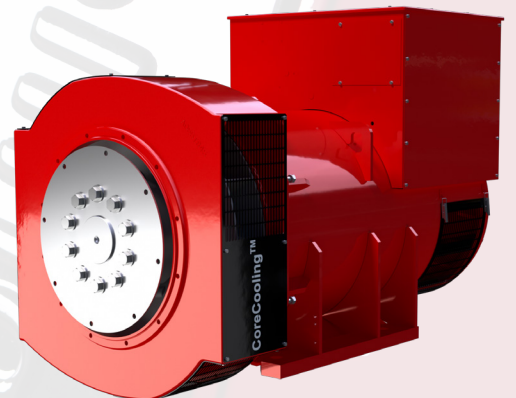




# STAMFORD® S-RANGE STAMFORD® S6

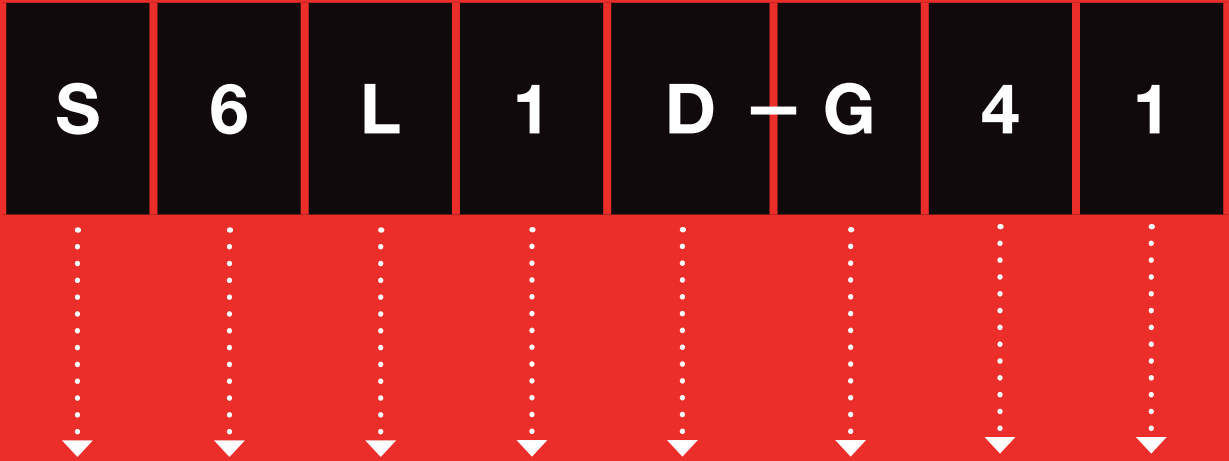


LOW VOLTAGE ALTERNATOR  
810-1150 kVA 50Hz  
1000-1438 kVA 60Hz



**STAMFORD | AvK™**  
POWERING TOMORROW, TOGETHER

# The S6 Nomenclature



Character	Brand	Family Series	Voltage	Revision	Descriptor	Core Length	Pole	Bearing
Examples	STAMFORD	6	L = Low	1	D = Dedicated M = Marine	C/D/E/F/G/H	4/6	1/2

# STAMFORD® S6 Dedicated



Enhanced thermal management .....



Optimised power density core

New core lengths:  
1260 & 1400 kVA

Adaptor foot option,  
enabling switching  
between S6 & P7

High efficiency air-flow .....

Flexible foot option, enabling switching  
between alternative brands

Product evolution through technological revolution.

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

# S6 Dedicated Ratings

## 50Hz

Class H 125/40						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	640	800	648	810	648	810
S6L1D-D4	728	910	752	940	752	940
S6L1D-E4	800	1000	840	1050	840	1050
S6L1D-F4	888	1110	920	1150	920	1150
S6L1D-G4	964	1205	1008	1260	1008	1260
S6L1D-H4	1068	1335	1120	1400	1120	1400

Standby 150/40						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	660	825	668	835	668	835
S6L1D-D4	768	960	784	980	784	980
S6L1D-E4	848	1060	880	1100	880	1100
S6L1D-F4	944	1180	952	1190	952	1190
S6L1D-G4	1004	1255	1052	1315	1052	1315
S6L1D-H4	1112	1390	1168	1460	1168	1460

