NEWAGE® STAMFORD® AvK®

PowerPortfolio

The ultimate alternator range



The Ultimate Range

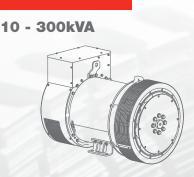
S-Range

3 YEAF

NEWAGE[®]

STAMFORD[®]

7.5 - 5,000kVA



Compact yet powerful, the NEWAGE® range of three-phase, four-pole synchronous AC alternators of brushless design are the latest addition to the STAMFORD® and AvK® brand portfolio.

NEWAGE[®] includes fit for market alternators, up to 300kVA Low Voltage, whilst applying the same STAMFORD[®] and AvK[®] brand quality standards, global support team and established service network. The range focuses on a compact design to maximise power density and space saving, providing optimized and reliable power for standby and other applications.

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 Diesel Engine compatibility: all brands and nodes

Common Features

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

Designed For

Prime Power and Standby

Classifications

Compatible with Industrial Standards:



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

Classifications

CF

UL

Compatible with Industrial Standards:



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

Compatible with Marine Classifications:

Compatible with Industrial Standards:

EN

IEC

CSA

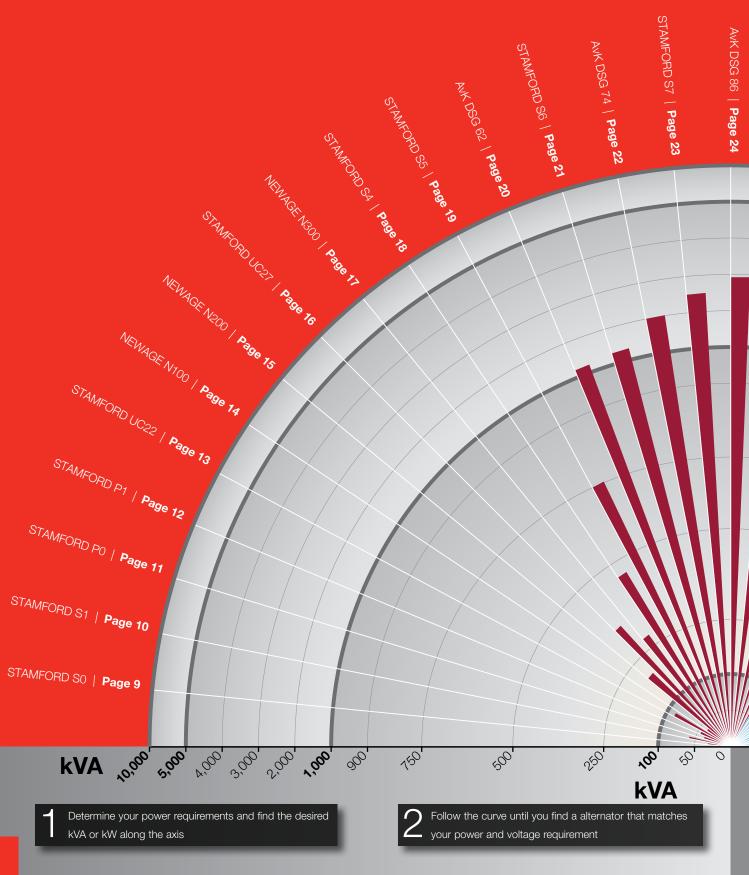
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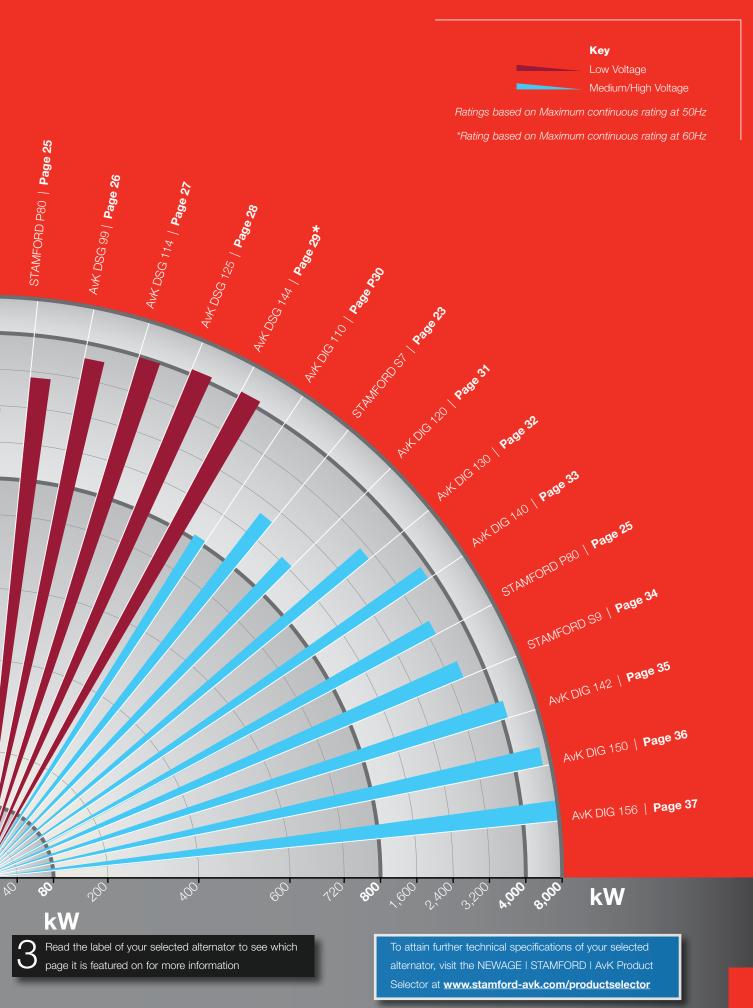
Designed For

