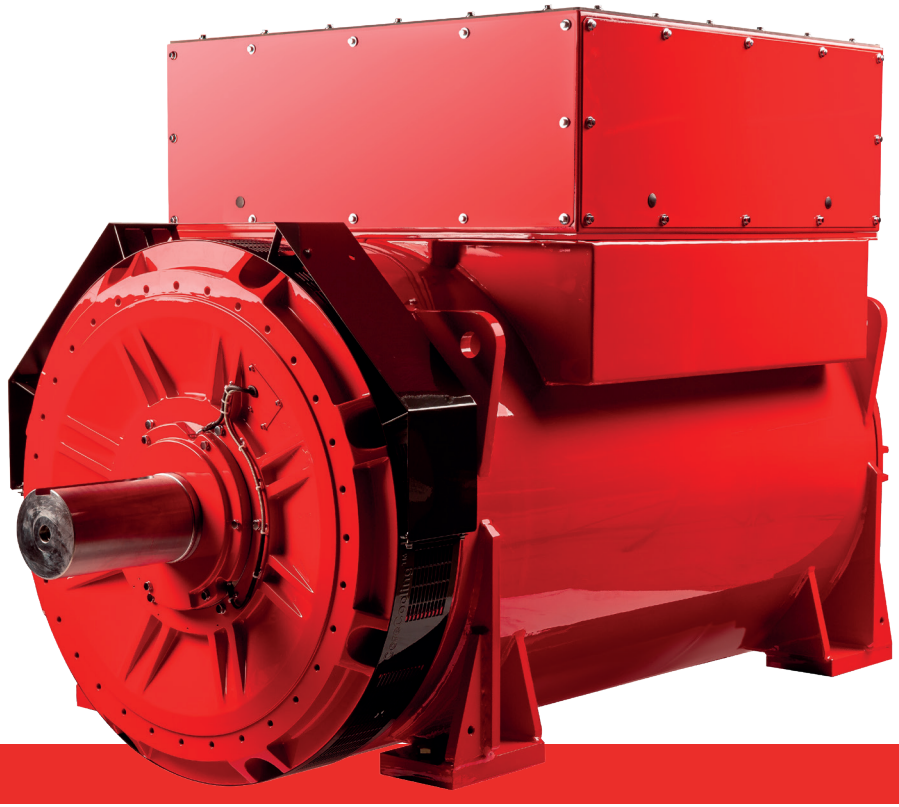
OUR DIFFERENCE?
THE DETAIL.

