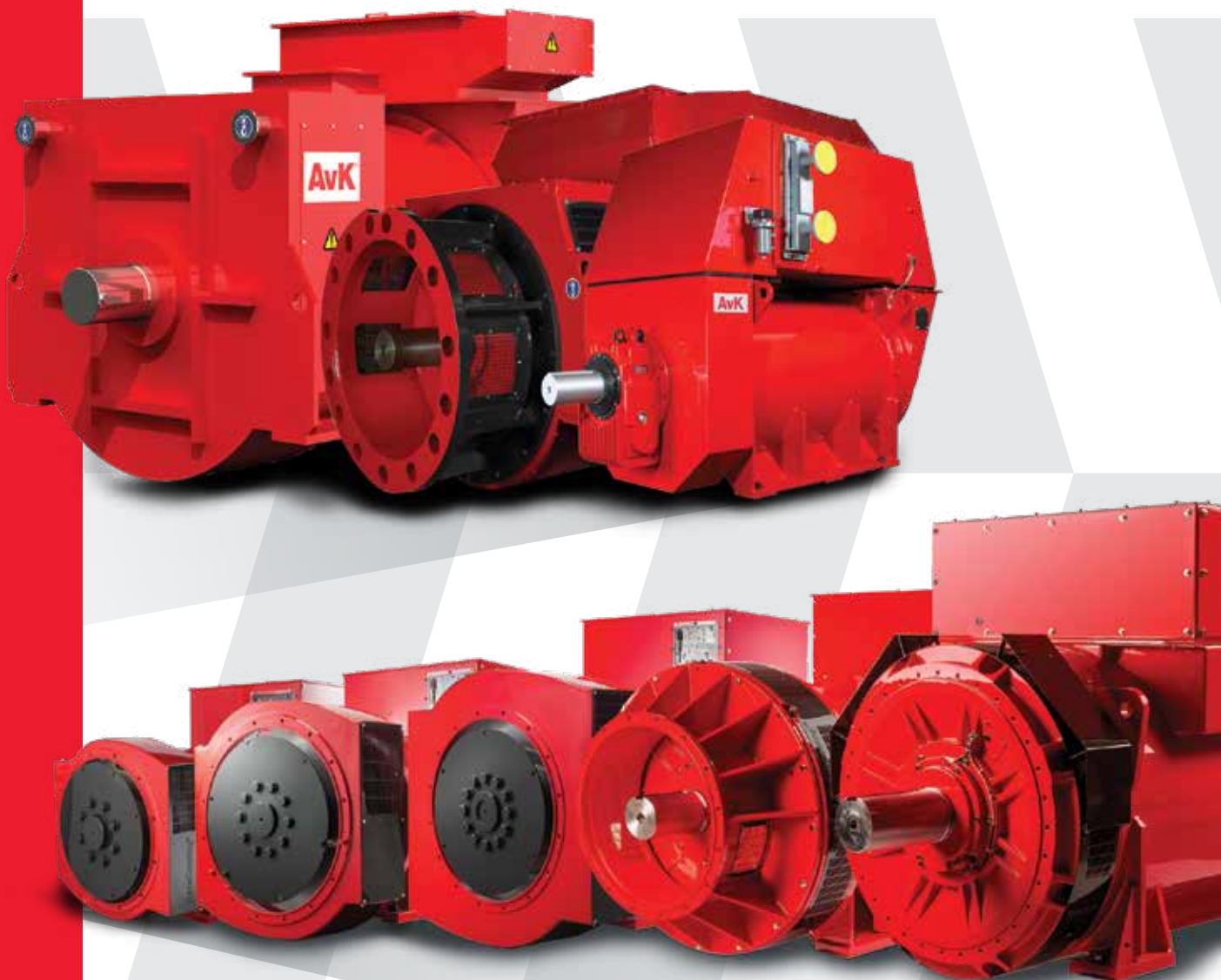


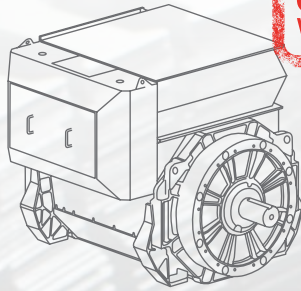
STAMFORD[®]
AvK[®]

PowerPortfolio

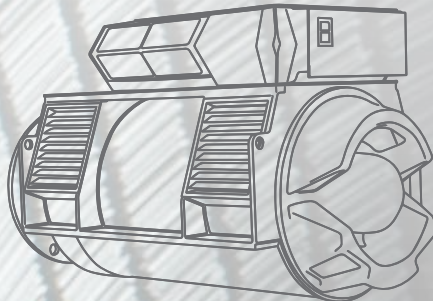
the ultimate alternator range



The Ultimate Range

STAMFORD®
S-Range
7.5 – 5,000kVA
**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.

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: 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:

**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

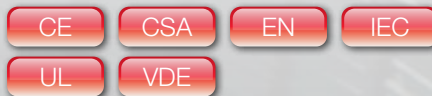
Highly configurable design

Designed For

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

Classifications

Compatible with Industrial Standards:

