.94	0.90	0.87	0.84	0.80	0.75
2500~3000	0.90	0.86	0.83	0.80	0.76	0.71
3000~3500	0.86	0.82	0.79	0.75	0.71	0.66
3500~4000	0.81	0.77	0.74	0.70	0.66	0.61
>4000	按要求	按要求	按要求	按要求	按要求	按要求

按要求—根据客户要求 According to customer requirements

特征 FEATURES:

- | | |
|--|--|
| 1.可靠的自动电压调节器励磁系统和任选的永磁发电机系统, 在各种情况下可提供恒定励磁 | 1.Reliable AVR exciting system and optional permanent magnetic system always provide in variable excitation on all occasions |
| 2.很容易与电网或其它发电机并联 | 2.Easy to be connected with power network of parallel other generators |
| 3.经动平衡的转子, 带有密封的滚珠轴承, 具有单轴承和双轴承两种结构 | 3.Balanced rotor, sealed single and double ball bearings |
| 4.安装简单, 维护保养方便; 具有极易操作的接线柱、旋转整流器和联轴器螺栓 | 4.Convenient installation and easy maintenance, easy access to terminal.rotating rectifier and coupling bolts |
| 5.多规格的过渡接套和单轴承盘片式联轴器 | 5.Wide range of flange adapter and coupling disc for single bearing |
| 6.符合所有主导的陆用标准 | 6.In conformity with all mainland standard |

电气特征 ELECTRICAL CHARACTER:

励磁系统 EXCITATION SYSTEM:

标准配置自动电压调节器 (AVR) 为; SX440、SX460、KRS440B、MX341B或MX321为任选的自动电压调节器 (AVR) 主机定子通过AVR向励磁机定子提供电力。AVR中的高效率半导体器件确保输出电压从最初较低的剩磁电压逐渐增大至额定值。励磁机转子的输出功率通过三相全波桥式整流器输给主机转子。该整流器两端并有压敏电阻, 抑制浪涌电压, 以免由诸如短路或者并联时相位失步而引起的冲击。励磁机定子带有磁钢, 可保证在任何情况下顺利起动。所有AVR的稳态电压调整率 $\leq \pm 1\%$, SX440、KRS440B、MX341B、MX321具有并联、低频保护, 外部电压调节等多种功能。MX321、MX341B为带永磁发电机所用的AVR。

The standard AVR include Sx440, SX460、KRS440B、MX341B OR MX321（optional AVR）
The main stator provides the exciter stator with the power via AVR. The high efficiency semiconductor inside AVR ensures the output voltage gradually up to the rated value from the initial lower remanence voltage. The power of the exciters rotor is output to the host rotor through 3-phasefull wave rectifer. Two ends of the rectifer are connected with piezo resistance for restraining surge voltage and avoiding the impact caused by short cicuit of parallel synchronization loss. Exciters stator is equipped with permanent magnetic steel can make generator starting smoothly in any occasions.Whole stable voltage regulation is 1%, and SX440、KRS440B、MX341B、MX321 have features of parallel connection.low frequency protection and exterior voltage adjustment,etc.
MX341B and MX321 are the AVR for the permanent magnetic motors.

电压调整率 VOLTAGE REGULATION:

电压调整率是指允许发动机转速在4%以内的波动下、功率因数在0.8满后与1之间，从空载到满载的电压变化（包括冷态至热态的变化），可用AVR上的一个微调来调整电压。
Voltage regulation refers to the change of voltage from non-load to full-load with power factor langing from 0.8 to 1 and 4%’s fuctuation of the speed of engine. Voltage is adjusted via potention meter of AVR.

电气特性 ELECTRIC FEATURES:

绝缘和浸漆 INSULATION:

绝缘等级是“H”级。
所有绕制的零部件都是用专门研制的材料并采用特殊的工艺浸漆的，为发电机在恶劣环境中运行提供保障。专门开发的树脂基材料为线圈和各旋转部件提供了高加工强度和高机械强度。
Insulation class H
All regulatory components are made up with special materials and also immersed in lacquer by peculiar tech . Varnish and colophony materials are developed to strengthen the processing and machinery intensity of windings and revoving parts for protecting the generator work under corosive environment.

绕组和电气性能 WINDINGS AND ELECTRIC FEATURES:

所有发电机的定子采用高导磁性能冷轧硅钢板叠压而成，新型双层叠绕组、结构坚固，绝缘性能好。一个完全连续的阻尼绕组减少了并联时的振荡。这种新型绕组，且极和齿都经过仔细精选的绕组抑制了输出电压的波形畸变。
All the generator stators adopt high magnetic conductibility energy cold rolling silicon steel plate to fold up, double winding,firm structure, good insulating.Continuous damp windings abate surges. T’he poles and teeth of the windings are carefully chosen, which helps checking the wave distortion of output voltage.

电话干扰 PHONE INTERFERENCE:

THF（如BS EN 600 34-1所定义）小于2%.TIF（如NEMA MG1-22所定义）小于50.
THF（as defined by BS EN 600 34-1）<2%.TIF（as defined by NEMA MG1-22）<50.

无线电干扰 RADIO INTERFERENCE:

无刷装置和高质量的AVR确保无线电传送时干扰很小。如果需要的话，可另外提供RFI抑制装置。
Brushless apparatus and high quality AVR ensure little radio interference in transmission.RFI noise filter is also available.

机械特性 MECHANIC FEATURES:

外壳 FRAME:

所有陆用发电机的标准型为IP22（GB/T 4942.1, IEC 60034-5）。作为任选，可提供IP23的防护等级，但额定功率下降5%。船用发电机的标准型为IP23。作为任选件，可在发电机上装备空气过滤器，但额定值下降5%。
All the industrial generator’s standard is IP22（GB/T 4942.1, IEC 60034-5）.IP23 is also available,but rated power will decrease 5%.Marine-generator is IP23 as normal standard.Air filter is an option,but rated power will decrease 5% while it is installed.

轴和键 AXIS AND KEY:

所有发电机转子都经动平衡校验，校验振动比GB/T 9239和ISO1940第1部分第2.5级中规定的最小值还要低。双支点发电机带一个半键校动平衡。
All rotors should pass balance test, which vibration is lower than the minimum value of BS6861 P.1,G2.5.Two-bearing generator has a half-key testing balance.

接线端子和接线盒 TERMINAL AND TERMINAL BOX:

标准的发电机是三相，并可对引至接线端子的12个接线头重接，接线端子安装在发电机非驱动端的出线板上。在薄钢板制成的出线盒内有AVR，具有足够空间让用户布线。为易于操作，面板为拆卸式面板。
The normal three-phase generators have 12 leads brought out to the terminals in the terminal box.The terminals are put on the board of the non-drive end . AVR is mounted in the terminal box made in steel sheet and enough space left inside for laying wires. The box is equipped with removable panels.

过渡接套和联轴器 ENGINE ADAPTOR AND COUPLING:

TWG II 系列发电机都具有单轴承和双轴承两种结构。
TWG II 系列单轴承结构的过渡接套可选SAE#00、0、1/2、1、2、3、4、5；盘片式联轴器可选SAE#6.5，7.5，8，10，11.5，14，16，18，21
TwG series generators have two kinds of structure, single bearing and double bearing.
Engine adapler for single-beaing could be SAE00、0、12、1、2、3、4 and 5, Couping disc for single-beaing could be SAE#6.5，7.5，8.10，11.5，14，16，18and 21.
Engine adapter for double-bearing could be SAE#00, 0, 1/2, 1, 2, 3, 4 and 5.

可供选择的配置 OPTION FEATURES:

- | | |
|-------------------|---|
| 1.过渡联接套及可互换的盘式连轴器 | 1.Adapters and interchangeable drive disk |
| 2.单相 | 2.Single phase |
| 3.电压远程调整 | 3.Remote voltage adjust |
| 4.IP23防护等级 | 4.IP23 protection class |
| 5.空间加热器 | 5.Space heaters |
| 6.热敏电阻 | 6.Thermistors |
| 7.断路器 | 7.Circuit breaker |

型号及容量 TYPE AND CAPACITY

型 号 TYPE	额定功率Rated Power (4P-1500rpm 2P-3000rpm 50HZ 400V)							重 量 Weight(kg)	
	连续Continuous/40℃			备用Stand by/40℃		备用Stand by/27℃			
	H级125K			H级150K		H级163K		单轴承 Single Bearing	双轴承 Double Bearing
	kVA	kW	η (%)	kVA	kW	kVA	kW		
TWG II 162D	12.5	10	73.2	13.8	11	15	12	83	89
TWG II 162E	15	12	76.8	16.5	13.2	18	14.5	94	100
TWG II 162F	17.5	14	78.9	19.5	15.6	21	16.8	101	107
TWG II 162G	25	20	81.2	27.5	22	30	24	117	123
TWG II 182H	30	24	81.6	32.5	26	35	28	130	136
TWG II 182J	35	28	82.5	37.5	30	40	32	143	149
TWG II 182K	37.5	30	84.5	40	32	42.5	34	159	165
TWG II 164A	7.5	6	78.5	8.1	6.5	8.6	6.9	82	88
TWG II 164B	10.0	8	78.8	10.8	8.6	11.5	9.2	86	92
TWG II 164C	12.5	10	80.6	13.5	10.8	14.4	11.5	92	98
TWG II 164D	15.0	12	81.2	16.3	13.0	17.3	13.8	95	101
TWG II 184E	20.0	16	84.5	21.6	17.3	23.0	18.4	116	122
TWG II 184EC	22.5	18	85.0	24.3	19.4	25.9	20.7	125	131
TWG II 184F	25.0	20	85.9	27.0	21.6	28.8	23.0	146	152
TWG II 184FC	27.5	22	86.0	29.8	23.8	31.6	25.3	148	154
TWG II 184G	30.0	24	86.3	32.4	25.9	34.5	27.6	150	156
TWG II 184GC	35.0	28	86.4	37.1	29.7	38.9	31.1	160	166
TWG II 184H	37.5	30	86.6	40	32	41.3	33	182	188
TWG II 184J	42.5	34	86.8	45	36	47.5	38	193	199
TWG II 224BC	37.5	30	86.7	40	32	41.3	33	215	221
TWG II 224B	42.5	34	87.0	45	36	47.5	38	235	241
TWG II 224C	50.0	40	88.0	52.5	42	55	44	252	258
TWG II 224DC	56.3	45	88.4	60	48	62.5	50	268	274
TWG II 224D	60.0	48	88.6	63	50.5	66	53	278	284
TWG II 224E	72.5	58	90.0	77.5	62	80	64	300	306
TWG II 224FC	80.0	64	90.1	85	68	88	70.5	320	326
TWG II 224F	85.0	68	90.2	90	72	94	75	340	346
TWG II 224G	94.0	75	90.3	100	80	106	85	350	356
TWG II 274B	100.0	80	90.4	106	85	110	88	360	366
TWG II 274C	117.5	94	90.8	127.5	102	131	105	385	391
TWG II 274CC	125	100	91.0	132.5	106	137.5	110	419	425
TWG II 274D	140	112	91.5	147	117.6	154	123	430	436
TWG II 274EC	150	120	92.1	160	128	165	132	455	461
TWG II 274E	160	128	92.3	170	136	176	141	475	481
TWG II 274FB	175	140	92.4	185	148	194	155	504	510
TWG II 274F	181	145	92.4	190	152	200	160	520	526
TWG II 274FC	190	152	92.5	200	160	212.5	170	540	546
TWG II 274G	200	160	93.3	212.5	170	220	176	570	576
TWG II 274H	225	180	93.1	237.5	190	250	200	590	596
TWG II 274HC	250	200	93.0	270	216	275	220	610	616

