# **NEWAGE® STAMFORD®** AVK®

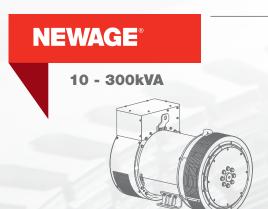
# **PowerPortfolio**

The ultimate alternator range



Powering the world with confidence since 1904

# The Ultimate Range



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.



#### **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:









IEC

#### **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

#### Diesei Lingine compa

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:

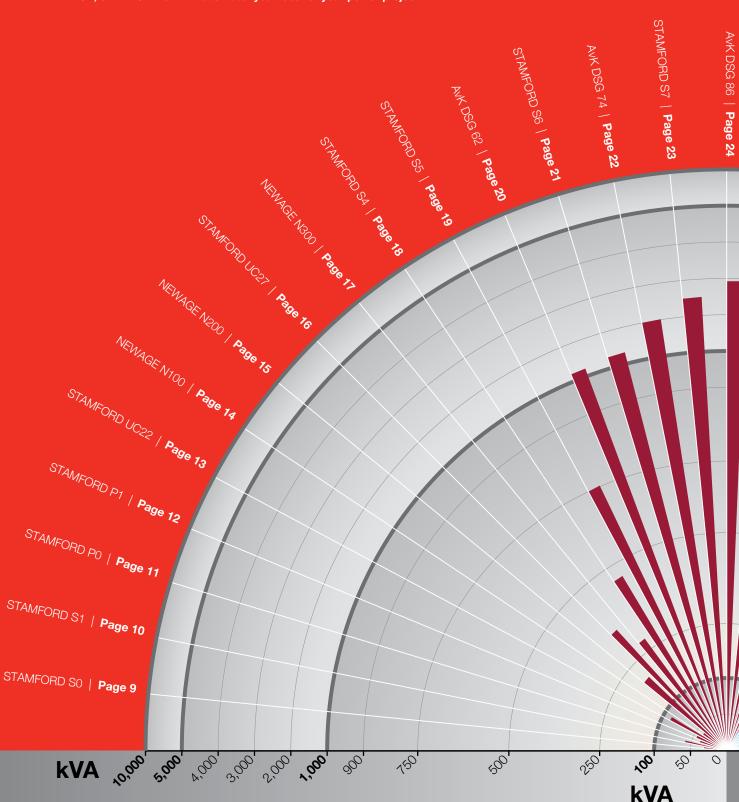


Compatible with Marine Classifications:



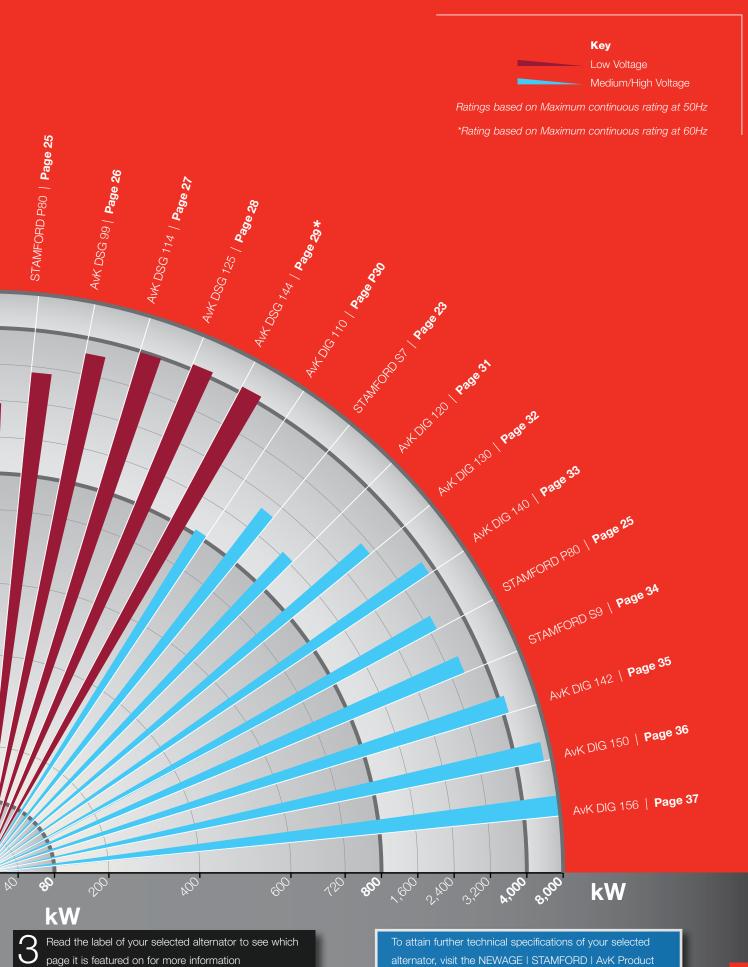
# Quick Alternator Selector

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



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

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



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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 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.