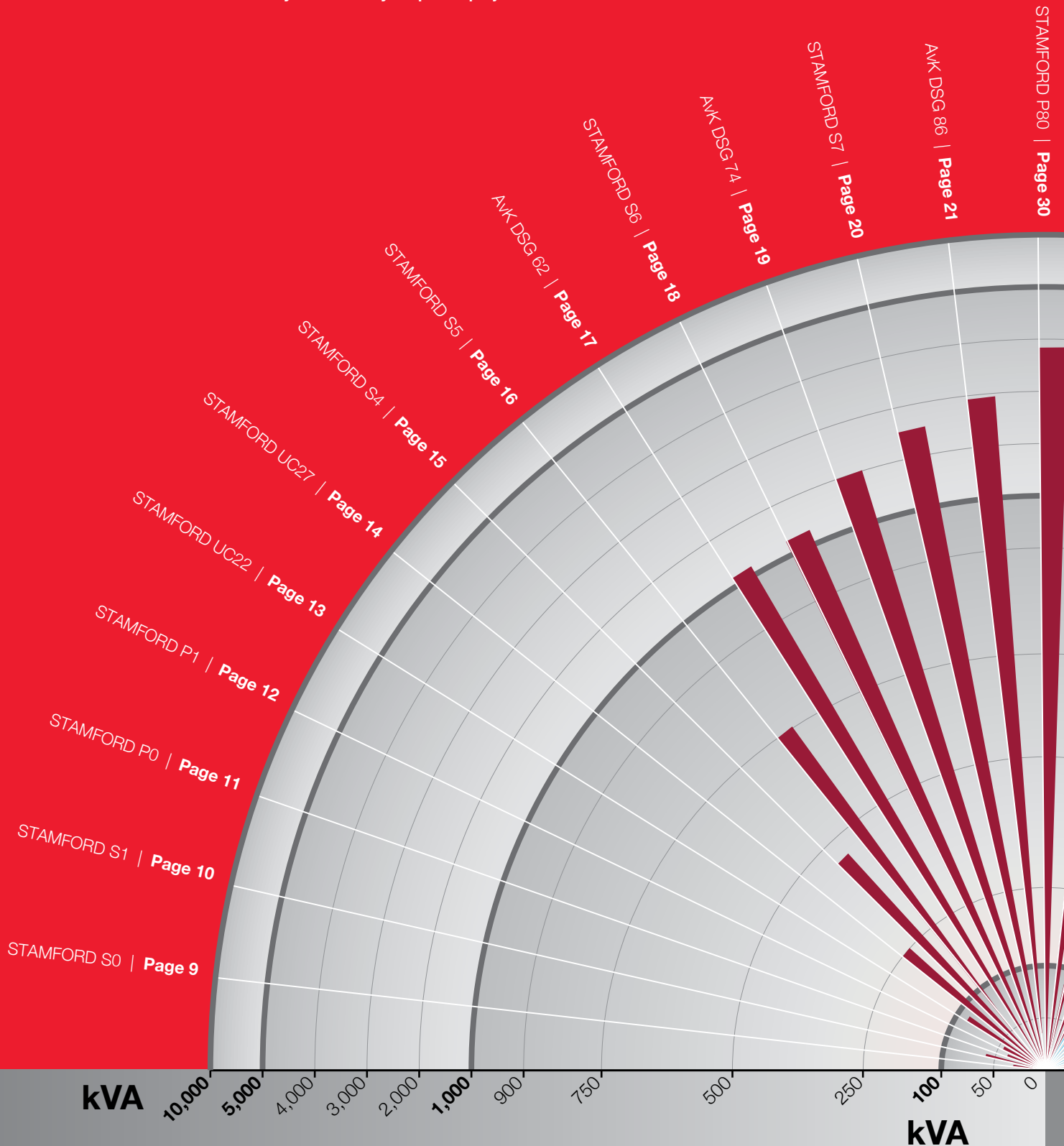


Compatible with Marine Classifications:



Quick Alternator Selector

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



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

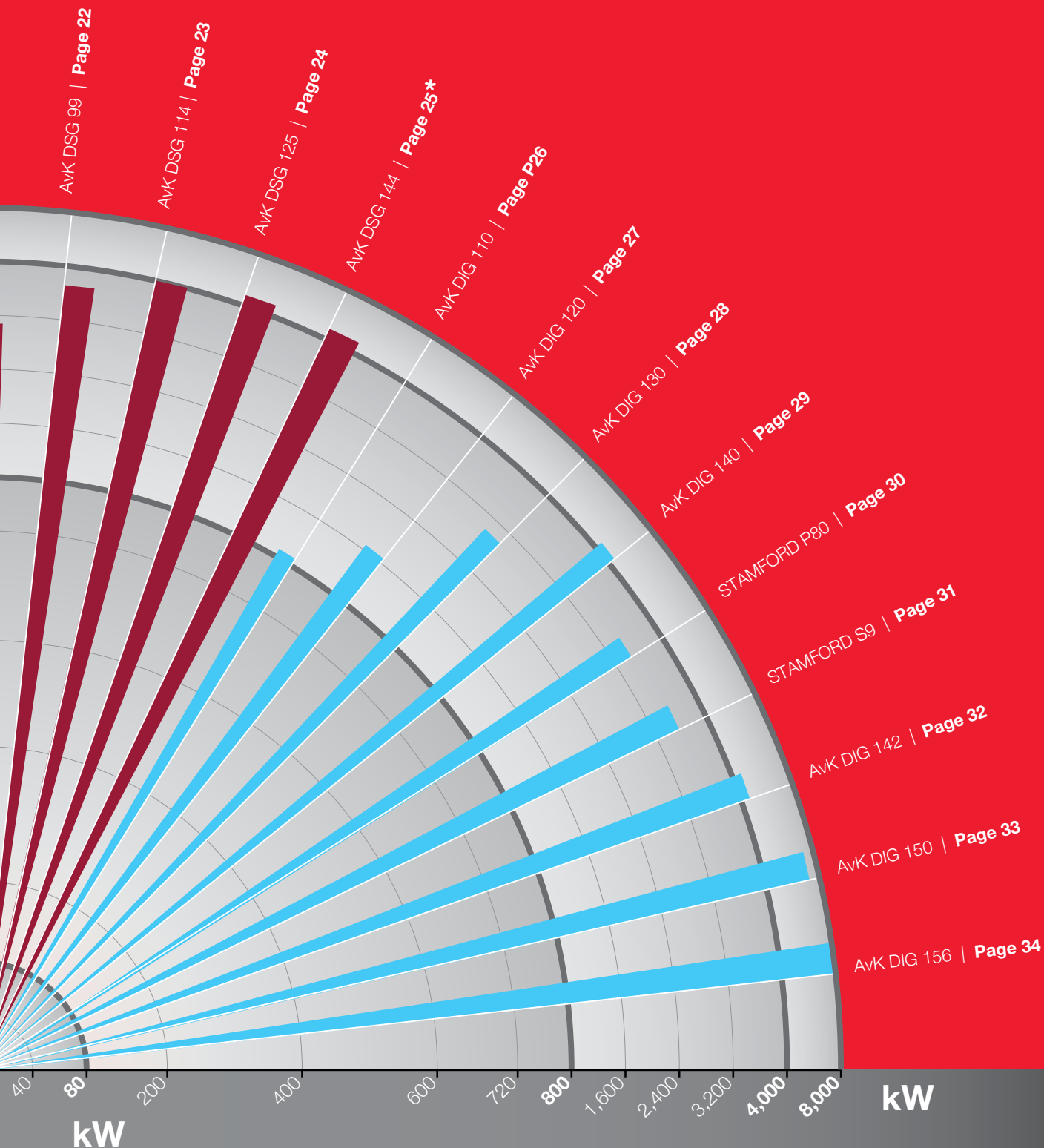
2 Follow the curve until you find an alternator that matches your power and voltage requirement

Key

-  Low Voltage
-  Medium/High Voltage

Ratings based on Maximum continuous rating at 50Hz

*Rating based on Maximum continuous rating at 60Hz



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/productselector

Customer Support Excellence. Every™ Time.

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, Cummins Generator Technologies prides itself 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 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.

For applications engineering support or training contact applications@cummins.com



Application Engineering Training

Cummins Generator Technologies offers 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 customized 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.

Global Customer Service

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

For support on service events and inquiries contact
EMEA: emea.service@cummins.com
Americas: cgta.service@cummins.com
China: CGT.China.service@cummins.com
APAC: APAC.service@cummins.com

Aftermarket Parts

For genuine Aftermarket Parts, visit:
www.stamford-avk.com/parts

Accessories

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 MX321 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

STAMFORD | AvK 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.

Genuine STAMFORD | AvK AVR's Maximise Performance

STAMFORD | AvK offer a complete range of analogue and digital AVRs designed to match your application.

