



STAMFORD® & AvK® POWER PORTFOLIO



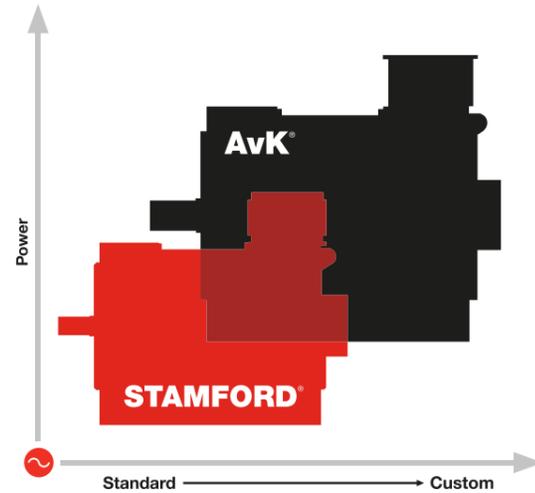
The ultimate alternator solution
Anytime, anywhere



STAMFORD | AvK™

POWERING TOMORROW, TOGETHER

THE ULTIMATE RANGE

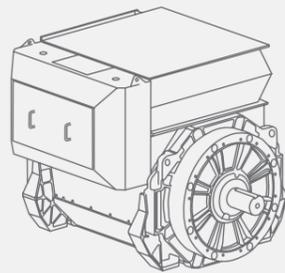




We are here to support your future decarbonisation goals, through our end-to-end expertise in versatile solutions. Backed by the reassurance of our world-renowned brands recognised for reliability and complete peace of mind, we are with you on your journey towards sustainability.

stamford-avk.com/future-ready

STAMFORD® S-RANGE



3 YEAR WARRANTY

Utilising wire-wound technology and with an output extending from 7.5 to 5,000kVA, 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:

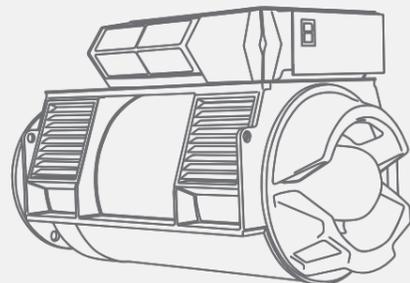


Compatible with Marine Classifications:



AvK®

600 – 11,200kVA



With a robust bar wound configuration, AvK® alternators are robustly engineered products up to 11,200kVA, 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.

Prime Movers

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:



QUICK ALTERNATOR SELECTOR

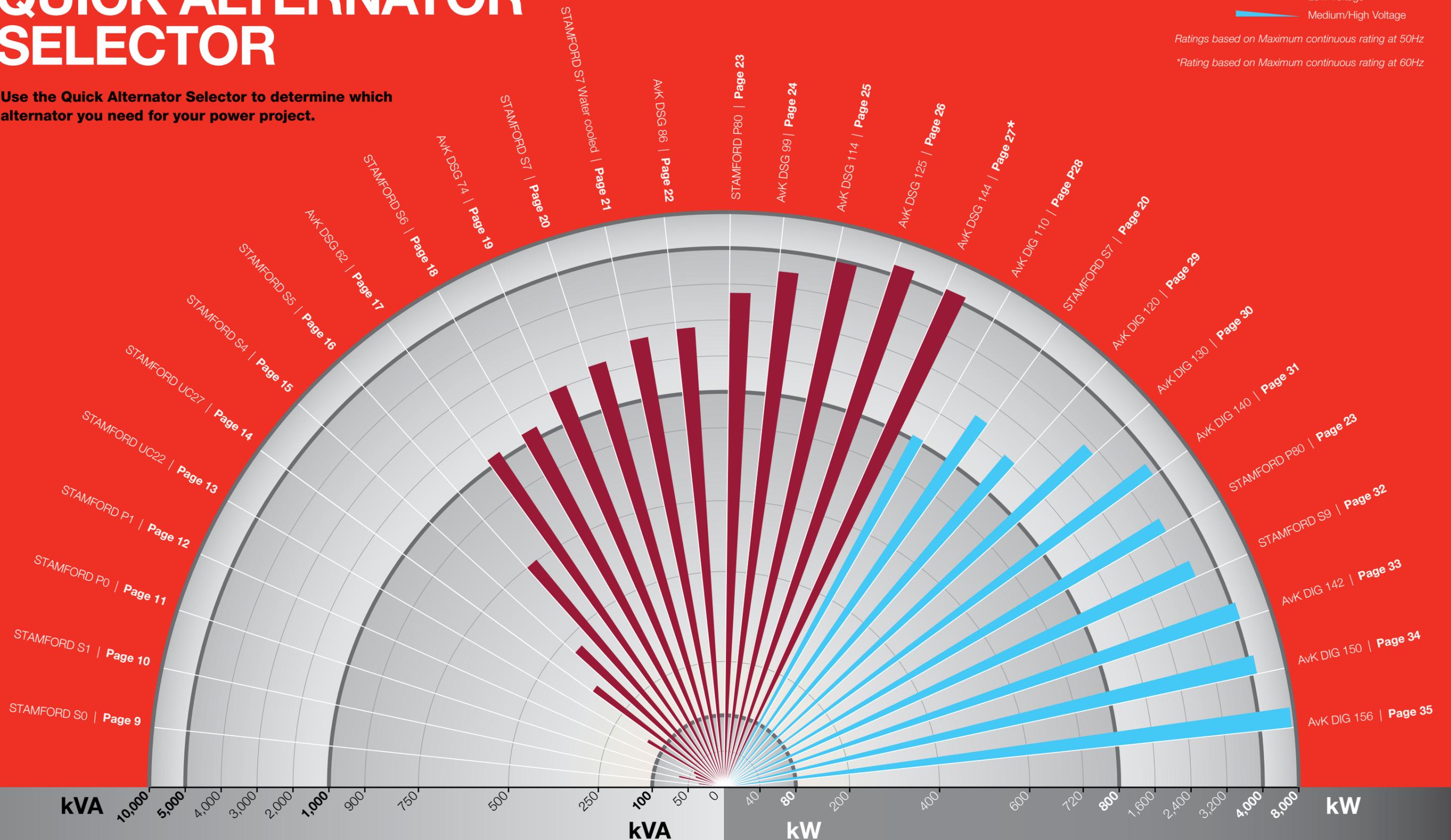
Use the Quick Alternator Selector to determine which alternator you need for your power project.

