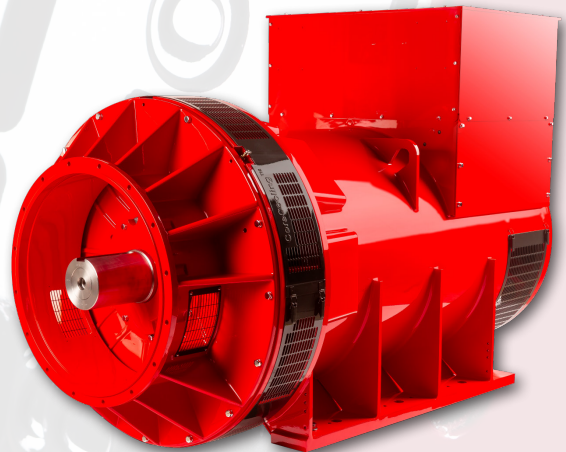




STAMFORD® S-RANGE STAMFORD® S7

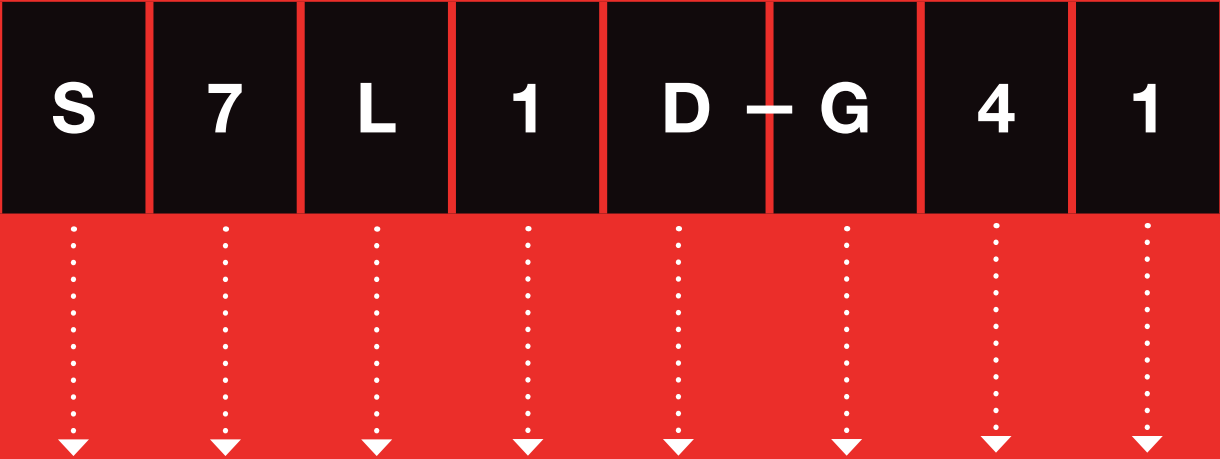


LOW AND HIGH VOLTAGE ALTERNATOR
1555-2500 kVA 50Hz
1894-3000 kVA 60Hz



STAMFORD | AvK™
POWERING TOMORROW, TOGETHER

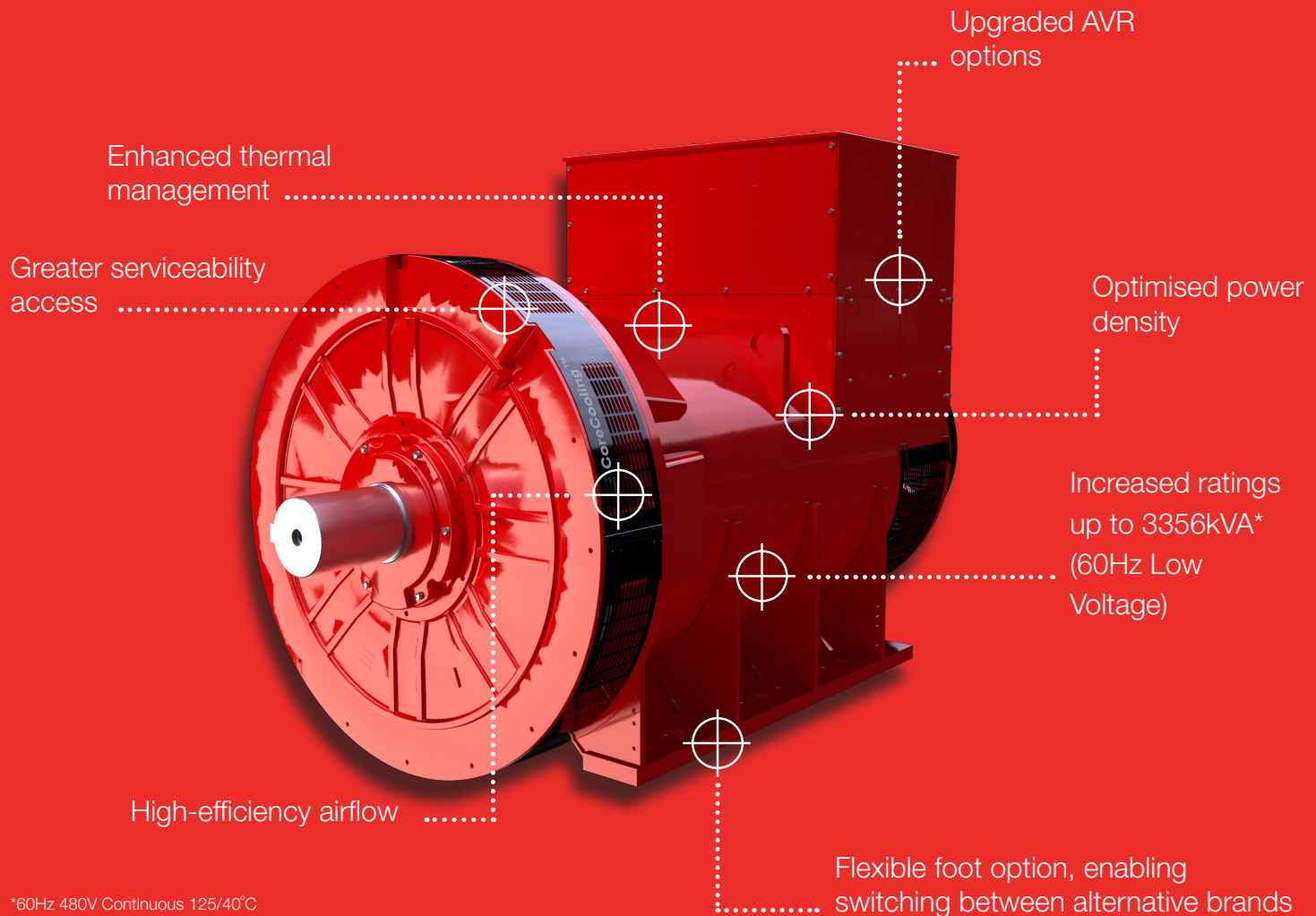
The S7 Nomenclature



Character	Brand	Family Series	Voltage	Revision	Descriptor	Core Length	Pole	Bearing
Examples	STAMFORD	7	L = Low H = High	1	W = Water-cooled D = Dedicated M = Marine	C/D/E/F/G/H/ J/K	4/6	1/2

STAMFORD® S7

Low Voltage Dedicated



*60Hz 480V Continuous 125/40°C

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

S7 Low Voltage Dedicated Ratings

50Hz

Class H 125/40						
Winding Number	312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1204	1505	1240	1550	1240	1550
S7L1D-D4	1292	1615	1320	1650	1320	1650
S7L1D-E4	1360	1700	1400	1750	1400	1750
S7L1D-F4	1476	1845	1520	1900	1520	1900
S7L1D-G4	1616	2020	1664	2080	1664	2080
S7L1D-H4	1798	2135	1800	2250	1800	2250
S7L1D-J4	1940	2425	2000	2500	2000	2500
S7L1D-J6	1311	1639	1352	1690	1352	1690
S7L1D-K4*	2240	2800	2240	2800	2200	2750

Standby 150/40						
Winding Number	312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1256	1570	1292	1615	1292	1615