Only genuine STAMFORD & AvK AVR's should be used to avoid expensive repair costs and under performance of your STAMFORD or AvK alternator. To find out more please email parts.enquires@cummins.com



A Digital STAMFORD and AvK AVR, the DM110

AVR	Type	Excitation Method	Voltage Regulation
SX460	Analogue	Self-Excited	+/-1.0%
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%
MX321	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%

EBS – Excitation Boost System

PMG – Permanent Magnet Generator

The Right Technology

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

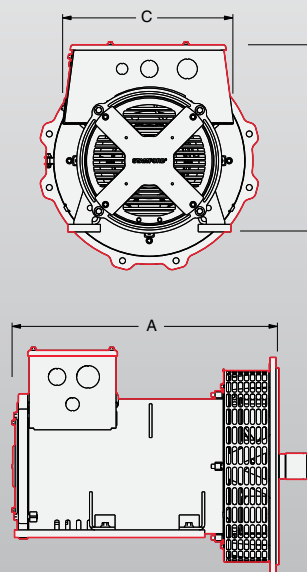
Oil & Gas Auxiliary	●
Telecommunications	●
Mobile Construction	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

Prime Movers

Diesel Engine	●
Gas Engine	

**DIMENSIONS**

Drawings represent standard design
All dimensions in millimetres (mm)



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

**3 YEAR
WARRANTY**

**S1****STAMFORD®**

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

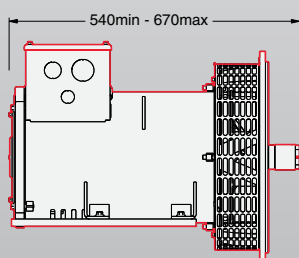
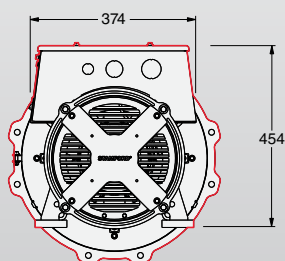
Optional Features	
Excitation System	Auxiliary Winding
Output configurations	1 phase re-connectable
Environmental protection	Anti-condensation Heaters
	Epoxy Gel Coat

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

Prime Movers	
Diesel Engine	●
Gas Engine	

DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



**3 YEAR
WARRANTY**

STAMFORD®**P0**

Model	P0
Maximum continuous rating at 50Hz (kVA)	17.5
Maximum continuous rating at 60Hz (kVA)	25

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

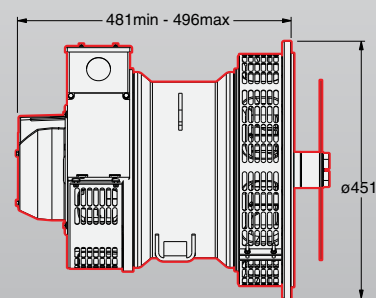
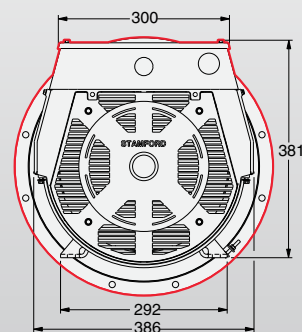
Designed For	
Marine Auxiliary	●
Oil & Gas Auxiliary	●
Telecommunications	●
Mobile Construction	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

Prime Movers	
Diesel Engine	●
Gas Engine	



DIMENSIONS

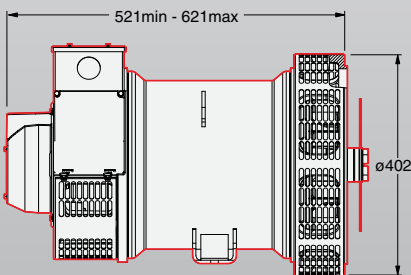
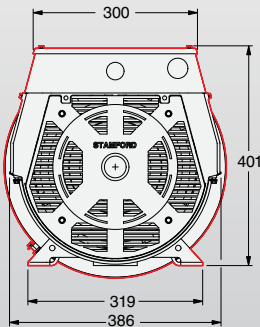
Drawings represent standard design
All dimensions in millimetres (mm)





DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



P1

STAMFORD®

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	

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

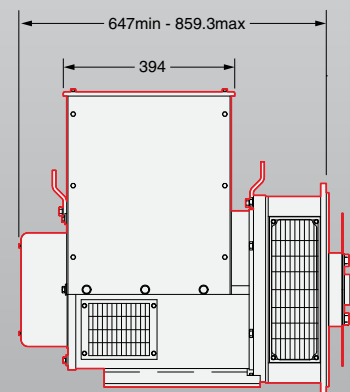
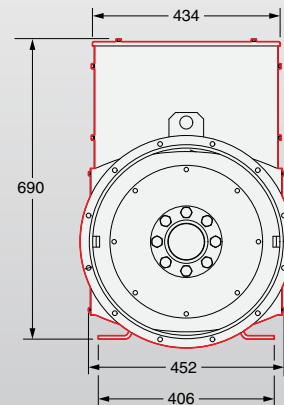
Designed For	
Grid Code Compatible	●
Marine Auxiliary	●
Oil & Gas Auxiliary	●
Telecommunications	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

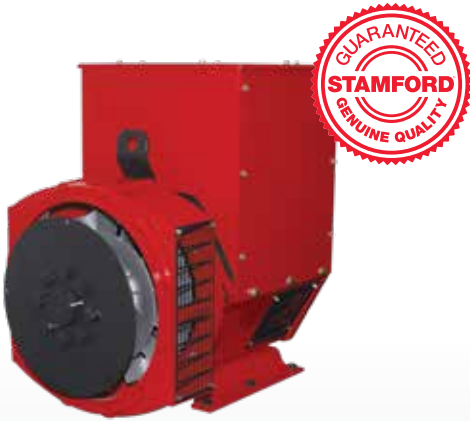
Prime Movers	
Diesel Engine	●
Gas Engine	●



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





UC27

STAMFORD®

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

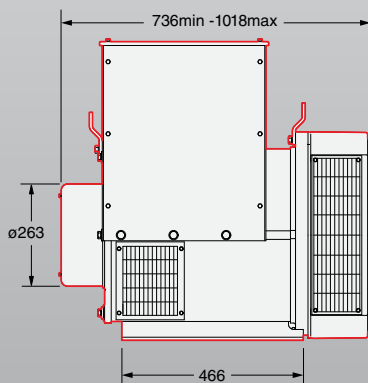
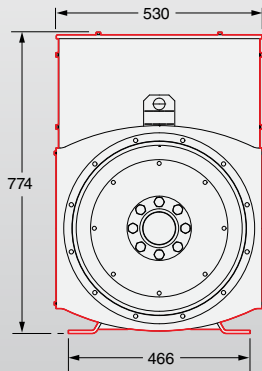
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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	●

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)	560

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
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	●