型号及容量 TYPE AND CAPACITY

型 号 TYPE	额定功率Rated Power (4P-1500rpm 2P-3000rpm 50HZ 400V)							重 量 Weight(kg)	
	连续Continuous/40℃			备用Stand by/40℃		备用Stand by/27℃			
	H级125K			H级150K		H级163K		单轴承 Single Bearing	双轴承 Double Bearing
	kVA	kW	η (%)	kVA	kW	kVA	kW		
TWG II 314BC	250	200	92.2	270	216	275	220	790	795
TWG II 314B	275	220	92.4	289	231	305	244	815	820
TWG II 314C	300	240	92.7	320	256	330	264	860	865
TWG II 314DB	312	250	93.1	331	265	344	275	920	925
TWG II 314DC	325	260	93.1	345	276	362.5	290	930	935
TWG II 314D	350	280	93.3	370	296	388	310	940	945
TWG II 314EC	375	300	93.4	400	320	419	335	1050	1055
TWG II 314E	400	320	93.5	425	340	450	360	1065	1070
TWG II 314F	450	360	94	478	382	495	396	1125	1130
TWG II 354B	450	360	94.1	478	382	495	396	1160	1170
TWG II 354C	500	400	94.4	525	420	550	440	1270	1280
TWG II 354CC	562.5	450	94.5	587.5	470	625	500	1300	1310
TWG II 354D	600	480	94.6	640	512	665	532	1410	1420
TWG II 354DC	625	500	94.6	662.5	530	687.5	550	1428	1438
TWG II 354EC	662	530	94.8	695	556	731	585	1510	1520
TWG II 354E	700	560	94.8	737.5	590	770	616	1563	1573
TWG II 354F	750	600	93.3	775	620	790	632	1683	1693
TWG II 404B	750	600	93.3	775	620	790	632	1780	1780
TWG II 404C	800	640	93.6	825	660	840	672	1820	1820
TWG II 404D	900	720	93.8	937.5	750	957.5	766	1890	1890
TWG II 404E	1000	800	94.3	1030	824	1050	840	2000	2000
TWG II 404F	1125	900	94.7	1162.5	930	1187.5	950	2250	2250
TWG II 404G	1250	1000	95	1287.5	1030	1312.5	1050	2540	2540
TWG II 404H	1400	1120	95	1460	1168	1500	1200	2700	2700
TWG II 454B	1400	1120	95.2	1460	1168	1500	1200	2677	2677
TWG II 454C	1550	1240	95.6	1615	1292	1660	1328	2880	2880
TWG II 454D	1688	1350	95.9	1750	1400	1800	1440	3100	3100
TWG II 454E	1875	1500	96.1	1950	1560	2000	1600	3200	3200
TWG II 454F	2000	1600	96.2	2100	1680	2150	1720	3600	3600
TWG II 454G	2250	1800	95.8	2330	1864	2400	1920	3850	3850
TWG II 454H	2500	2000	95.7	2600	2080	2670	2136	4300	4300

注:

*所有额定值是基于环境温度最高40℃，海拔1000米以内。

*不同环境温度下提供的备用功率不同。有关备用功率的定义参见ISO8528-3标准。

*电机出风口的防滴盖板是船用机标准型配置，若用户需要，也可为非船用机提供。

*其它极数的发电机请与制造商联系。

*其它功率、电压的发电机要根据用户需要制造。

*所有扩展型号的发电机外形安装尺寸以铁心长度代号第一个字母为准。例如:TWG II 274EC的外形安装尺寸与TWG II 274E相同。

REMARK:

*All the rated are on basis of environment temperature 40℃,altitude not exceeding 1000m.

*Different temperature offers different standby power,the define of the standby power is related to the standard of ISO528-3.

*The dripproof shutter plate on air outlet of motor is standard configuration for marine type.And non-marine use on request.

*Other pole generator,please contact the Manufacture.*Other power and voltage generator are on user request.

*All extended models of generator installation dimensions in order to shape the first letter of core length of the code shall prevail.Eg.TWGII274EC dimensions are same to TWG II 274E.

型号及容量 TYPE AND CAPACITY

型 号 TYPE	额定功率Rated Power (4P-1800rpm 2P-3600rpm 60HZ 480V)							重 量 Weight(kg)	
	连续Continuous/40℃			备用Stand by/40℃		备用Stand by/27℃			
	H级125K			H级150K		H级163K		单轴承	双轴承
	kVA	kW	η (%)	kVA	kW	kVA	kW	Single Bearing	Double Bearing
TWG II 162D	15.6	12.5	71.9	16.9	13.5	17.5	14	83	89
TWG II 162E	18.8	15	75.8	20	16	22.5	18	94	100
TWG II 162F	21.9	17.5	78.1	23.2	18.5	26	21	101	107
TWG II 162G	31.3	25	80.6	34.4	27.5	37.5	30	117	123
TWG II 182H	35	28	80.9	37.5	30	40	32	130	136
TWG II 182J	40	32	82.1	42.5	34	45	36	143	149
TWG II 182K	46.9	37.5	84	50	40	52.5	42	159	165
TWG II 164A	9.4	7.5	78.5	10	8	10.5	8.4	82	88
TWG II 164B	12.5	10	79	13.8	11	14.5	11.5	86	92
TWG II 164C	15.6	12.5	80.3	16.9	13.5	17.5	14	92	98
TWG II 164D	18.8	15	81.2	20	16	21.25	17	95	101
TWG II 184E	25	20	83.8	26.8	21.4	28.8	23	116	122
TWG II 184EC	27.5	22	83.8	30	24	32	26	125	131
TWG II 184F	31.3	25	85.5	33.5	26.8	36.2	29	146	152
TWG II 184FC	32.5	26	85.6	35	28	38	30	148	154
TWG II 184G	37.5	30	86.7	39.4	31.5	41	33	150	156
TWG II 184GC	43.8	35	86.8	46.8	37.5	48.8	39	160	166
TWG II 184H	47.5	38	85.6	50	40	52.5	42	182	188
TWG II 184J	52.5	42	86.5	56	45	58.8	47	193	199
TWG II 224BC	47.5	38	87.5	52.5	42	56.3	45	215	221
TWG II 224B	52.5	42	87.7	58.1	46.5	62.5	50	235	241
TWG II 224C	65	52	88.6	70	56	72.5	58	252	258
TWG II 224DC	70	56	89.2	75	60	80	64	268	274
TWG II 224D	75	60	89.3	80	64	85	68	278	284
TWG II 224E	87.5	70	90.5	95	76	100	80	300	306
TWG II 224FC	95	76	90.6	100	80	105	84	320	326
TWG II 224F	102.5	82	90.8	110	88	112.5	90	340	346
TWG II 224G	112.5	90	91	120	96	125	100	350	356
TWG II 274B	125	100	91	132.5	106	137.5	110	360	366
TWG II 274C	145	116	91.2	155	124	160	128	385	391
TWG II 274CC	150	120	91.3	160	128	165	132	419	425
TWG II 274D	170	136	91.5	177.5	142	187.5	150	430	436
TWG II 274EC	180	144	92.1	190	152	200	160	455	461
TWG II 274E	190	152	92.3	200	160	210	168	475	481
TWG II 274FB	212.5	170	92.6	223	178	234	187	504	510
TWG II 274F	220	176	92.6	230	184	245	196	520	526
TWG II 274FC	225	180	92.7	237.5	190	250	200	540	546
TWG II 274G	245	196	93.5	255	204	275	220	570	576
TWG II 274H	275	220	93.6	287.5	230	300	240	590	596
TWG II 274HC	300	240	92.5	315	252	330	264	610	616

型号及容量 TYPE AND CAPACITY

型 号 TYPE	额定功率Rated Power (4P-1800rpm 2P-3600rpm 60HZ 480V)							重 量 Weight(kg)	
	连续Continuous/40℃			备用Stand by/40℃		备用Stand by/27℃			
	H级125K			H级150K		H级163K		单轴承 Single Bearing	双轴承 Double Bearing
	kVA	kW	η (%)	kVA	kW	kVA	kW		
TWG II 314BC	300	240	92.5	315	252	330	264	790	795
TWG II 314B	315	252	92.8	335	268	345	276	815	820
TWG II 314C	375	300	93.3	400	320	415	332	860	865
TWG II 314DB	385	308	93.4	405	324	423	339	920	925
TWG II 314DC	393	315	93.4	415	332	430	344	930	935
TWG II 314D	425	340	93.5	450	360	475	380	940	945
TWG II 314EC	440	352	93.6	460	368	500	400	1050	1055
TWG II 314E	475	380	93.6	500	400	525	420	1065	1070
TWG II 314F	550	440	94.2	582	466	606	485	1125	1130
TWG II 354B	562	450	94.2	596	477	618	495	1160	1170
TWG II 354C	625	500	94.6	660	528	690	552	1270	1280
TWG II 354CC	690	552	94.7	725	580	760	608	1300	1310
TWG II 354D	745	596	94.8	800	640	825	660	1410	1420
TWG II 354DC	775	620	94.8	825	660	850	680	1428	1438
TWG II 354EC	812	650	95	854	683	894	715	1510	1520
TWG II 354E	850	680	95	900	720	940	752	1563	1573
TWG II 354F	895	716	93.6	928.8	743	938.8	751	1683	1693
TWG II 404B	895	716	93.6	928.8	743	938.8	751	1780	1780
TWG II 404C	957.5	766	93.8	992.5	794	1000	800	1820	1820
TWG II 404D	1088	870	94.5	1125	900	1138	910	1890	1890
TWG II 404E	1200	960	94.8	1235	988	1250	1000	2000	2000
TWG II 404F	1325	1060	95.1	1356	1085	1388	1110	2250	2250
TWG II 404G	1450	1160	95.5	1500	1200	1550	1240	2540	2540
TWG II 404H	1624	1300	95.5	1681	1345	1737	1390	2700	2700
TWG II 454B	1690	1352	95.5	1760	1408	1810	1448	2677	2677
TWG II 454C	1890	1512	95.7	1970	1576	2025	1620	2880	2880
TWG II 454D	2050	1640	96.1	2140	1712	2200	1760	3100	3100
TWG II 454E	2250	1800	96.1	2350	1880	2425	1940	3200	3200
TWG II 454F	2500	2000	96.3	2625	2100	2700	2160	3600	3600
TWG II 454G	2800	2240	96.1	2900	2320	3000	2400	3850	3850
TWG II 454H	3100	2480	96	3200	2560	3300	2640	4300	4300

注:

*所有额定值是基于环境温度最高40℃，海拔1000米以内。

*不同环境温度下提供的备用功率不同。有关备用功率的定义参见ISO8528-3标准。

*电机出风口的防滴盖板是船用机标准型配置，若用户需要，也可为非船用机提供。

*其它极数的发电机请与制造商联系。

*其它功率、电压的发电机要根据用户需要制造。

*所有扩展型号的发电机外形安装尺寸以铁心长度代号第一个字母为准。例如:TWG II 274EC的外形安装尺寸与TWG II 274E相同。

REMARK:

*All the rated are on basis of environment temperature 40℃,altitude not exceeding 1000m.

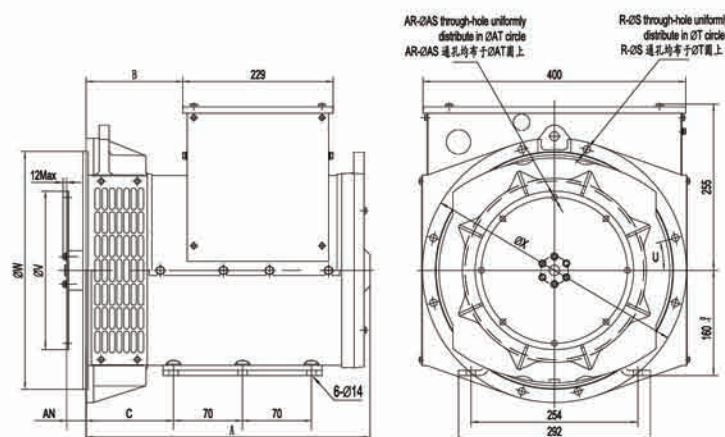
*Different temperature offers different standby power,the define of the standby power is related to the standard of ISO528-3.

*The drip-proof shutter plate on air outlet of motor is standard configuration for marine type.And non-marine use on request.

*Other pole generator,please contact the Manufacture.*Other power and voltage generator are on user request.

*All extended models of generator installation dimensions in order to shape the first letter of core length of the code shall prevail.Eg.TWGII274EC dimensions are same to TWG II 274E.