Key

- Low Voltage
- Medium/High Voltage

Ratings based on Maximum continuous rating at 50Hz

*Rating based on Maximum continuous rating at 60Hz



1 Determine your power requirements and find the desired kVA or kW along the axis

2 Follow the curve until you find an alternator that matches your power and voltage requirement

3 Read the label of your selected alternator to see which page it is featured on for more information

To attain further technical specifications of your selected alternator, visit the STAMFORD | AvK Product Selector at www.stamford-avk.com/alternators/product-selector

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 our 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 life simpler - 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 end-user. 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 Parts and Service 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	Type	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%
DM730	Digital	Self-Excited	+/-1.0%

EBS – Excitation Boost System

PMG – Permanent Magnet Generator



STAMFORD® S0



Model	S0
Maximum continuous rating at 50Hz (kVA)*	30
Maximum continuous rating at 60Hz (kVA)**	36

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	H
Excitation System	Self Exciting
Ingress Protection	IP23

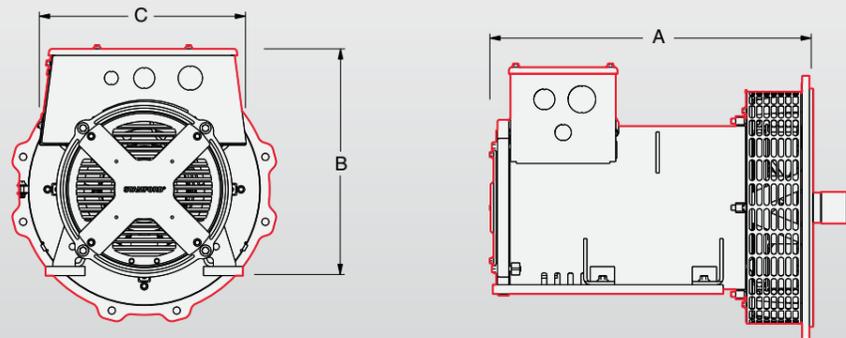
Optional Features	
Excitation System	Auxiliary Winding on SOL2 Models
Output configurations	1 phase re-connectable
Environmental protection	Anti-condensation Heaters Epoxy Gel Coat

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

Prime Movers	
Diesel Engine	●
Gas Engine	

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



Model	A	B	C
SOL1	405-485	350	314
SOL2	495-545	405	345

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

3 YEAR WARRANTY



STAMFORD® S1



Model	S1
Maximum continuous rating at 50Hz (kVA)*	62.5
Maximum continuous rating at 60Hz (kVA)**	75

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	H
Excitation System	Self Exciting
Ingress Protection	IP23

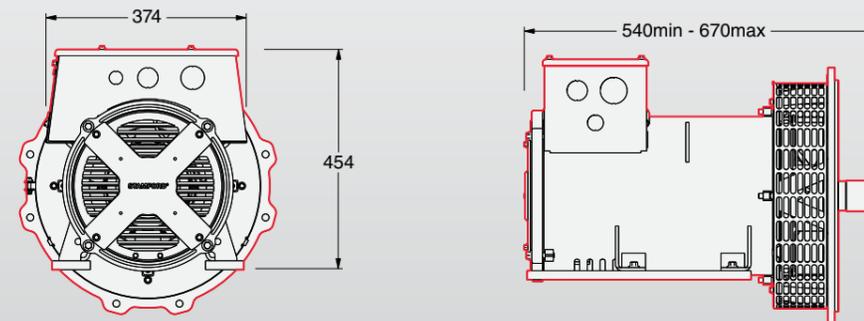
Optional Features	
Excitation System	Auxiliary Winding
Output configurations	1 phase re-connectable
Environmental protection	Anti-condensation Heaters Epoxy Gel Coat

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

Prime Movers	
Diesel Engine	●
Gas Engine	

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



3 YEAR WARRANTY



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

STAMFORD® P0



Model	P0
Maximum continuous rating at 50Hz (kVA)*	17.5
Maximum continuous rating at 60Hz (kVA)**	21.9

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	H
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

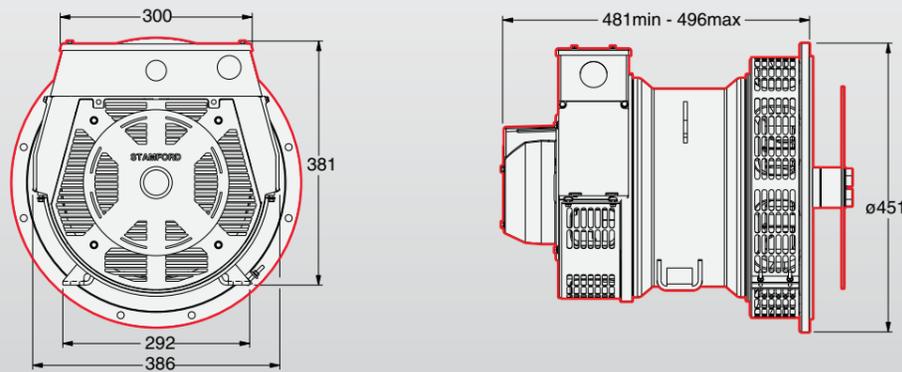
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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		

*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® P1



Model	P1
Maximum continuous rating at 50Hz (kVA)*	42.5
Maximum continuous rating at 60Hz (kVA)**	55

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
Terminals	12
Material Insulation Class	H
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

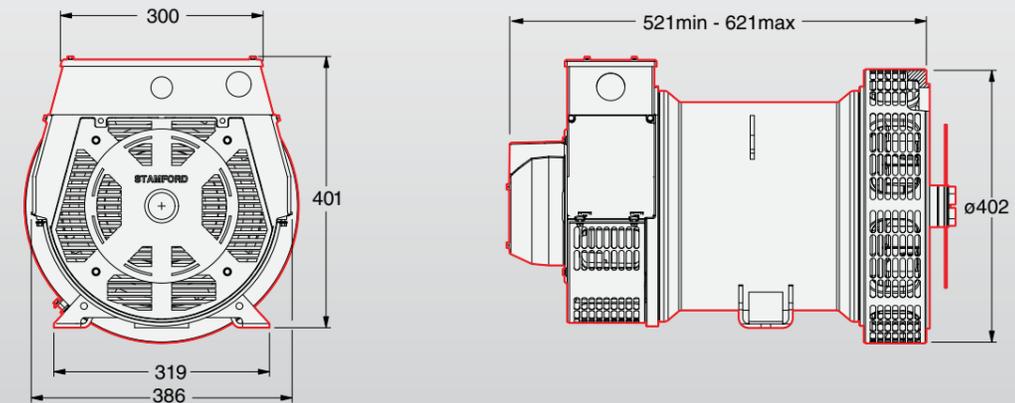
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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		

*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® 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	H
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

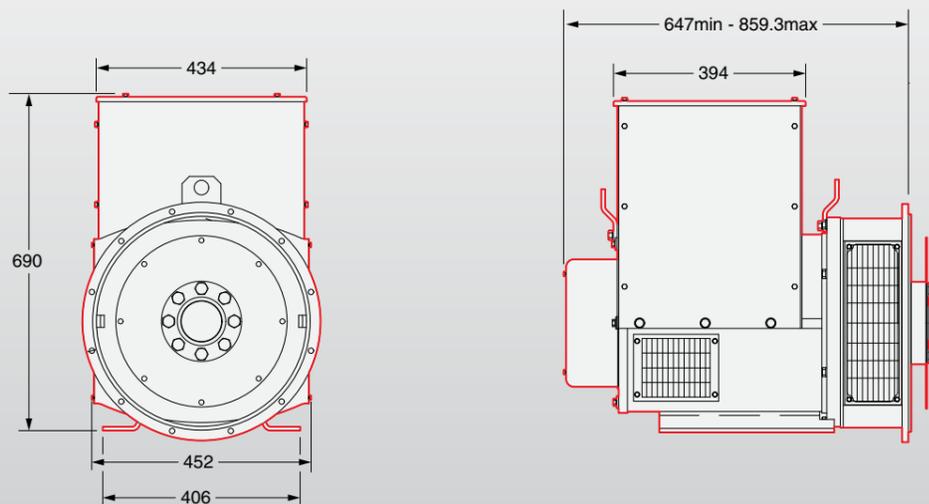


Designed For		
Grid Code Compatible		●
Marine Auxiliary		●
Oil & Gas Auxiliary		●
Telecommunications		●
Combined Heat & Power		●
Critical Protection & UPS		●
Continuous Power & Standby		●