3 YEAR WARRANTY

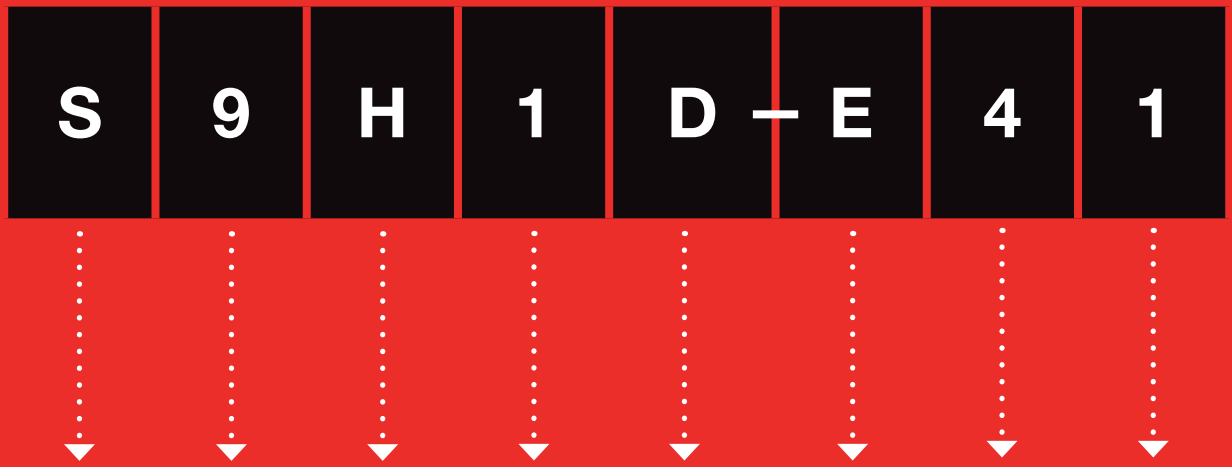


GENUINE **STAMFORD** DESIGN

STAMFORD® S9

Fitted with **CoreCooling™** technology

The S9 Nomenclature



Character	Brand	Family Series	Voltage	Revision	Descriptor	Core Length	Pole	Bearing
Examples	STAMFORD	1/2/3/4/5 etc	L = Low M = Medium H = High	1	D = Dedicated	A/B/C/D/ E/F/G/H	4	1/2

STAMFORD® S9 Dedicated

GENUINE STAMFORD DESIGN

True Class H HV technology for enhanced power density

Greater serviceability access

Extended insulation lifetime (HV)

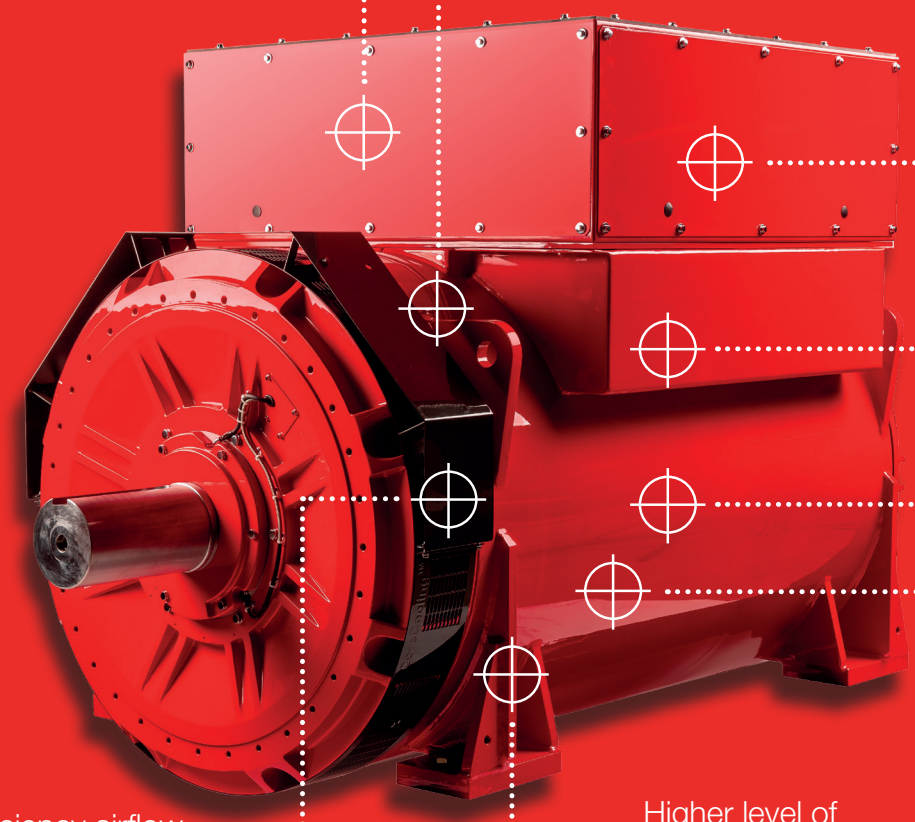
Optimised efficiency

Optimised power density

Increased ratings up to 5600kVA*

Higher level of integration flexibility

High efficiency airflow



Product evolution through technological revolution.

Our new **CoreCooling™ technology** results in improved thermal performance and increased power density... it's in the detail.