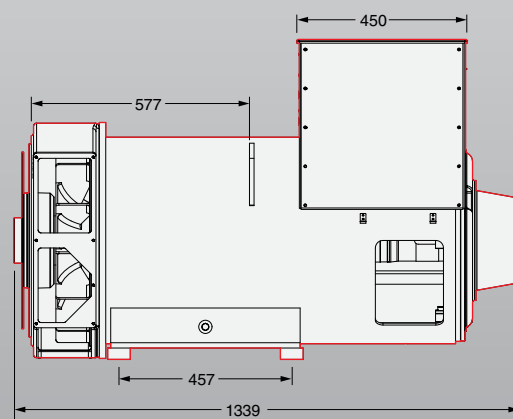
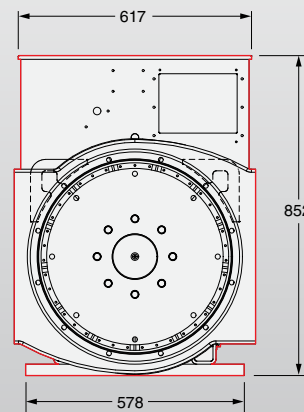
Prime Movers

Diesel Engine	●
Gas Engine	●



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)

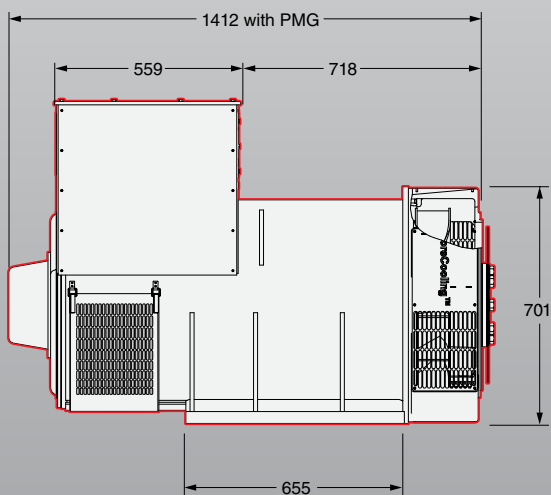
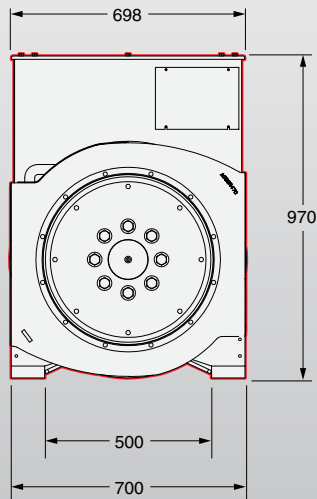


**3 YEAR
WARRANTY**



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



S5

STAMFORD®

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
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	●

**3 YEAR
WARRANTY**

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

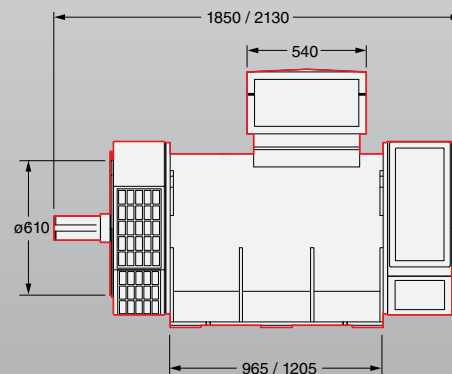
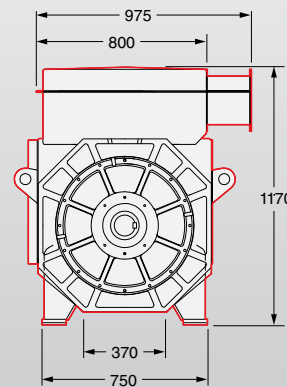
Designed For	
Grid Code Compatible	
Marine Auxiliary	●
Oil & Gas	●
Oil & Gas Auxiliary	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

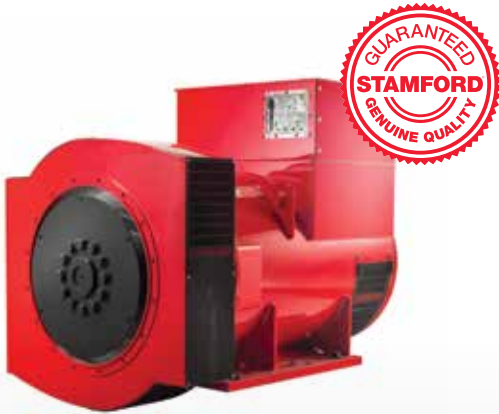
Prime Movers	
Diesel Engine	●
Gas Engine	●



DIMENSIONS

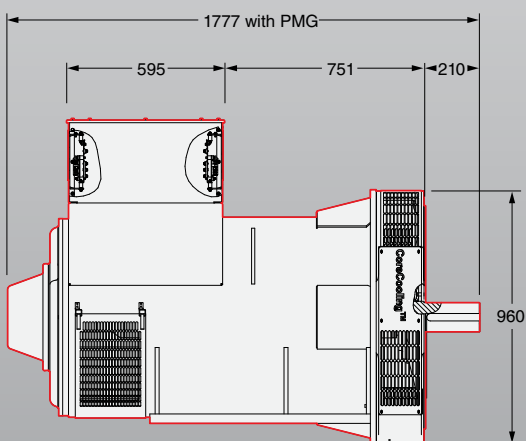
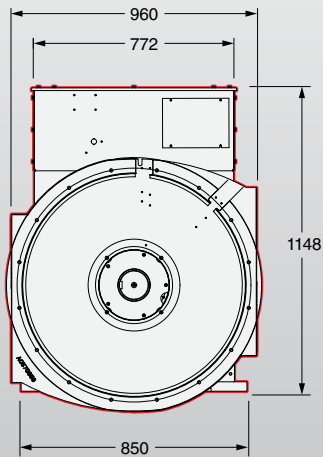
Drawings represent standard design
All dimensions in millimetres (mm)





DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



S6

STAMFORD®

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
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	●

700 - 1,695 kVA

**3 YEAR
WARRANTY**

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

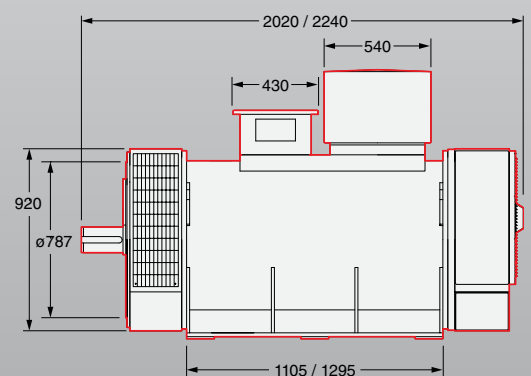
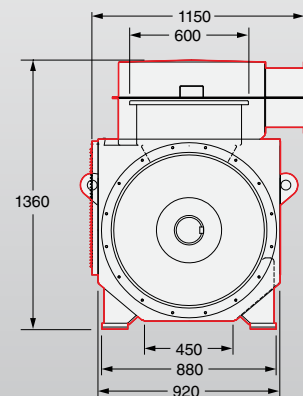
Power Plant	
Grid Code Compatible	
Marine Auxiliary	●
Oil & Gas	●
Oil & Gas Auxiliary	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