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

Quick Alternator Selector

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





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 NEWAGE, 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 NEWAGE, 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
- NEWAGE, STAMFORD and AvK parts identification
- Extensive Aftermarket network distribution for genuine NEWAGE, STAMFORD and AvK parts
- Extensive aftermarket distribution for genuine NEWAGE, 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 India: Cgtil.Csnotify@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 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

NEWAGE I STAMFORD I 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 NEWAGE | STAMFORD | AvK AVR's Maximise Performance

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

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



A Digital STAMFORD and AvK AVR, the DM110

AVR	Туре	Excitation Method	Voltage Regulation
AS440	Analogue	Self-Excited	+/-1.0%
AS540	Analogue	Self-Excited/Aux Winding	+/-1.0%
AS480	Analogue	Self-Excited + EBS	+/-1.0%
MX341	Analogue	PMG	+/-1.0%
MX322	Analogue	PMG	+/-0.5%
DM110	Digital	PMG/Aux. Winding	+/-0.25%
DECS 100	Digital	PMG/Aux. Winding	+/-0.25%
DECS 250	Digital	PMG/Aux. Winding	+/-0.25%
UNITROL 1010	Digital	PMG/Aux. Winding	+/-0.2%
UNITROL 1020	Digital	PMG/Aux. Winding	+/-0.2%
DM710	Digital	Self-Excited	+/-1.0%
DM730	Digital	Self-Excited	+/-1.0%

EBS – Excitation Boost System PMG – Permanent Magnet Generator

The Right Technology

7.5 - 40 kVA

STAMFORD[®] SO

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	Н
Excitation System	Self Exciting
Ingress Protection	IP23

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

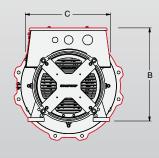
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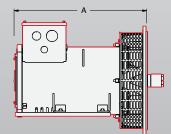
Oil & Gas Auxiliary	•
Telecommunications	•
Mobile Construction	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	
Diesel Engine	•
Gas Engine	





DIMENSIONS



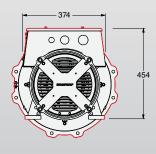


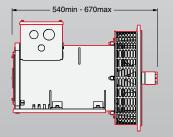
Model	А	В	С
S0L1	405-485	350	314
SOL2	495-545	405	345





Drawings represent standard design All dimensions in millimetres (mm)





S1	S	TAMFOR)®
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	Н
Excitation System	Self Exciting
Ingress Protection	IP23

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

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



STAMFORD[®] PO

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

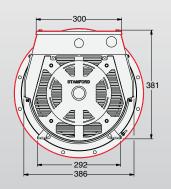
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

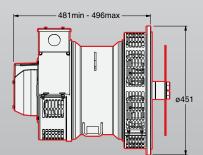
Designed For Marine Auxiliary Oil & Gas Auxiliary Telecommunications Mobile Construction Combined Heat & Power Critical Protection & UPS Continuous Power & Standby