Prime Movers		
Diesel Engine		●
Gas Engine		●

*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

Model	UC27
Maximum continuous rating at 50Hz (kVA)*	250
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	H
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

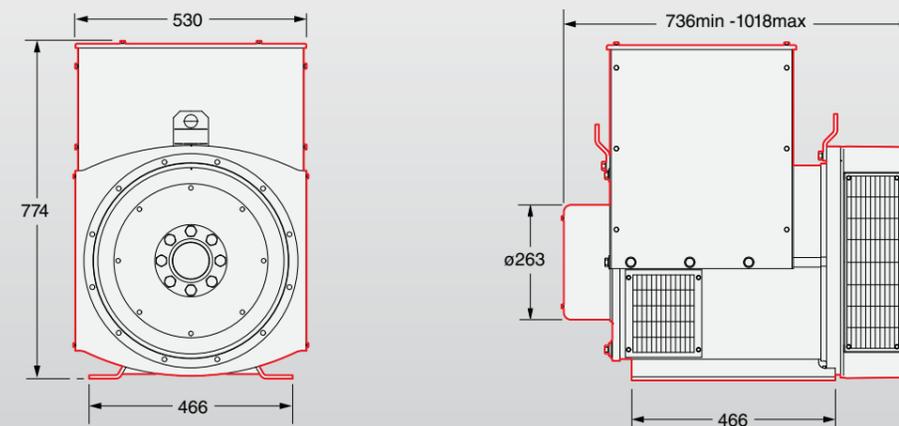


Designed For		
Grid Code Compatible		●
Marine Auxiliary		●
Oil & Gas Auxiliary		●
Telecommunications		●
Combined Heat & Power		●
Critical Protection & UPS		●
Continuous Power & Standby		●

Prime Movers		
Diesel Engine		●
Gas Engine		●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

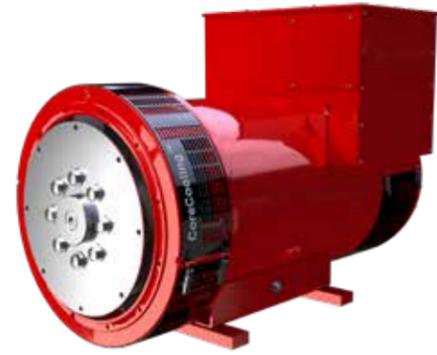
DIMENSIONS



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



STAMFORD® 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	H
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

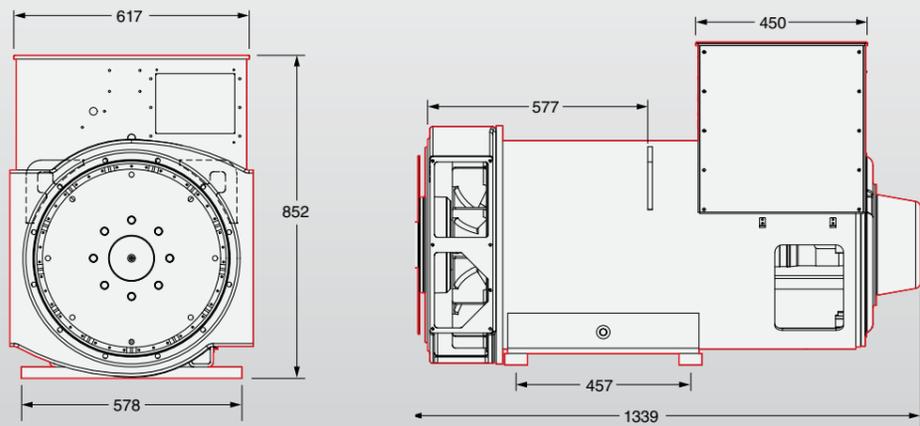
Optional Features - continued	
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters
Foot options	Adaptor Foot Flexible Foot

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



3 YEAR WARRANTY



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

STAMFORD® S5



Model	S5
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	H
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

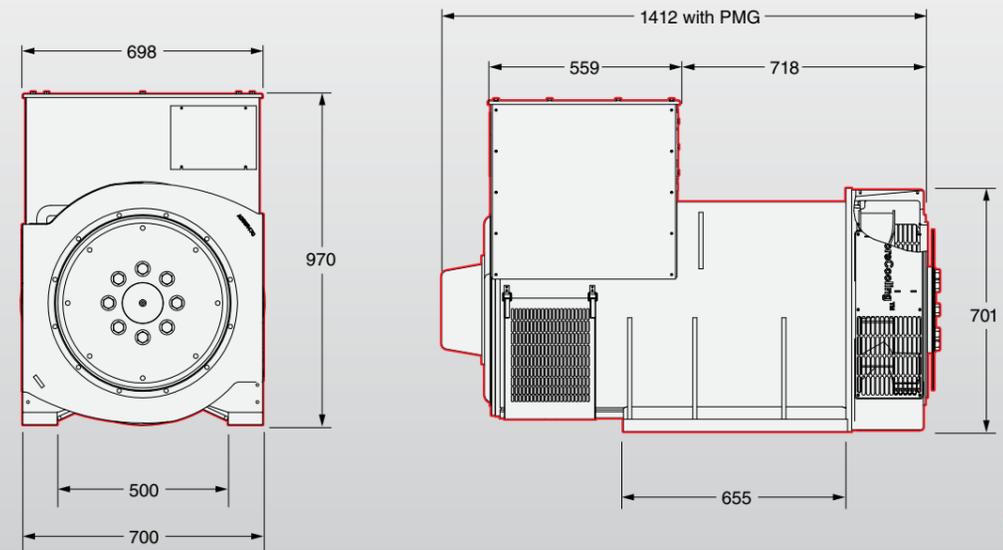
Optional Features - continued	
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



3 YEAR WARRANTY



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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

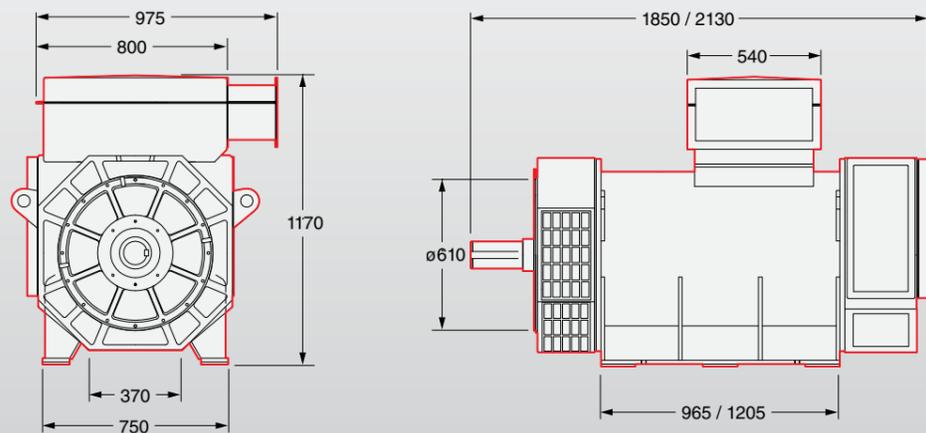
Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*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® S6