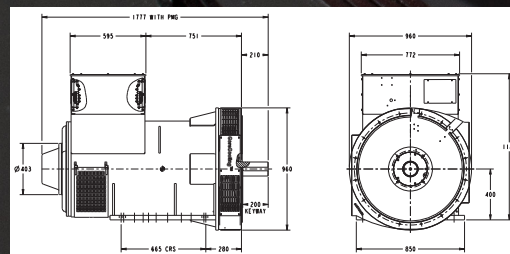
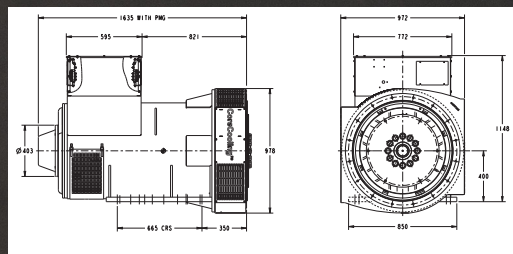
Standby 163/27						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	680	850	688	860	680	850
S6L1D-D4	800	1000	808	1010	808	1010
S6L1D-E4	880	1100	900	1125	900	1125
S6L1D-F4	976	1220	984	1230	984	1230
S6L1D-G4	1032	1290	1076	1345	1080	1350
S6L1D-H4	1144	1430	1200	1500	1200	1500

## 60Hz

Class H 125/40						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	700	875	740	925	800	1000
S6L1D-D4	820	1025	850	1063	900	1125
S6L1D-E4	920	1150	960	1200	1040	1300
S6L1D-F4	1020	1275	1070	1338	1150	1438
S6L1D-G4	1040	1300	1145	1431	1200	1500
S6L1D-H4	1185	1481	1255	1569	1355	1694

Standby 150/40						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	730	913	775	969	835	1044
S6L1D-D4	870	1088	900	1125	950	1188
S6L1D-E4	965	1206	1000	1250	1080	1350
S6L1D-F4	1080	1350	1125	1406	1200	1500
S6L1D-G4	1085	1356	1200	1500	1255	1569
S6L1D-H4	1235	1544	1310	1637	1410	1762

Standby 163/27						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1D-C4	760	950	800	1000	870	1088
S6L1D-D4	900	1125	930	1163	975	1219
S6L1D-E4	1000	1250	1040	1300	1120	1400
S6L1D-F4	1120	1400	1170	1463	1260	1575
S6L1D-G4	1130	1413	1250	1563	1300	1625
S6L1D-H4	1270	1588	1345	1681	1450	1812



## Specification

MODEL	S6-Dedicated
Ratings at 50Hz (kVA) Class H	800-1400
Ratings at 60Hz (kVA) Class H	875-1694
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage Sensing	3 Phase sensing
Bearing Arrangement	Single
SAE Adaptors	0
Terminals	6
Material Insulation Class	H
Excitation System	MX321/PMG
Ingress Protection	IP23
Optional Features	
SAE Adaptors	00,1
Bearing Arrangement	Double
Ingress Protection	IP44 Terminal Box
Output Configurations	3 Phase Reconnectable
Voltage sensing	2 Phase sensing
Temperature Monitoring	Winding RTDs
Temperature Monitoring	Thermistors
Adaptor Feet	✓
Flexible Feet	✓
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

## Accessories

### Factory Build Options

Anti-Condensation Heater (with Terminal Box)
Quadrature Droop kit
Bearing RTD (Each Bearing)
Remote Voltage Trimmer
Radio frequency interference (RFI) Suppressor Kit
Excitation Loss Module
Diode Failure Detector

### Available With

	MX321™	MX341
Current Sensing Kit	✓	✓
Controlled Short Circuit	✓	X
Manual Voltage Regulator	✓	✓
Frequency Detection Module	✓	✓
Power Factor Controller - PFC3	✓	✓
Remote Control Interface	✓	✓
Excitation Circuit Breaker	✓	✓

### Voltage Regulator Options

MX341
MX341 UL
MX321™ UL
DECS100
DM110

Please note all ratings and drawings are preliminary and subject to change.