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, <a href="STAMFORD">STAMFORD</a> 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 I STAMFORD I 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



# **STAMFORD**°

**S**0

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

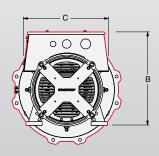
Designed For
Oil & Gas Auxiliary
Telecommunications
Mobile Construction
Combined Heat & Power
Critical Protection & UPS
Continuous Power & Standby

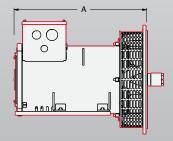
Prime Movers	
Diesel Engine	•
Gas Engine	





#### **DIMENSIONS**

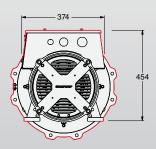


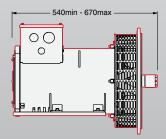


Model	A	В	С
S0L1	405-485	350	314
S0L2	495-545	405	345



Drawings represent standard design All dimensions in millimetres (mm)





#### **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	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

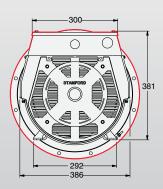
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

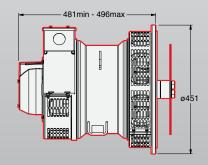
Designed For
Marine Auxiliary
Oil & Gas Auxiliary
Telecommunications
Mobile Construction
Combined Heat & Power
Critical Protection & UPS
Continuous Power & Standby

Prime Movers	
Diesel Engine	•
Gas Engine	



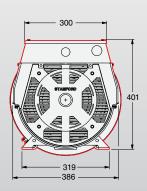
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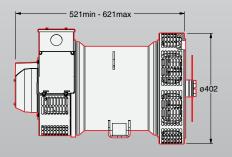






Drawings represent standard design All dimensions in millimetres (mm)





#### **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	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	

# **STAMFORD**°

# **UC22**

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

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

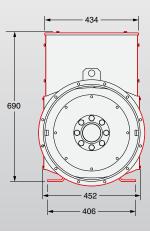
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

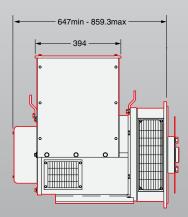
Designed For	
Grid Code Compatible	
Marine Auxiliary	
Oil & Gas Auxiliary	
Telecommunications	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	

Prime Movers	
Diesel Engine	•
Gas Engine	•



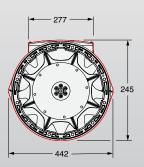
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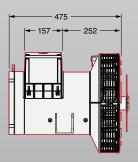






Drawings represent standard design All dimensions in millimetres (mm)





# 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

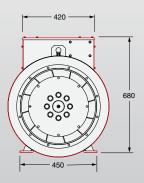
Optional Features	
Environmental protection	Anti-condensation Heaters

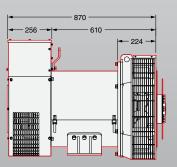
Designed For	
Oil & Gas Auxiliary	
Telecommunications	
Mobile Construction	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•



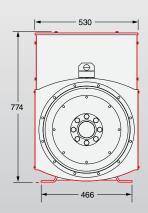
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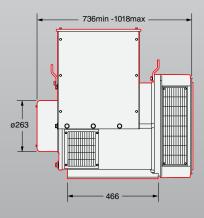






Drawings represent standard design All dimensions in millimetres (mm)





# **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	
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

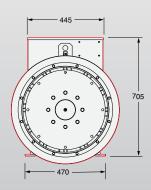
Optional Features	
Environmental protection	Anti-condensation Heaters

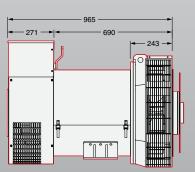
Designed For	
Oil & Gas Auxiliary	
Telecommunications	
Mobile Construction	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