Model	S6
Maximum continuous rating at 50Hz (kVA)*	1,400
Maximum continuous rating at 60Hz (kVA)**	1,695

Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	0, 00, 1
Terminals	6
Material Insulation Class	H
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

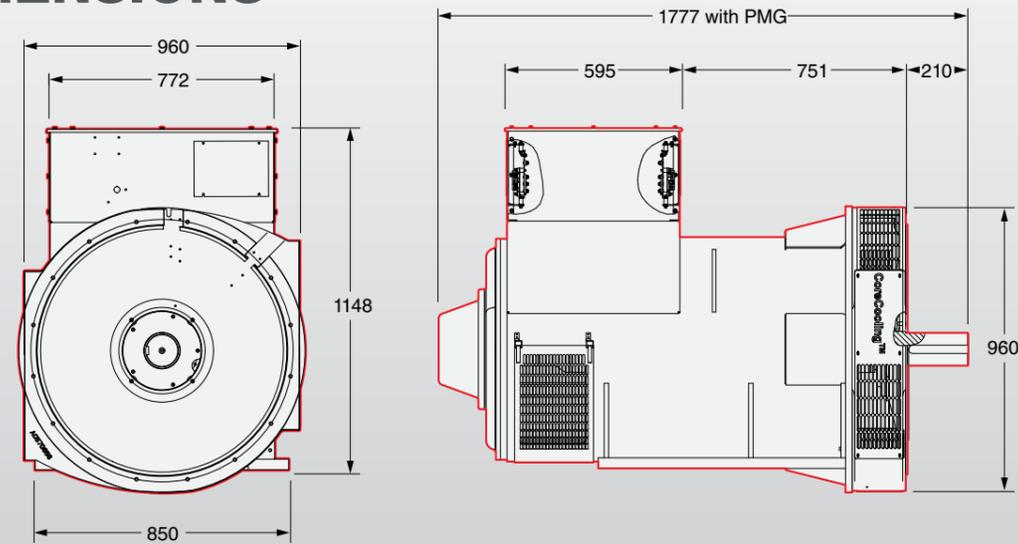
Optional Features - continued	
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters
Ingress Protection	IP44

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



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



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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

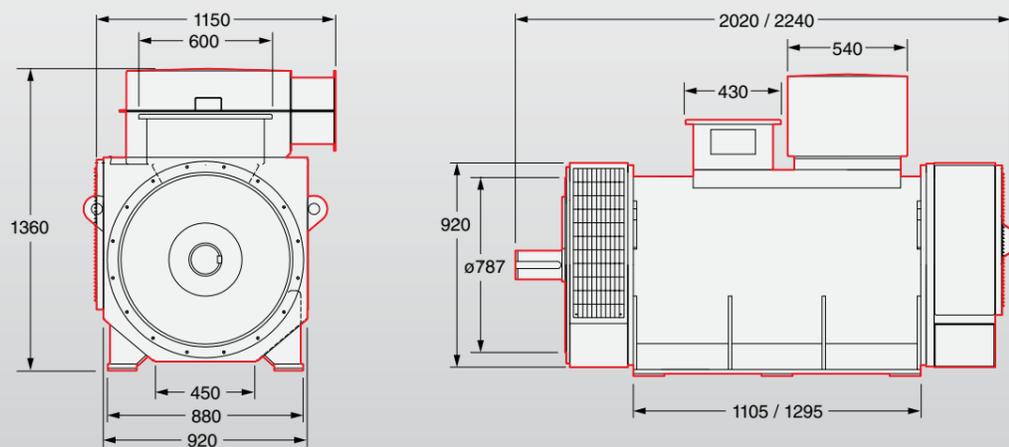
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

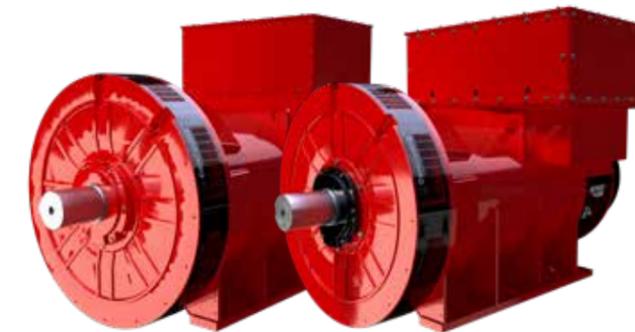
DIMENSIONS



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



STAMFORD® S7



Model	S7 LV	S7 HV
Maximum continuous rating at 50Hz (kVA)*	2,800	1625
Maximum continuous rating at 60Hz(kVA)**	3,356	-

Specifications		
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	H	H
Excitation System	PMG	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
	IP44	-
Voltage Sensing	3 Phase sensing	-
AVR	DECS150	-

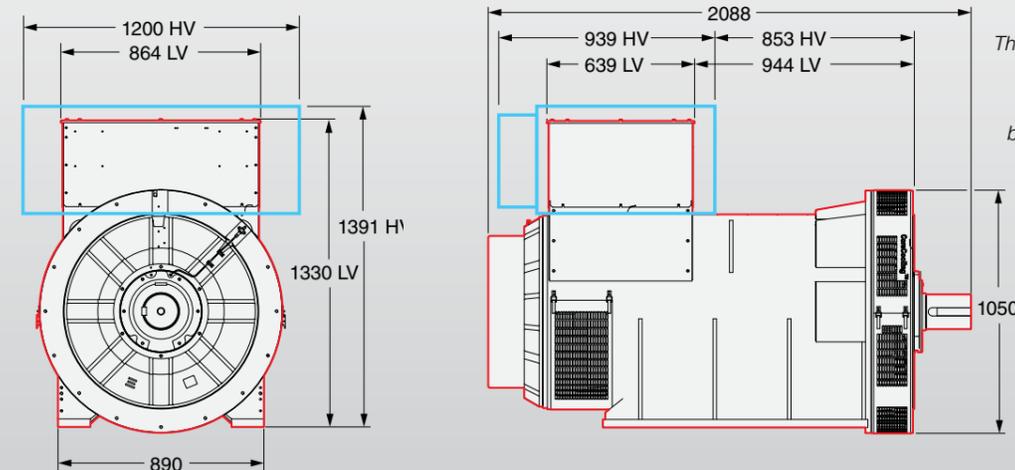
Optional Features - continued	S7 LV	S7 HV
Temperature Monitoring	Winding RTDs	Bearing RTD
	Thermistors	
Terminals	-	6 terminals, open starpoint
Environmental Protection	Anti-Condensation Heater	Anti-Condensation Heater
Foot options	Flexible Foot	-