GA drawings are indicative of S6D-H core dimensions

Please contact our applications department for additional voltages that are available (applications@cummins.com)

G & H cores are not reconnectable

**3 YEAR  
WARRANTY**

# S6 Marine Ratings

## 50Hz

Class B (70°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	424	<b>530</b>	440	<b>550</b>	456	<b>570</b>
S6L1M-D4	510	<b>638</b>	525	<b>656</b>	540	<b>675</b>
S6L1M-E4	588	<b>735</b>	600	<b>750</b>	608	<b>760</b>
S6L1M-F4	632	<b>790</b>	640	<b>800</b>	656	<b>820</b>
S6L1M-H4	764	<b>955</b>	804	<b>1005</b>	808	<b>1010</b>

Class F (90°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	504	<b>630</b>	520	<b>650</b>	540	<b>675</b>
S6L1M-D4	560	<b>700</b>	576	<b>720</b>	592	<b>740</b>
S6L1M-E4	648	<b>810</b>	664	<b>830</b>	680	<b>850</b>
S6L1M-F4	720	<b>900</b>	736	<b>920</b>	752	<b>940</b>
S6L1M-H4	764	<b>955</b>	804	<b>1005</b>	832	<b>1040</b>

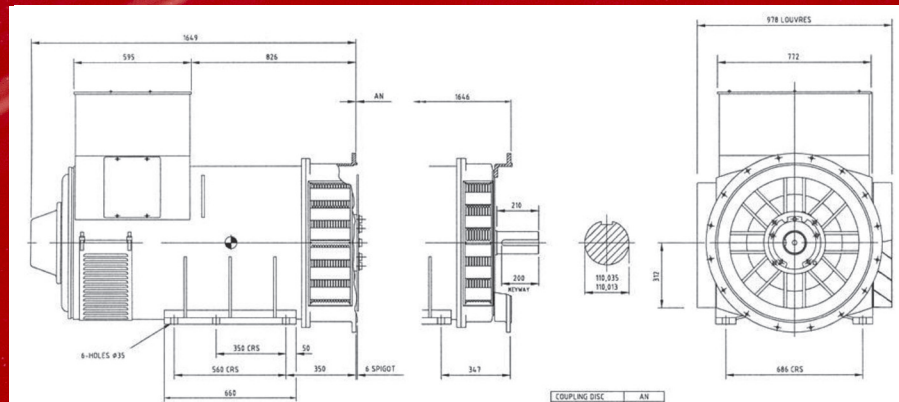
Class H (110°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	380		400		415	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	504	<b>630</b>	520	<b>650</b>	540	<b>675</b>
S6L1M-D4	612	<b>765</b>	628	<b>785</b>	644	<b>805</b>
S6L1M-E4	664	<b>830</b>	680	<b>850</b>	696	<b>870</b>
S6L1M-F4	744	<b>930</b>	760	<b>950</b>	776	<b>970</b>
S6L1M-H4	832	<b>1040</b>	880	<b>1100</b>	900	<b>1125</b>

## 60Hz

Class B (70°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	<b>512</b>	638	<b>530</b>	662	<b>570</b>	712
S6L1M-D4	<b>570</b>	713	<b>600</b>	750	<b>640</b>	800
S6L1M-E4	<b>660</b>	825	<b>680</b>	850	<b>740</b>	925
S6L1M-F4	<b>740</b>	925	<b>772</b>	965	<b>808</b>	1010
S6L1M-H4	<b>880</b>	1100	<b>940</b>	1175	<b>975</b>	1219

Class F (90°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	<b>585</b>	731	<b>610</b>	763	<b>655</b>	819
S6L1M-D4	<b>655</b>	819	<b>690</b>	863	<b>740</b>	925
S6L1M-E4	<b>764</b>	956	<b>790.4</b>	988	<b>850</b>	1063
S6L1M-F4	<b>850</b>	1063	<b>890.4</b>	1113	<b>920</b>	1150
S6L1M-H4	<b>889</b>	1112	<b>940</b>	1175	<b>1024</b>	1281

Class H (110°C) Temperature Rise, Continuous, 50°C Ambient						
Winding Number	311/312					
Volts	416		440		480	
Model	kW	kVA	kW	kVA	kW	kVA
S6L1M-C4	<b>630</b>	788	<b>650</b>	813	<b>700</b>	875
S6L1M-D4	<b>709</b>	887	<b>745</b>	931	<b>795</b>	994
S6L1M-E4	<b>824</b>	1031	<b>850</b>	1063	<b>920</b>	1150
S6L1M-F4	<b>920</b>	1150	<b>960</b>	1200	<b>1016</b>	1270
S6L1M-H4	<b>1015</b>	1269	<b>1040</b>	1300	<b>1169</b>	1462