Prime Movers	
Diesel Engine	•
Gas Engine	•



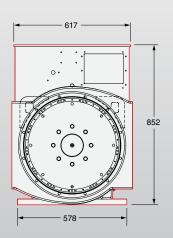
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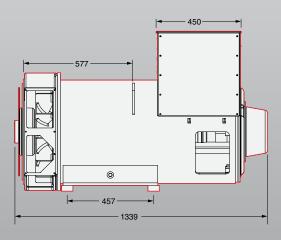






Drawings represent standard design All dimensions in millimetres (mm)







**S4** 

# **STAMFORD**°

Model	<b>S4</b>
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	•

# **STAMFORD**°

**S5** 

Model	<b>\$</b> 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

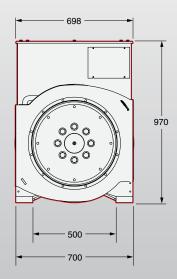
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	3 phase re-connectable
Voltage sensing	3-Phase sensing
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation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

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

Prime Movers	
Diesel Engine	•
Gas Engine	•



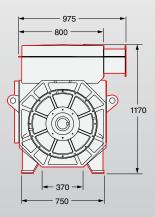
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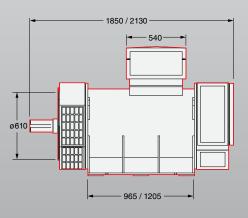






Drawings represent standard design All dimensions in millimetres (mm)





# **DSG 62**

# **AvK**<sup>®</sup>

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

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

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

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	•

# **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		

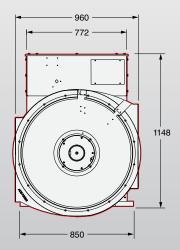
Designed For
Grid Code Compatible
Marine Auxiliary
Oil & Gas
Oil & Gas Auxiliary
Combined Heat & Power
Critical Protection & UPS
Continuous Power & Standby

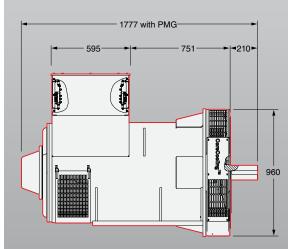
Prime Movers	
Diesel Engine	•
Gas Engine	•





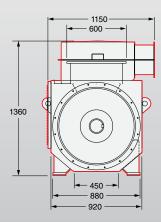
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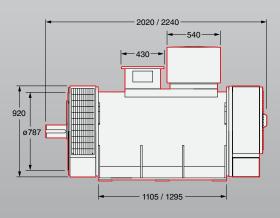






Drawings represent standard design All dimensions in millimetres (mm)





# **DSG 74**

# AvK®

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

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

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

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

Prime Movers	
Diesel Engine	•
Gas Engine	•

# **STAMFORD**®

**S7** 

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

0-690 4 • Wound	10,500 - 11,000
•	4
Wound	
	Form Wound
alogue	Digital
Phase	3 Phase
Single	Double
AE 0	None
6	4
-	Winding RTDs 2/phase
Н	Н
PMG	DECS100/PMG
P23	IP23
	Paralleling capability
	P23 ralleling pability

Optional Features			
Bearing Arrangement	Double	Single	
SAE Adaptors	SAE 00	SAE0, SAE 00	
Ingress Protection	IP44 Terminal Box	-	
	IP44	-	
Voltage Sensing	3 Phase sensing	-	
AVR	DECS150	-	
Temperature Monitoring	Winding RTDs	Bearing RTD	
	Thermistors		
Terminals	-	6 terminals, open starpoint	
Environmental Protection	Anti- Condensation Heater	Anti- Condensation Heater	
Foot options	Flexible Foot	-	

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

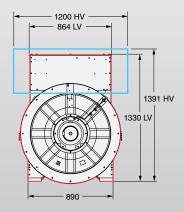
Prime Movers		
Diesel Engine	•	•
Gas Engine	•	•

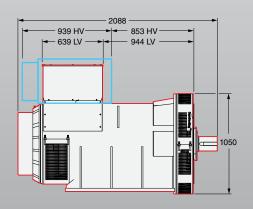


S7 LV

S7 HV

#### **DIMENSIONS**

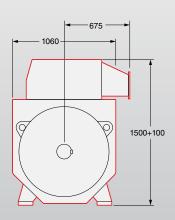


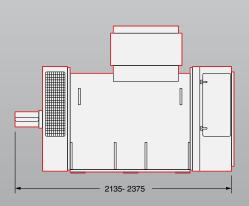






Drawings represent standard design All dimensions in millimetres (mm)