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	●	●

*50 Hz = LV - 400V - 10500V
 **60 Hz = LV - 480V - 13800V
 (4 Pole)

DIMENSIONS



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

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



STAMFORD® S7 Water Cooled



Model	S7LV - Water Cooled
Ratings at 50Hz (kVA) Class H*	2,200
Ratings at 60Hz (kVA) Class H**	2,644

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	H
Excitation System	MX322™/PMG
Ingress Protection	IP23, IP54
Connection with other machines	Paralleling capability
Cooling Method	Water cooled (IC81W)

Optional Features	
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	●

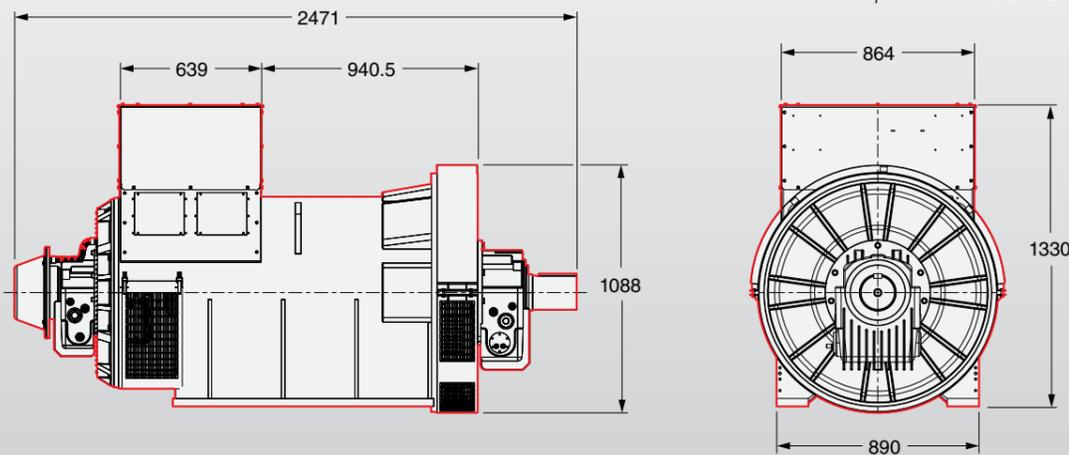
Factory Build Options		
Anti-Condensation Heater		●
Quadrature Droop Kit		●
Bearing RTD (Each Bearing)		●
Remote Voltage Trimmer		●
Radio Frequency Interference (RFI) Suppressor Kit		●
Excitation Loss Module		●
Diode Failure Detector		●
Winding RTDs and Thermistors (in another level)		●
Protection CTs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

Prime Movers		
Diesel Engine		●
Gas Engine		●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

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.

DIMENSIONS



3 YEAR WARRANTY



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

AvK® DSG 86



Model	DSG 86
Maximum continuous rating at 50Hz (kVA)*	2,990
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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

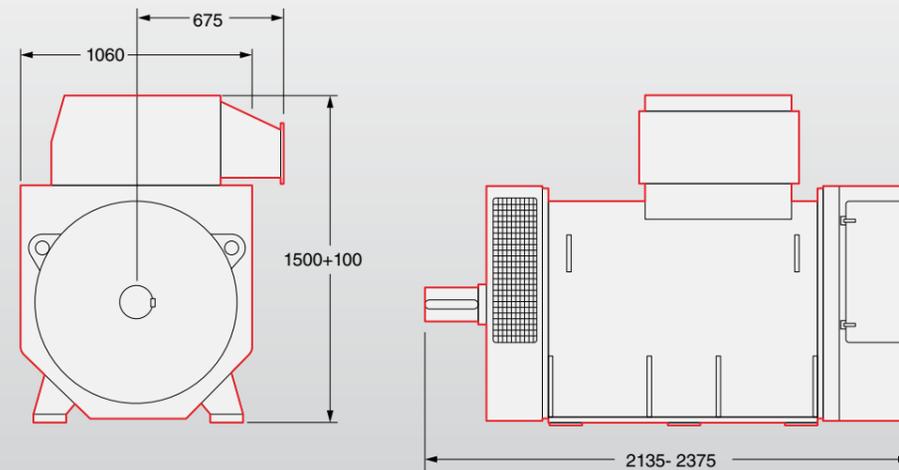
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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		

*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® P80



Model	P80 LV	P80 MV	P80 HV
Maximum continuous rating at 50Hz (kVA)*	3,900	4,200	3,800
Maximum continuous rating at 60Hz (kVA)**	4,400	5,100	4,700

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	H	H	F
Excitation System	PMG		
Ingress Protection	IP23		
Temperature monitoring	Winding RTDs		
Connection with other machines	Paralleling capability		

Optional Features	
Bearing Arrangement	Single*
Ingress Protection	IP23 Air Filters

Optional Features - continued	
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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

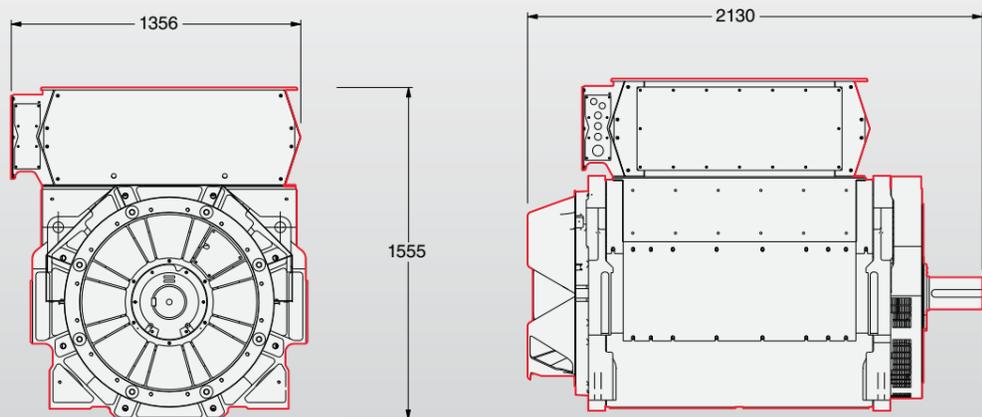
Prime Movers			
Diesel Engine	●	●	●
Gas Engine	●	●	●
Gas Turbine	●	●	●
Steam Turbine	●	●	●

*50 Hz = LV – 400V, MV – 3300V, HV – 10500V

**60 Hz = LV – 480V, MV – 4160V, HV – 13800V (4 Pole)

* Not for cores W, X, Y

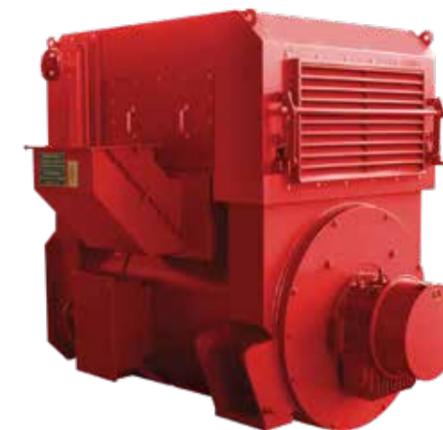
DIMENSIONS



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



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	H
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