OUTLINE FOR TWG II 164A-D & TWG II 164D-G (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B
TWG II 164A	365	94
TWG II 164B	365	94
TWG II 164C	392	107
TWG II 164D	392	107

尺寸DIMENSION

型号MODEL	A	B
TWG II 162D	365	94
TWG II 162E	365	94
TWG II 162F	417	132
TWG II 162G	417	132

法兰式过渡接套FLANGE

SAE.No.	R	S	T	U	W	X	C
2	12	11	466.7	15	447.6	489	172
3	8	11	428.6	15	409.5	451	145
4	8	11	381.0	15	361.9	402	133
5	8	11	333.3	22.5	314.3	356	133
6	8	11	285.8	22.5	266.7	308	164.7

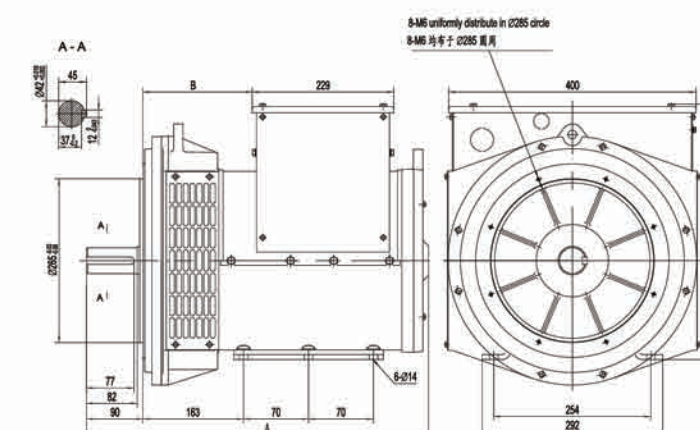
盘片式联轴器DISC COUPLING

SAE.No.	AN	AR	AS	AT	V
6.5	30.16	6	8.7	200.0	215.8
7.5	30.16	8	8.7	222.2	241.2
8	61.9	6	11	244.5	263.4
10	53.8	8	11	295.3	314.2
11.5	39.6	8	11	333.4	352.3

注：表中A为SAE4 & SAE5时的长度尺寸
SAE2 尺寸A需增加39；
SAE3 尺寸A需增加12；
SAE6 尺寸A需增加31.7。
SAE3 & SAE4 的8个孔分布于12等分圆周上。

Remark: In the table, A refers to the length of SAE4 & SAE5
The length of SAE2(A) should add 39;
The length of SAE3(A) should add 12;
The length of SAE6(A) should add 31.7;
The 8 holes of SAE3 & SAE4 are distributed in the 12 equal parts of circumference.

OUTLINE FOR TWG II 164A2-D2 & TWG II 162D2-G2 (DOUBLE BEARING)



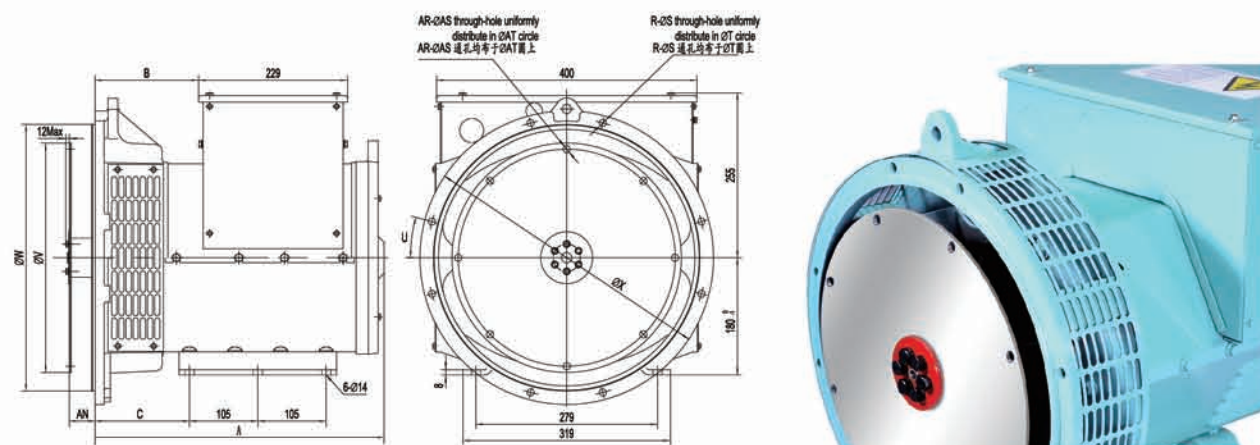
尺寸DIMENSION

型号MODEL	A	B
TWG II 164A2	486	124
TWG II 164B2	486	124
TWG II 164C2	513	137
TWG II 164D2	513	137

尺寸DIMENSION

型号MODEL	A	B
TWG II 162D2	486	124
TWG II 162E2	486	124
TWG II 162F2	538	162
TWG II 162G2	538	162

OUTLINE FOR TWG II 184E-G & TWG II 182H-K (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B
TWG II 184E	432	147
TWG II 184F	522	237
TWG II 184G	522	237

尺寸DIMENSION

型号MODEL	A	B
TWG II 182H	482	197
TWG II 182J	482	197
TWG II 182K	522	237

法兰式过渡接套FLANGE

SAE.No.	R	S	T	U	W	X	C
2	12	11	466.7	15	447.6	489	172
3	8	11	428.6	15	409.5	451	145
4	8	11	381.0	15	361.9	402	133
5	8	11	333.3	22.5	314.3	356	133
6	8	11	285.8	22.5	266.7	308	164.7

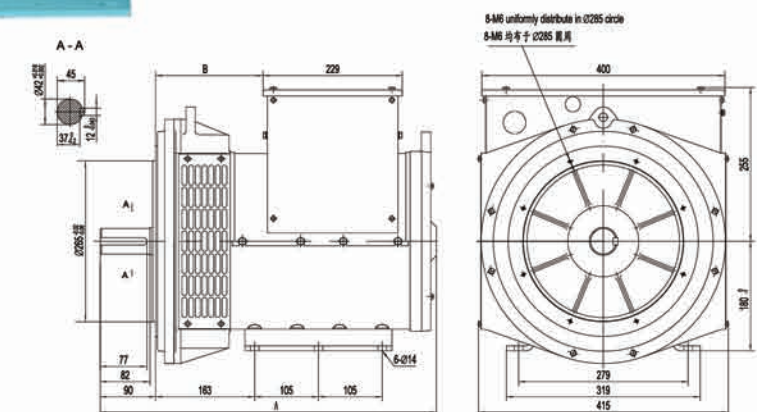
盘片式联轴器DISC COUPLING

SAE.No.	AN	AR	AS	AT	V
6.5	30.16	6	8.7	200.0	215.8
7.5	30.16	8	8.7	222.2	241.2
8	62	6	11	244.5	263.4
10	53.8	8	11	295.3	314.2
11.5	39.6	8	11	333.4	352.3

注：表中A为SAE4 & SAE5时的长度尺寸
SAE2 尺寸A需增加39；
SAE3 尺寸A需增加12；
SAE6 尺寸A需增加31.7。
SAE3 & SAE4 的8个孔分布于12等分圆周上。

Remark: In the table, A refers to the length of SAE4 & SAE5
The length of SAE2(A) should add 39;
The length of SAE3(A) should add 12;
The length of SAE6(A) should add 31.7;
The 8 holes of SAE3 & SAE4 are distributed in the 12 equal parts of circumference.

OUTLINE FOR TWG II 184E-G & TWG II 182H-K (DOUBLE BEARING)



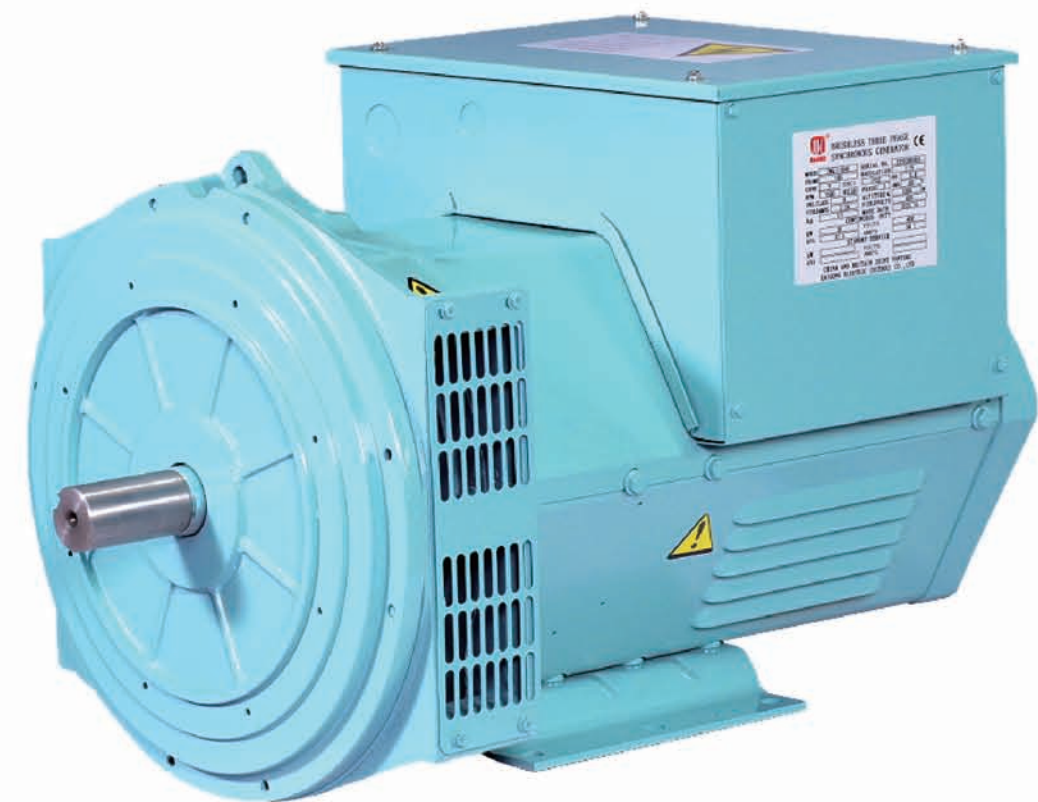
尺寸DIMENSION

型号MODEL	A	B
TWG II 184E2	553	177
TWG II 184F2	643	267
TWG II 184G2	643	267

尺寸DIMENSION

型号MODEL	A	B
TWG II 182H2	603	227
TWG II 182J2	603	227
TWG II 182K2	643	267

OUTLINE FOR TWG II 184H2-J2 (DOUBLE BEARING)

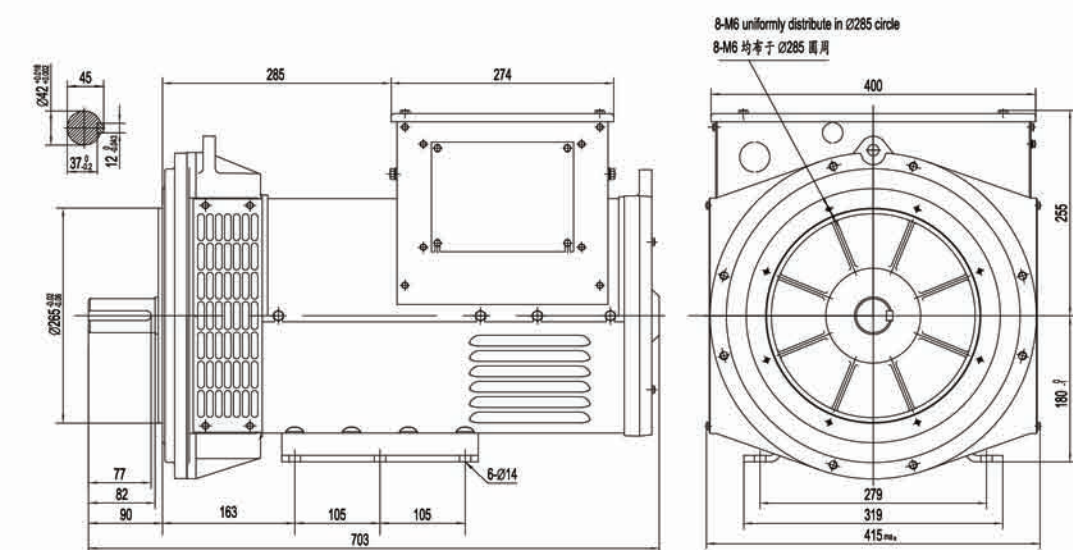


尺寸DIMENSION

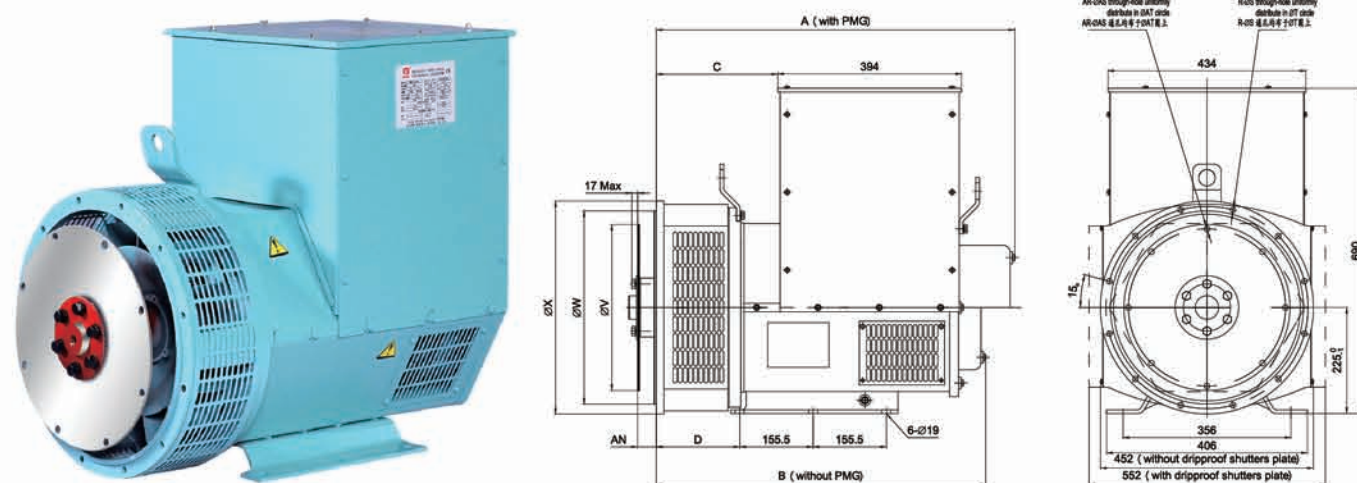
SAE.No.4	型号MODEL	A	B
	TWG II 184H	582	251
	TWG II 184J	582	251