# **DSG** 86

# **AvK**°

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	

2,290- 5,080 kVA

# **STAMFORD**°

## **P80**

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

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

Optional Features	
Bearing Arrangement	Single*
Ingress Protection	IP23 Air Filters
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

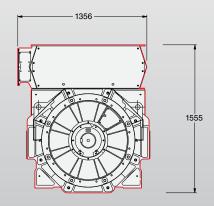
Designed For			
Power Plant	•	•	
Grid Code Compatible	•	•	
Marine Propulsion	•		
Marine Auxiliary	•		
Oil & Gas Auxliary	•		
Combined Heat & Power	•	•	
Critical Protection & UPS	•	•	
Continuous Power & Standby	•	•	

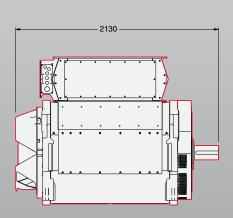
Prime Movers			
Diesel Engine	•	•	•
Gas Engine	•	•	•
Gas Turbine	•	•	•
Steam Turbine	•	•	•

<sup>\*</sup> Not for cores W, X, Y



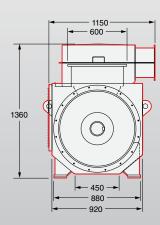
#### **DIMENSIONS**

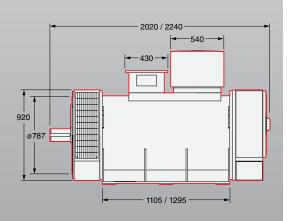






Drawings represent standard design All dimensions in millimetres (mm)





# **DSG** 99

# **AvK**<sup>®</sup>

Model	DSG 99
Maximum continuous rating at 50Hz (kVA)	4,700
Maximum continuous rating at 60Hz (kVA)	5,300

Specifications		
Voltage Range	400-690	
Poles	4, 6, 8, 10	
Technology	Bar Wound	
AVR	Digital	
Voltage sensing	3-Phase	
Bearing Arrangement	Double	
SAE Adaptors	0, 00	
Terminals	6	
Material Insulation Class	Н	
Excitation System	Auxiliary Winding	
Ingress Protection	IP23	
Temperature monitoring	Winding RTDs	
Connection with other machines	Paralleling capability	

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

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

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

# **AvK**<sup>®</sup>

# **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

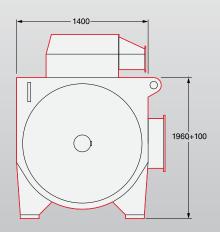
Optional Features		
Bearing Arrangement	Sleeve Bearings	
Ingress Protection	IP23 Air Filters	
Ingress Protection	IP44/54/55 Totally enclosed	
Cooling options	CACA/CACW	
Environmental protection	Anti-condensation Heaters	

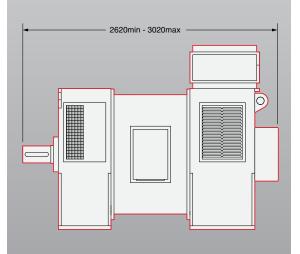
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	
Marine Auxiliary	
Oil & Gas	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	

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



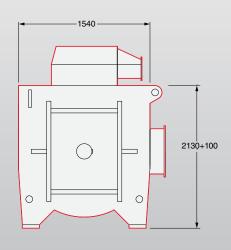
#### **DIMENSIONS**

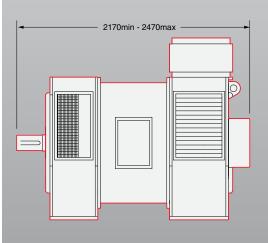






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# **DSG 125**

# **AvK**<sup>®</sup>

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

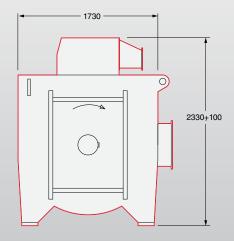
Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters

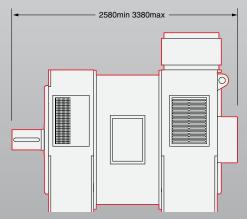
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	•
Marine Auxiliary	•
Oil & Gas	•
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	•

