

STAMFORD® & AvK® POWER PORTFOLIO

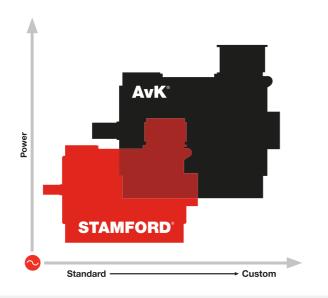




STAMFORD | AvK

POWERING TOMORROW, TOGETHER

THE **ULTIMATE RANGE**



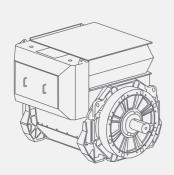


We are here to support your future decarbonisation goals, through our end-to-end expertise in versatile solutions. Backed by the reassurance of our world-renowned brands recognised for reliability and complete peace of mind, we are with you on your journey towards sustainability.



stamfordavk.li/future-ready

STAMFORD® S-RANGE





Utilising wire-wound technology and with an output extending from 7.5 to 5,600kVA, genuine STAMFORD® alternators are designed for delivering superior efficiencies in marine, oil and gas auxiliary, UPS, telecoms, CHP, construction and other continuous or standby power applications. STAMFORD alternators are available with a choice of SAE adaptors to ensure easy coupling to a wide range of prime movers. All STAMFORD S-Range is fitted with CoreCooling™ Technology.

Prime Movers

Diesel and Gas, Steam and Gas Turbine and are future ready for Hydrogen and Battery Hybrid systems and other decarbonised technologies

Engine compatibility: all brands and nodes

Common Features

Technology: Wire wound Protection: IP23 as standard Open ventilated construction

Designed For

Prime Power, Standby, Marine, Oil and Gas Auxiliary, Mining, Critical Protection and UPS, Combined Heat and Power, Telecoms, Mobile Construction

Classifications

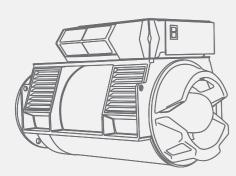
Compatible with Industrial Standards:



Compatible with Marine Classifications:



AvK®



With a robust bar wound configuration, AvK® alternators are robustly engineered products up to 8,500kVA, specifically designed to meet the challenges of the most arduous applications and environments - be it in extraction of oil and gas, coal and minerals, critical marine power to tankers and container vessels. Our extensive experience and knowledge gathered from a large number of diverse alternator installations worldwide provides expertise in offering integrated design solutions that helps our customers compete more successfully throughout the world.

Designed to couple with: Diesel Engine, Gas Engine, Steam Turbine, Gas Turbine

Diesel Engine compatibility: all brands and nodes

Common Features

Technology: Bar wound Protection: IP23 as standard with higher IP ratings available as options Totally enclosed construction Highly configurable design

Designed For

Prime Power, Power Plants, Marine, Oil and Gas, Mining

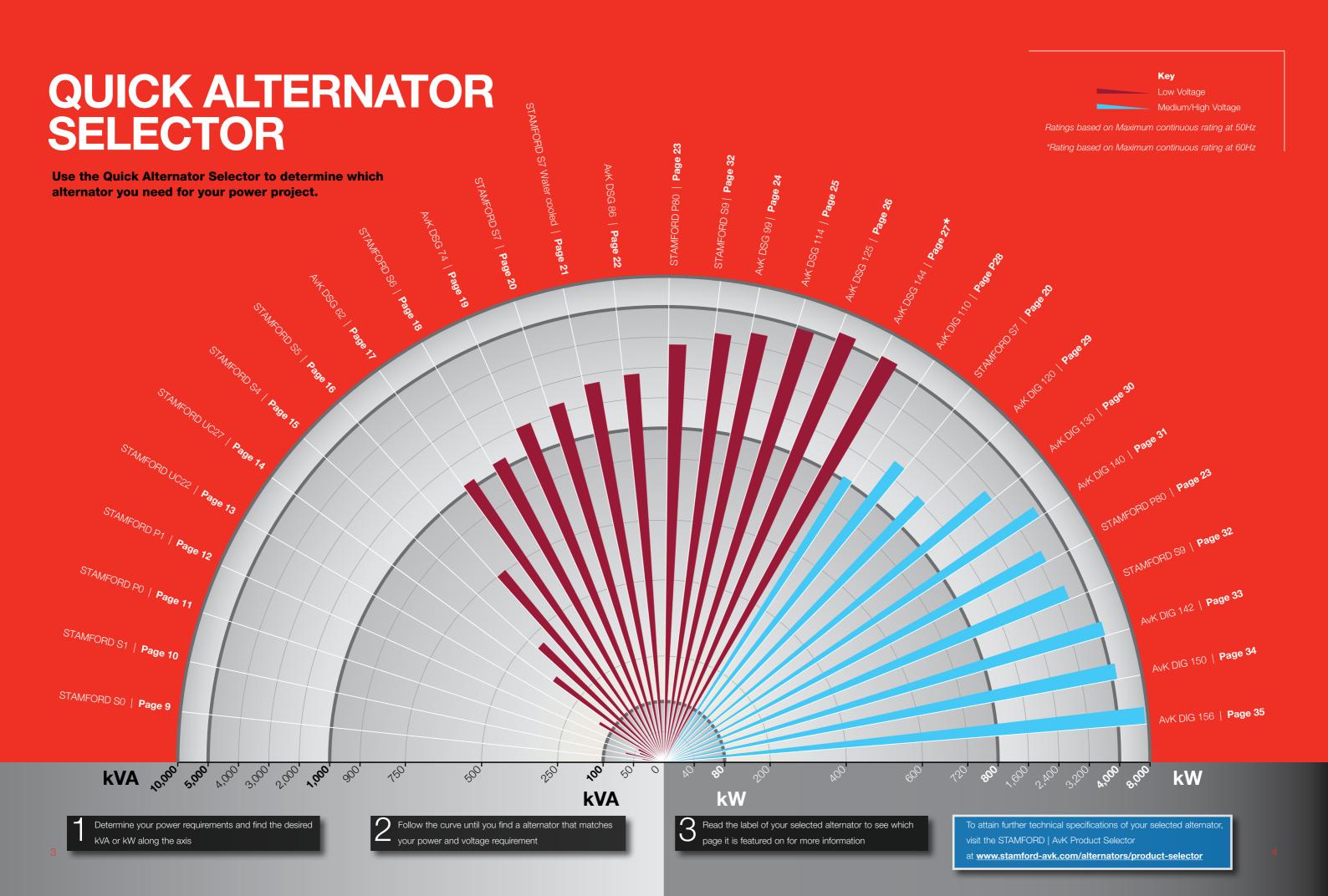
Classifications

Compatible with Industrial Standards:



Compatible with Marine Classifications:





GLOBAL PEACE OF MIND

INDUSTRY LEADING TECHNICAL SUPPORT

It's what we do

From pre-sales application support all the way through to engineers servicing your STAMFORD® or AvK® alternators, we're there for you. For over 100 years and counting, we provide ourself on the proven support we've delivered for our customers, globally.

Selecting the right alternator for the right application

In today's complex world our goal is to make your lifesimpler - by using our unrivaled experience to provide solutions to your challenges. With a rich, proven history of helping our customers become efficient, we understand the performance requirements that each application and operating environment demands. Our knowledgeable, experienced applications engineers align individual customers' power needs with the most suitable alternator specification.

Application Engineering Training

We offer a wide range of alternator application training courses to help our customers in the design and operation of our products.

Our training packages can be fully customised to meet your training requirements. We are completely flexible and can adapt any of our training courses to ensure we deliver material that suits your business objectives. From the very basics of electrical fundamentals to complex alternator sizing we will aim to deliver training to meet the specified requirements of the delegates.

Our training courses can be conducted in-house or locally at customer premises.







One Global Service Network

Our professional engineers are widely recognised in the industry as experts in electrical, electronic and mechanical engineering. They in turn are supported by a common worldwide spares and service network for all STAMFORD® and AvK® alternators.

What that means to you

- Experienced "Factory" engineers and trained local Dealer network to respond immediately to rectify customer onsite problems
- Quotations for inspection, commissioning and refurbishment of alternators at the customer site
- AVR & accessory set-up on site
- STAMFORD and AvK parts identification
- Extensive Aftermarket network distribution for genuine STAMFORD and AvK parts
- Extensive aftermarket distribution for genuine STAMFORD and AvK parts
- Quotations for extended warranty
- Quotations for Genset installation and coupling alignment checks

Service Training

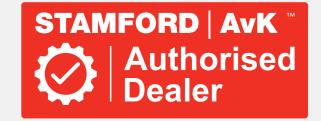
Product familiarity will ensure maximum productivity and optimum use of the alternator. Our Service Training teams offer service training courses for engineers, operators and service and support staff. Each course is individually tailored to suit the needs of the customer, the generator set builder or the enduser. Product familiarisation courses, with a choice of training modules - including alternator control systems, applications, trouble-shooting, maintenance or other specific requirements - are also available.

For further information on service training contact **stamford-avkservicetraining@cummins.com**

Aftermarket Parts

STAMFORD and AvK alternators are supported around the world by global authorised parts dealers who can supply genuine parts for STAMFORD or AvK alternators.

Always source parts from our Authorised Dealers: **stamford-avk.com/parts**



ACCESSORIES

GLOSSARY

Current Sensing Kit

Assists the AVR to achieve accurate voltage regulation when supplying loads at the end of long cable runs.

Separate Voltage Trimmer

Provides remote fine adjustment of the alternator output voltage.

Paralleling Kit

Quadrature Droop provides a drooping characteristic, when paralleling alternators, ensuring the load is shared in proportion to the alternator outputs.

RFI Suppressor Kit

Reduces the radiated RFI signal from the alternator to enable compliance with various high level EMC standards.

Excitation Loss Module

Detects loss of excitation, not easily detectable by other means, when alternators are running in parallel. This unit switches a single pole change over contact which can be incorporated into an external protection system.

Manual Voltage Regulator

Controls the alternator output voltage manually under emergency conditions. This must be in conjunction with the PMG type control system.

Frequency Detection Module

Senses frequency, and hence rotational speed, can be used to disengage the starter when engine fires, and to shut down the engine in event of overspeed.

Power Factor Controller

Controls and maintains a required power factor condition whilst running in parallel with a mains supply. This unit also incorporates a voltage matching facility for use with basic automatic synchronising equipment.

Alternator Protection Module

Detects overload conditions by measuring voltage discrepancies in the alternator phase voltages. On fault detection, the unit switches a change over contact; this could be incorporated to trip a circuit breaker, stop the engine, or de-excite the alternator.

Diode Failure Detector

On detection of a failed rotating diode this module switches a change over contact. This could either trigger an alarm or automatically shut down the set.

Excitation Circuit Breaker

Circuit breaker which is tripped by a signal from the MX322™ AVR overvoltage detection circuit.

Dual AVR System

Used for manual switching between two AVRs where the specification calls for the provision of a backup AVR.

AVRs

We offer a wide selection of AVR's (Automatic Voltage Regulator) which are suitable for use with many of the products within the alternator range. The AVR is the heart of the alternator and maintains the steady state output voltage within close limits during operation. The AVR's include the latest technology to provide the highest level of performance during all operating conditions.

All AVR's are encapsulated to provide protection against moisture, salt and sand in the atmosphere and mounted on anti-vibration mounts for mechanical protection from engine vibration.

The importance of genuine parts

STAMFORD | AvK[™] offer a complete range of analogue and digital AVRs, and all other parts designed to match your application.