S7L1D-D4	1340	1675	1376	1720	1376	1720
S7L1D-E4	1414	1768	1456	1820	1456	1820
S7L1D-F4	1536	1920	1584	1980	1584	1980
S7L1D-G4	1684	2105	1736	2170	1736	2170
S7L1D-H4	1780	2225	1872	2340	1872	2340
S7L1D-J4	2020	2525	2080	2600	2080	2600
S7L1D-J6	1366	1707	1406	1758	1406	1758
S7L1D-K4*	2328	2910	2328	2910	2288	2860

Standby 163/27						
Winding Number	312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1292	1615	1328	1660	1328	1660
S7L1D-D4	1372	1715	1416	1770	1416	1770
S7L1D-E4	1455	1819	1498	1873	1498	1873
S7L1D-F4	1580	1975	1628	2035	1628	2035
S7L1D-G4	1732	2165	1800	2250	1800	2250
S7L1D-H4	1832	2290	1920	2400	1920	2400
S7L1D-J4	2080	2600	2144	2680	2144	2680
S7L1D-J6	1406	1758	1450	1812	1450	1812
S7L1D-K4*	2400	3000	2400	3000	2356	2945

60Hz

Class H 125/40						
Winding Number	312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1365	1706	1455	1819	1515	1894
S7L1D-D4	1455	1819	1550	1937	1615	2019
S7L1D-E4	1470	1837	1555	1944	1695	2119
S7L1D-F4	1656	2070	1770	2212	1840	2300
S7L1D-G4	1880	2350	2000	2500	2080	2600
S7L1D-H4	1940	2425	2030	2537	2200	2750
S7L1D-J4	2080	2600	2200	2750	2400	3000
S7L1D-J6	1406	1758	1487	1859	1622	2028
S7L1D-K4*	2330	2913	2465	3081	2685	3356