SAE.No.	C	R	S	T	W	X
3	145	12	12	428.6	409.5	460
4	133	12	12	381	361.9	460

SAE.No.	AN	AR	AS	AT	V
7.5	30.16	8	8.7	222.2	241.2
8	62	6	11	244.5	263.4
10	53.8	8	11	295.3	314.2
11.5	39.6	8	11	333.4	352.3



OUTLINE FOR TWG II 224B-F (SINGLE BEARING)



尺寸DIMENSION

SAE.NO.1	型号MODEL	A	B	C
	TWG II 224B	724	662	225
	TWG II 224C	724	662	225
	TWG II 224D	814	752	315
	TWG II 224E	814	752	315
	TWG II 224F	859	797	361
	TWG II 224G	859	797	361

尺寸DIMENSION

SAE.NO.2 SAE.NO.3	型号MODEL	A	B	C
	TWG II 224B	710	648	211
	TWG II 224C	710	648	211
	TWG II 224D	800	738	301
	TWG II 224E	800	738	301
	TWG II 224F	845	783	346
	TWG II 224G	845	783	346

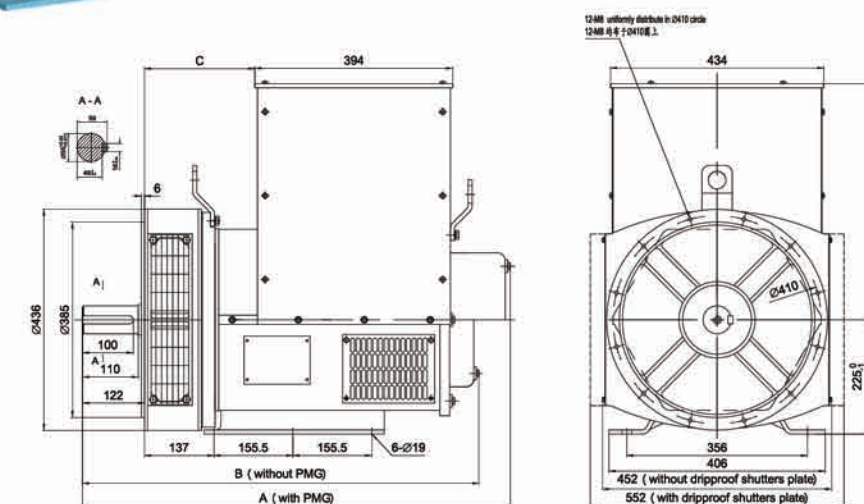
法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	D
1	12	12	530.2	511.1	553	191.3
2	12	12	466.7	447.6	490	177
3	12	12	428.6	409.5	451	177
4	12	12	381.0	361.9	453	177

盘片式联轴器DISC COUPLING

SAE.No.	AN	AR	AS	AT	V
8	61.9	6	11	244.5	263.4
10	53.8	8	11	295.3	314.2
11.5	39.6	8	11.5	333.4	352.3
14	25.4	8	13.5	438.2	466.5

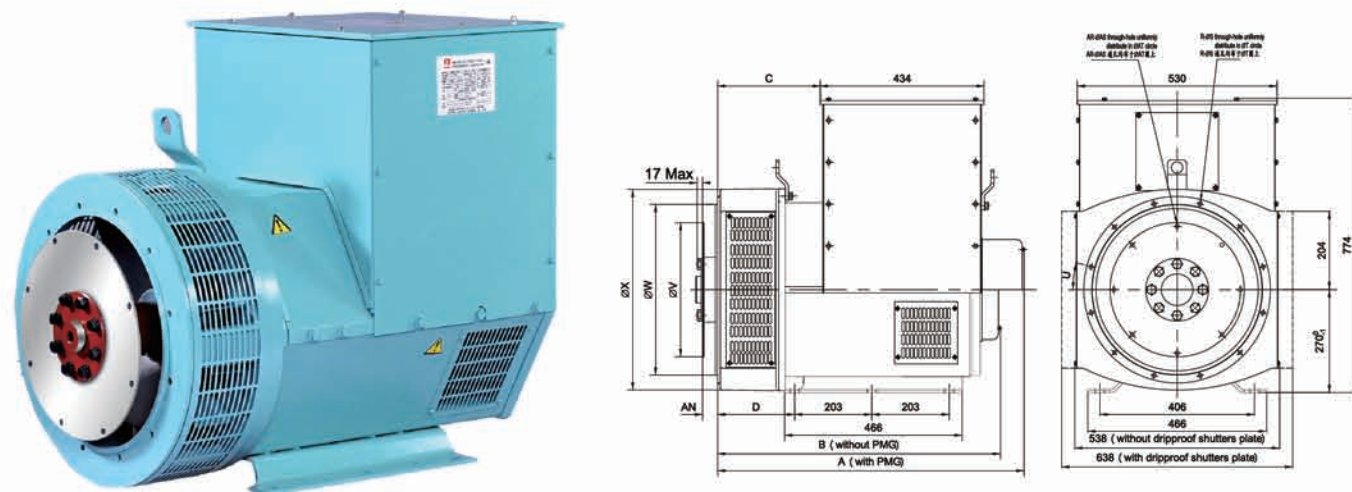
OUTLINE FOR TWG II 224B2-F2 (DOUBLE BEARING)



尺寸DIMENSION

型号MODEL	A	B	C
TWG II 224B2	793	731	218
TWG II 224C2	793	731	218
TWG II 224D2	883	821	308
TWG II 224E2	883	821	308
TWG II 224F2	928	866	353
TWG II 224G2	928	866	353

OUTLINE FOR TWG II 274B-H (SINGLE BEARING)



尺寸DIMENSION

SAE.NO.1	型号MODEL	A	B	C	D
	TWG II 274B	814	751	274	216
	TWG II 274C	814	751	274	216
	TWG II 274D	929	866	389	216
	TWG II 274E	929	866	389	216
	TWG II 274F	979	916	439	216
	TWG II 274G	1018	956	479	216
	TWG II 274H	1018	956	479	216

尺寸DIMENSION

SAE.NO.2	型号MODEL	A	B	C	D
	TWG II 274B	799	736	260	202
	TWG II 274C	799	736	260	202
	TWG II 274D	914	851	375	202
	TWG II 274E	914	851	375	202
	TWG II 274F	961	901	425	202
	TWG II 274G	1004	941	465	202
	TWG II 274H	1004	941	465	202

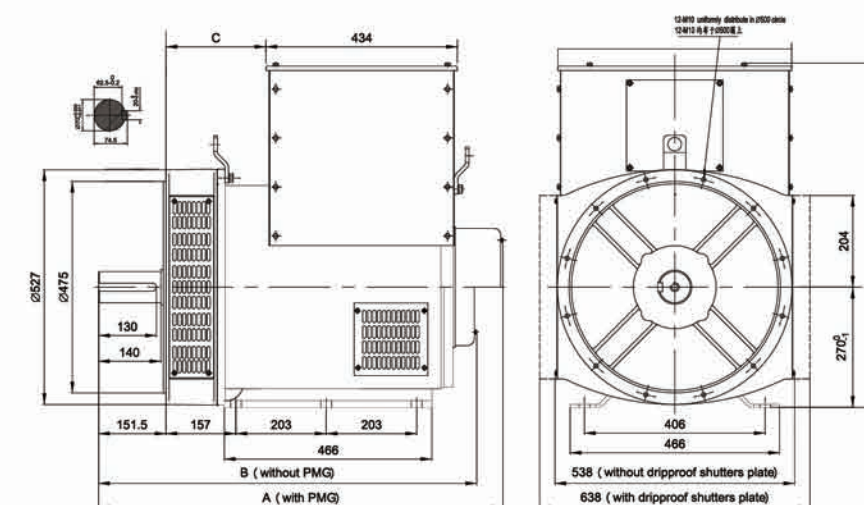
法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	U
1	12	12.7	530.2	511.1	580	15
2	12	11	466.7	447.6	530	15
3	12	11	428.6	409.5	530	15

盘片式联轴器DISC COUPLING

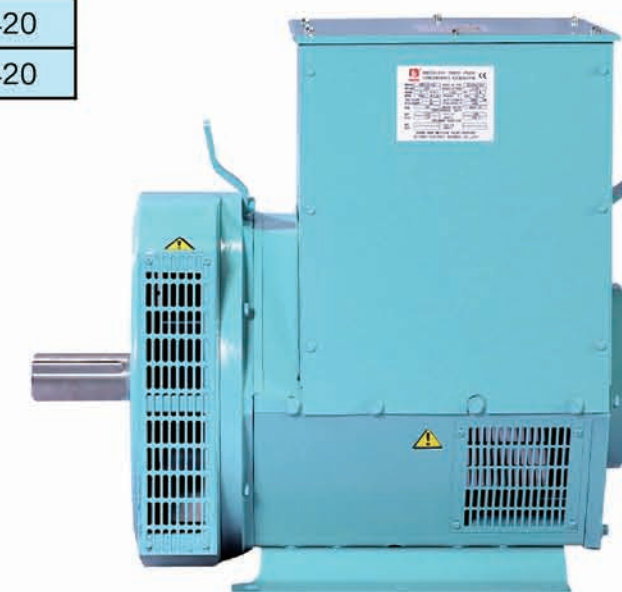
SAE.No.	AN	AR	AS	AT	V
10	53.8	8	11	295.3	314.2
11.5	39.6	8	11.5	333.4	352.3
14	25.4	8	13.5	438.2	466.5

OUTLINE FOR TWG II 274B2-H2 (DOUBLE BEARING)

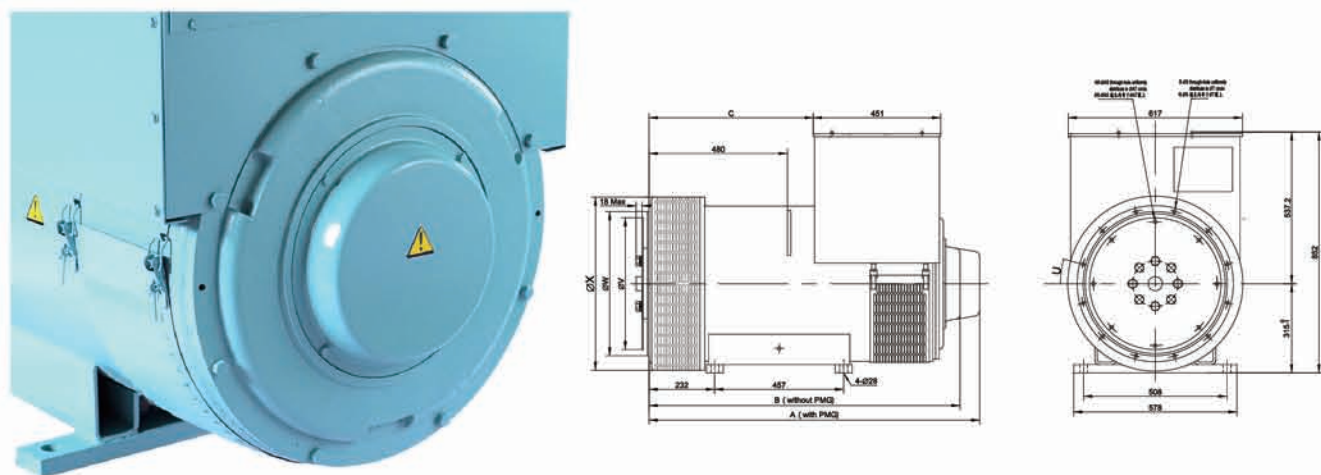


尺寸DIMENSION

型号MODEL	A	B	C
TWG II 274B2	905	842	215
TWG II 274C2	905	842	215
TWG II 274D2	1020	957	330
TWG II 274E2	1020	957	330
TWG II 274F2	1070	1007	380
TWG II 274G2	1110	1047	420
TWG II 274H2	1110	1047	420