Only genuine STAMFORD® and AvK® parts should be used to avoid expensive repair costs and under-performance of your STAMFORD or AvK alternator. Always source parts from our Authorised Parts and Service Dealers:

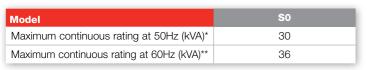
stamford-avk.com/parts



AVR	Туре	Excitation Method	Voltage Regulation
AS440	Analogue	Self-Excited	+/-1.0%
AS540	Analogue	Self-Excited/Aux Winding	+/-1.0%
AS480	Analogue	Self-Excited + EBS	+/-1.0%
MX341	Analogue	PMG	+/-1.0%
MX322™	Analogue	PMG	+/-0.5%
DM110	Digital	PMG/Aux. Winding	+/-0.25%
DECS 100	Digital	PMG/Aux. Winding	+/-0.25%
DECS 250	Digital	PMG/Aux. Winding	+/-0.25%
UNITROL 1010	Digital	PMG/Aux. Winding	+/-0.2%
UNITROL 1020	Digital	PMG/Aux. Winding	+/-0.2%
DM710	Digital	Self-Excited	+/-1.0%

EBS – Excitation Boost System
PMG – Permanent Magnet Generator

STAMFORD SO



Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2 Phase
Bearing Arrangement	Single
SAE Adaptors	3, 4, 5
Terminals	12
Material Insulation Class	Н
Excitation System	Self Exciting
Ingress Protection	IP23

Optional Features	
Excitation System	Auxiliary Winding on S0L2 Models
Output configurations	1 phase re-connectable
Environmental protection	Anti-condensation Heaters
	Epoxy Gel Coat

Designed For

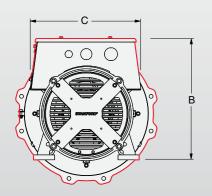


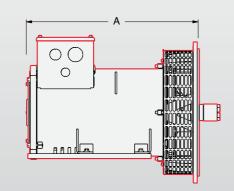
Designed For	
Oil & Gas Auxiliary	•
Telecommunications	•
Mobile Construction	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	
Diesel Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C

(4 Pole)

DIMENSIONS





Gas Engine

Model	A	В	С
S0L1	405-485	350	314
S0L2	495-545	405	345

Drawings represent standard design - All dimensions in millimetres (mm)

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STAMFORD S1

Model	S 1
Maximum continuous rating at 50Hz (kVA)*	62.5
Maximum continuous rating at 60Hz (kVA)**	75
Specifications	

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2 Phase
Bearing Arrangement	Single
SAE Adaptors	3, 4
Terminals	12
Material Insulation Class	Н
Excitation System	Self Exciting
Ingress Protection	IP23

Optional Features	
Excitation System	Auxiliary Winding
Output configurations	1 phase re-connectable
Environmental protection	Anti-condensation Heaters
	Epoxy Gel Coat

Designed For

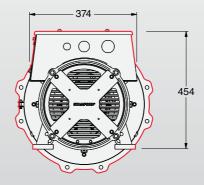


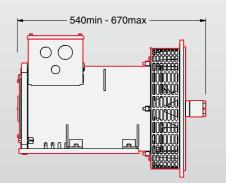
Designed For	
Oil & Gas Auxiliary	•
Telecommunications	•
Mobile Construction	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	

Prime Movers	
Diesel Engine	•
Gas Engine	
	D.:

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS









Drawings represent standard design - All dimensions in millimetres (mm)

STAMFORD° PO



Specifications	
Voltage Range	380-600
Poles	2, 4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	2, 3, 4, 5
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

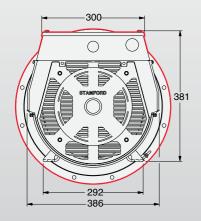


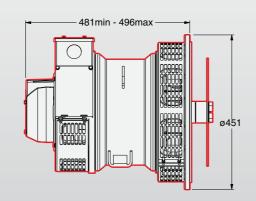
Designed For	
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Telecommunications	•
Mobile Construction	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS





Drawings represent standard design - All dimensions in millimetres (mm)

STAMFORD°

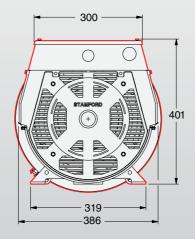
Maximum continuous rating at 50Hz (kVA)*	42.5
Maximum continuous rating at 60Hz (kVA)**	55
Specifications	380-600
Voltage Range	
Poles	2, 4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	2, 3, 4
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

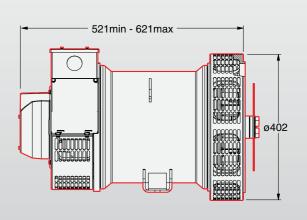


Designed For	
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Telecommunications	•
Mobile Construction	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	
Diesel Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS





Gas Engine



Drawings represent standard design - All dimensions in millimetres (mm)

STAMFORD UC22

Model	UC22
Maximum continuous rating at 50Hz (kVA)*	85
Maximum continuous rating at 60Hz (kVA)**	103.8

Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	1, 2, 3, 4
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

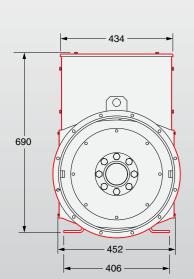
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters



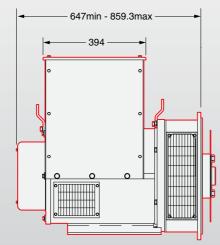
Designed For	
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Telecommunications	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)



DIMENSIONS



Drawings represent standard design - All dimensions in millimetres (mm)



STAMFORD UC27

Maximum continuous rating at 50Hz (kVA)*

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Maximum continuous rating at 60Hz (kVA)**	312.5
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	1, 2, 3
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters

1 phase re-connectable
3-Phase sensing

Thermistors

Anti-condensation Heaters



Designed For	
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Telecommunications	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•