*MV - 60Hz 4160V Continuous 125/40°C (5/6th pitch)

S9 Medium Voltage Dedicated Ratings 5/6th Pitch

50Hz

Class F 105/40		
Winding Number	51*	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1472	**1840**
S9M1D-B4	1751	**2190**
S9M1D-C4	1950	**2438**
S9M1D-D4	2134	**2668**
S9M1D-E4	2325	**2907**
S9M1D-F4	2737	**3422**
S9M1D-G4	3131	**3915**
S9M1D-H4	3385	**4232**

Class H 125/40		
Winding Number	51	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1600	**2000**
S9M1D-B4	1904	**2380**
S9M1D-C4	2120	**2650**
S9M1D-D4	2320	**2900**
S9M1D-E4	2528	**3160**
S9M1D-F4	2976	**3720**
S9M1D-G4	3404	**4255**
S9M1D-H4	3680	**4600**

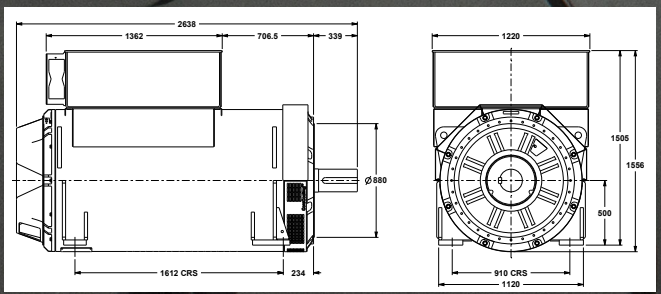
Standby 150/40		
Winding Number	51	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1712	**2140**
S9M1D-B4	2037	**2547**
S9M1D-C4	2268	**2836**
S9M1D-D4	2482	**3103**
S9M1D-E4	2704	**3381**
S9M1D-F4	3184	**3980**
S9M1D-G4	3642	**4553**
S9M1D-H4	3937	**4922**

60Hz

Class F 105/40		
Winding Number	51	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**1840**	2300
S9M1D-B4	**2082**	2604
S9M1D-C4	**2318**	2898
S9M1D-D4	**2598**	3248
S9M1D-E4	**2870**	3588
S9M1D-F4	**3308**	4135
S9M1D-G4	**3819**	4775
S9M1D-H4	**4121**	5152

Class H 125/40		
Winding Number	51	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**2000**	2500
S9M1D-B4	**2264**	2830
S9M1D-C4	**2520**	3150
S9M1D-D4	**2824**	3530
S9M1D-E4	**3120**	3900
S9M1D-F4	**3596**	4495
S9M1D-G4	**4152**	5190
S9M1D-H4	**4480**	5600

Standby 150/40		
Winding Number	51	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**2140**	2675
S9M1D-B4	**2422**	3028
S9M1D-C4	**2696**	3371
S9M1D-D4	**3021**	3777
S9M1D-E4	**3338**	4173
S9M1D-F4	**3847**	4810
S9M1D-G4	**4442**	5553
S9M1D-H4	**4793**	5992



*Other windings are available

S9 Medium Voltage Dedicated Ratings 2/3rd Pitch

50Hz

Class F 105/40		
Winding Number	851*	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1325	**1656**
S9M1D-B4	1344	**1680**
S9M1D-C4	1752	**2190**
S9M1D-D4	1950	**2438**
S9M1D-E4	2134	**2668**
S9M1D-F4	2325	**2907**
S9M1D-G4	2737	**3422**
S9M1D-H4	3132	**3915**

Class H 125/40		
Winding Number	851	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1440	**1800**
S9M1D-B4	1680	**2100**
S9M1D-C4	1904	**2380**
S9M1D-D4	2120	**2650**
S9M1D-E4	2320	**2900**
S9M1D-F4	2528	**3160**
S9M1D-G4	2976	**3720**
S9M1D-H4	3404	**4255**