Standby 150/40						
Winding Number	312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1420	1775	1515	1894	1580	1975
S7L1D-D4	1520	1990	1615	2019	1680	2100
S7L1D-E4	1530	1912	1620	2025	1760	2200
S7L1D-F4	1725	2156	1840	2300	1920	2400
S7L1D-G4	1950	2437	2080	2600	2165	2706
S7L1D-H4	2015	2519	2110	2637	2290	2862
S7L1D-J4	2170	2712	2294	2868	2500	3125
S7L1D-J6	1466	1833	1551	1939	1690	1762
S7L1D-K4*	2430	3038	2685	3356	2800	3500

Standby 163/27						
Winding Number	312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S7L1D-C4	1456	1820	1556	1945	1620	2025
S7L1D-D4	1555	1944	1660	2075	1730	2162
S7L1D-E4	1575	1969	1665	2081	1810	2263
S7L1D-F4	1775	2219	1895	2369	1975	2469
S7L1D-G4	2005	2506	2140	2675	2230	2787
S7L1D-H4	2075	2594	2175	2719	2360	2950
S7L1D-J4	2230	2787	2350	2938	2560	3200
S7L1D-J6	1507	1884	1589	1986	1730	2163
S7L1D-K4*	2490	3113	2635	3294	2875	3594

*K Core Available Q1 2023

Specification

MODEL	S7 LV - Dedicated
Ratings at 50Hz (kVA) Class H*	1550-2800
Ratings at 60Hz (kVA) Class H**	1894-3356
Specifications	
Voltage Range	380-690
Poles	4/6
Technology	Wire Wound
AVR	Analogue
Voltage Sensing	2 Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 0
Terminals	6
Material Insulation Class	H
Excitation System	MX341/PMG (C-H core only)
	MX322™/PMG (J-K core only)
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Double
SAE Adaptors	SAE 00
Ingress Protection	IP44 (C & H Cores only)
Voltage Sensing	3 Phase
Temperature Monitoring	Winding RTDs
Temperature Monitoring	Thermistors
Environmental Protection	Anti-Condensation Heater
Adaptor Feet	X
Flexible Feet	✓
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

*50Hz 400V Continuous 125/40°C
**60Hz 480V Continuous 125/40°C

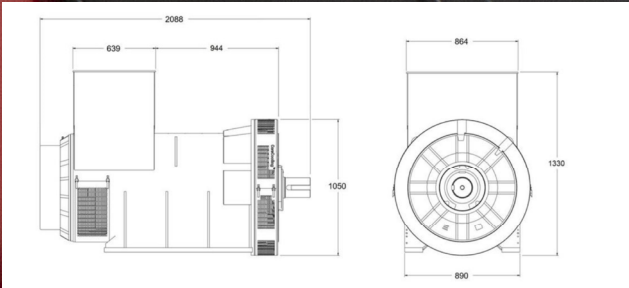
Accessories

Factory Build Options
Anti-Condensation Heater
Quadrature Droop Kit
Bearing RTD (Each Bearing)
Air Inlet Filter
Drip Proof Louvres
Remote Voltage Trimmer
Radio Frequency Interference (RFI) Suppressor Kit
Excitation Loss Module
Diode Failure Detector

Available With	MX322™	MX341
Current Sensing Kit	✓	✓
Controlled Short Circuit	✓	X
Manual Voltage Regulator	✓	✓
Frequency Detection Module	✓	✓
Power Factor Controller - PFC3	✓	✓
Remote Control Interface	✓	✓
Excitation Circuit Breaker	✓	✓
Dual AVR	X	X

Voltage Regulator Options	PMG
UL MX341***	✓
UL MX322™	✓
DECS 100	✓
DM 110	✓
DECS 150	✓
No AVR	✓

*** MX341 not available on S7 J & K-core



S7 LV Dedicated - GA Drawings are indicative of S7-J core dimensions
Please contact our applications department for additional voltages that are available
Ratings are preliminary and are subject to change



S7LV Marine Ratings 380-480V

50Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	868	1085	892	1115	892	1115	876	1095
S7L1M-D4	920	1150	952	1190	952	1190	932	1165
S7L1M-E4	992	1240	1024	1280	1024	1280	1004	1255
S7L1M-F4	1060	1325	1096	1370	1096	1370	1072	1340
S7L1M-G4	1160	1450	1196	1495	1196	1495	1172	1465
S7L1M-H4	1228	1535	1268	1585	1268	1585	1240	1550
S7L1M-J4	1310.4	1638	1344	1680	1344	1680	1260	1575

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	944	1180	992	1240	1012	1265	992	1240
S7L1M-D4	1004	1255	1056	1320	1076	1345	1056	1320
S7L1M-E4	1056	1320	1096	1370	1096	1370	1088	1360
S7L1M-F4	1092	1365	1148	1435	1192	1490	1216	1520
S7L1M-G4	1200	1500	1264	1580	1312	1640	1332	1665
S7L1M-H4	1392	1740	1436	1795	1436	1795	1408	1760
S7L1M-J4	1542.4	1928	1584	1980	1584	1980	1460.8	1826