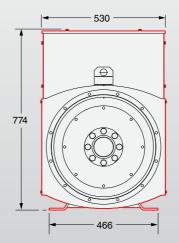
DIMENSIONS

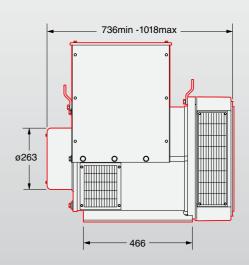
Output configurations

Environmental protection

Voltage sensing
Temperature monitoring

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)







Drawings represent standard design - All dimensions in millimetres (mm)

STAMFORD° S4

Model	S4
Maximum continuous rating at 50Hz (kVA)*	450
Maximum continuous rating at 60Hz (kVA)**	562.5

Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	0, 0.5, 1, 2, 3
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
AVR	Digital



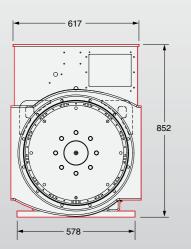
Optional Features - continued	
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters
Foot options	Adaptor Foot Flexible Foot

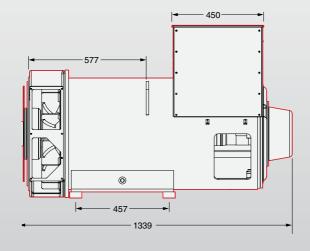
Designed For	
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS







Drawings represent standard design - All dimensions in millimetres (mm)

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STAMFORD° \$5

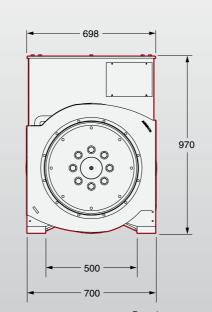
Maximum continuous rating at 50Hz (kVA)*	750
Maximum continuous rating at 60Hz (kVA)**	937
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	00, 0, 0.5, 1
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	3 phase re-connectable
Voltage sensing	3-Phase sensing
AVR	Digital

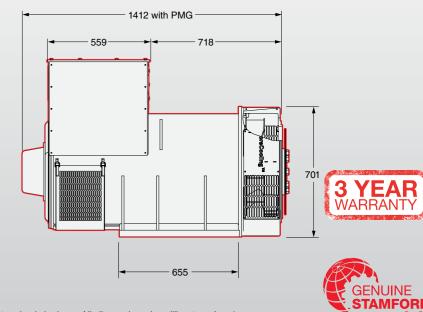


Optional Features - continued	
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters
	_
Designed For	
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change
*50Hz 400V Continuous 125/40°C
**60Hz 480V Continuous 125/40°C

DIMENSIONS





Drawings represent standard design - All dimensions in millimetres (mm)

AvK[®]

DSG 62

Model	DSG 62
Maximum continuous rating at 50Hz (kVA)*	1,100
Maximum continuous rating at 60Hz (kVA)**	1,320

Specifications	
Voltage Range	400-690
Poles	4
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

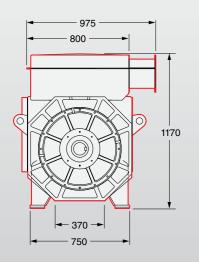


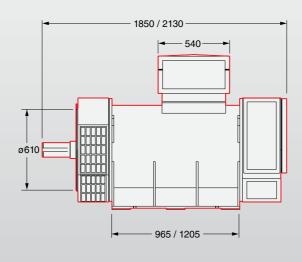
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Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS





Drawings represent standard design - All dimensions in millimetres (mm)

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STAMFORD° S6

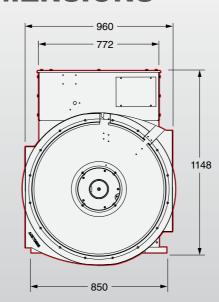
Maximum continuous rating at 50Hz (kVA)*	1,400		
Maximum continuous rating at 60Hz (kVA)**	1,695		
Cassifications			
Specifications Voltage Range	380-690		
Poles	4		
. 0.00			
Technology	Wire Wound		
AVR	Analogue		
Voltage sensing	3-Phase		
Bearing Arrangement	Single		
SAE Adaptors	0, 00, 1		
Terminals	6		
Material Insulation Class	Н		
Excitation System	PMG		
Ingress Protection	IP23		
Connection with other machines	Paralleling capability		
Optional Features			
Bearing Arrangement	Double		
Ingress Protection	IP23 Air Filters		
Ingress Protection	IP44 Air Filters		
AVR	Digital		
Temperature monitoring	Winding RTDs		
Temperature monitoring	Thermistors		

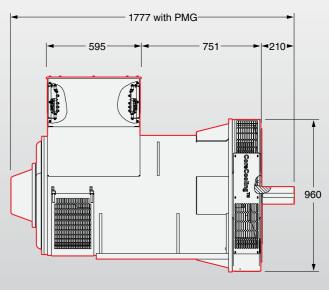


Optional Features - continued	•	
Temperature monitoring	Thermistors	
Environmental protection	Anti-condensation Heaters	
Ingress Protection	IP44	
Designed For		
Grid Code Compatible	•	
Marine Auxiliary	•	
Oil & Gas	•	
Oil & Gas Auxiliary	•	
Combined Heat & Power	•	
Critical Protection & UPS	•	
Continuous Power & Standby	•	
Prime Movers		
Diesel Engine	•	
Gas Engine	•	

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS







GENUINE STAMFORD AVK

Drawings represent standard design - All dimensions in millimetres (mm)

Low voltage **Power Portfolio** Power Portfolio High voltage Low voltage

AvK[®]

DSG 74

Model	DSG 74
Maximum continuous rating at 50Hz (kVA)*	2,000
Maximum continuous rating at 60Hz (kVA)**	2,400

Specifications	
Voltage Range	400-690
Poles	4, 6, 8
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