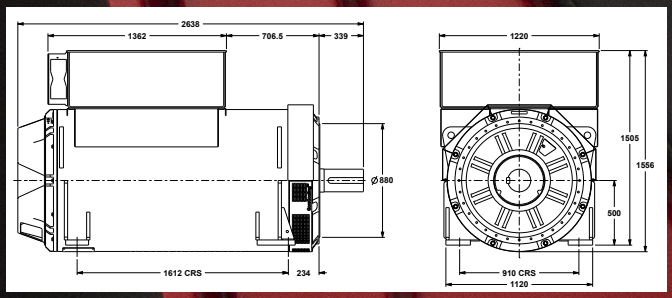
Standby 150/40		
Winding Number	851	
Volts	3300	
Model	kW	kVA
S9M1D-A4	1541	**1926**
S9M1D-B4	1797	**2247**
S9M1D-C4	2037	**2547**
S9M1D-D4	2268	**2836**
S9M1D-E4	2482	**3103**
S9M1D-F4	2704	**3381**
S9M1D-G4	3184	**3980**
S9M1D-H4	3642	**4553**

60Hz

Class F 105/40		
Winding Number	851	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**1693**	2116
S9M1D-B4	**1913**	2392
S9M1D-C4	**2083**	2604
S9M1D-D4	**2318**	2898
S9M1D-E4	**2598**	3248
S9M1D-F4	**2870**	3588
S9M1D-G4	**3308**	4135
S9M1D-H4	**3820**	4775

Class H 125/40		
Winding Number	851	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**1840**	2300
S9M1D-B4	**2080**	2600
S9M1D-C4	**2264**	2830
S9M1D-D4	**2520**	3150
S9M1D-E4	**2824**	3530
S9M1D-F4	**3120**	3900
S9M1D-G4	**3596**	4495
S9M1D-H4	**4152**	5190

Standby 150/40		
Winding Number	851	
Volts	4160	
Model	kW	kVA
S9M1D-A4	**1969**	2461
S9M1D-B4	**2225**	2782
S9M1D-C4	**2422**	3028
S9M1D-D4	**2696**	3371
S9M1D-E4	**3021**	3777
S9M1D-F4	**3338**	4173
S9M1D-G4	**3848**	4810
S9M1D-H4	**4442**	5553



*Other windings are available

S9 High Voltage Dedicated Ratings 5/6th Pitch

50Hz

Class F 105/40

Winding Number	83*			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1380	**1725**	1400	**1750**
S9H1D-B4	1649	**2062**	1692	**2116**
S9H1D-C4	1851	**2314**	1851	**2314**
S9H1D-D4	2090	**2613**	2090	**2613**
S9H1D-E4	2400	**3000**	2400	**3000**
S9H1D-F4	2741	**3427**	2741	**3427**
S9H1D-G4	2988	**3735**	2988	**3735**
S9H1D-H4	3312	**4140**	3312	**4140**

Class H 125/40

Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1500	**1875**	1520	**1900**
S9H1D-B4	1800	**2250**	1840	**2300**
S9H1D-C4	2012	**2515**	2012	**2515**
S9H1D-D4	2272	**2840**	2272	**2840**
S9H1D-E4	2608	**3260**	2608	**3260**
S9H1D-F4	2980	**3725**	2980	**3725**
S9H1D-G4	3248	**4060**	3248	**4060**
S9H1D-H4	3600	**4500**	3600	**4500**

Standby 150/40

Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1604	**2006**	1626	**2033**
S9H1D-B4	1926	**2408**	1968	**2461**
S9H1D-C4	2152	**2691**	2152	**2691**
S9H1D-D4	2431	**3039**	2431	**3039**
S9H1D-E4	2790	**3488**	2790	**3488**
S9H1D-F4	3188	**3986**	3188	**3986**
S9H1D-G4	3475	**4344**	3475	**4344**
S9H1D-H4	3852	**4815**	3852	**4815**