OUTLINE FOR TWG II 314B-F (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B	C	D
TWG II 314B	1172	1101	584	493
TWG II 314C	1172	1101	584	493
TWG II 314D	1172	1101	584	493
TWG II 314E	1262	1191	674	583
TWG II 314F	1262	1191	674	583

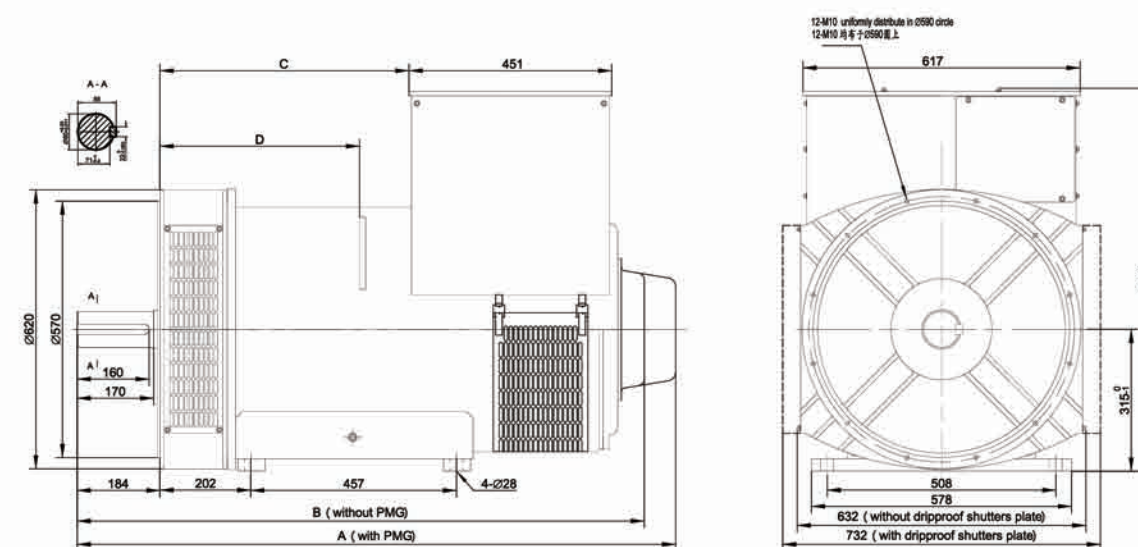
法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	U
0	16	14	679.5	647.6	711	11.25
1/2	12	14	619.1	584.1	680	15
1	12	12.7	530.2	511.1	617	15
2	12	11	466.7	447.6	617	15
3	12	11	428.6	409.5	617	15

盘片式联轴器DISC COUPLING

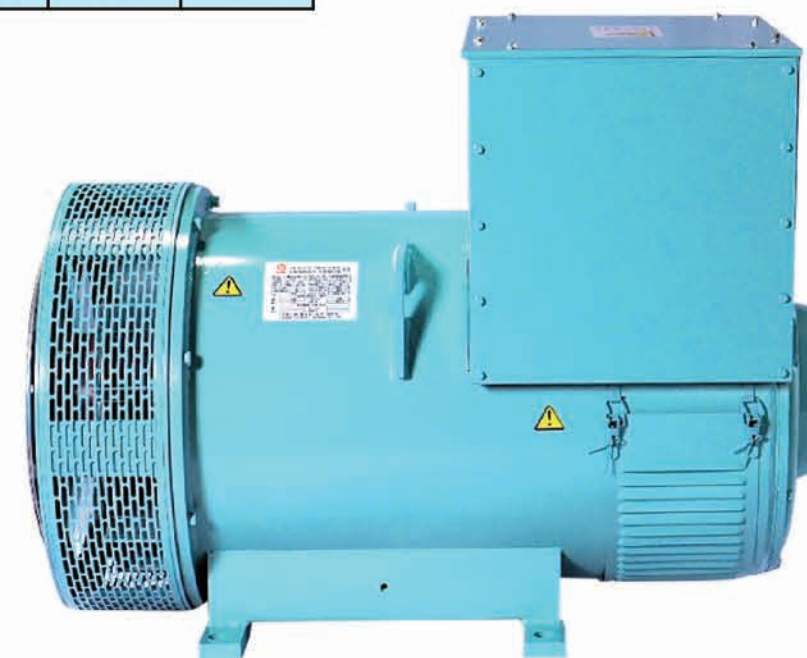
SAE.No.	AN	AR	AS	AT	V
11.5	39.6	8	11.5	333.4	352.3
14	25.4	8	13.5	438.2	466.5
18	15.7	6	16.7	542.9	571.1

OUTLINE FOR TWG II 314B2-F2 (DOUBLE BEARING)

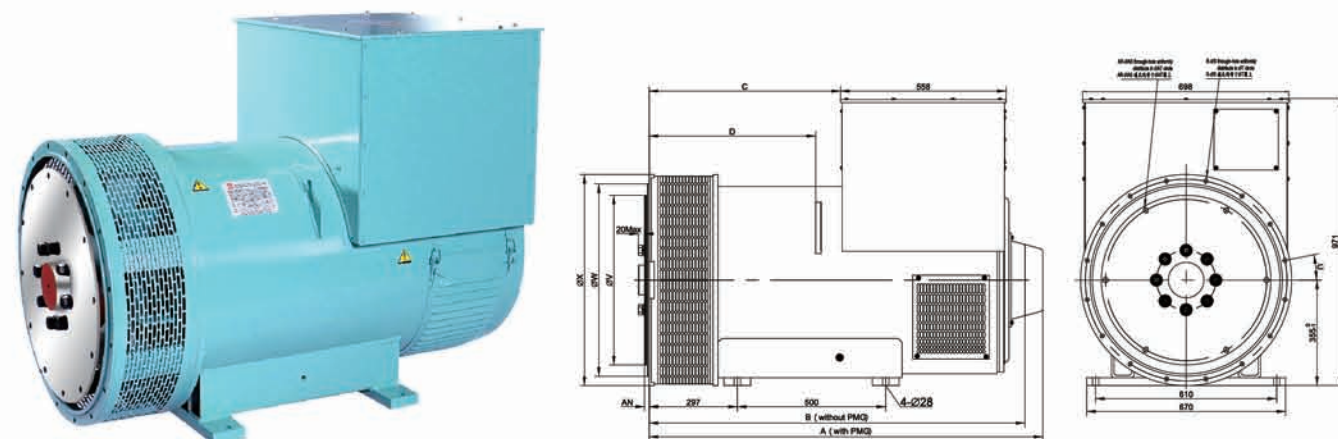


尺寸DIMENSION

型号MODEL	A	B	C	D
TWG II 314B2	1326	1255	554	463
TWG II 314C2	1326	1255	554	463
TWG II 314D2	1326	1255	554	463
TWG II 314E2	1416	1345	654	553
TWG II 314F2	1416	1345	654	553



OUTLINE FOR TWG II 354B-F (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B	C	D
TWG II 354B	1337	1266	642	568
TWG II 354C	1337	1266	642	568
TWG II 354D	1337	1266	642	568
TWG II 354E	1412	1341	717	643
TWG II 354F	1412	1341	717	643

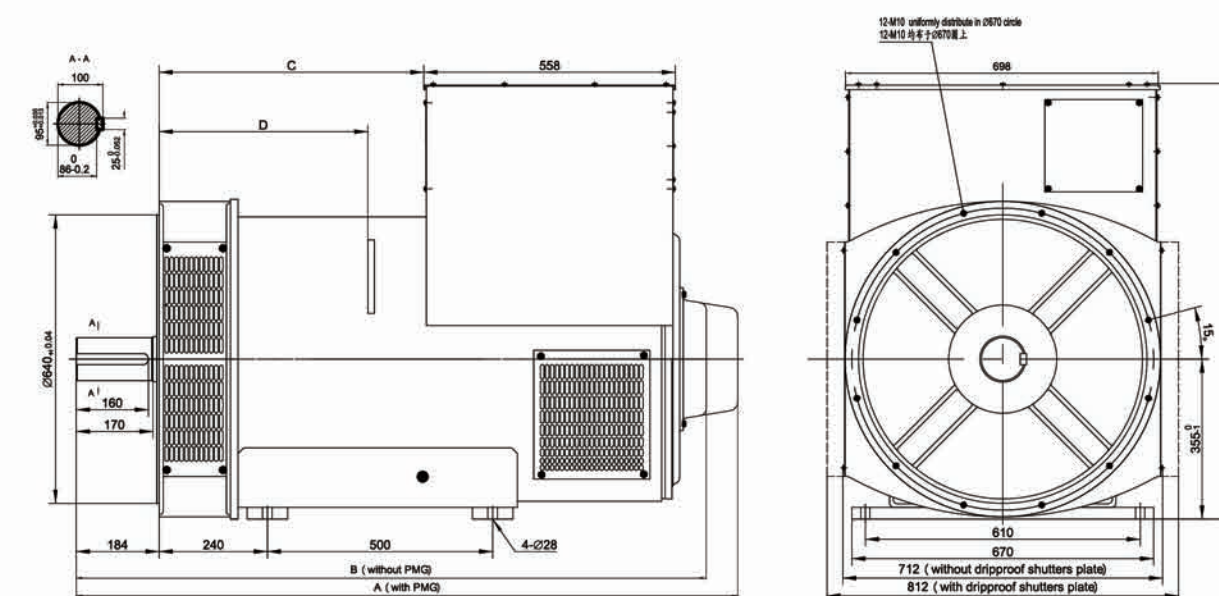
法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	U
00	16	14	851	787.3	882	11.25
0	16	14	679.5	647.6	711	11.25
1/2	12	14	619.1	584.1	700	15
1	12	12.7	530.2	511.1	710	15
2	12	11	466.7	447.6	710	15

盘片式联轴器DISC COUPLING

SAE.No.	AN	AR	AS	AT	V
14	25.4	8	14	438.2	466.6
18	15.7	6	16.7	542.9	571.5
21	0	12	16.7	641.3	673.0

OUTLINE FOR TWG II 354B2-F2 (DOUBLE BEARING)

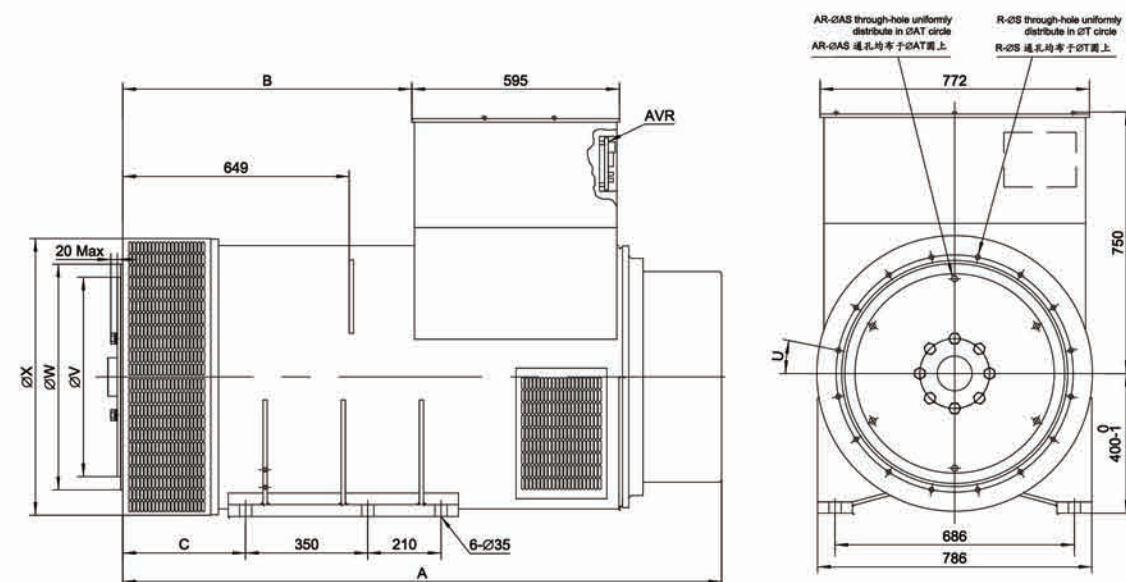


尺寸DIMENSION

型号MODEL	A	B	C	D
TWG II 354B2	1464	1393	585	511
TWG II 354C2	1464	1393	585	511
TWG II 354D2	1464	1393	585	511
TWG II 354E2	1539	1468	660	586
TWG II 354F2	1539	1468	660	586