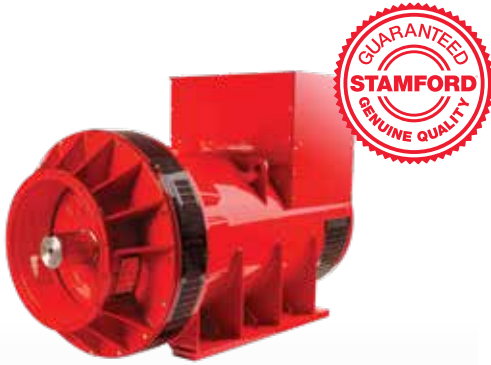
Prime Movers

Diesel Engine	●
Gas Engine	●

**DIMENSIONS**

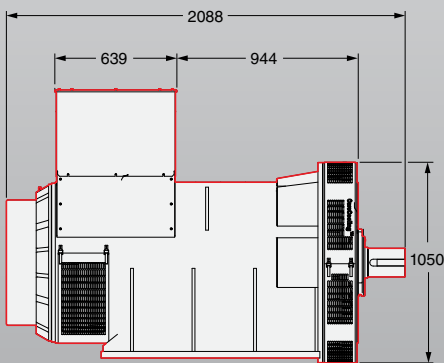
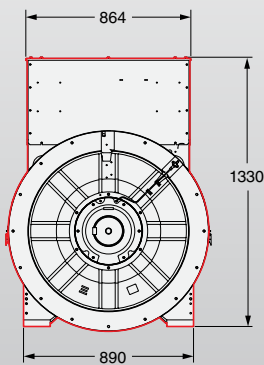
*Drawings represent standard design
All dimensions in millimetres (mm)*





DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



**3 YEAR
WARRANTY**

S7

STAMFORD®

Model	S7
Maximum continuous rating at 50Hz (kVA)	2,500
Maximum continuous rating at 60Hz (kVA)	3,000

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2 Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 0
Terminals	6
Material Insulation Class	H
Excitation System	PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Double
SAE Adaptors	SAE 00
Ingress Protection	IP44 Terminal Box IP44
Voltage Sensing	3 Phase sensing
AVR	DECS150
Temperature Monitoring	Winding RTDs Thermistors
Environmental Protection	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	●

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

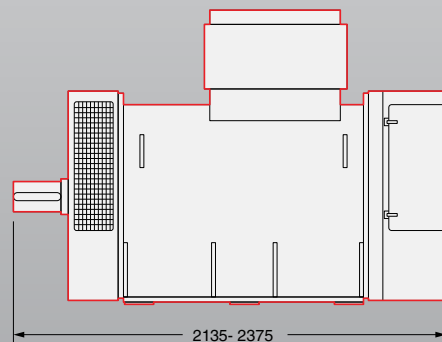
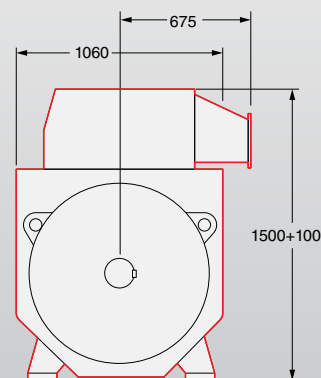
Designed For	
Power Plant	
Grid Code Compatible	●
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

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



DIMENSIONS

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

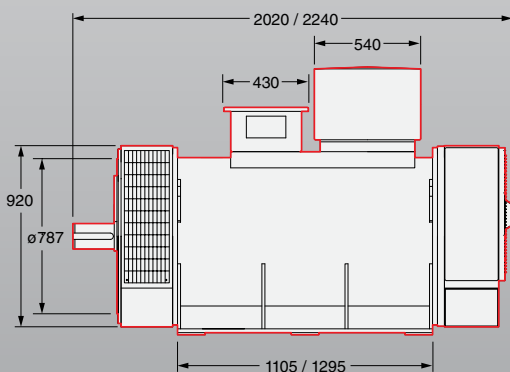
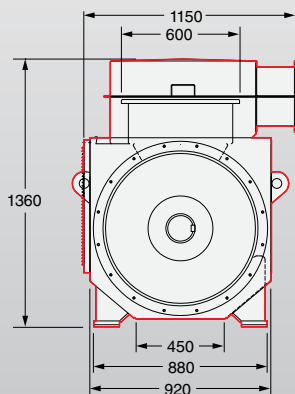


670 - 3,410 KVA



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



DSG 99

AvK®

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	

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

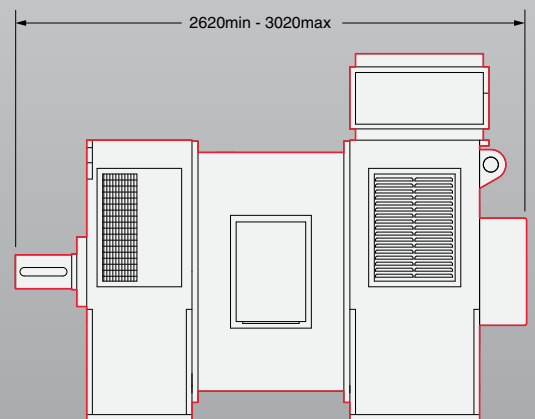
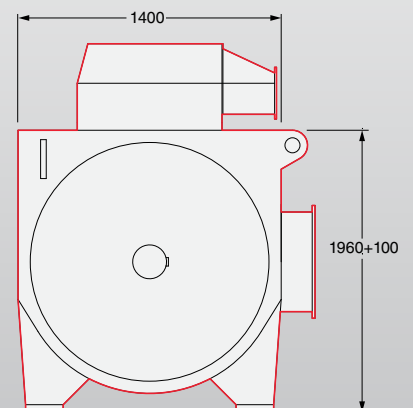
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

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



DIMENSIONS

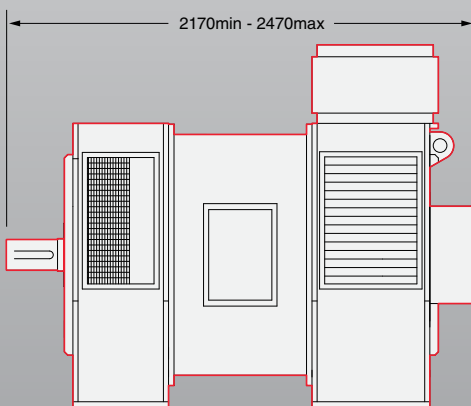
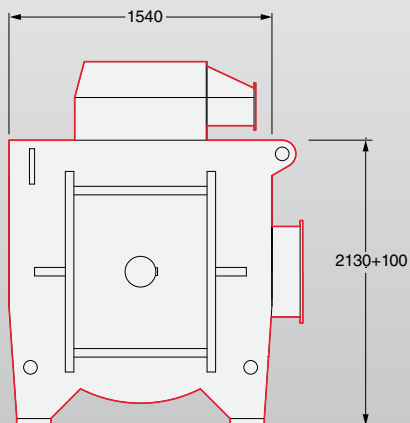
*Drawings represent standard design
All dimensions in millimetres (mm)*





DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



DSG 125

AvK®

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	

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

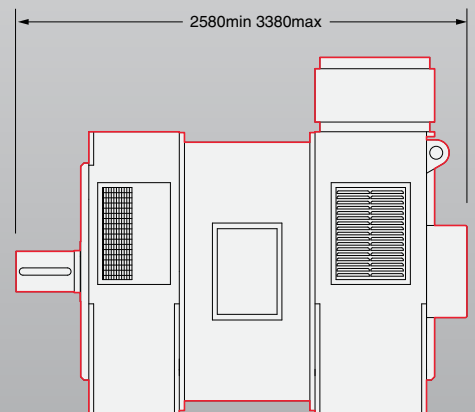
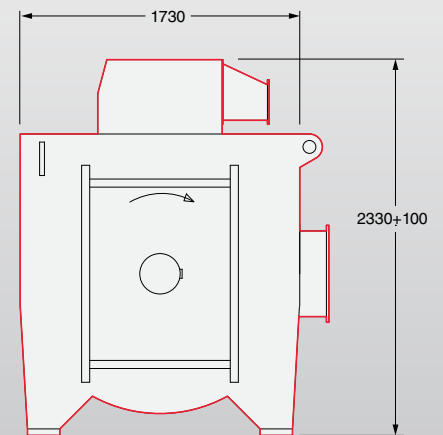
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	●

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



DIMENSIONS

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



Low Voltage

6,000 - 6,600 kVA



DIG 110

AvK®

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

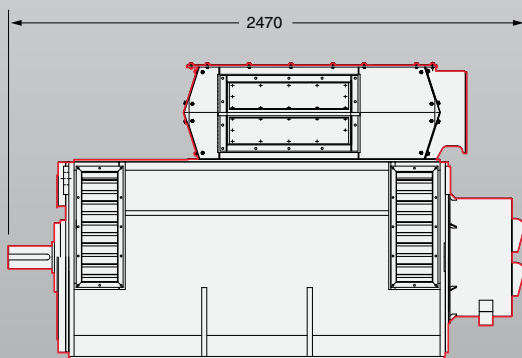
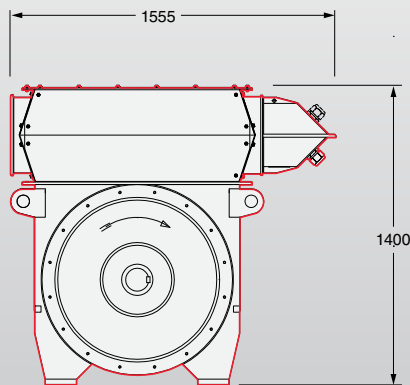
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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

Drawings represent standard design
All dimensions in millimetres (mm)



High Voltage
560 - 1,300 kVA

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

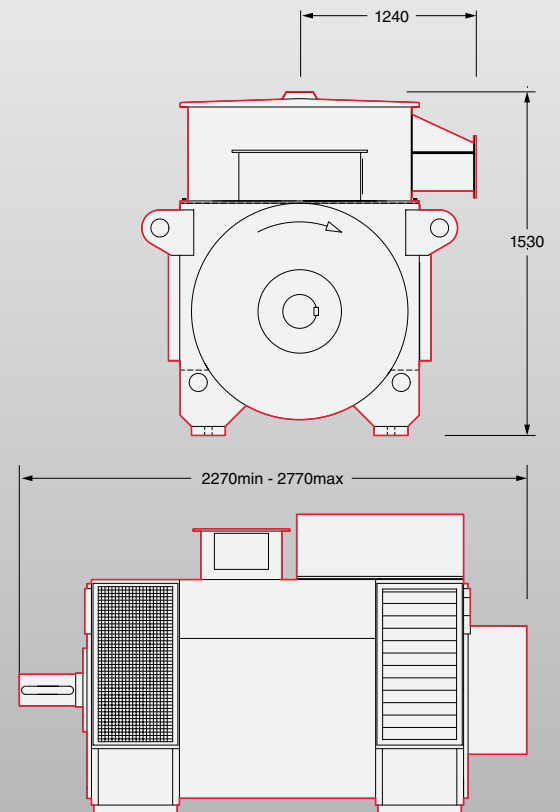
Designed For	
Power Plant	●
Grid Code Compatible	●
Marine Propulsion	
Oil & Gas	●
Combined Heat & Power	●
Continuous Power & Standby	●

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



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



High Voltage

880 - 2,600 kVA



DIG 130

AvK®

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

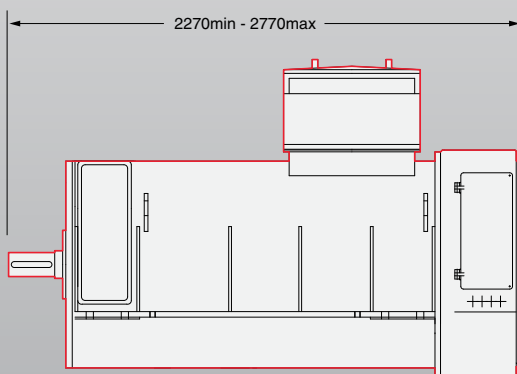
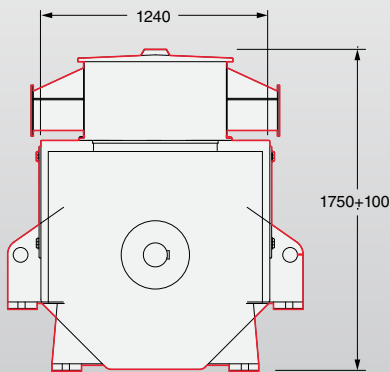
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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

Drawings represent standard design
All dimensions in millimetres (mm)



High Voltage
1,140 - 4,000 kVA

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

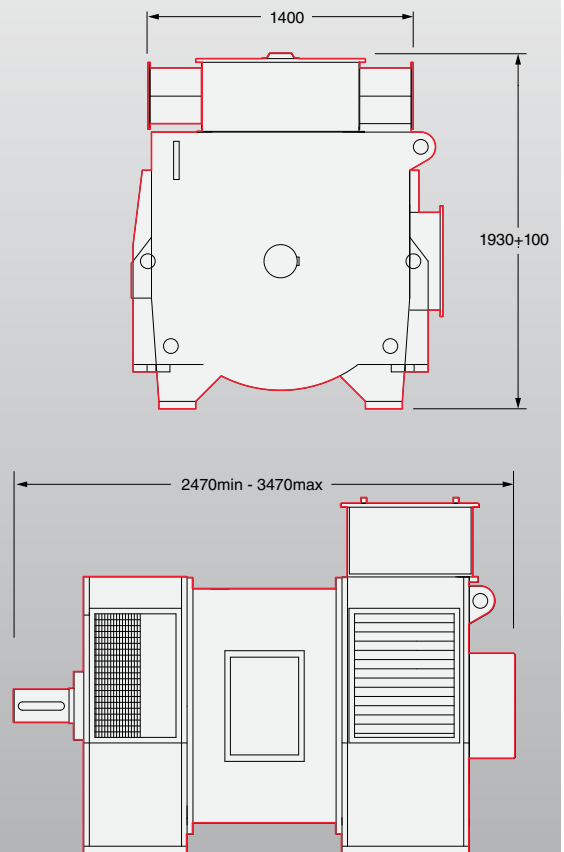
Designed For	
Power Plant	●
Grid Code Compatible	
Marine Propulsion	●
Oil & Gas	●
Combined Heat & Power	●
Continuous Power & Standby	●