60Hz

Class F 105/40

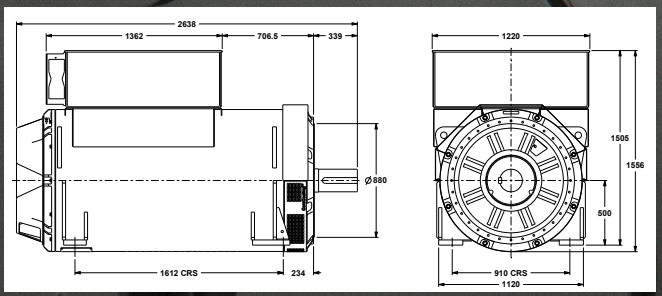
Winding Number	91					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1463**	1829	**1549**	1936	**1619**	2024
S9H1D-B4	**1766**	2208	**1865**	2332	**1950**	2438
S9H1D-C4	**1994**	2493	**2112**	2640	**2208**	2760
S9H1D-D4	**2186**	2733	**2314**	2893	**2419**	3024
S9H1D-E4	**2476**	3096	**2620**	3275	**2741**	3427
S9H1D-F4	**2804**	3505	**2966**	3708	**3102**	3878
S9H1D-G4	**3058**	3823	**3238**	4048	**3385**	4232
S9H1D-H4	**3323**	4154	**3518**	4398	**3680**	4600

Class H 125/40

Winding Number	91					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1590**	1988	**1638**	2104	**1760**	2200
S9H1D-B4	**1920**	2400	**2028**	2535	**2120**	2650
S9H1D-C4	**2168**	2710	**2296**	2870	**2400**	3000
S9H1D-D4	**2384**	2980	**2524**	3155	**2640**	3300
S9H1D-E4	**2692**	3365	**2848**	3560	**2980**	3725
S9H1D-F4	**3048**	3810	**3224**	4030	**3372**	4215
S9H1D-G4	**3324**	4155	**3520**	4400	**3680**	4600
S9H1D-H4	**3612**	4515	**3824**	4780	**4000**	5000

Standby 150/40

Winding Number	91					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1701**	2172	**1800**	2251	**1883**	2354
S9H1D-B4	**2054**	2568	**2169**	2712	**2268**	2836
S9H1D-C4	**2319**	2900	**2456**	3071	**2568**	3210
S9H1D-D4	**2550**	3189	**2700**	3376	**2824**	3531
S9H1D-E4	**2880**	3601	**3047**	3809	**3188**	3986
S9H1D-F4	**3261**	4077	**3449**	4312	**3608**	4510
S9H1D-G4	**3556**	4446	**3766**	4708	**3937**	4922
S9H1D-H4	**3864**	4831	**4091**	5115	**4280**	5350



*Other windings are available

S9 High Voltage Dedicated Ratings 2/3rd Pitch

50Hz

Class F 105/40

Winding Number	983*			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1124	**1405**	1178	**1472**
S9H1D-B4	1466	**1833**	1494	**1868**
S9H1D-C4	1722	**2153**	1722	**2153**
S9H1D-D4	1844	**2305**	1844	**2305**
S9H1D-E4	2082	**2603**	2082	**2603**
S9H1D-F4	2390	**2988**	2390	**2988**
S9H1D-G4	2731	**3414**	2731	**3414**
S9H1D-H4	2976	**3721**	2976	**3721**

Class H 125/40

Winding Number	983			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1222	**1527**	1280	**1600**
S9H1D-B4	1600	**2000**	1624	**2030**
S9H1D-C4	1872	**2340**	1872	**2340**
S9H1D-D4	2012	**2515**	2012	**2515**
S9H1D-E4	2272	**2840**	2272	**2840**
S9H1D-F4	2608	**3260**	2608	**3260**
S9H1D-G4	2980	**3725**	2980	**3725**
S9H1D-H4	3248	**4060**	3248	**4060**

Standby 150/40

Winding Number	983			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S9H1D-A4	1307	**1634**	1370	**1712**
S9H1D-B4	1712	**2140**	1737	**2172**
S9H1D-C4	2003	**2504**	2006	**2508**
S9H1D-D4	2152	**2691**	2152	**2691**
S9H1D-E4	2431	**3039**	2431	**3039**
S9H1D-F4	2790	**3488**	2790	**3488**
S9H1D-G4	3188	**3986**	3188	**3986**
S9H1D-H4	3475	**4344**	3475	**4344**