OUTLINE FOR TWG II 404B-H (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B
TWG II 404B	1586	727
TWG II 404C	1586	727
TWG II 404D	1586	727
TWG II 404E	1586	727
TWG II 404F	1586	727
TWG II 404G	1687	828
TWG II 404H	1687	828



法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	U	C
00	16	14	851	787.3	889	11.25	366
0	16	14	679.5	647.6	793	11.25	350
1/2	12	14	619.1	584.1	793	15	350
1	12	12.7	530.2	511.1	793	15	350

盘片式联轴器DISC COUPLING

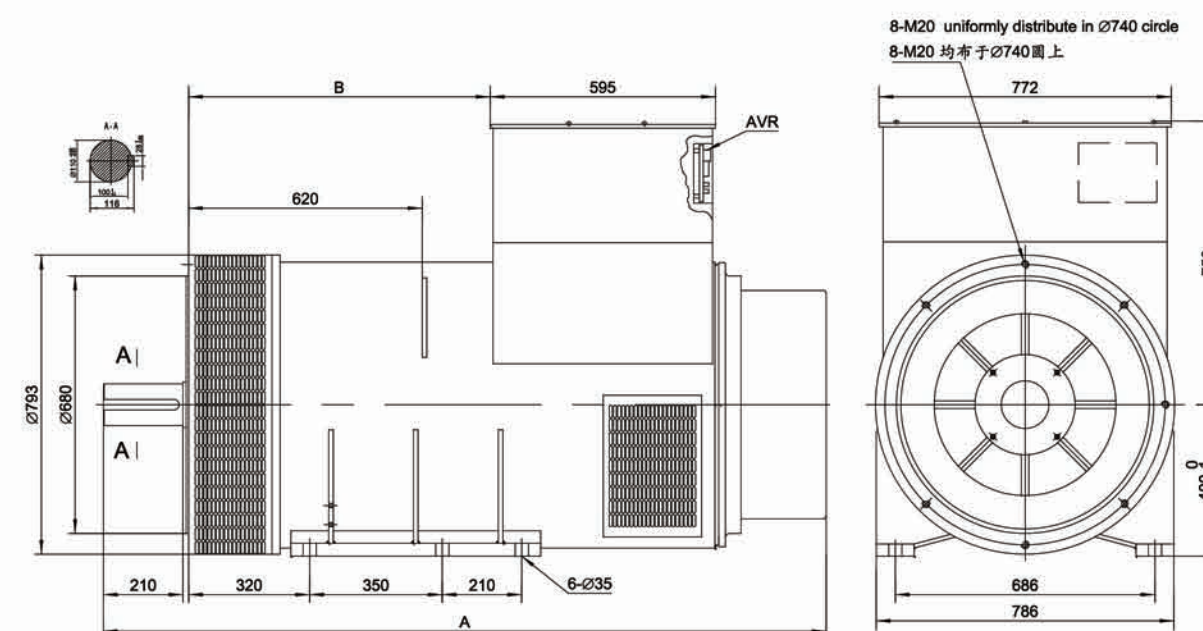
SAE.No.	AN	AR	AS	AT	V
14	25.4	8	14	438.2	466.6
18	15.7	6	16.7	542.9	571.5
21	0	12	16.7	641.3	673.0

OUTLINE FOR TWG II 404B2-H2 (DOUBLE BEARING)

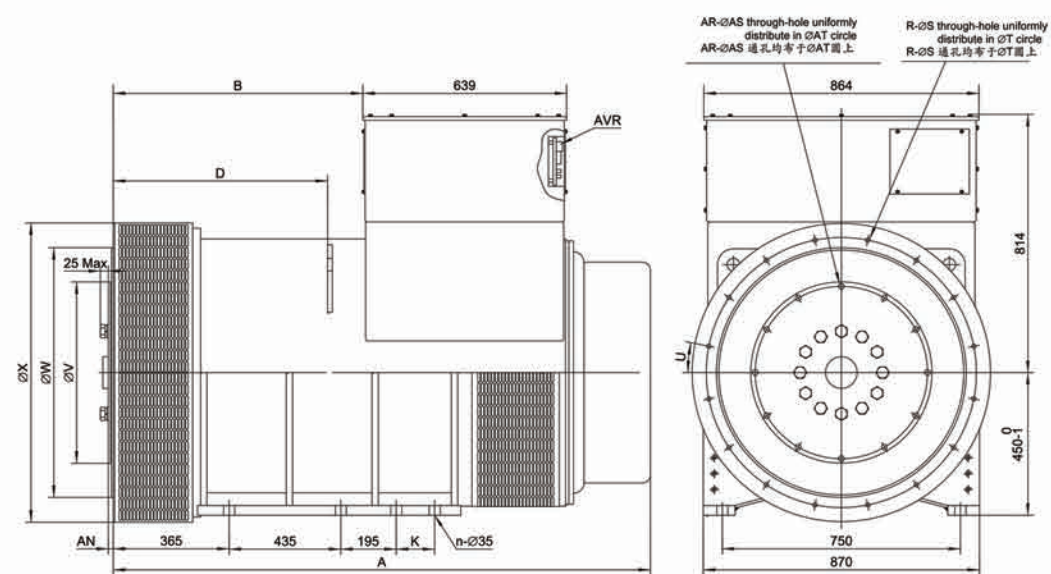


尺寸DIMENSION

型号MODEL	A	B
TWG II 404B2	1726	698
TWG II 404C2	1726	698
TWG II 404D2	1726	698
TWG II 404E2	1726	698
TWG II 404F2	1726	698
TWG II 404G2	1826	799
TWG II 404H2	1826	799

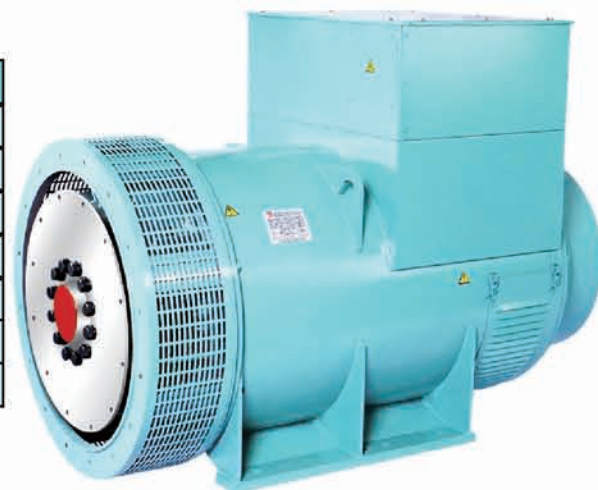


OUTLINE FOR TWG II 454B-H (SINGLE BEARING)



尺寸DIMENSION

型号MODEL	A	B	D	n	K
TWG II 454B	1690	787	675	6	
TWG II 454C	1690	787	675	6	
TWG II 454D	1690	787	675	6	
TWG II 454E	1840	937	725	6	
TWG II 454F	1840	937	725	6	
TWG II 454G	1925	1022	835	8	170
TWG II 454H	1925	1022	835	8	170



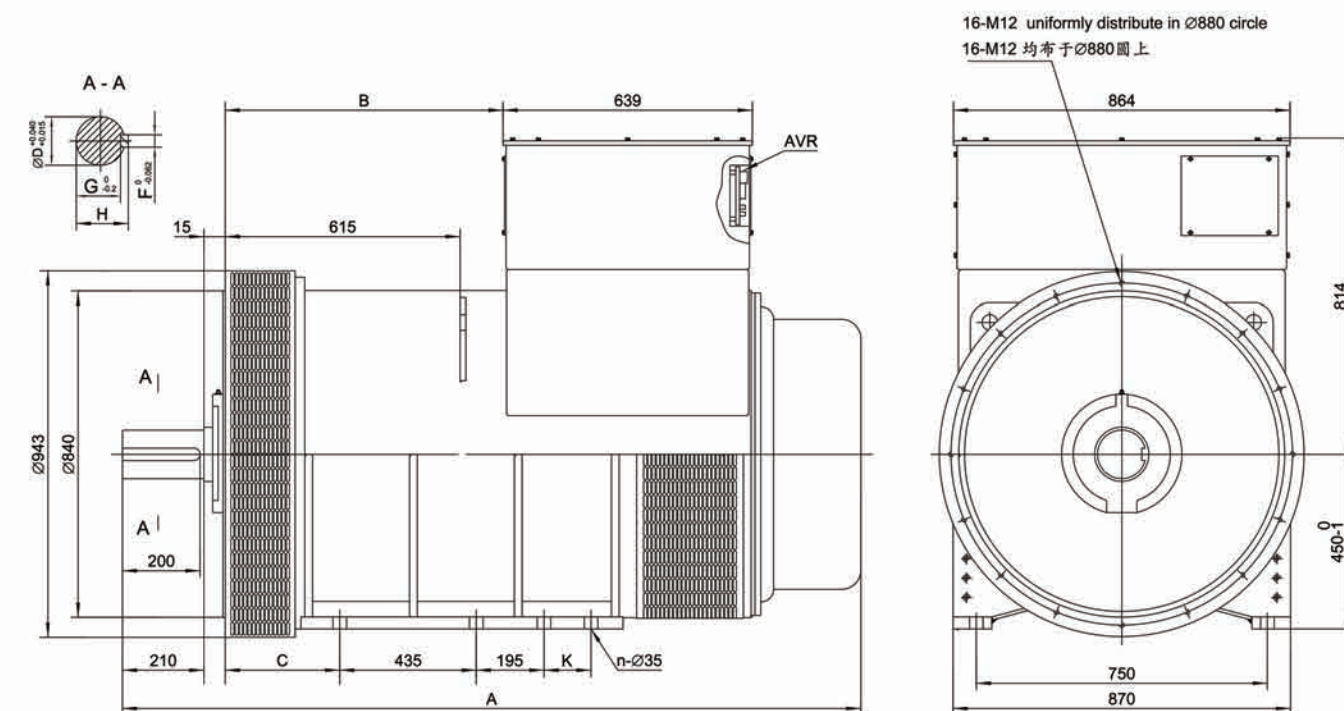
法兰式过渡接套FLANGE

SAE.No.	R	S	T	W	X	U
00	16	14	851	787.3	943	11.25
0	16	14	679.5	647.6	943	11.25
1/2	12	14	619.1	584.1	943	15

盘片式联轴器DISC COUPLING

SAE.No.	AN	AR	AS	AT	V
14	25.4	8	14	438.2	466.6
18	15.7	6	16.7	542.9	571.5
21	0	12	16.7	641.3	673.0
24	0	12	20.7	692.0	733.3

OUTLINE FOR TWG II 454B2-H2 (DOUBLE BEARING)



尺寸DIMENSION

型号MODEL	A	B	C	D	E	F	G	H	n	K
TWG II 454B2	1887	717	295	125	605	32	114	132	6	
TWG II 454C2	1887	717	295	125	605	32	114	132	6	
TWG II 454D2	1887	717	295	125	605	32	114	132	6	
TWG II 454E2	2037	867	295	125	655	32	114	132	6	
TWG II 454F2	2037	867	295	125	655	32	114	132	6	
TWG II 454G2	2122	952	295	150	765	36	138	158	8	170
TWG II 454H2	2122	952	295	150	765	36	138	158	8	170

ST 系列单相交流同步发电机

SERIES SINGLE-PHASE A.C. SYNCHRONOUS GENERATOR

简介 INTRODUCTION:

ST系列发电机主要是作为城镇、乡村、家庭及小型船舶的照明和日用电器的电源。
发电机为防滴式结构，防护等级IP21。凸极旋转磁场自激恒压型式，内部采用优质电磁材料和电工材料制成。定、转子绝缘等级为B级或F级。
发电机采用JB/T3320.2-2000标准制造，同时也符合IEC34-1标准。整机外观精致、结构紧凑、易于维修。

ST series generators are designed to serve mainly as the power of household appliances and the lighting in towns, villages, houses or minitype ships.
The structure of generator is drip-proof type, protection class IP21, salient-pole rotating field selfexcitation and constant voltage type. The generator interior is made of high quality magnetic and electrical materials. The insulation for stator and rotor is class B or F. The generators are made as per standard JB/T3320.2-2000, also in conformity to IEC34-1 standard.
The generators are elegant in appearance, tight in structure and easy maintenance.