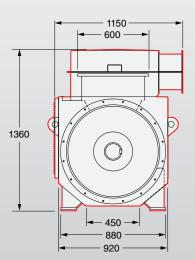


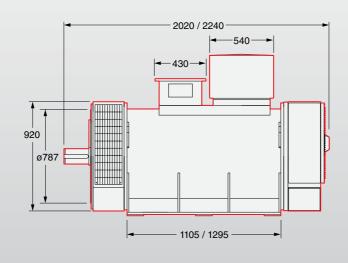
Designed For	
Power Plant	
Grid Code Compatible	
Marine Auxiliary	•
Oil & Gas	•
Oil & Gas Auxiliary	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS





Drawings represent standard design - All dimensions in millimetres (mm)

19



STAMFORD S7

Model	S7 LV	S7 HV
Maximum continuous rating at 50Hz (kVA)*	2,800	1625
Maximum continuous rating at 60Hz (kVA)**	3,363	-

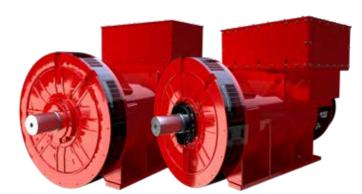
Voltage Range	380-690	10,500 - 11,000
		, ,
Poles	4/6	4
Technology	Wire Wound	Bar Wound
AVR	Analogue	Digital
Voltage sensing	2 Phase	3 Phase
Bearing Arrangement	Single	Double
SAE Adaptors	SAE 0	None
Terminals	6	4
Temperature Monitoring	-	Winding RTDs 2/phase
Material Insulation Class	Н	Н
Excitation System	MX341/ PMG (C-H core only) MX322 TM/ PMG (J-K core only)	DECS100/PMG
Ingress Protection	IP23	IP23
Connection with other machines	Paralleling capability	Paralleling capability

Optional Features		
Bearing Arrangement	Double	Single
SAE Adaptors	SAE 00	SAE0, SAE 00
Ingress Protection	IP44 (C & H cores only)	-
Voltage Sensing	3 Phase sensing	-
AVR	DECS150	-

1200 HV

864 LV

890 -



S7 LV

S7 HV

S7 LV	S7 HV
Winding RTDs	Bearing RTD
Thermistors	bearing NTD
-	6 terminals, open starpoint
Anti- Condensation Heater	Anti- Condensation Heater
Flexible Foot	-
	Winding RTDs Thermistors - Anti- Condensation Heater

Designed For
Power Plant
Grid Code Compatible
Marine Propulsion
Marine Auxiliary
Oil & Gas
Oil & Gas Auxiliary
Combined Heat & Power
Critical Protection & UPS
Continuous Power & Standby

Prime Movers		
Diesel Engine	•	•
Gas Engine	•	•

Ratings are subject to change *50 Hz = LV - 400V - 10500V **60 Hz = LV - 480V - 13800V (4 Pole)

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

1050

Drawings represent standard design - All dimensions in millimetres (mm)

1391 H\

1330 LV



2088

►|**-** 853 HV

939 HV-

– 639 LV —

STAMFORD® S7 Water Cooled



Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	MX322™
Voltage sensing	3-Phase
Bearing Design	Anti-friction
Bearing Arrangement	Double
Material Insulation Class	Н
Excitation System	MX322™/PMG
Ingress Protection	IP23, IP54
Connection with other machines	Paralleling capability
Cooling Method	Water cooled (IC81W)

Bearing Arrangement	Sleeve Bearings
SAE Adaptors	SAE 0, 00, None
Flexible Feet	•
Designed For	
Marine Auxiliary	•
Marine Propulsion (PTI, PTO Excludes PTH)	•

Combined Heat & Power

DIMENSIONS

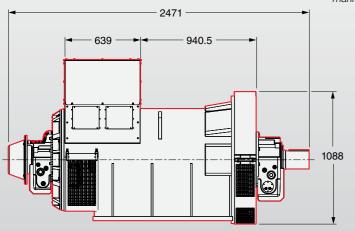
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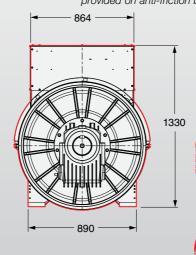
Factory Build Options	
Anti-Condensation Heater	
Quadrature Droop Kit	
Bearing RTD (Each Bearing)	
Remote Voltage Trimmer	
Radio Frequency Interference (RFI) Suppressor Kit	
Excitation Loss Module	
Diode Failure Detector	
Winding RTDs and Thermistors (in another level)	
Protection CTs	

Prime Movers	
Diesel Engine	•
Gas Engine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C

STAMFORD® alternators meet the classification requirements of all major marine societies. Certifications can be considered on request Adaptors to be provided on anti-friction bearing machines only.





Drawings represent standard design - All dimensions in millimetres (mm)

21



Maximum continuous rating at 50Hz (kVA)*

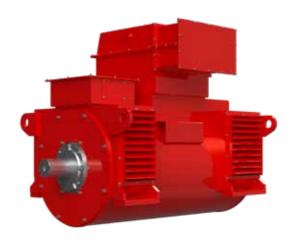
DSG 86

2,990

Paralleling capability

Maximum continuous rating at 60Hz (kVA)**	3,408	
Specifications		
Voltage Range	400-690	
Poles	4, 6, 8, 10	
Technology	Bar Wound	
AVR	Digital	
Voltage sensing	3-Phase	
Bearing Arrangement	Double	
SAE Adaptors	1, 0, 00	
Terminals	6	
Material Insulation Class	Н	
Excitation System	Auxiliary Winding	
Ingress Protection	IP23	
Temperature monitoring	Winding RTDs	

Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heater



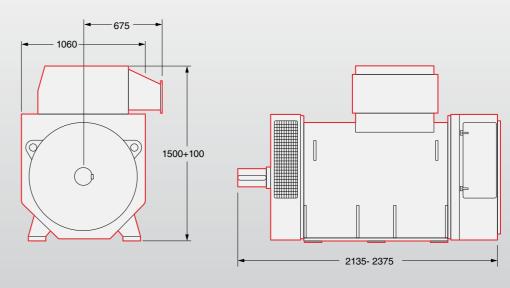
Designed For	
Power Plant	
Grid Code Compatible	•
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	
Steam Turbine	