60Hz

Class F 105/40

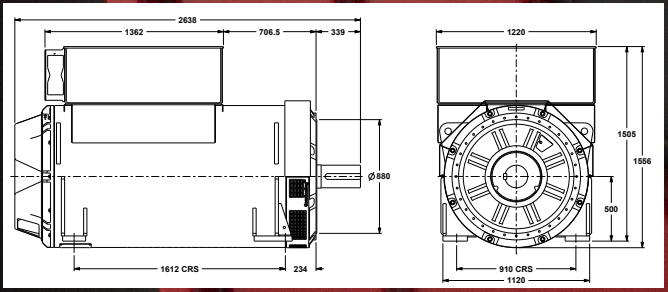
Winding Number	991					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1130**	1413	**1197**	1496	**1251**	1564
S9H1D-B4	**1529**	1912	**1619**	2024	**1692**	2116
S9H1D-C4	**1766**	2208	**1865**	2332	**1950**	2438
S9H1D-D4	**1994**	2493	**2112**	2640	**2208**	2760
S9H1D-E4	**2186**	2733	**2314**	2893	**2419**	3024
S9H1D-F4	**2476**	3096	**2620**	3275	**2741**	3427
S9H1D-G4	**2804**	3505	**2965**	3707	**3102**	3878
S9H1D-H4	**3058**	3823	**3238**	4048	**3385**	4232

Class H 125/40

Winding Number	991					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1229**	1536	**1301**	1626	**1360**	1700
S9H1D-B4	**1662**	2078	**1760**	2200	**1840**	2300
S9H1D-C4	**1920**	2400	**2028**	2535	**2120**	2650
S9H1D-D4	**2168**	2710	**2296**	2870	**2400**	3000
S9H1D-E4	**2384**	2980	**2524**	3155	**2640**	3300
S9H1D-F4	**2692**	3365	**2848**	3560	**2980**	3725
S9H1D-G4	**3048**	3810	**3224**	4030	**3372**	4215
S9H1D-H4	**3324**	4155	**3520**	4400	**3680**	4600

Standby 150/40

Winding Number	991					
Volts	12470		13200		13800	
Model	kW	kVA	kW	kVA	kW	kVA
S9H1D-A4	**1315**	1644	**1392**	1740	**1455**	1819
S9H1D-B4	**1779**	2224	**1883**	2354	**1968**	2461
S9H1D-C4	**2054**	2568	**2169**	2712	**2268**	2835
S9H1D-D4	**2320**	2900	**2456**	3070	**2568**	3210
S9H1D-E4	**2551**	3189	**2700**	3376	**2824**	3531
S9H1D-F4	**2880**	3601	**3047**	3809	**3188**	3986
S9H1D-G4	**3261**	4077	**3449**	4312	**3608**	4510
S9H1D-H4	**3556**	4446	**3766**	4708	**3937**	4922



*Other windings are available

Specification

MODEL	S9 Dedicated- MV	S9 Dedicated- HV
Maximum continuous ratings at 50Hz (kVA) 125/40ºC*	2000-4600	1875-4500
Maximum continuous ratings at 60Hz (kVA) 125/40ºC**	2500-5600	2200-5000
Specifications		
Voltage Range	3300-4160	5500-13800
Poles	4	
Technology	Bar Wound	
Application	Prime Power/Standby	
AVR	Digital	
Voltage Sensing	2 Phase	
Bearing Arrangement	Single/Double	
SAE Adaptors	SAE 0 / 00	
Centre Height	500	
Terminals	6	
Material Insulation Class	H	
Excitation System	PMG	
Ingress Protection	IP23	
	IP54 Terminal Box	
Connection with other machines	Paralleling capability	
Bearings re-grease interval	Up to 3000 hours	
Temperature Monitoring	Winding RTDs	
Environmental Protection	Anti-Condensation Heater	
Optional Features		
Voltage Sensing	3 Phase sensing	
Application	Grid	
Centre Height	265, 349, 450	
Current Transformers	1, 2, 3 per phase	
Earth Fault Protection	Current Transformer	
Prime Movers		
Diesel Engine	✓	
Gas Engine	✓	

*MV - 50Hz 3300V Continuous 125/40ºC (5/6th pitch)
**MV - 60Hz 4160V Continuous 125/40ºC (5/6th pitch)
*HV - 50Hz 10500V Continuous 125/40ºC (5/6th pitch)
**HV - 60Hz 13800V Continuous 125/40ºC (5/6th pitch)