使用环境 ENVIRONMENT CONDITIONS:

在下列环境条件下,发电机能够额定运行。

- 1.海拔不超过1000米。
- 2.冷却空气温度25~313K(-15℃~40℃)。
- 3.相对湿度不超过90%。

Under the following environment, the generator could run continuously:

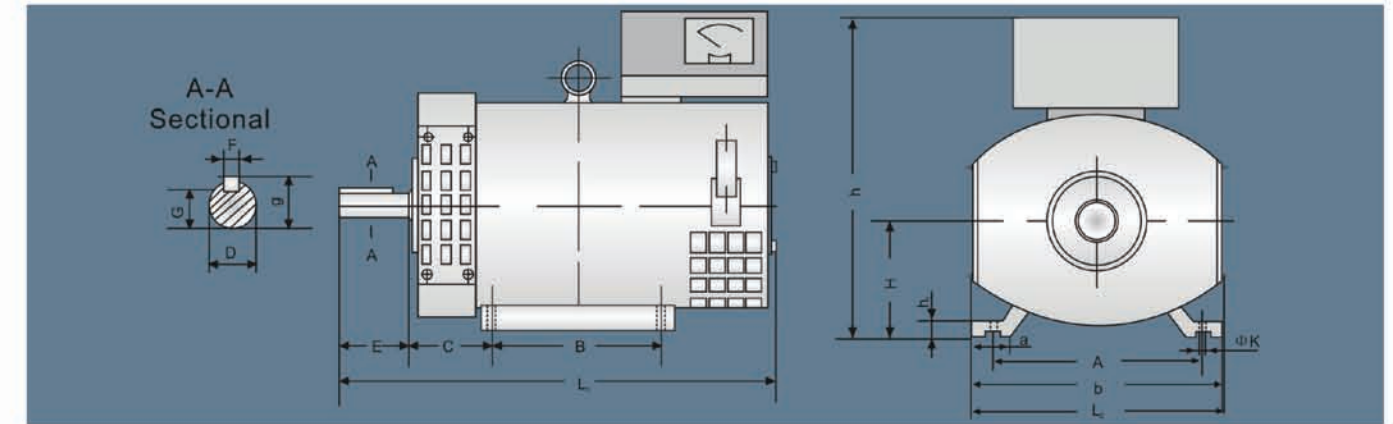
- 1.Altitude: not exceed 1000m.
- 2.Cooling air temperature: 25~313K(-15℃~40℃).
3. Relative air humidity: not exceed 90%.



技术参数 TECHNICAL DATA

型号 Type	功率 Output (kW)	电流 Current(A)		电压 Voltage(V)		功率因数 Power Factor (cos φ)	极数 Pole number	转速 Speed (r.p.m)	频率 Freq. (Hz)
		串联Series Connection	并联Parallel Connection	串联Series Connection	并联Parallel Connection				
ST-1	1	4.35	8.7	230	115	1.0	4	1500/1800	50/60
ST-2	2	8.7	17.4						
ST-3	3	12	26						
ST-5	5	21.8	43.5						
ST-7.5	7.5	32.6	65.2						
ST-10	10	43.5	87						
ST-12	12	52.2	104						
ST-15	15	65.3	130						
ST-20	20	87	174						
ST-24	24	104	208						

外形及安装尺寸 OVERALL AND MOUNTING DIMENSIONS



型号 Type	功率 Output (kW)	安装尺寸 Installing dimensions(mm)										外形尺寸 Overall dimensions(mm)					
		H	A	B	C	D	E	F	G	g	K	a	b	h1	h	L1	L2
ST-1	1	132	216	178	89	32	80	10	27	34.8	12	34	250	18	384	480	270
ST-2	2	132	216	178	89	32	80	10	27	34.8	12	34	250	18	385	480	270
ST-3	3	132	216	178	89	32	80	10	27	34.8	12	34	250	18	384	480	270
ST-5	5	160	254	254	108	38	80	10	33	40.8	15	50	310	25	440	580	325
ST-7.5	7.5	160	254	254	108	38	80	10	33	40.8	15	50	310	25	440	580	325
ST-10	10	180	279	203	121	42	110	12	37	44.8	15	60	339	25	480	610	365
ST-12	12	180	279	203	121	42	110	12	37	44.8	15	60	339	25	480	610	365
ST-15	15	200	318	228	133	48	110	14	42.5	51.2	19	60	378	30	540	660	400
ST-20	20	200	318	228	133	48	110	14	42.5	51.2	19	60	378	30	540	660	400
ST-24	24	200	318	228	133	48	110	14	42.5	51.2	19	60	378	30	540	660	400

STC 系列三相交流同步发电机

SERIES THREE-PHASE A.C. SYNCHRONOUS GENERATOR

简介 INTRODUCTION:

STC系列发电机适用于乡村、城镇、工地、山区及牧区等照明及动力的三相交流电源，也可作为应急备用电源。
发电机为防滴转场式结构，防护等级IP21，绝缘等级B级或F级。采用谐波励磁系统，使用安全可靠，维护简单方便。
发电机为三相四线制，采用带有中性点的星形接法，额定线电压400V，相电压230V，频率50Hz，功率因数0.8（滞后）。根据需要，也可提供60Hz及其它电压值的发电机。
发电机可以直接或通过三角皮带连接原动力在额定速度下做正反连续运转，当原动力的旋转速度发生3%变化，负载在0~100%，功率因数在0.8~1.0范围内时，发电机提供恒定电压。当负载突然发生变化（增或减）时，发电机将立即回到正常工作状态，同时，不需要任何启动装置，发电机能够直接启动空载的鼠笼式感应电机。
本系列发电机采用JB/T8981-1999标准制造，同时也符合IEC34-1标准。

STC Series generators are used in town, countryside, worksites, villages and pastures as electric STC series generators are used as lighting in countryside, town, worksites, mountain and pasturing areas, the three phase A.C. power supply, as well as to be reserved emergency power source.
The generator is adopted drip-proof with rotary field type, protection class IP23, insulation class B or F and harmonic excitation system. It is safe and reliable, easy operation and maintenance.
The generator is three-phase, four-wire type, adopting star connection with neutral point. The rated line voltage is 400V, phase voltage 230V, frequency 50Hz, power factor 0.8 (lag). We can provide 60Hz and the other voltages value according to the customers request.
The generator can be coupled with a prime mover directly or through v-belt making right or reverse continuous rotation at the rated speed. When the rotation speed of prime mover changes 3% or so and load varies in the range of 0~100% and 0.8~1.0, the generators offer constant voltage.
When sudden change (increase or decrease) of load, the generator will soon return to their normal working state, at the same time, without any starting device the generator can directly start an unloaded squirrel cage induction motor.
The generators are made as per standard JB/T8981-1999, as well as in conformity to IEC34-1.

使用环境 ENVIRONMENT CONDITIONS:

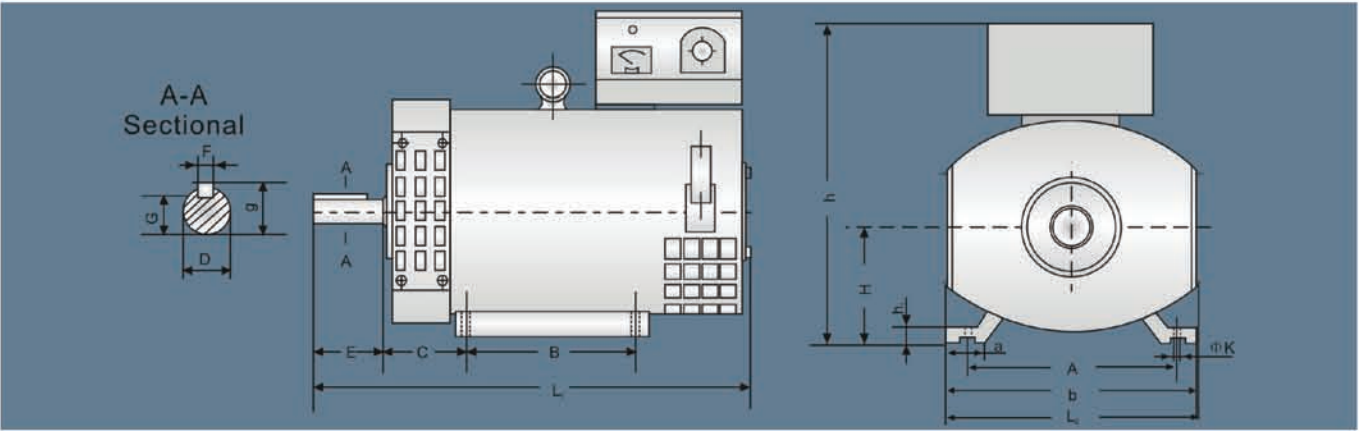
- 在下列环境条件下，发电机能够额定运行。
1. 海拔不超过1000米。
2. 冷却空气温度258~313K (-15°C~40°C)。
3. 相对湿度不超过90%。
- Under the following environment, the generator could run continuously:
1. Altitude: not exceed 1000m.
2. Cooling air temperature: 258~313K (-15°C~40°C).
3. Relative humidity: not exceed 90%.



技术参数 TECHNICAL DATA

型号 Type	功率 Output		电压 Voltage (V)	电流 Current (A)	功率因数 Power Factor (cos φ)	转速 Speed (r.p.m)	频率 Freq. (Hz)	极数 Pole number
	kVA	kW						
STC-3	3.8	3	400/230	5.4	0.8	1500	50	4
STC-5	6.3	5		9				
STC-7.5	9.4	7.5		13.5				
STC-8	10	8		14.4				
STC-10	12.5	10		18.1				
STC-12	15	12		21.7				
STC-15	18.5	15		27.1				
STC-20	25	20		36.1				
STC-24	30	24		43.3				
STC-30	37.5	30		54.1				
STC-40	50	40		72.2				
STC-50	62.5	50		90.2				

外形及安装尺寸 OVERALL AND MOUNTING DIMENSIONS



型号 Type	功率 Output		安装尺寸 Installing dimensions (mm)										外形尺寸 Overall dimensions (mm)					
	kVA	kW	H	A	B	C	D	E	F	G	g	K	a	b	h1	h	L1	L2
STC-3	3.8	3	132	216	178	89	32	80	10	27	34.8	12	34	250	18	400	480	270
STC-5	6.3	5	160	254	254	108	38	80	10	33	40.8	15	50	310	25	455	580	325
STC-7.5	9.4	7.5	160	254	254	108	38	80	10	33	40.8	15	50	310	25	455	580	325
STC-8	10	8	160	254	254	108	38	80	10	33	40.8	15	50	310	25	455	580	325
STC-10	12.5	10	180	279	203	121	42	110	12	37	44.8	15	60	339	25	495	610	365
STC-12	15	12	180	279	203	121	42	110	12	37	44.8	15	60	339	25	495	610	365
STC-15	18.5	15	200	318	228	133	48	110	14	42.5	51.5	19	60	378	30	540	660	400
STC-20	25	20	200	318	228	133	48	110	14	42.5	51.5	19	60	378	30	540	660	400
STC-24	30	24	200	318	228	133	48	110	14	42.5	51.5	19	60	378	30	540	660	400
STC-30	37.5	30	225	356	286	149	60	140	18	53	64	19	65	421	32	610	770	452
STC-40	50	40	225	356	286	149	60	140	18	53	64	19	65	421	32	610	770	452
STC-50	62.5	50	225	356	311	149	60	140	18	53	64	19	65	421	32	610	810	452