Prime Movers	
Diesel Engine	•
Gas Engine	



DIMENSIONS

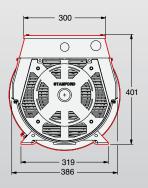


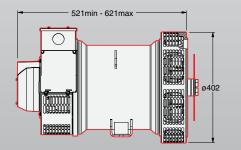




DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





ModelP1Maximum continuous rating at 50Hz (kVA)42.5Maximum 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	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

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

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

Gas Engine

STAN	AFORD °	UC22

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

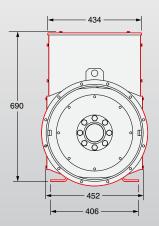
Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	1, 2, 3, 4
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

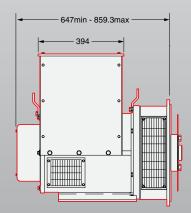
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

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



DIMENSIONS

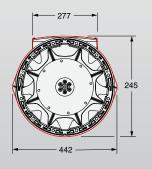


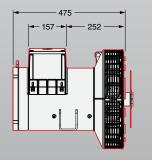




DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





N100

NEWAGE

Model	N100
Maximum continuous rating at 50Hz (kVA)	20
Maximum continuous rating at 60Hz (kVA)	26

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 4, 5
Terminals	6
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23

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	•

NEWAGE®

N200

Model	N200
Maximum continuous rating at 50Hz (kVA)	200
Maximum continuous rating at 60Hz (kVA)	250

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 2, 3
Terminals	6
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23

Optional Features

Environmental protection

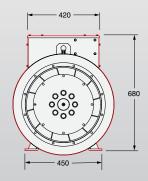
Anti-condensation
Heaters

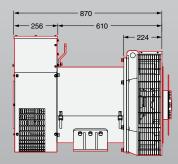
Designed For	
Oil & Gas Auxiliary	
Telecommunications	
Mobile Construction	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime MoversDiesel Engine●Gas Engine●



DIMENSIONS

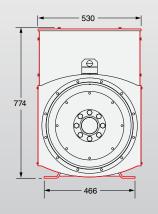


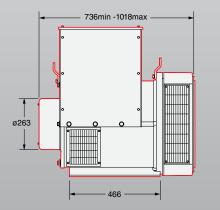




DIMENSIONS

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

Optional Features

optional reatures	
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	•

NEWAGE®

N300

Model	N300
Maximum continuous rating at 50Hz (kVA)	300
Maximum continuous rating at 60Hz (kVA)	362

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	SAE 1, 2
Terminals	6
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23

Optional Features

Environmental protection	

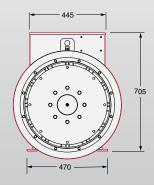
Anti-condensation
Heaters

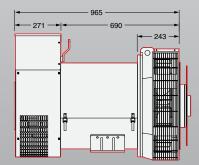
Designed For	
Oil & Gas Auxiliary	
Telecommunications	
Mobile Construction	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime MoversDiesel Engine●Gas Engine●



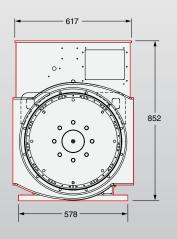
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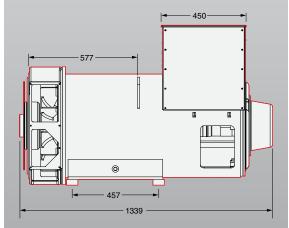






Drawings represent standard design All dimensions in millimetres (mm)







S4	S	TAMFORD)®
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	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

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

STAI	ИFO	RD	S5
			<u> </u>

Model	S 5
Maximum continuous rating at 50Hz (kVA)	750
Maximum continuous rating at 60Hz (kVA)	937

Specifications	
Voltage Range	380-690
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	00, 0, 0.5, 1
Terminals	12
Material Insulation Class	Н
Excitation System	Self exciting
Ingress Protection	IP23
Connection with other machines	Paralleling capability

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

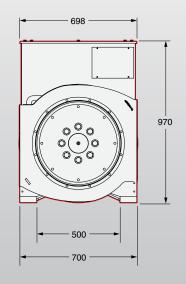
Designed For

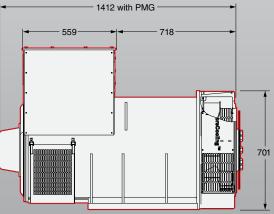
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas Auxiliary	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	٠
Gas Engine	٠



DIMENSIONS

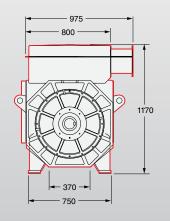


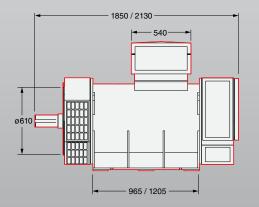






Drawings represent standard design All dimensions in millimetres (mm)