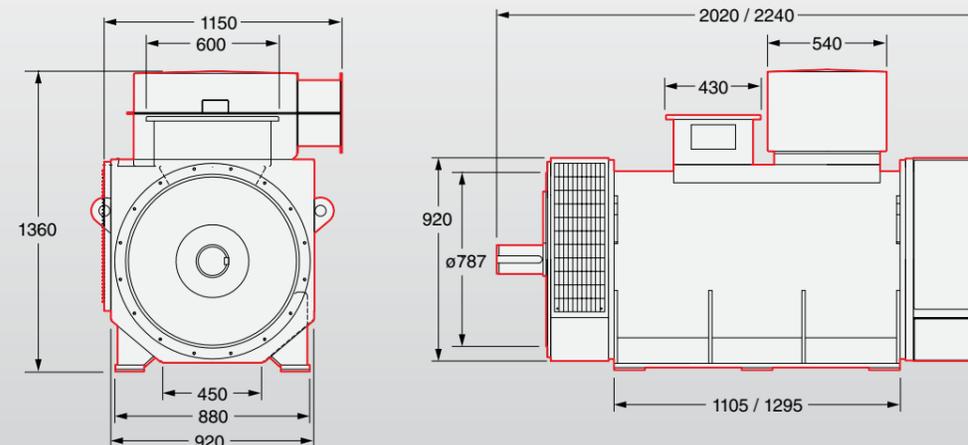
Designed For	
Power Plant	
Grid Code Compatible	●
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

Prime Movers	
Diesel Engine	●
Gas Engine	●
Gas Turbine	
Steam Turbine	

*50Hz 400V Continuous 125/40°C

**60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS



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



AvK® 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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

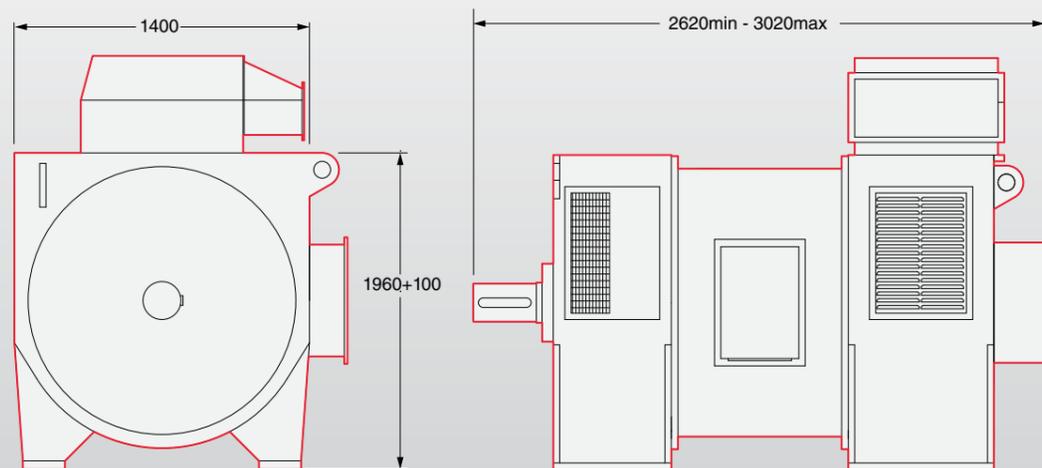
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	

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

DIMENSIONS



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



AvK® DSG 125



Model	DSG 125
Maximum continuous rating at 50Hz (kVA)*	7,000
Maximum continuous rating at 60Hz (kVA)**	8,500

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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

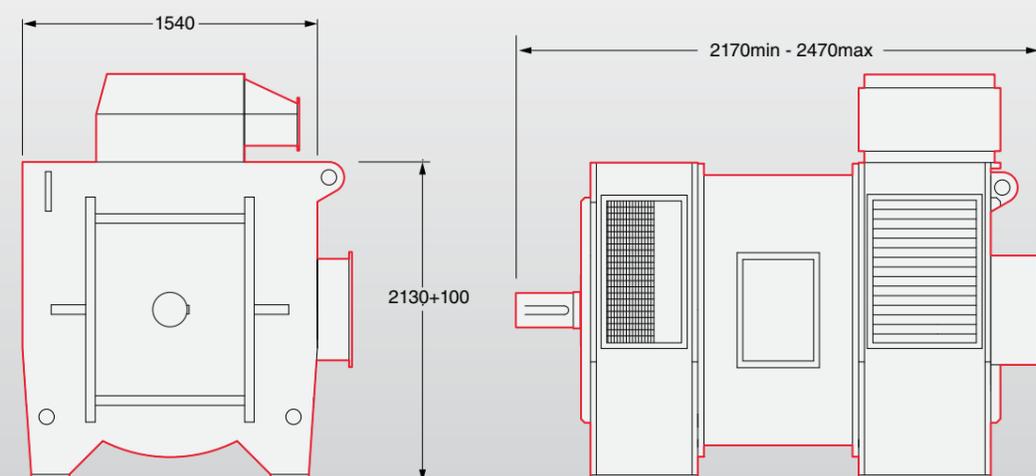
Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters

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	

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

DIMENSIONS



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



AvK[®] DSG 144



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	H
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

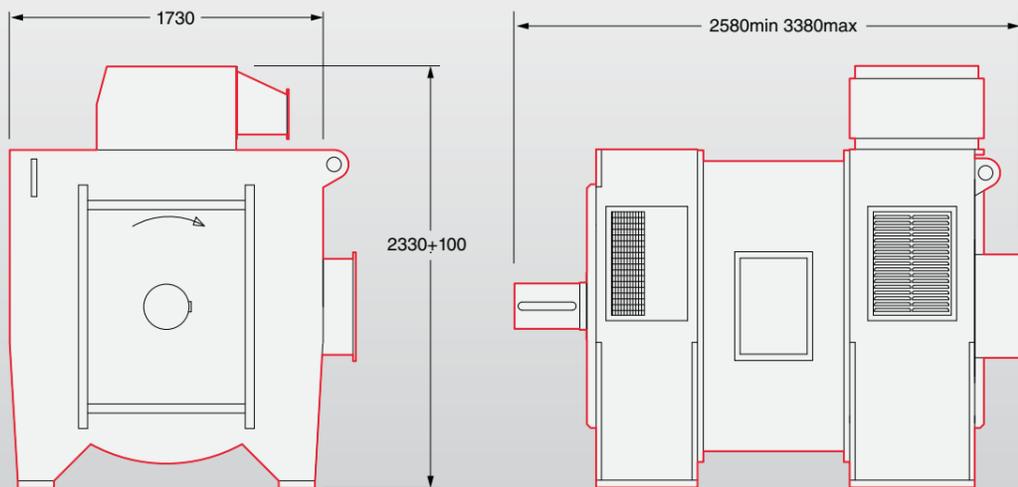
Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters