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



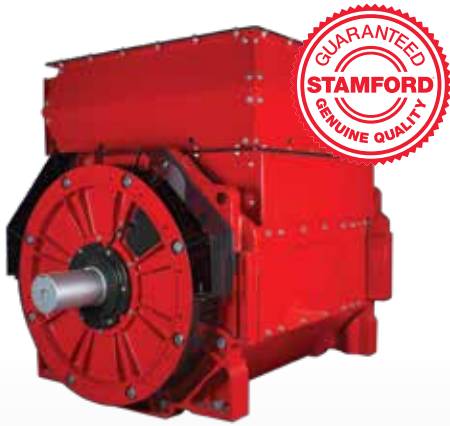
DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



High Voltage

2,200 - 5,300 kVA



P80

STAMFORD®

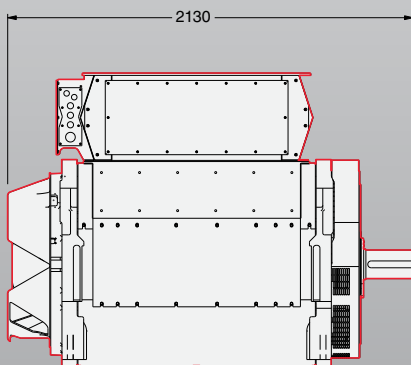
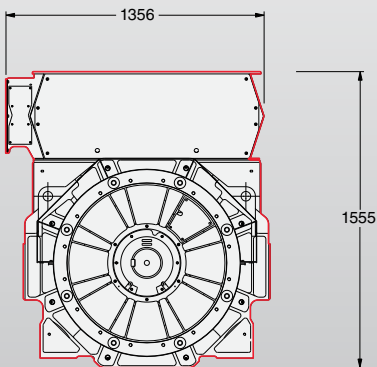
Low Voltage

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	2-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		

DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



Optional Features	
Bearing Arrangement	Single*
Ingress Protection	IP23 Air Filters
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	●	●	●

* Not for cores W, X, Y

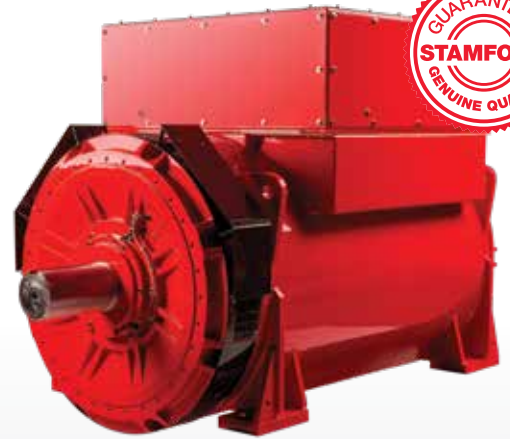
2,265 - 4,770 kVA

2,290 - 5,080 kVA

High Voltage

STAMFORD®

S9



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

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

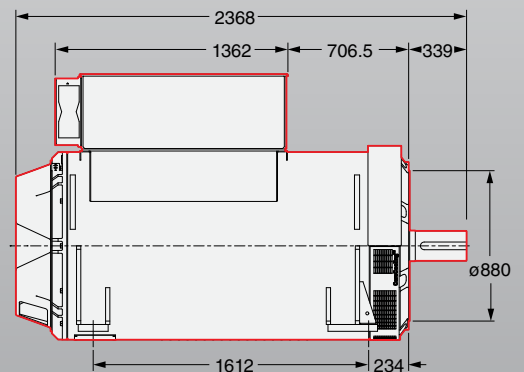
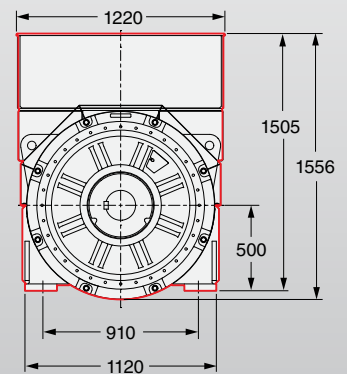
Optional Features	
Voltage Sensing	3 Phase
Centre height	265, 349, 450
Current transformers	1, 2, 3 per phase
Earth fault protection	Current Transformer

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

Drawings represent standard design
All dimensions in millimetres (mm)



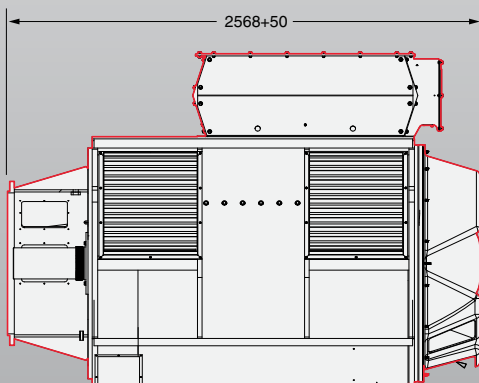
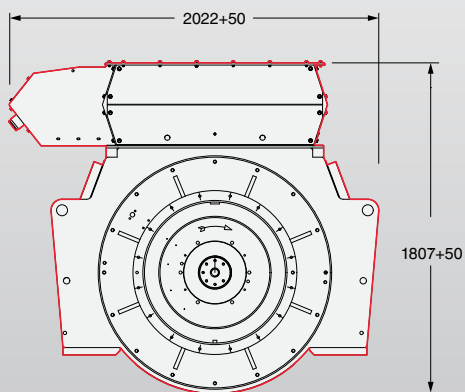
3 YEAR WARRANTY

High Voltage
2,150 - 5,000 kVA



DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



DIG 142

AvK[®]

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	●

3,760 - 6,700 kVA

High Voltage

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

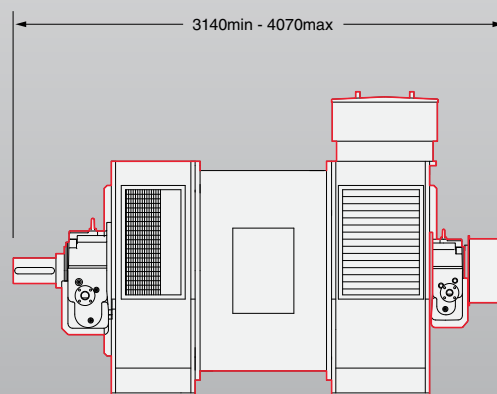
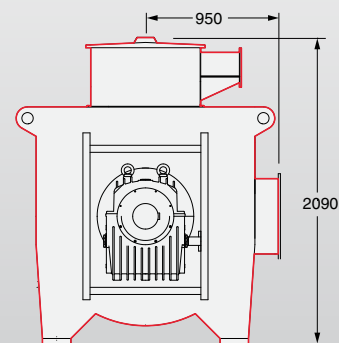
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