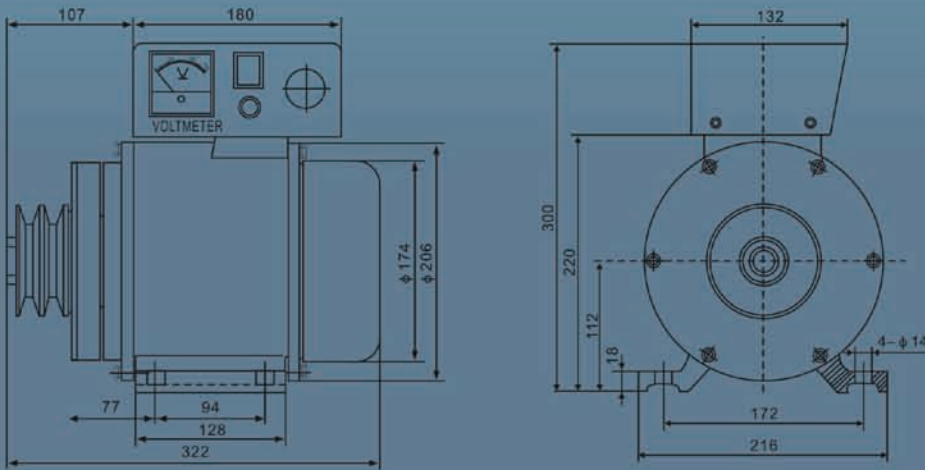
FHW 系列永磁直流弧焊发电机
SERIES PERMANENT-MAGNET DC
ARC-WELDINGGENERATOR

简介 INTRODUCTION:

FHW系列永磁式弧焊发电机，具有体积小，重量轻，容量大，效率高，使用方便，质量可靠之特点，采用不低于12PS柴、汽油机或7.5KW电动机做动力，并可配装于三、四轮车及其它机动车辆上，组成移动或固定式电焊，发电两用机组。适用于油田、矿产开发、道路工程、桥梁建筑工程、管道工程、城镇、农村、林区、牧区、渔港、工业、作坊、边防哨所、小型船舶、家庭及公共场所的电焊、照明（不可用日光灯）或电钻、电锤等交直流两用电器电源。
本机电焊部分采用负极对地两级输出结构，电焊和发电可分别使用或同时使用，其总负载以达本说明书中所规定容量。其特点是采用永磁方式，（使用稀土永磁材料）从而废除了传统的励磁结构。电焊时，焊接电流调节范围广，引弧容易、燃烧稳定，焊接性能可达到国家AX系列弧焊机的技术标准。
FHW Series of Permanent magnet DC Arc-Welding Generator has such characteristics as small size,light weight, convenient in operation, high in efficiency and reliable in quality, etc. It adopts 12ps diesel or gasoline engine or 7.5KW electric motor as its dynamic force.And it can also be assembled on tricycle,quadricycle or other motor vehicles to make up movable or stationary welding and generating double duty equipment. It has been widely used as power supply for lighting and such AC-DC electrical appliances as electric drill and electric hammer in oil field, mineral exploitation, highway and bridge engineering, pipe work, cities and towns rural area forest region, pastoral area, fishing port, industries workshops ,frontier sentry, small ship, house hold and public places,etc. The welding section of this equipment adopts the structure of cathode to ground and bipole output.The welding and generation can be used separately or simultaneously.The total load can reach the specified capacity in the instruction manual. Furthermore, since it adopts the permanent-magnet structure, the traditional excitation unit has been abolished.During welding, it has such characteristic as wide adjusting range of welding current, easy generating of arc, and stable flameholding, etc.The welding performance has met the national technical standard for AX series arc-welding machine.



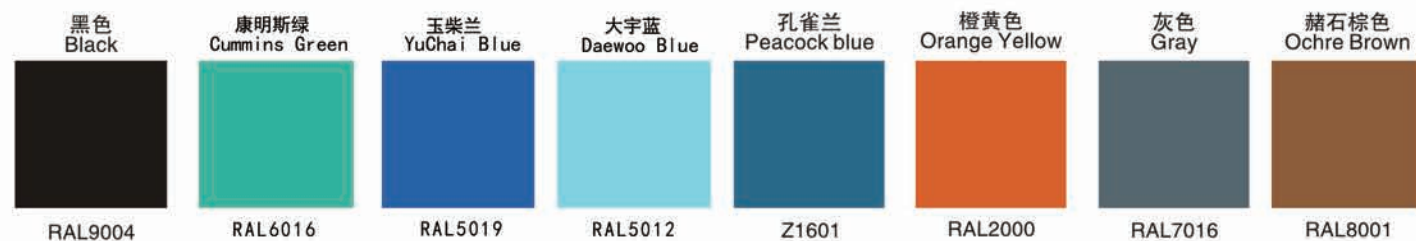
外形及安装尺寸 OVERALL AND MOUNTING DIMENSIONS



技术参数 TECHNICAL DATA

	数据名称	计量单位	FHW-160	FHW-180	FHW-200	FHW-250
电焊部分	直流空载电压 DC Idle Voltage	V	60	60	65	70
	额定电流 Rated Current	A	160	180	200	200
	电流调节范围 Adjustable Current Range	A	80-180	85-200	90-220	95-250
	直流电焊电压 DC Welding Voltage	V	22-32	22-32	22-32	25-32
	额定负载持续率 Rated Duty Cycle	%	60	60	60	60
	温升 Temperature Rise	℃	70	70	70	70
	额定电压 Rated Voltage	V	220	220	220	220
发电部分	额定功率 Rated Output	W	1500	1600	1800	1800
	工作周期 Work Cycle		连续	连续	连续	连续
	额定转速 Rated Speed	r/min	3000	3000	3000	3000
共性数据	组合动力匹配内燃机 Combined Power-Matching Internal Combustion Engine	PS	≈10	≈12	≈14	≈14
	组合动力匹配电动机 Combined Power-Matching Electromotor	kW	≈6.5	≈7.5	≈9.5	≈9.5
	三角带轮 Wheel for V-velt	直径 Φ95mm	槽型S10t-typeB	槽型S10r-typeB	槽型S10t-typeB	槽型S10t-typeB
	绝缘等级 Class Of Insulation	级	B	B	B	B
	体积 Size	mm	322×216×300	322×216×300	322×216×300	322×216×300
	重量 Weight	kg	27	28.5	30.5	31

发电机色版 The color series



注：可以按客户要求定制颜色。
Note: Colors can be customized according to customer requirements.

发电机铭牌 Nameplate



BRUSHLESS THREE PHASE

SYNCHRONOUS GENERATOR

CE

MODEL	TWGII 404H			SERIAL NO.	2303760018		
FRAME	400			REGULATION	±1%		
CONN.	Y	ENCL	IP22	PF	0.8		
RPM	1500	Hz	50	PHASE	3	AMB.	27 °C
INS.CLASS	H		ALTITUDE	≤ 1000		m	
FIELDAMPS	3.0A		FIELDVOLTS	80V			
kg	4300	MADE DATE	2023.03				
CONTINUOUS DUTY							
k w	2000	VOLTS	400V				
kVA	2500	AMPS	3608				
STANDBY SERVICE							
k w		VOLTS					
kVA		AMPS					

Nameplate (TWGII1314~454)



BRUSHLESS THREE PHASE

SYNCHRONOUS GENERATOR



MODEL	TWGII 184G		SERIAL NO.	2303318008	
FRAME	180		REGULATION	±1%	
CONN.	Y	ENCL	IP22	PF	0.8
RPM	1500	Hz	50	PHASE	3
INS.CLASS	H		ALTITUDE	≤ 1000	m
FIELDAMPS	2.5A		FIELDVOLTS	40V	
kg	144		MADE DATE	2023.03	
CONTINUOUS DUTY					
k w	24		VOLTS	400V	
kVA	30		AMPS	43.3A	
STANDBY			SERVICE		
k w			VOLTS		
kVA			AMPS		

Nameplate (TWGII1164~274)

A.C. SYNCHRONOUS GENERATOR									
ISO9001									
TYPE:		ST - 20							
Output:		20 kW	Serial NO.:		2308803008				
Voltage:		230 V	EXCIT. VOLT.:		92 V				
Current:		86.9 A	EXCIT. CURR.:		5.4 A				
Speed:		1500 r/min	INS. CL.:		B	IP	Duty:	S1	
Phase:		1	50 Hz	COSφ=1.0		Date:	2023.03		
STANDARD JB/T 11817-2014									
								OUTPUT	
									
								U1 U2	
MADE IN CHINA									

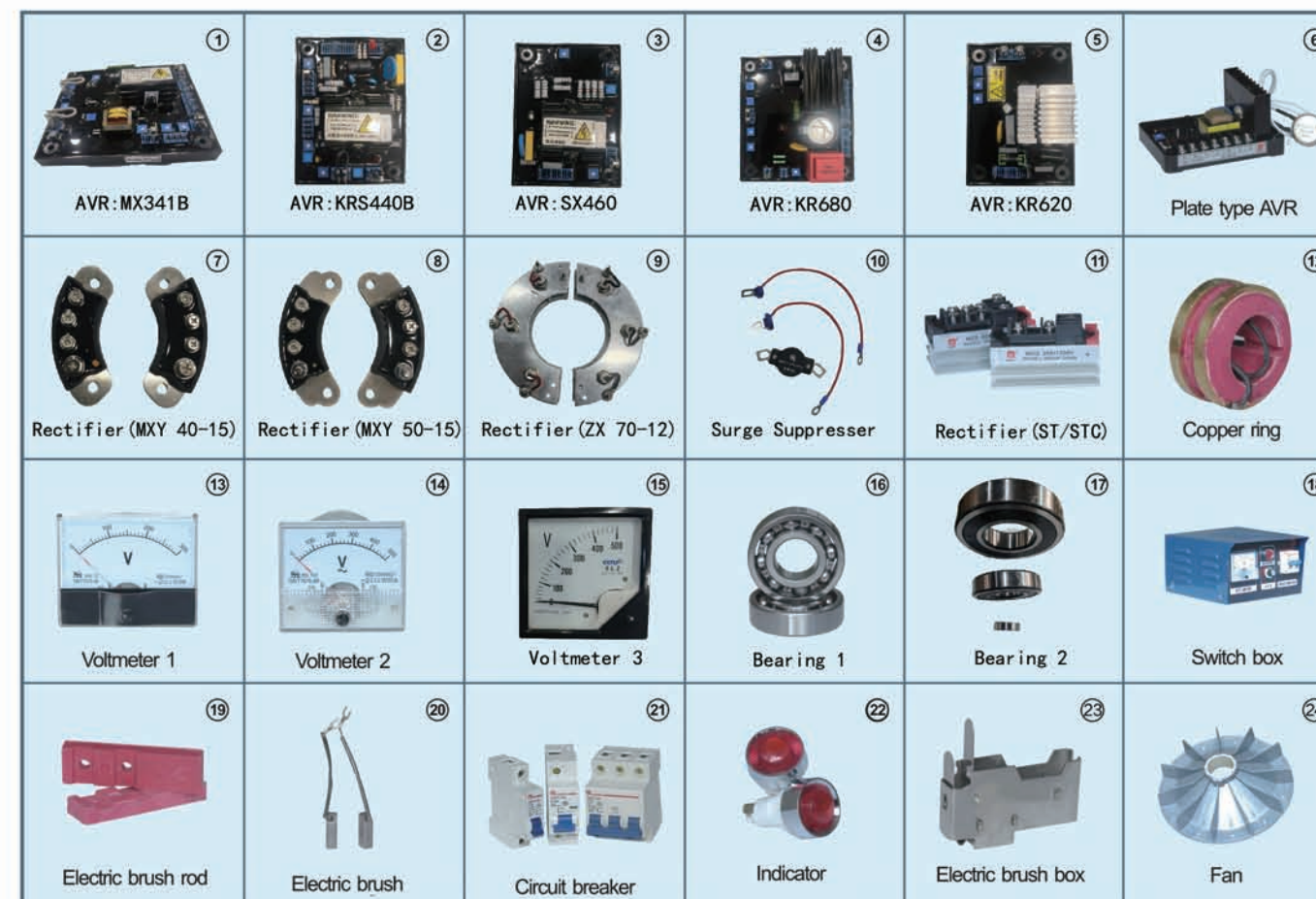
Nameplate (ST)

A.C. SYNCHRONOUS GENERATOR									
ISO9001									
TYPE:	STC - 20								
Output:	20 kW	Serial NO.:	2308803008						
Voltage:	400 V	EXCIT. VOLT.:	92 V						
Current:	36.1 A	EXCIT. CURR.:	5.4 A						
Speed:	1500 r/min	INS. CL.:	B	IP	Duty:	S1			
Phase:	3	50 Hz	COSφ=0.8	Date:	2023.03				
STANDARD JB/T 8981-2011									
MADE IN CHINA									
					OUTPUT				
									
					U V W N				

Nameplate (STC)

注：可以按客户要求定制铭牌。
Note: The nameplate can be customized according to customer requirements.

发电机配件 Spare Parts of Generator



注：请使用原厂配件，因使用非正品配件造成的故障，由使用方负责。
Note: Please use original accessories. The user is responsible for any failures caused by using non genuine accessories.

真诚创造价值
—SINCERITY CREATE VALUE—

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