AvK °
62
0
0

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

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

Designed For
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

Low Voltage

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	Н
Excitation System	PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44 Air Filters
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters
Ingress Protection	IP44

Decision of F

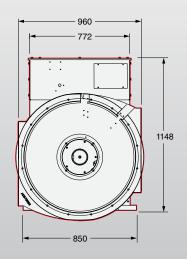
Designed For	
Grid Code Compatible	•
Marine Auxiliary	•
Oil & Gas	•
Oil & Gas Auxiliary	•
Combined Heat & Power	•
Critical Protection & UPS	•
Continuous Power & Standby	•
Prime Movers	

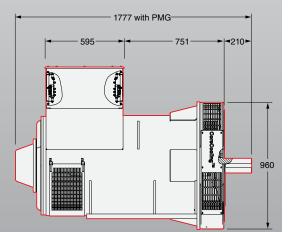
Prime Movers	
Diesel Engine	•
Gas Engine	•





DIMENSIONS



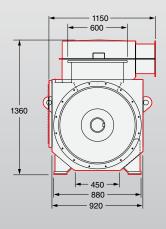


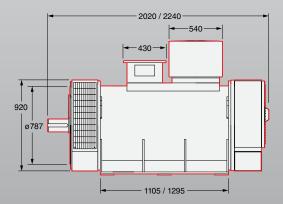
AvK°



DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





DSG 74

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

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

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

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

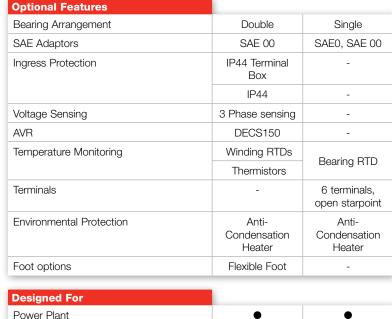
Prime Movers	
Diesel Engine	•
Gas Engine	•

STAMFORD

Model	S7 LV	S7 HV
Maximum continuous rating at 50Hz (kVA)	2,500	1625
Maximum continuous rating at 60Hz (kVA)	3,000	-

S7

Specifications		
Voltage Range	380-690	10,500 - 11,000
Poles	4	4
Technology	Wire Wound	Form Wound
AVR	Analogue	Digital
Voltage sensing	2 Phase	3 Phase
Bearing Arrangement	Single	Double
SAE Adaptors	SAE 0	None
Terminals	6	4
Temperature Monitoring	-	Winding RTDs 2/phase
Material Insulation Class	Н	Н
Excitation System	PMG	DECS100/PMG
Ingress Protection	IP23	IP23
Connection with other machines	Paralleling capability	Paralleling capability



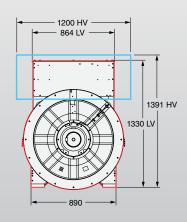
Designed For		
Power Plant	•	•
Grid Code Compatible	•	•
Marine Propulsion	•	
Marine Auxiliary	•	
Oil & Gas		
Oil & Gas Auxiliary	•	
Combined Heat & Power	•	•
Critical Protection & UPS	•	•
Continuous Power & Standby	•	•
Prime Movers		
Diesel Engine	•	•
Gas Engine	•	•

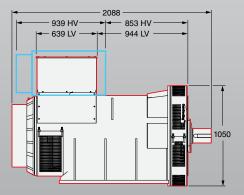
STANFORD STAMFORD

S7 LV

S7 HV

DIMENSIONS

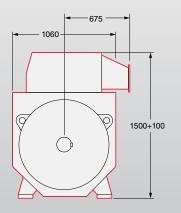


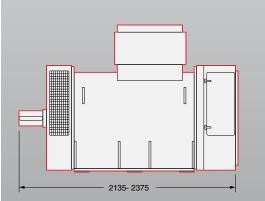






Drawings represent standard design All dimensions in millimetres (mm)





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

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

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

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

Low Voltage

Maximum continuous rating at 50Hz (kVA)

Maximum continuous rating at 60Hz (kVA)

STAMFORD[®]