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C

DIMENSIONS

Connection with other machines



Drawings represent standard design - All dimensions in millimetres (mm)



Power Portfolio Low voltage Medium/High voltage Power Portfolio Low voltage Low voltage

STAMFORD® P80



Specifications			
Voltage Range	380-690	3,300- 4,160	6,000- 13,800
Poles	4		
Technology	Wire Wound	Bar Wound	Bar Wound
AVR	Digital		
Voltage sensing	3-Phase		
Bearing Arrangement	Double		
SAE Adaptors	0, 00		
Terminals	6		
Material Insulation Class	Н	Н	F
Excitation System	PMG		
Ingress Protection	IP23		
Temperature monitoring	Winding RTDs		
Connection with other machines	Paralleling capability		

Single***

IP23 Air Filters



Temperature monitoring

Environmental protection	Anti-condensation Heaters	
Designed For		
Power Plant	• • •	
Grid Code Compatible	• • •	
Marine Propulsion	•	
Marine Auxiliary	•	
Oil & Gas Auxliary	•	
Combined Heat & Power	• • •	
Critical Protection & UPS	• • •	
Continuous Power & Standby		

Prime Movers			
Diesel Engine	•	•	•
Gas Engine	•	•	•
Gas Turbine	•	•	•
Steam Turbine	•	•	•

Ratings are subject to change *50 Hz = LV - 400V, MV - 3300V, HV - 10500V

Thermistors

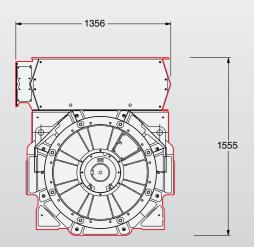
**60 Hz = LV - 480V, MV - 4160V, HV - 13800V

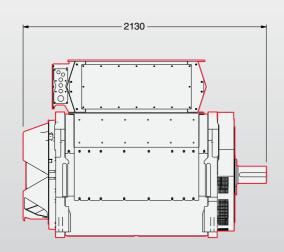
DIMENSIONS

Optional Features
Bearing Arrangement

Ingress Protection

*** Not for cores W, X, Y





GENUINE STAMFORD AVK

AvK®

DSG 99

Model	DSG 99
Maximum continuous rating at 50Hz (kVA)*	4,700
Maximum continuous rating at 60Hz (kVA)**	5,300
Specifications	
Voltage Range	400-690
Poles	4, 6, 8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

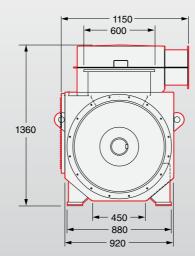


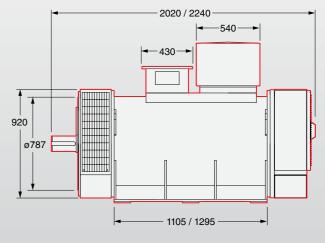
Designed For	
Power Plant	
Grid Code Compatible	•
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	
Steam Turbine	

DIMENSIONS

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)





GENUINE STAMFORD AVK

Drawings represent standard design - All dimensions in millimetres (mm)

Drawings represent standard design - All dimensions in millimetres (mm)

AvK[®]

Ingress Protection

Cooling options

Environmental protection

DIMENSIONS

DSG 114

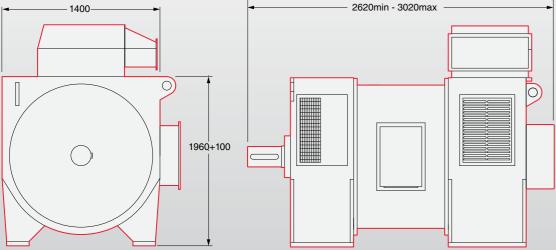
Model	DSG 114
Maximum continuous rating at 50Hz (kVA)*	5,000
Maximum continuous rating at 60Hz (kVA)**	5,940
Specifications	
Voltage Range	400-690
Poles	6, 8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters



Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	
Steam Turbine	

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C)



IP44/54/55 Totally enclosed

CACA/CACW

Anti-condensation Heaters

Drawings represent standard design - All dimensions in millimetres (mm)

25





DSG 125

Model	D3G 125
Maximum continuous rating at 50Hz (kVA)*	7,000
Maximum continuous rating at 60Hz (kVA)**	8,500
Connectifications	
Specifications Voltage Range	690
Poles	8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters

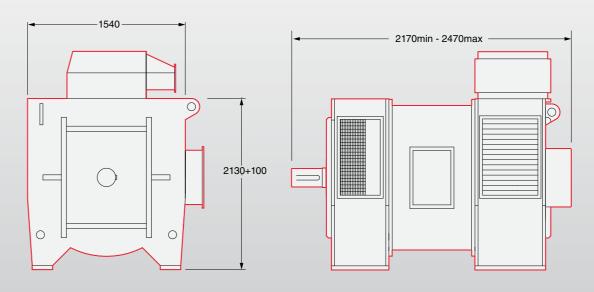


Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	
Steam Turbine	

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C

DIMENSIONS



Drawings represent standard design - All dimensions in millimetres (mm)



AvK[®]

Optional Features
Ingress Protection

Cooling options

Environmental protection

DSG 144

IP54/55 Totally enclosed

CACW

Anti-condensation Heaters

Model	DSG 144
Maximum continuous rating at 60Hz (kVA)**	6,600
Specifications	
Voltage Range	690
Poles	10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

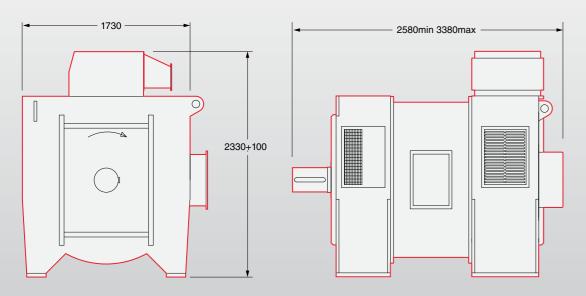
AVK

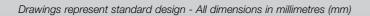
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	
Steam Turbine	