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	1060	1325	1092	1365	1092	1365	1072	1340
S7L1M-D4	1140	1425	1164	1455	1164	1455	1144	1430
S7L1M-E4	1200	1500	1232	1540	1232	1540	1212	1515
S7L1M-F4	1300	1625	1340	1675	1340	1675	1320	1650
S7L1M-G4	1424	1780	1464	1830	1464	1830	1440	1800
S7L1M-H4	1504	1880	1584	1980	1584	1980	1528	1910
S7L1M-J4	1708	2135	1760	2200	1760	2200	1600	2000

60Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	980	1225	1045	1306	1070	1337	1090	1362
S7L1M-D4	1045	1306	1115	1394	1140	1425	1160	1450
S7L1M-E4	1096	1370	1160	1450	1220	1525	1260	1575
S7L1M-F4	1195	1494	1275	1594	1300	1625	1325	1656
S7L1M-G4	1350	1687	1440	1800	1470	1837	1500	1875
S7L1M-H4	1425	1781	1520	1900	1555	1944	1585	1981
S7L1M-J4	1450	1812	1530	1913	1600	2000	1670	2088

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	1115	1394	1185	1481	1210	1512	1235	1544
S7L1M-D4	1185	1481	1265	1581	1290	1612	1320	1650
S7L1M-E4	1240	1550	1320	1650	1380	1725	1432	1790
S7L1M-F4	1355	1694	1440	1800	1475	1844	1500	1875
S7L1M-G4	1530	1912	1630	2037	1660	2075	1700	2125
S7L1M-H4	1620	2025	1725	2156	1760	2200	1800	2250
S7L1M-J4	1710	2137	1815	2269	1890	2363	1980	2475

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1M-C4	1210	1512	1290	1612	1310	1637	1335	1669
S7L1M-D4	1290	1612	1365	1706	1390	1738	1425	1781
S7L1M-E4	1300	1625	1370	1712	1430	1787	1500	1875
S7L1M-F4	1425	1781	1560	1950	1590	1987	1620	2025
S7L1M-G4	1655	2069	1760	2200	1795	2244	1830	2288
S7L1M-H4	1710	2137	1790	2237	1850	2312	1940	2425
S7L1M-J4	1830	2288	1940	2425	2025	2531	2115	2644

S7LV Marine Ratings 660-690V

50Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	960	1200	960	1200
S7L1M-E4	992	1240	992	1240
S7L1M-F4	1020	1275	1020	1275
S7L1M-J4	1316	1645	1316	1645

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	1076	1345	1076	1345
S7L1M-E4	1088	1360	1088	1360
S7L1M-F4	1152	1440	1152	1440
S7L1M-J4	1556	1945	1556	1945

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	1164	1455	1164	1455
S7L1M-E4	1165	1456	1208	1510
S7L1M-F4	1263	1579	1312	1640
S7L1M-J4	1728	2160	1728	2160

60Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	1132	1415	1132	1415
S7L1M-E4	1164	1455	1164	1455
S7L1M-F4	1196	1495	1196	1495
S7L1M-J4	1528	1910	1528	1910

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	1268	1585	1268	1585
S7L1M-E4	1280	1600	1280	1600
S7L1M-F4	1352	1690	1352	1690
S7L1M-J4	1808	2260	1808	2260

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1M-D4	1304	1630	1372	1715
S7L1M-E4	1420	1775	1420	1775
S7L1M-F4	1540	1925	1540	1925
S7L1M-J4	2008	2510	2008	2510

Specification

MODEL	S7LV - Marine
Ratings at 50Hz (kVA) Class H*	1365-2200
Ratings at 60Hz (kVA) Class H**	1669-2644
Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage Sensing	3 Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 0
Terminals	6
Material Insulation Class	H
Excitation System	MX322™/PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Double
SAE Adaptors	SAE 00/no adaptor for double
Ingress Protection	IP44 complete machine
Voltage Sensing	3 Phase (MX341 2 phase)
Temperature Monitoring	Winding RTDs
Temperature Monitoring	Thermistors
Environmental Protection	Anti-Condensation Heater
Adaptor Feet	X
Flexible Feet	✓
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

*50Hz 400V Continuous 125/40°C
**60Hz 480V Continuous 125/40°C

The standard S7 air-cooled marine product is also available with sleeve bearings (2 bearings only)

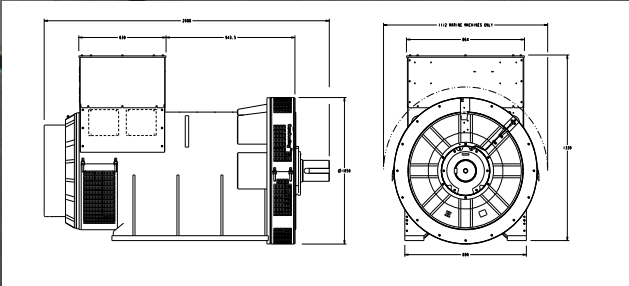
S7 LV Marine - GA Drawings are indicative of S7-J core dimensions
Please contact our applications department for additional voltages that are available