Model

Specifications Voltage Range	380-690	3,300-4,160	6.000-13.80
Poles		4	-,
Technology	Wire Wound	Bar Wound	Bar Wound
AVR		Digital	
Voltage sensing		3-Phase	
Bearing Arrangement		Double	
SAE Adaptors		0, 00	
Terminals		6	
Material Insulation Class	Н	Н	F
Excitation System		PMG	
Ingress Protection		IP23	
Temperature monitoring		Winding RTD	S
Connection with other machines	Pa	ralleling capat	oility
	_		
Optional Features Bearing Arrangement	_	Single*	
Ingress Protection		IP23 Air Filter	e
Temperature monitoring		Thermistors	3
Environmental protection	Anti-o	ondensation F	leaters
		ondonoation	loatoro
Designed For			
Power Plant	•	•	•
Grid Code Compatible	•	•	•
Marine Propulsion	•		
Marine Auxiliary	•		
Oil & Gas Auxliary	•		
Combined Heat & Power	•	•	•
Critical Protection & UPS	•	•	•
Continuous Power & Standby	•	•	•
Prime Movers			
Diesel Engine	•	•	•
Gas Engine	•	•	•
			•
Gas Turbine			

P80

P80 LV

3,900

4,400

P80 MV

4,200

5,100

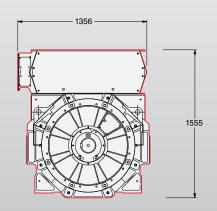
P80 HV

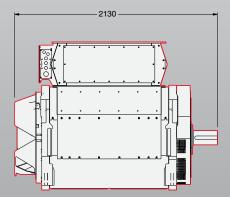
3,800

4,700

AMF

Drawings represent standard design All dimensions in millimetres (mm)

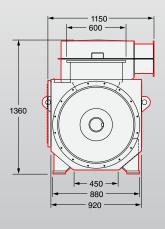


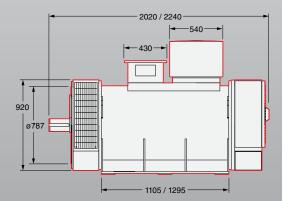


* Not for cores W, X, Y



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

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

Designed For	
Power Plant	
Grid Code Compatible	•
Marine Propulsion	•
Marine Auxiliary	٠
Oil & Gas	٠
Combined Heat & Power	•
Critical Protection & UPS	٠
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

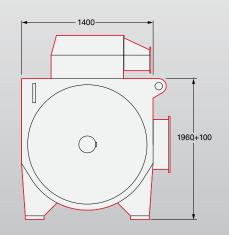
Specifications	
Voltage Range	400-690
Poles	6, 8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

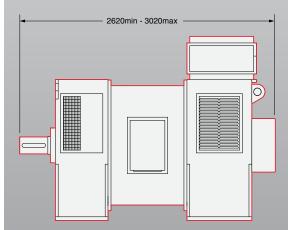
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	
Marine Auxiliary	
Oil & Gas	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	
Prime Movers	
Diesel Engine	
Gas Engine	
Gas Turbine	
Steam Turbine	



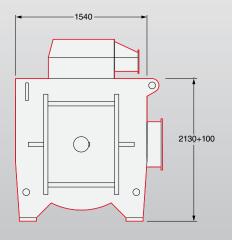
DIMENSIONS

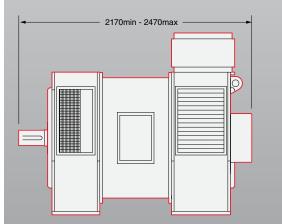






Drawings represent standard design All dimensions in millimetres (mm)





DSG 125		AvK	8
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	Н
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

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

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	
Steam Turbine	

Heaters

AvK°

DSG 144

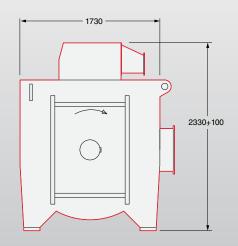
Model	DSG 144
Maximum continuous rating at 60Hz (kVA)	6,600
Specifications	
Voltage Range	690
Poles	10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
	(Sleeve Bearings)
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	Н
Excitation System	Auxiliary Winding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

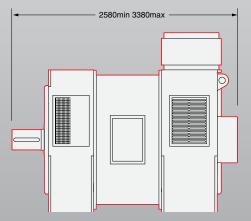
Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•
	_
Prime Movers	
Diesel Engine	
Gas Engine	•
Gas Turbine	



DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





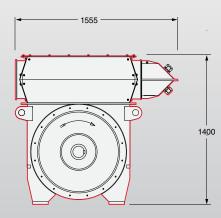
6,000 - 6,600 kVA

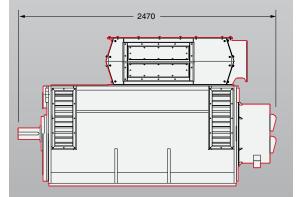
Steam Turbine



DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





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	•

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

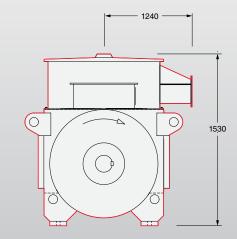
Specifications	
Voltage Range	3,300-11,000
Poles	4
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double
SAE Adaptors	1, 0, 00
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

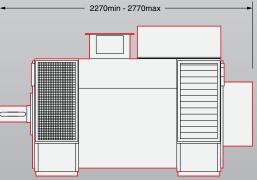
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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

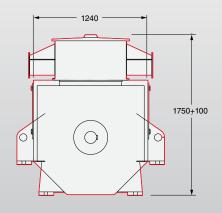


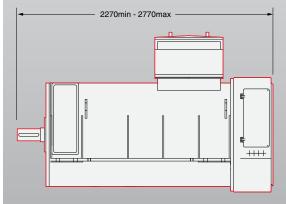




DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





DIG 130

AvK[®]

Model	DIG 130	
Maximum continuous rating at 50Hz (k)	/A) 3,850	
Maximum continuous rating at 60Hz (k)	VA) 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 wovers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•

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

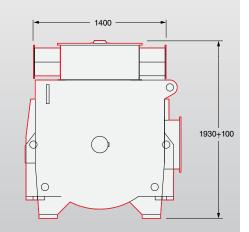
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

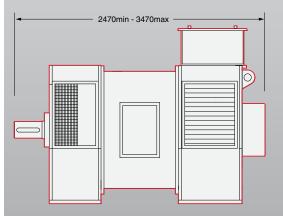
Designed

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

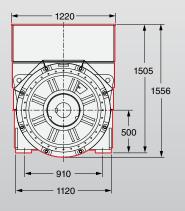


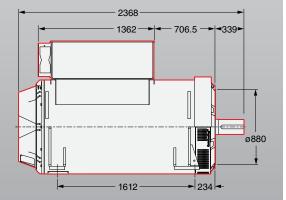




DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)







S9	S 1	FAMFORD	8
Model		S 9	
Maximum continuous rating at 50Hz	z (kVA)	4,500	
Maximum continuous rating at 60Hz	z (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	Н
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	

Prime Movers	
Diesel Engine	•
Gas Engine	•

High Voltage 2,150 - 5,000 kVA

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

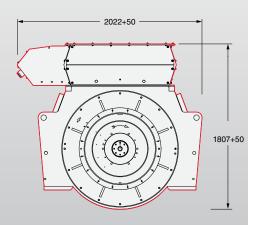
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•
Prime Movers	

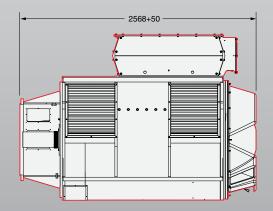
Prime Movers

Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•



DIMENSIONS

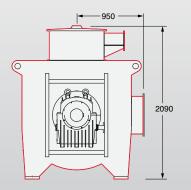


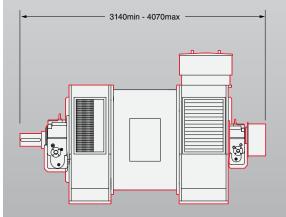




DIMENSIONS

Drawings represent standard design All dimensions in millimetres (mm)





DIG 150

AvK[®]

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	•

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

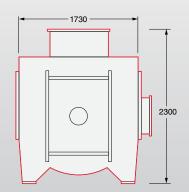
Optional Features Ingress Protection IP23 Air Filters Ingress Protection IP44/54 Totally enclosed Cooling options CACA/CACW Environmental protection Anti-condensation Heaters

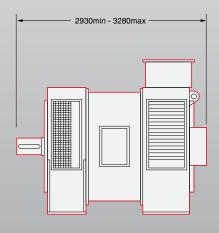
Designed For
Power Plant
Grid Code Compatible
Marine Propulsion
Oil & Gas
Combined Heat & Power
Continuous Power & Standby
Prime Movers
Diesel Engine

Prime wovers	
Diesel Engine	•
Gas Engine	•
Gas Turbine	•
Steam Turbine	•



DIMENSIONS





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 their 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 **NEWAGE, 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 up to 11,200 kVA.

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