# Specification

MODEL	S6-Marine
Ratings at 50Hz (kVA) Class H	630-1125
Ratings at 60Hz (kVA) Class H	788-1462
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage Sensing	3 Phase sensing
Bearing Arrangement	Single
SAE Adaptors	0
Terminals	6
Material Insulation Class	H
Excitation System	MX321/PMG
Ingress Protection	IP23
Optional Features	
Poles	6
Bearing Arrangement	Double
SAE Adaptors	00
Ingress Protection	IP23
Output Configurations	3 Phase Reconnectable
Voltage sensing	3 Phase sensing
Temperature Monitoring	Winding RTDs
Temperature Monitoring	Thermistors
Adaptor Feet	X
Flexible Feet	✓
Prime Movers	
Diesel Engine	✓
Gas Engine	✓

# Accessories

Factory Build Options
Anti-Condensation Heater (with Terminal Box)
Quadrature Droop kit
Bearing RTD (Each Bearing)
Air Inlet Filter
Remote Voltage Trimmer
Radio frequency interference (RFI) Suppressor Kit
Excitation Loss Module
Diode Failure Detector

Available With	MX321™	MX341
Current Sensing Kit	✓	✓
Controlled Short Circuit	✓	X
Manual Voltage Regulator	✓	✓
Frequency Detection Module	✓	✓
Power Factor Controller - PFC3	✓	✓
Remote Control Interface	✓	✓
Excitation Circuit Breaker	✓	✓

Voltage Regulator Options
MX341
MX341 UL
DM110

Please note all ratings and drawings are preliminary and subject to change.  
 GA drawings are indicative of S6M-F core dimensions  
 Please contact our applications department for additional voltages that are available (applications@cummins.com)



# Applications



## Case Study

**Purpose:**  
Data Centre

**Location:**  
Northern Europe

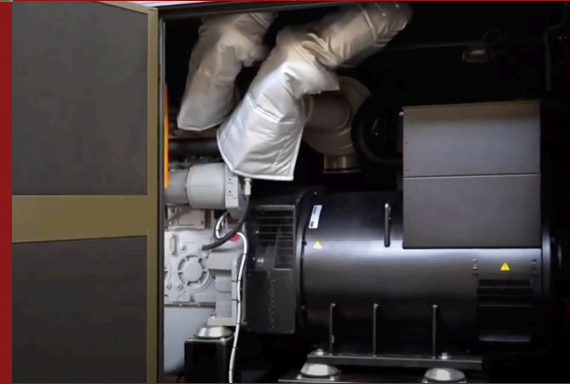
**Specified:**  
2 x **STAMFORD**® S6

Reliable gensets to support critical functions in total safety and ensuring the highest level of security was required for a North European based Data Centre. Visa S.p.A., Italy provided the most appropriate solutions to cover this specific project need.

Reliability, robustness and cutting-edge technology was crucial to avoid any risks arising from the power failure of infrastructure. Specified to meet all requirements were 2 x **STAMFORD**® S6 with Class F (105/40°C) temperature rise and fitted with a **STAMFORD**® MX321™ AVR and PMG, assisting in the output of 3.6 MVA power.

“**STAMFORD**® alternators were specifically selected for their reliability and high level of quality”

- Visa S.p.A.





## 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.

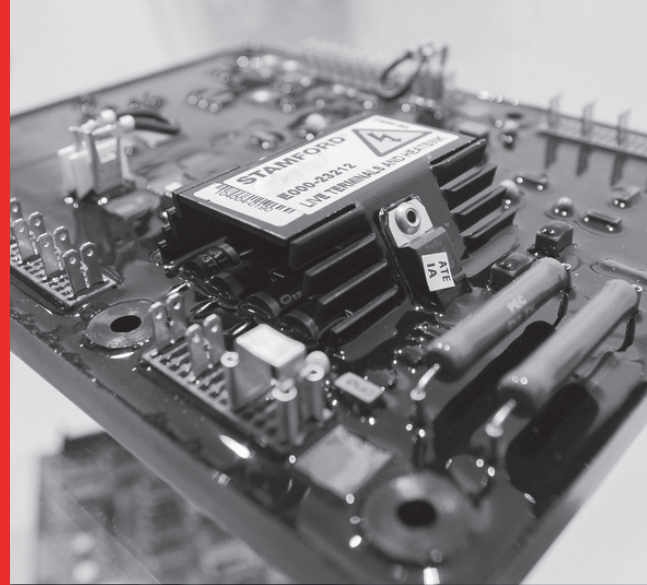
Selecting the right alternator for the right application? We understand the performance requirements that each application and operating environment demands.

**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.



[stamford-avk.com/future-ready](https://stamford-avk.com/future-ready)



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**www.stamford-avk.com**



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