Accessories

Factory Build Options
Anti-Condensation Heater
Quadrature Droop Kit
Bearing RTD (Each Bearing)
Air Inlet Filter
Drip Proof Louvres
Remote Voltage Trimmer
Radio Frequency Interference (RFI) Suppressor Kit
Excitation Loss Module
Diode Failure Detector

Available With	MX322™
Current Sensing Kit	✓
Controlled Short Circuit	✓
Manual Voltage Regulator	✓
Frequency Detection Module	✓
Power Factor Controller - PFC3	✓
Remote Control Interface	✓
Excitation Circuit Breaker	✓
Dual AVR	X

Voltage Regulator Options	PMG
MX341	✓
DECS 100	✓
DM 110	✓
DECS 150	✓



**3 YEAR
WARRANTY**

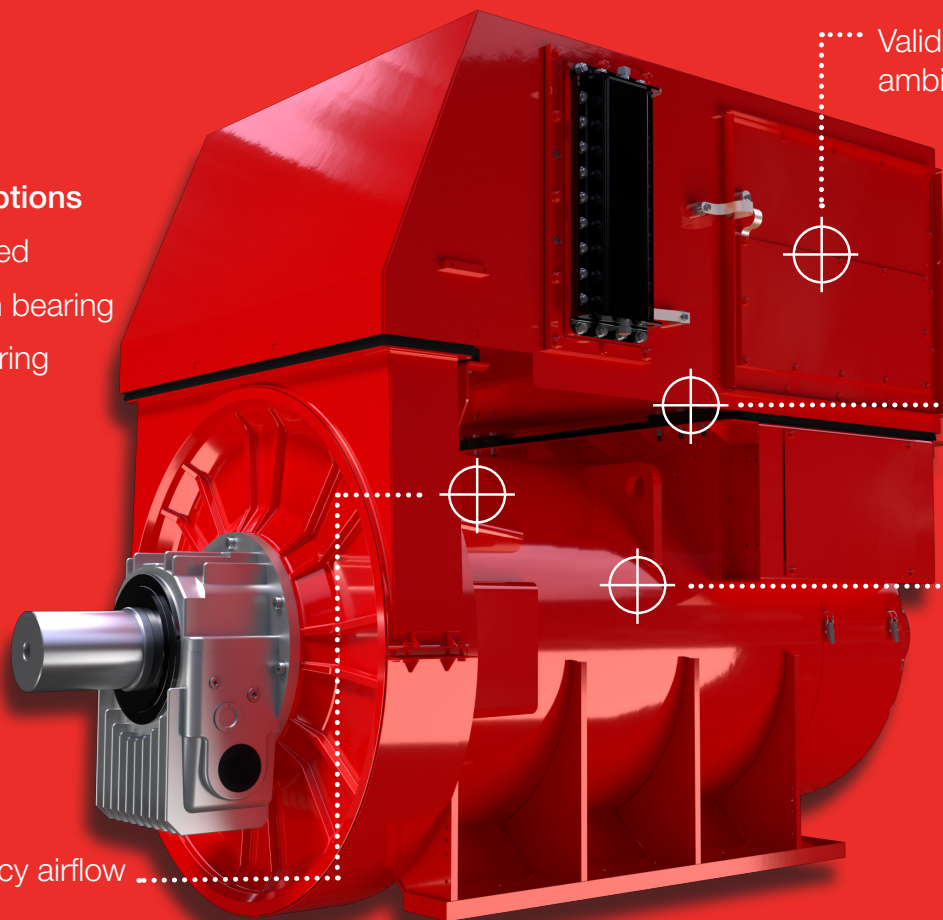
STAMFORD® S7

Low Voltage Water Cooled



Features & Options

- Water cooled
- Anti-friction bearing
- Sleeve bearing option



Validated at high ambient temperature

Anti-vibration mounts for high reliability on water cooler

Class H insulation as standard for superior thermal life

High-efficiency airflow

Uptime Maximised

- Flexibility of applications usage including PTO (Power Take Off) and PTI (Power Take In)
- Meets a wide range of marine classifications including IP23, IP54 and SOLAS
- Supports overload capability of 110% for one hour in every twelve hours (as per ISO8528)
- 3 x short circuit current handling capability

Product evolution through technological revolution.