Ratings are subject to change **60Hz 480V Continuous 125/40°C

DIMENSIONS







AvK®

DIG 110

Model	DIG 110
Maximum continuous rating at 50Hz (kVA)*	1,080
Maximum continuous rating at 60Hz (kVA)**	1,300
Specifications	
Voltage Range	3,300-11,000
Poles	4
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

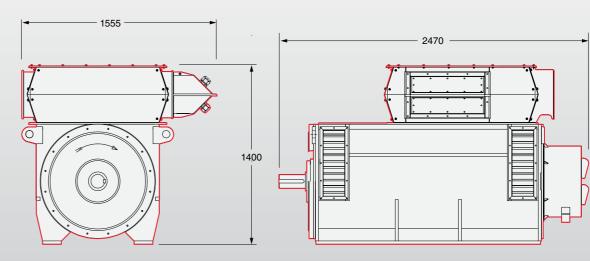


Designed For	
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

DIMENSIONS

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C



Drawings represent standard design - All dimensions in millimetres (mm)



27

Power Portfolio High voltage Power Portfolio High voltage

AvK[®]

Cooling options

Environmental protection

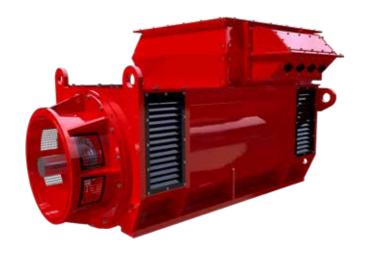
DIMENSIONS

DIG 120

CACA/CACW

Anti-condensation Heaters

Model	DIG 120
Maximum continuous rating at 50Hz (kVA)*	2,050
Maximum continuous rating at 60Hz (kVA)**	2,600
Specifications	
Voltage Range	3,300-11,000
Poles	4
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability
	_
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed

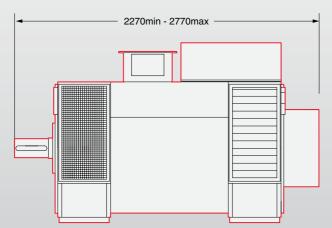


Designed For
Power Plant
Grid Code Compatible
Marine Propulsion
Oil & Gas
Combined Heat & Power
Continuous Power & Standby

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

1530



Drawings represent standard design - All dimensions in millimetres (mm)

29



AvK[®]

DIG 130

Model	DIG 130
Maximum continuous rating at 50Hz (kVA)*	3,850
Maximum continuous rating at 60Hz (kVA)**	4,000
Specifications	
Voltage Range	3,300-13,800
Poles	4, 6
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

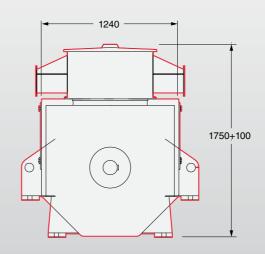


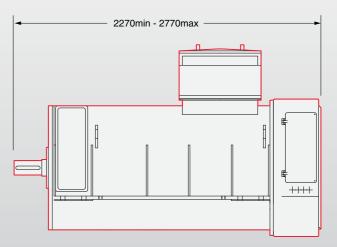
Designed For	
Power Plant	•
Grid Code Compatible	•
'	
Marine Propulsion	_
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

DIMENSIONS

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)







Drawings represent standard design - All dimensions in millimetres (mm)

Medium/ High voltage **Power Portfolio** High voltage Power Portfolio Low voltage

AvK[®]

DIG 140

Model	DIG 140
Maximum continuous rating at 50Hz (kVA)*	4,600
Maximum continuous rating at 60Hz (kVA)**	5,300

Specifications	
Voltage Range	3,300-13,800
Poles	4, 6
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

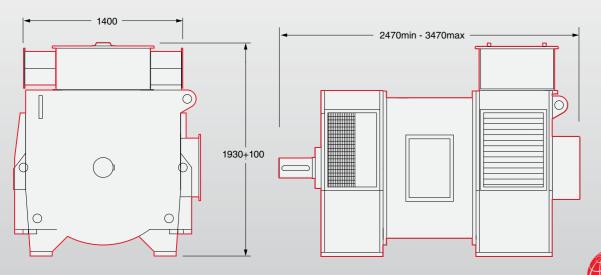
DIMENSIONS



Designed For	
Power Plant	•
Grid Code Compatible	
Marine Propulsion	•
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)



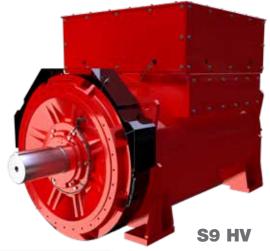
Drawings represent standard design - All dimensions in millimetres (mm)

31



Model	S9 LV	S9 MV	S9 HV
Maximum continuous rating at 50Hz (kVA)*	4,250	4,600	4,500
Maximum continuous rating at 60Hz (kVA)**	5,100	5,600	5,000

Specifications			
Voltage Range	380-690	3,300-4,160	5500-13,800
Poles	4	4	4
Technology	Wire Wound	Bar Wound	Bar Wound
AVR	Digital	Digital	Digital
Voltage sensing	3-Phase	2-Phase	2-Phase
Bearing Arrangement	Single\Double	Single\Double	Single\Double
SAE Adaptors	SAE 0 /00	SAE 0 / 00	SAE 0 / 00
Centre height	500	500	500
Terminals	6	6	6
Material Insulation Class	Н	Н	Н
Excitation System	DM110/PMG STD	PMG	PMG
Ingress Protection	IP23	IP23 IP54 Terminal Box	IP23 IP54 Terminal Box
Connection with other machines	Paralleling capability	Paralleling capability	Paralleling capability
Temperature monitoring	Winding RTDs	Winding RTDs	Winding RTDs