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	

**60Hz 480V Continuous 125/40°C

DIMENSIONS



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



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

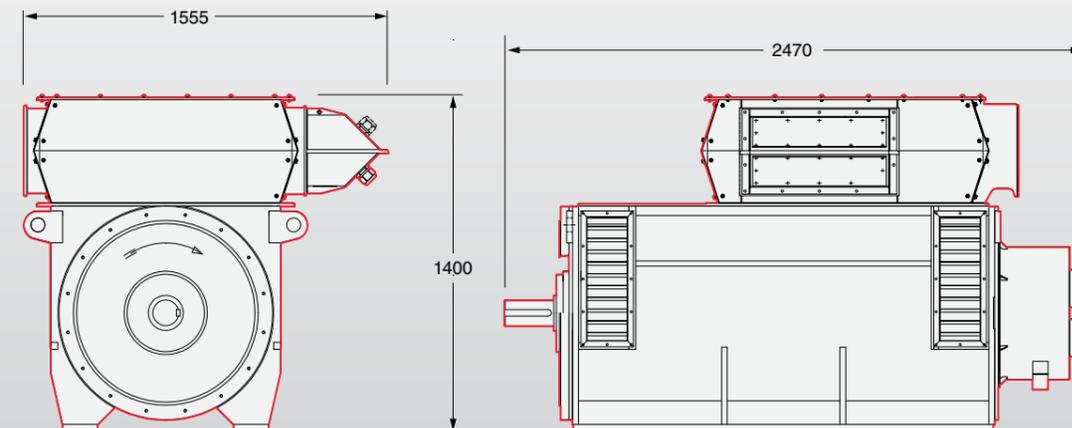
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
**60Hz 480V Continuous 125/40°C (4 Pole)

DIMENSIONS



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



AvK® DIG 120



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

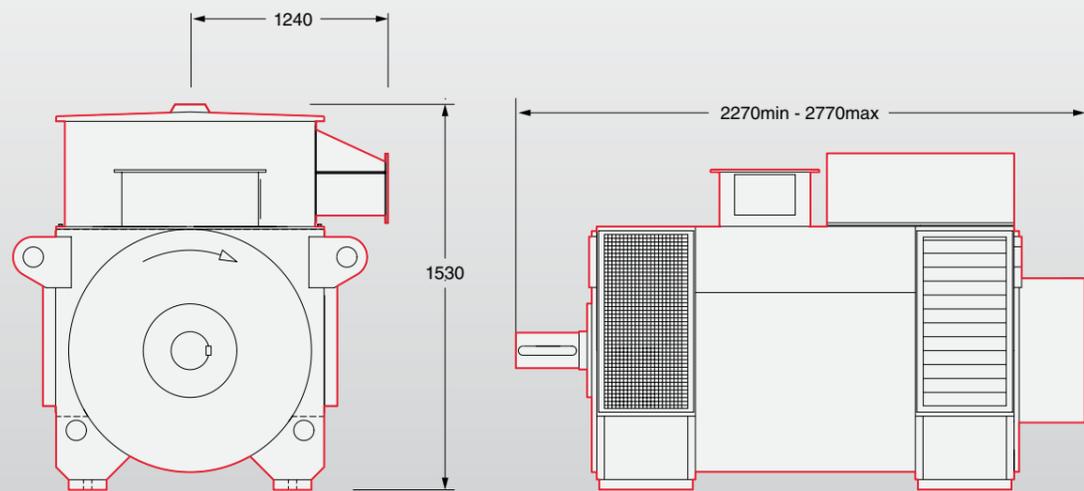
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



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



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

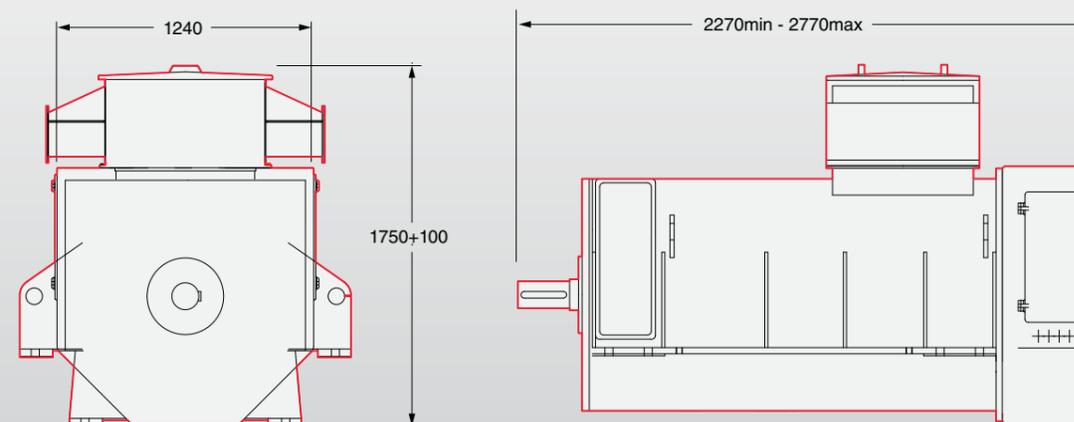
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



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



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

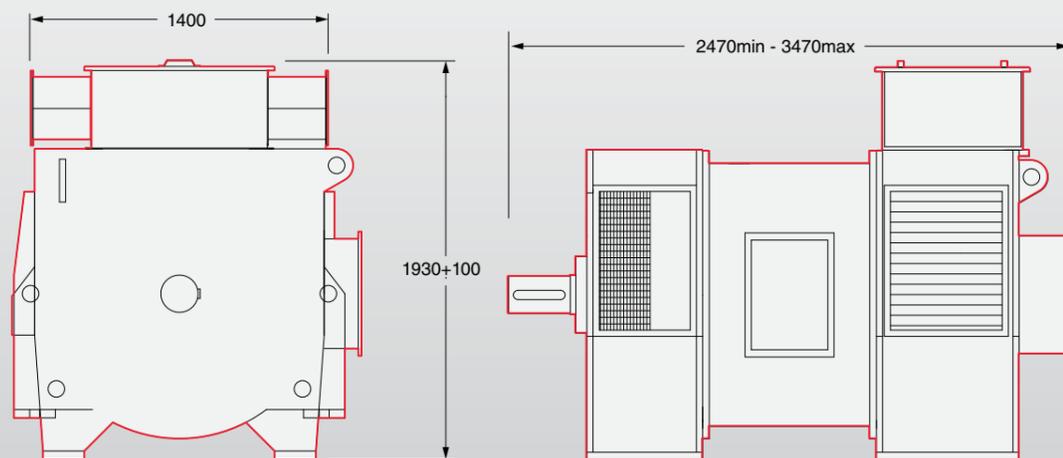
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*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® S9