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

S7 Low Voltage Water Cooled Ratings 380-480V

50Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	920	1150	952	1190	952	1190	932	1165
S7L1W-E4	992	1240	1024	1280	1024	1280	1004	1255
S7L1W-F4	1060	1325	1096	1370	1096	1370	1072	1340
S7L1W-J4	1310	1638	1344	1680	1344	1680	1260	1575

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	1004	1255	1056	1320	1076	1345	1056	1320
S7L1W-E4	1056	1320	1096	1370	1096	1370	1088	1360
S7L1W-F4	1092	1365	1148	1435	1192	1490	1216	1520
S7L1W-J4	1542	1928	1584	1980	1584	1980	1460	1826

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	380		400		415		440	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	1140	1425	1164	1455	1164	1455	1144	1430
S7L1W-E4	1200	1500	1232	1540	1232	1540	1212	1515
S7L1W-F4	1300	1625	1340	1675	1340	1675	1320	1650
S7L1W-J4	1708	2135	1760	2200	1760	2200	1600	2000

60Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	1045	1306	1115	1394	1140	1425	1160	1450
S7L1W-E4	1096	1370	1160	1450	1220	1525	1260	1575
S7L1W-F4	1195	1494	1275	1594	1300	1625	1325	1656
S7L1W-J4	1450	1812	1530	1913	1600	2000	1670	2088

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	1185	1481	1265	1581	1290	1612	1320	1650
S7L1W-E4	1240	1550	1320	1650	1380	1725	1432	1790
S7L1W-F4	1355	1694	1440	1800	1475	1844	1500	1875
S7L1W-J4	1710	2137	1815	2269	1890	2363	1980	2475

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)								
Winding Number	312							
Volts	416		440		460		480	
Model	kW	kVA	kW	kVA	kW	kVA	kW	kVA
S7L1W-D4	1290	1612	1365	1706	1390	1738	1425	1781
S7L1W-E4	1300	1625	1370	1712	1430	1787	1500	1875
S7L1W-F4	1425	1781	1560	1950	1590	1987	1620	2025
S7L1W-J4	1830	2288	1940	2425	2025	2531	2115	2644

Ratings are based on a water inlet temperature of 38°C
Ratings are preliminary and subject to change

S7 Low Voltage Water Cooled Ratings 660-690V

50Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	960	1200	960	1200
S7L1W-E4	992	1240	992	1240
S7L1W-F4	1020	1275	1020	1275
S7L1W-J4	1316	1645	1316	1645

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	1076	1345	1076	1345
S7L1W-E4	1088	1360	1088	1360
S7L1W-F4	1152	1440	1152	1440
S7L1W-J4	1556	1945	1556	1945

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	26			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	1164	1455	1164	1455
S7L1W-E4	1165	1456	1208	1510
S7L1W-F4	1263	1579	1312	1640
S7L1W-J4	1728	2160	1728	2160

60Hz

Class B (70°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	1132	1415	1132	1415
S7L1W-E4	1164	1455	1164	1455
S7L1W-F4	1196	1495	1196	1495
S7L1W-J4	1528	1910	1528	1910

Class F (90°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	1268	1585	1268	1585
S7L1W-E4	1280	1600	1280	1600
S7L1W-F4	1352	1690	1352	1690
S7L1W-J4	1808	2260	1808	2260

Class H (110°C Temperature Rise, Continuous, 50°C Ambient)				
Winding Number	28			
Volts	660		690	
Model	kW	kVA	kW	kVA
S7L1W-D4	1304	1630	1372	1715
S7L1W-E4	1420	1775	1420	1775
S7L1W-F4	1540	1925	1540	1925
S7L1W-J4	2008	2510	2008	2510

Ratings are based on a water inlet temperature of 38°C
Ratings are preliminary and subject to change

Specification

MODEL	S7LV - Water Cooled
Ratings at 50Hz (kVA) Class H*	1425-2200
Ratings at 60Hz (kVA) Class H**	1612-2644
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	MX322™
Voltage Sensing	3 Phase
Bearing Design	Anti-friction
Bearing Arrangement	Double
SAE Adaptors	SAE 0
Terminals	6
Material Insulation Class	Class H
Excitation System	MX322™/PMG
Ingress Protection	IP23, IP54
Connection with other machines	Paralleling capability
Cooling Method	Water cooled (IC81W)
Optional Features	
Bearing Design	Sleeve
SAE Adaptors	SAE 00, None
Flexible Feet	✓
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

*50Hz 400V Continuous 125/40°C

**60Hz 480V Continuous 125/40°C

Adaptors to be provided on anti-friction bearing machines only

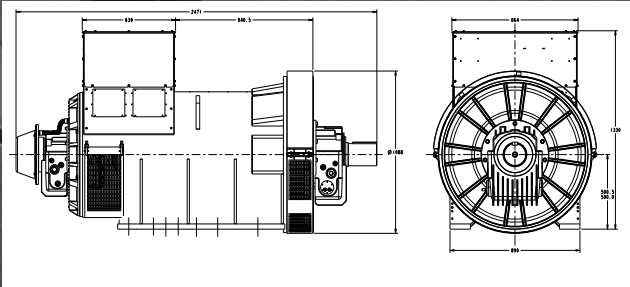
The standard S7 air-cooled marine product is also available with sleeve bearings (2 bearings only)