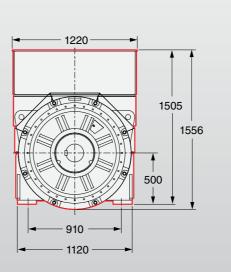
Optional Features			
Voltage Sensing	3 Phase	3 Phase	3 Phase
Centre height	450	265, 349, 450	265, 349, 450
Current transformers	1, 2, 3 per phase	1, 2, 3 per phase	1, 2, 3 per phase
Earth fault protection	Current Transformer	Current Transformer	Current Transformer

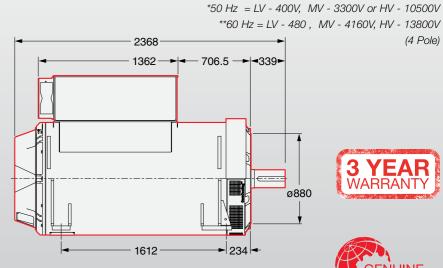
Designed For			
Power Plant	•	•	•
Grid Code Compatible	•	•	•
Marine Propulsion			
Marine Auxiliary		•	•
Oil & Gas	•		
Oil & Gas Auxiliary	•	•	•
Combined Heat & Power	•	•	•
Critical Protection & UPS	•	•	•
Continuous Power & Standby	•	•	•

Prime Movers			
Diesel Engine	•	•	•
Gas Engine	•	•	•

DIMENSIONS

Ratings are subject to change





Drawings represent standard design - All dimensions in millimetres (mm)



(4 Pole)



Power Portfolio Power Portfolio Power Portfolio High voltage Power Portfolio High voltage

AvK®

Optional Features
Ingress Protection

Environmental protection

DIG 142

Model	DIG 142
Maximum continuous rating at 50Hz (kVA)*	5,800
Maximum continuous rating at 60Hz (kVA)**	6,700

Specifications	
Voltage Range	3,300-13,800
Poles	4
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability



Designed For	
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C (4 Pole)

Model Maximum continuous rating at 50Hz (kVA)* Maximum continuous rating at 60Hz (kVA)** 8,500 Specifications

AvK[®]

DIG 150

Specifications	
Voltage Range	3,300-13,800
Poles	4, 6, 8
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

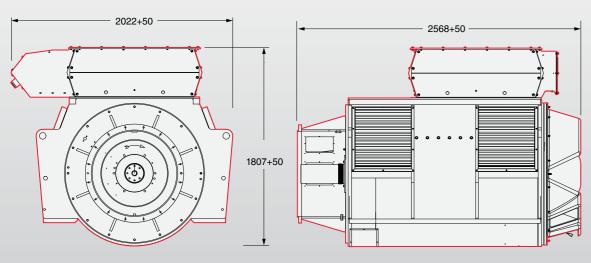
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters



Designed For	
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	•
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

DIMENSIONS

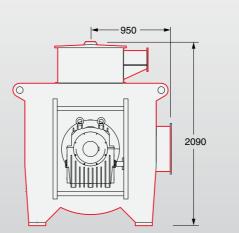


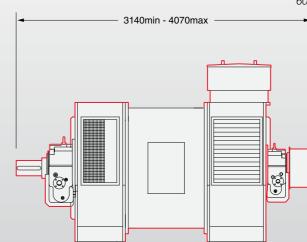
IP23 Air Filters

Anti-condensation Heaters

> GENUINE STAMFORD AVK

DIMENSIONS





Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°

(4 Pole)

GENUINE STAMFORD AVK

Drawings represent standard design - All dimensions in millimetres (mm)

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Power Portfolio High voltage

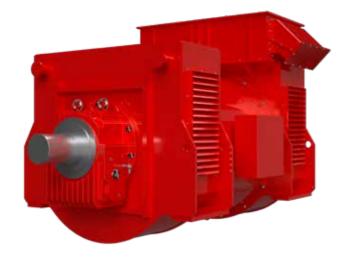


DIG 156

Model	DIG 156
Maximum continuous rating at 50Hz (kVA)*	10,800
Maximum continuous rating at 60Hz (kVA)**	8,500

Specifications	
Voltage Range	3,300-13,800
Poles	6, 8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

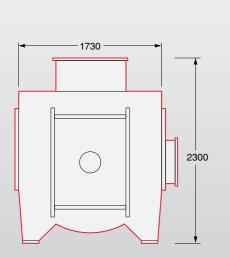


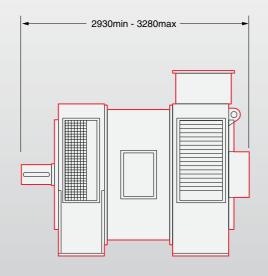
Designed For	
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	•
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

Ratings are subject to change *50Hz 400V Continuous 125/40°C **60Hz 480V Continuous 125/40°C

DIMENSIONS

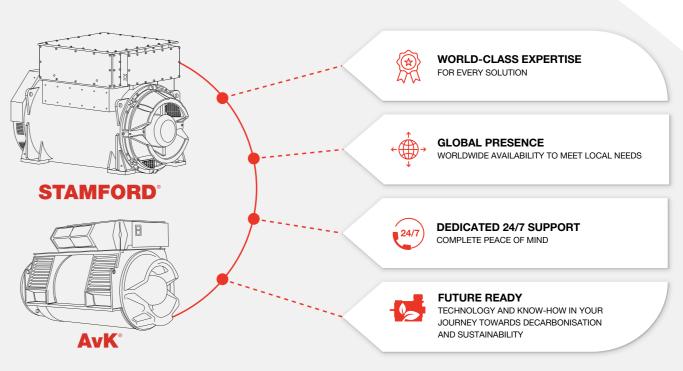




Drawings represent standard design - All dimensions in millimetres (mm)

GENUINE STAMFORD AVK

OUR POWER PROMISE





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