**DIMENSIONS**

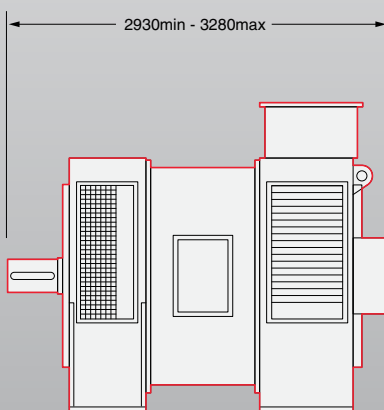
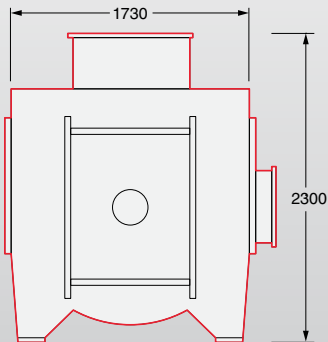
Drawings represent standard design
All dimensions in millimetres (mm)





DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



DIG 156

AvK®

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	4, 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

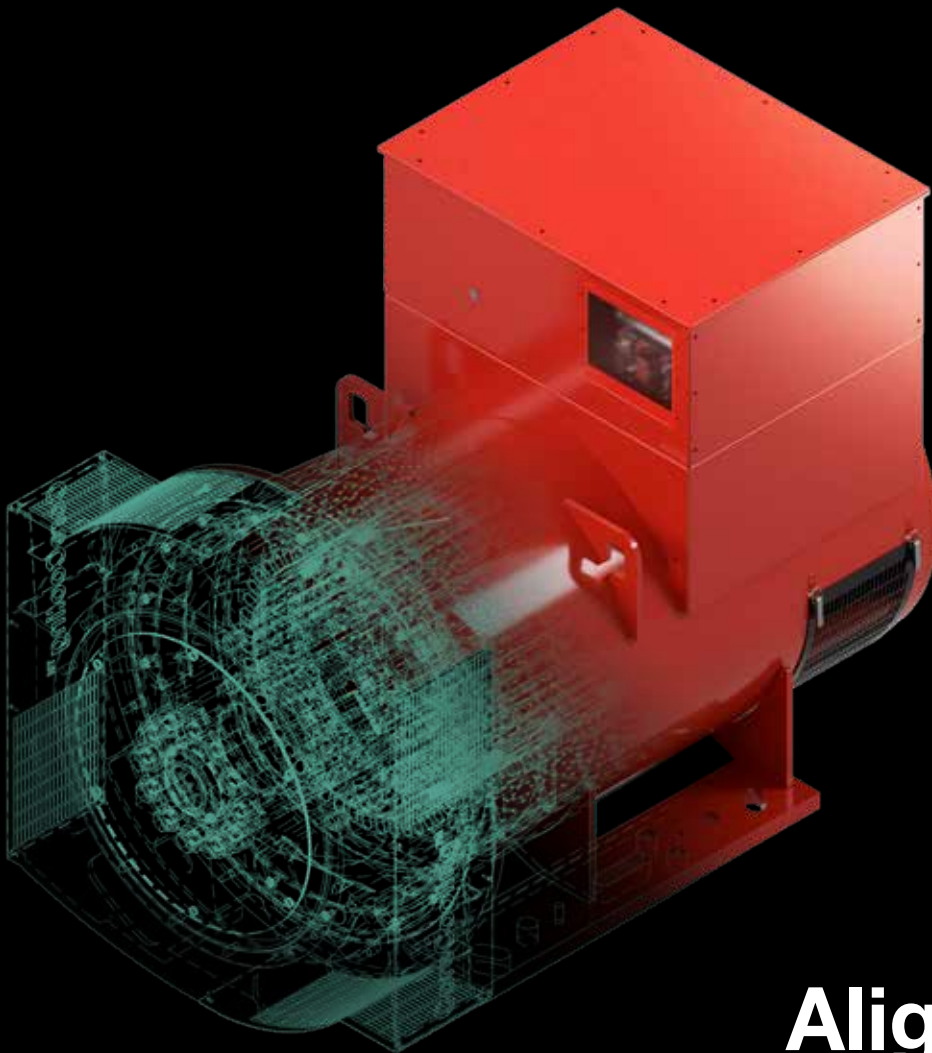
Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

STAMFORD® | AvK®

World Class Alternator Technology Centre



Aligning
SOLUTIONS
Together

Capabilities on offer



Generator Set Integration

- Facilitate the integration of STAMFORD and AvK products into your generator sets
- We make it easy - 5 simple stages of integration
- Industry leading lead-time from initial discussion to validated design
- Validation and acceptance tests



Site Tests & Failure Investigations

- Installation quality assurance on generator set only and at the site can be completed to give you peace of mind
- Extensive field monitoring capabilities for investigating potential issues in the field



Witness Testing

- Witness tests on alternators
- Witness tests on generator sets up to 3 MW
- IP testing of alternators



Advanced Component Testing

- Linear vibration analysis and testing on alternators / generator sets
- Torsional testing
- Endurance testing of alternators and generator sets
- Tri-axial vibration testing for any excitation profile depending on size and weight of test specimen



Service Training and Specialised Training

- Comprehensive service training package available
- Specialist / customised training is also available on request

For further information contact:

@ stamford-avk@cummins.com



www.stamford-avk.com/atc

One Global Standard

Although our products are used in a variety of applications, the common factor is that Cummins Generator Technologies work to a single standard for both products and services no matter where you are in the world.

We work to One Global Standard, so each of our manufacturing plants build products to the same exacting quality that has come to distinguish our alternators in the industry.

All of our plants utilise the same sophisticated manufacturing technologies, advanced systems, common practices and rigorous testing techniques to ensure your **STAMFORD** and **AvK** alternators are built to last.



Our Promise

At Cummins Generator Technologies, it's not just the products we make that set us apart - it's how we engage our customers every day. The unique combination of knowledge, dependability and innovation we bring to each customer relationship turns everyday service into excellent customer support. As a result we help our customers operate with greater efficiency, making it possible for them to compete more successfully throughout the world.

Cummins Generator Technologies manufactures the world's broadest range of alternators from 7.5 to 11,200 kVA.

There for you™



Follow us @stamfordavk



/company/stamfordavk



stamfordavk



youtube.com/stamfordavk

For Applications Support:
applications@cummins.com

For Customer Service:
EMEA: emea.service@cummins.com
Americas: cgta.service@cummins.com
China: CGT.China.service@cummins.com
APAC: APAC.service@cummins.com

For general enquiries:
stamford-avk@cummins.com

Copyright 2019, Cummins Generator Technologies Ltd. All rights reserved.
Cummins and the Cummins logo are registered trade marks of Cummins Inc.
STAMFORD and AvK are registered trade marks of Cummins Generator Technologies Ltd.

Part No. PG_PP_P_EN_AF_Rev. 07



There for you™