Accessories

Factory Build Options
Anti-Condensation Heater
Quadrature Droop Kit
Bearing RTD (Each Bearing)
Remote Voltage Trimmer
Radio Frequency Interference (RFI) Suppressor Kit
Excitation Loss Module
Diode Failure Detector
Winding RTDs and Thermistors (in another level)
Protection CTs

STAMFORD alternators meet the classification requirements of all major marine societies. Certifications can be considered on request

Available With	MX322™
Current Sensing Kit	✓
Controlled Short Circuit	✓
Manual Voltage Regulator	✓
Frequency Detection Module	✓
Power Factor Controller - PFC3	✓
Remote Control Interface	✓
Excitation Circuit Breaker	✓



S7 Water Cooled - GA Drawings are indicative of S7-J core dimensions
Please contact our applications department for additional voltages that are available



STAMFORD® S7

High Voltage Dedicated 5/6th & 2/3rd pitch



Enhanced thermal management

Greater serviceability access

Optimised power density

Increased ratings
up to 1625 kVA*
(50Hz High
Voltage)

High-efficiency airflow

*50Hz 10500V Continuous 125/40°C 5/6th pitch

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

S7 High Voltage Dedicated Ratings 5/6th pitch

50Hz

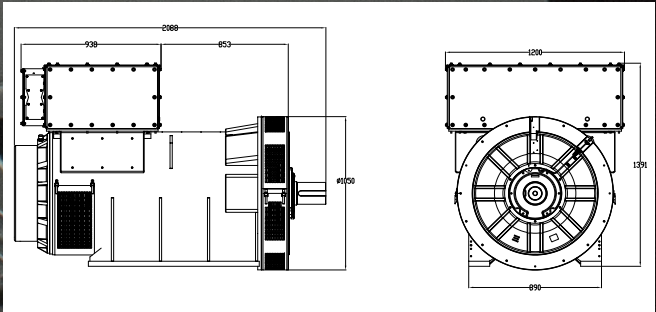
Class H 125/40	83			
Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	864	1080	864	1080
S7H1D-D4	976	1220	976	1220
S7H1D-E4	1080	1350	1080	1350
S7H1D-F4	1300	1625	1300	1625

Standby 150/40	83			
Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	924	1155	924	1155
S7H1D-D4	1040	1300	1040	1300
S7H1D-E4	1152	1440	1152	1440
S7H1D-F4	1388	1735	1388	1735

Standby 163/27	83			
Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	948	1185	948	1185
S7H1D-D4	1072	1340	1072	1340
S7H1D-E4	1188	1485	1188	1485
S7H1D-F4	1428	1785	1428	1785

50Hz

Class F 105/40	83			
Winding Number	83			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	800	1000	800	1000
S7H1D-D4	900	1125	900	1125
S7H1D-E4	1000	1250	1000	1250
S7H1D-F4	1200	1500	1200	1500



S7 HV - GA Drawings are indicative of S7-F core dimensions

Specification

MODEL	S7HV - Dedicated
Ratings at 50Hz (kVA) Class F*	1000-1500
Ratings at 50Hz (kVA) Class H**	1080-1625
Specifications	
Voltage Range	10500-11000
Poles	4
Technology	Form Wound
AVR	Digital
Voltage Sensing	3 Phase
Bearing Arrangement	Double
SAE Adaptors	None
Terminals	4
Temperature Monitoring	Winding RTDs 2 phase
Material Insulation Class	H
Excitation System	DECS100/PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Single
Temperature Monitoring	Bearing RTD
SAE Adaptors	SAE0, SAE 00
Terminals	6 terminals, open starpoint
Environmental Protection	Anti-Condensation Heater
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

*50Hz 10500V Continuous 105/40°C

**50Hz 10500V Continuous 125/40°C

Accessories

Factory Build Options
Anti-Condensation Heater
Bearing RTD (Each Bearing)

Available With	DECS 100
Current Sensing Kit	✓
Controlled Short Circuit	X
Manual Voltage Regulator	✓
Frequency Detection Module	✓
Power Factor Controller	✓
Remote Control Interface	X
Excitation Circuit Breaker	X
Dual AVR	X

Voltage Regulator Options	PMG
No AVR	✓

Please contact our applications department for additional voltages that are available
Ratings are preliminary and are subject to change



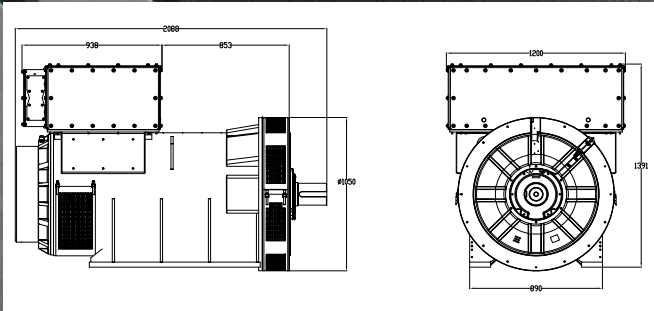
S7 High Voltage Dedicated Ratings 2/3rd pitch