GA Drawings are indicative of S9D-G/H core dimensions
Please contact our applications department for additional voltages that are available
Ratings are preliminary and are subject to change

Accessories

Factory Build Options
Anti-Condensation Heater
Quadrature Droop Kit
Bearing RTD (Each Bearing)
Air Inlet Filter
Drip Proof Louvres
Excitation Loss Module
Diode Failure Detector

Available With	DM110	DECS150	UNITROL
Current Sensing Kit	✓	✓	✓
Controlled Short Circuit	✓	✓	✓
Frequency Detection Module	✓	✓	✓
Power Factor Controller	✓	✓	✓
Remote Control Interface	✓	✓	✓
Dual AVR	✗	✗	✗

Voltage Regulator Options	With PMG
no AVR	✓
DM110	✓
DECS100	✓
DECS 150	✓
UNITROL 1010	✓
Deif DVC310	✓

3 YEAR WARRANTY

STAMFORD® S9 - HV Class H

STAMFORD® S9 Class H insulation technology delivers high resistance to mechanical and thermal stresses through the use of the latest insulation system technologies.

Developed based on over 30 years of high voltage **NEWAGE® | STAMFORD® | AvK®** product knowledge.

Extensive validation combined with the renowned S-Range **3 Year Warranty** assures confidence in this Class H insulation system.

The benefits of Class H insulation system:

- ✓ **Enhanced power density - smaller in weight and length**
- ✓ **Increased insulation lifetime**
- ✓ **Proven robust and durable design**
- ✓ **Validated for continuous operation at Class H insulation temperatures**

Applications

Case Study

Purpose:
Nickel Sulphide Mine

Location:
Western Region, Australia

Specified:
STAMFORD® S9 HV

Contract Power launched **STAMFORD®** S9 to the fleet of eight **STAMFORD®** HVSI804R1 units for the 12 MW power plant at the Savannah Nickel Sulphide Mine, located in the East Kimberly Region of Western Australia. The Savannah Mine is one of the three mining projects in this region.

"The **STAMFORD®** alternators have proven very reliable over the years in our Mining installations. With the modifications made to the new S9, they now become even more serviceable for these remote locations."

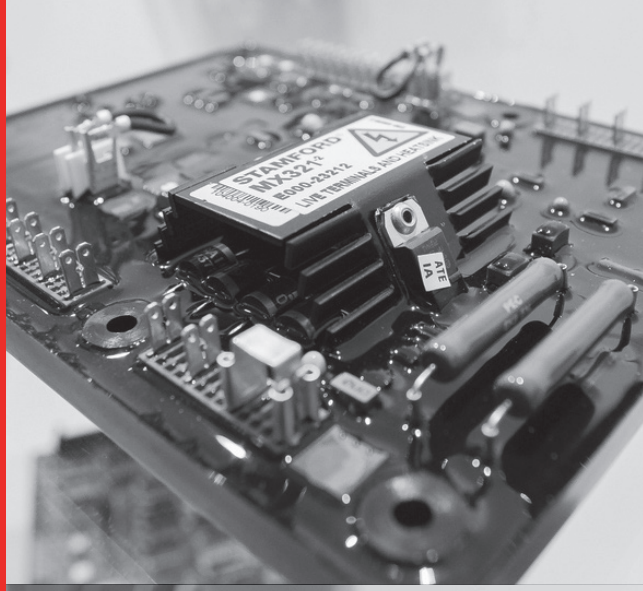
- Contract Power Australia

Customer Support Excellence

From pre-sales applications support all the way through to our extensive worldwide channel of customer service and authorised Parts and Service dealers servicing your **NEWAGE® I STAMFORD® I AvK®** alternators, we're there for you.

Selecting the right alternator for the right application? We understand the performance requirements that each application and operating environment demands.

Always Advancing—We also offer a comprehensive suite of Service Training courses designed to introduce, refresh, develop or expand your existing knowledge of NEWAGE®, STAMFORD® and AvK® genuine products.



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