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

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

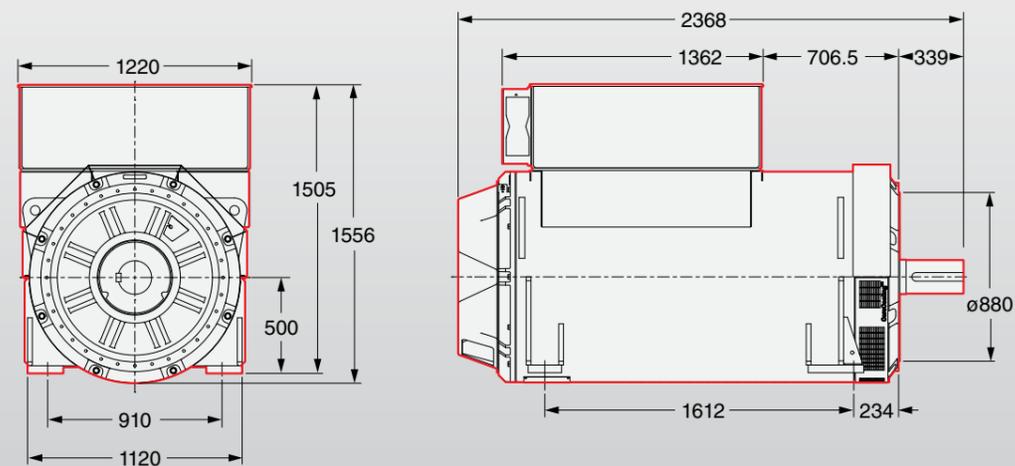
Optional Features		
Voltage Sensing	3 Phase	3 Phase
Centre height	265, 349, 450	265, 349, 450
Current transformers	1, 2, 3 per phase	1, 2, 3 per phase
Earth fault protection	Current Transformer	Current Transformer

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	●	●

*50 Hz = MV - 3300V, HV - 10500V
 **60 Hz = MV - 4160V, HV - 13800V
 (4 Pole)

DIMENSIONS



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



AvK® 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

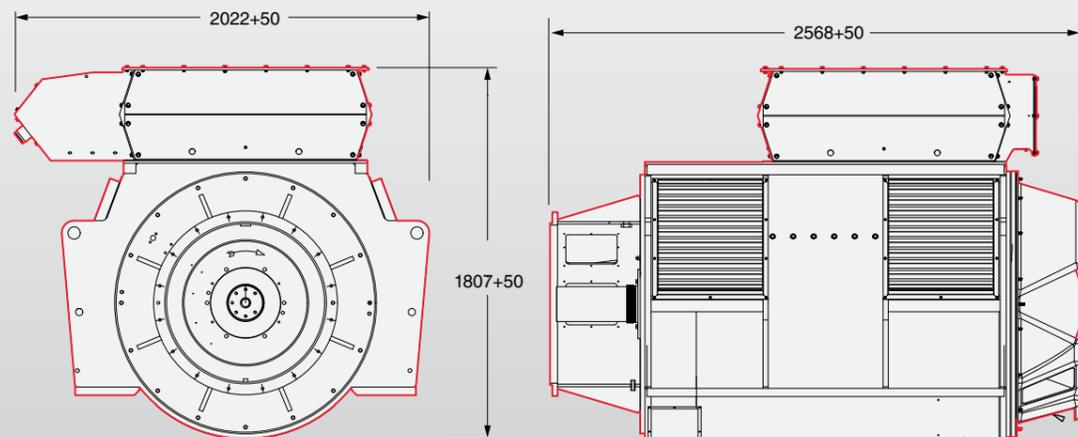
Optional Features	
Ingress Protection	IP23 Air Filters
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



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



AvK® DIG 150



Model	DIG 150
Maximum continuous rating at 50Hz (kVA)*	7,400
Maximum continuous rating at 60Hz (kVA)**	8,500

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

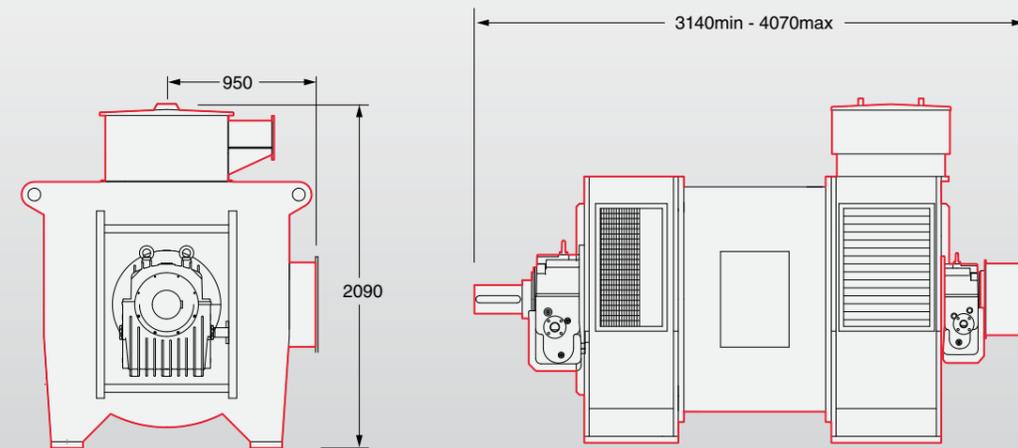
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

*50Hz 400V Continuous 125/40°C
 **60Hz 480V Continuous 125/40°C
 (4 Pole)

DIMENSIONS



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



AvK® DIG 156



Model	DIG 156
Maximum continuous rating at 50Hz (kVA)*	10,800
Maximum continuous rating at 60Hz (kVA)**	11,200

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

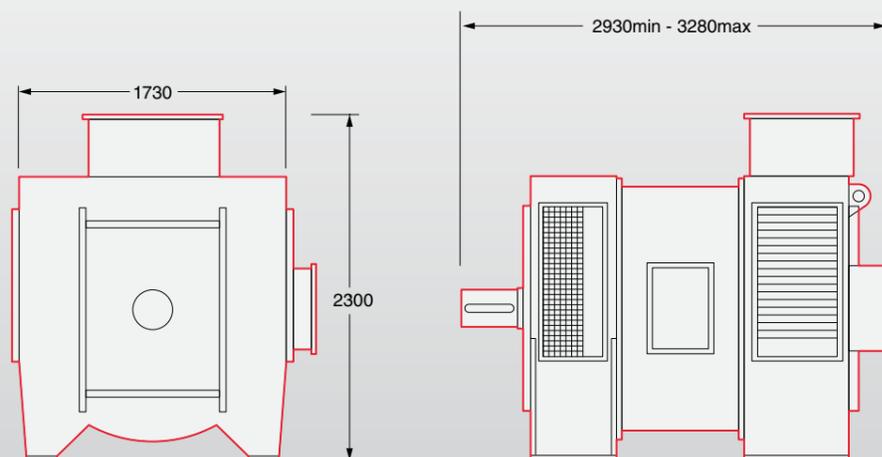
Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

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

DIMENSIONS



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



OUR POWER PROMISE

As the world's energy demands evolve, the power generation industry require ever more dependable solutions, tailored to tomorrow's needs.

At STAMFORD® | AvK®, we provide the pioneering innovation, world-class expertise and global lifecycle support you need. As a result, you can operate with greater certainty and compete more successfully.



stamford-avk@cummins.com

www.stamford-avk.com

Copyright 2022, Cummins Generator Technologies Ltd. All rights reserved.
Cummins and the Cummins logo are registered trade marks of Cummins Inc.
STAMFORD and AvK are registered trademarks of Cummins Generator Technologies Ltd.

Part No. PG_PP_P_EN_HP_Rev. 10

STAMFORD | AvK TM
POWERING TOMORROW, TOGETHER