50Hz

Class H 125/40	983			
Winding Number	983			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	752	940	752	940
S7H1D-D4	860	1075	860	1075
S7H1D-E4	940	1175	940	1175
S7H1D-F4	1132	1415	1132	1415

Standby 150/40	983			
Winding Number	983			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	804	1005	804	1005
S7H1D-D4	908	1135	908	1135
S7H1D-E4	1004	1255	1004	1255
S7H1D-F4	1208	1510	1208	1510

Standby 163/27	983			
Winding Number	983			
Volts	10500		11000	
Model	kW	kVA	kW	kVA
S7H1D-C4	828	1035	828	1035
S7H1D-D4	936	1170	936	1170
S7H1D-E4	1036	1295	1036	1295
S7H1D-F4	1244	1555	1244	1555



S7 HV - GA Drawings are indicative of S7-F core dimensions

Specification

MODEL	S7HV - Dedicated
Ratings at 50Hz (kVA) Class F*	870-1305
Ratings at 50Hz (kVA) Class H**	940-1415
Specifications	
Voltage Range	10500-11000
Poles	4
Technology	Wire Wound
AVR	Digital
Voltage Sensing	3 Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 0
Terminals	4
Material Insulation Class	H
Excitation System	DECS100/PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Double
Temperature Monitoring	Winding RTDs, Thermistors
SAE Adaptors	SAE 00
Terminals	6 terminals, open starpoint
Environmental Protection	Anti-Condensation Heater
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

*50Hz 10500V Continuous 105/40°C
**50Hz 10500V Continuous 125/40°C

Accessories

Factory Build Options
Anti-Condensation Heater
Bearing RTD (Each Bearing)

Available With	DECS 100
Current Sensing Kit	✓
Controlled Short Circuit	X
Manual Voltage Regulator	✓
Frequency Detection Module	✓
Power Factor Controller PFC3	✓
Remote Control Interface	X
Excitation Circuit Breaker	X
Dual AVR	X

Voltage Regulator Options	PMG
No AVR	✓

Please contact our applications department for additional voltages that are available
Ratings are preliminary and are subject to change



Applications



Case Study

Purpose:

Grid power for biogas plant

Location:

ShenZhen City

Specified:

1 x **STAMFORD®**
S-Range S7LV

With a working partnership since 2011, Shenzhen Dongjiang Environmental Renewable Energy Co. Ltd. felt confident to choose **STAMFORD®** | **AvK®** to provide an alternator to suit their requirements. The requirements to suit, were for an alternator giving a total output of 10.5kV/1000kW working at an ambient temperature at below 40°C.

STAMFORD® S7HV alternator was able to easily accomplish this. The **STAMFORD®** S7HV winding features and options for bearing RTD's also ensured the alternator fitted the customers specifications, to operate 7,500-8,000 hours per year. **STAMFORD®** | **AvK®** also designed a special coupling for the alternator allowing this bespoke product to accommodate the existing alternator in the genset.

"Specially designed coupling kit enabled ease of coupling to an existing alternator."

-Yayao Liang, Operation Supervisor,
Shenzhen Dongjiang Environmental Renewable Energy.



End-to-end Support

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 **STAMFORD® I AvK®** alternators, we're there for you.

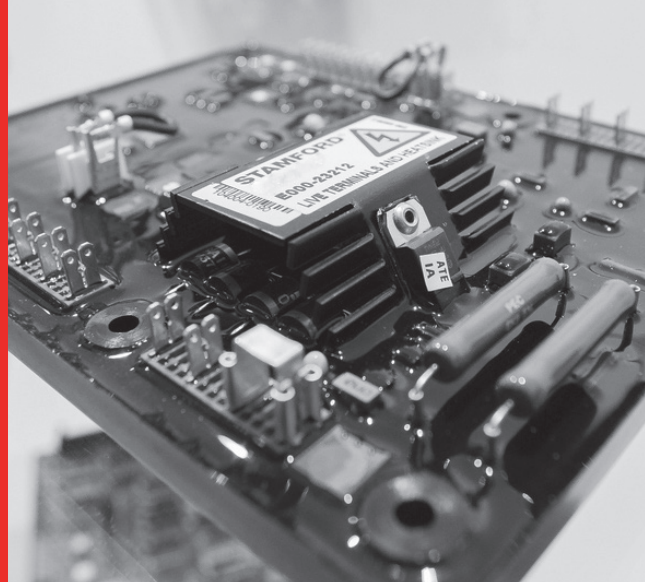
Selecting the right alternator for the right application? We understand the performance requirements that each application and operating environment demands.

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

We are here to support your future decarbonisation goals, through our end-to-end expertise in versatile solutions. Backed by the reassurance of our world-renowned brands recognised for reliability and complete peace of mind, we are with you on your journey towards sustainability.



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Part No. PB_S7_HP_Rev.7

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POWERING TOMORROW, TOGETHER