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



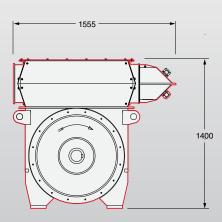
#### **DIMENSIONS**

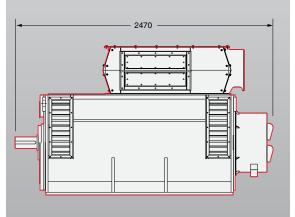






Drawings represent standard design All dimensions in millimetres (mm)





# **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	•

# **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

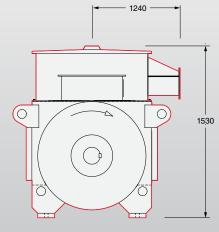
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	•



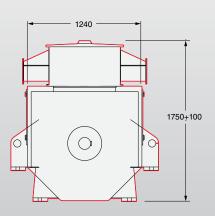
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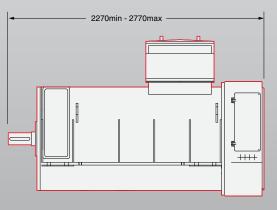






Drawings represent standard design All dimensions in millimetres (mm)





**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	•

# **AvK**®

# **DIG 140**

Model		DIG 140
Maximum continuous rating at 5	OHz (kVA)	4,600
Maximum continuous rating at 6	OHz (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

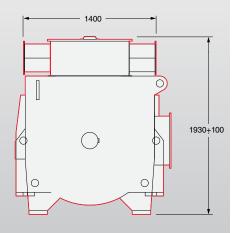
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

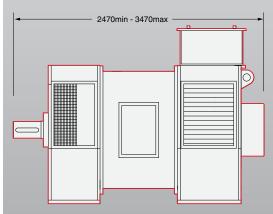
Designed For
Power Plant
Grid Code Compatible
Marine Propulsion
Oil & Gas
Combined Heat & Power
Continuous Power & Standby

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



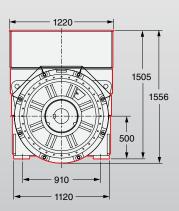
#### **DIMENSIONS**

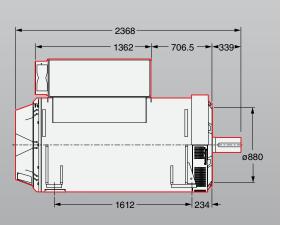






Drawings represent standard design All dimensions in millimetres (mm)







#### **S9**

# STAMFORD<sup>®</sup>

Model	<b>S</b> 9
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	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	
Diesel Engine	•
Gas Engine	•

# **AvK**®

# **DIG 142**

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

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

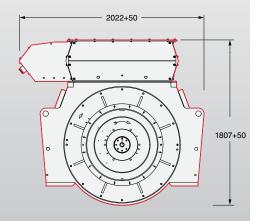
Optional Features	
Ingress Protection	IP23 Air Filters
Environmental protection	Anti-condensation Heaters

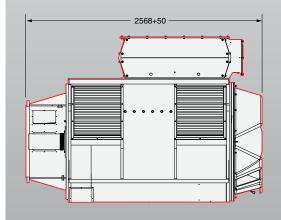
Designed For	
Power Plant	•
Grid Code Compatible	•
Marine Propulsion	
Oil & Gas	•
Combined Heat & Power	•
Continuous Power & Standby	•

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



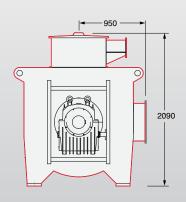
#### **DIMENSIONS**

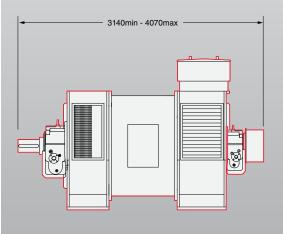






Drawings represent standard design All dimensions in millimetres (mm)





# **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

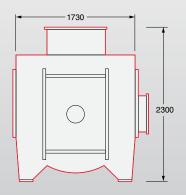
Optional Features	
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

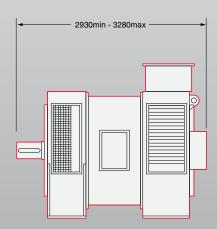
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	
Oil & Gas	
Combined Heat & Power	
Continuous Power & Standby	

Prime Movers	
Diesel Engine	•
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.

There for you™





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