STAMFORD®
AvK®

Power Portfolio

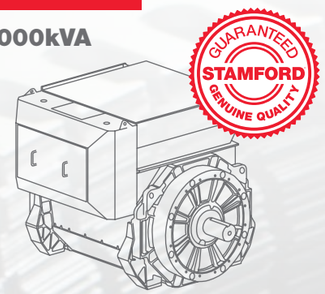
the ultimate alternator range

Cummins Generator Technologies | **Power Portfolio**

The Ultimate Range

STAMFORD®

4 – 5,000kVA



Utilising wire-wound technology and with an output extending from 4 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.

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

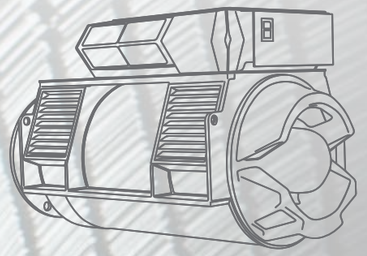
Designed For
Prime Power, Standby, Marine, Oil and Gas Auxiliary, Mining, Critical Protection and UPS, Combined Heat and Power, Telecoms, Mobile Construction

Classifications
Compatible with Industrial Standards:
CE | CSA | EN | IEC | NEMA | UL | VDE

Compatible with Marine Classifications:
ABS | BV | CCS | DNV | GL | KRS | LRS | NKK | RINA | SOLAS

AvK®

600 – 10,000kVA



With a robust bar wound configuration, AvK alternators are robustly engineered products up to 10,000kVA, specifically designed to meet the challenges of the most arduous applications and environments - be it in extraction of oil and gas, coal and minerals, critical marine power to tankers and container vessels. Our extensive experience and knowledge gathered from a large number of diverse alternator installations worldwide provides expertise in offering integrated design solutions that helps our customers compete more successfully throughout the world.

Prime Movers
Designed to couple with: Diesel Engine, Gas Engine, Steam Turbine, Gas Turbine
Diesel Engine compatibility: all brands and nodes

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

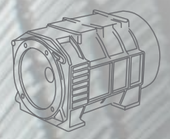
Designed For
Prime Power, Power Plants, Marine, Oil and Gas, Mining

Classifications
Compatible with Industrial Standards:
CE | EN | IEC | VDE

Compatible with Marine Classifications:
ABS | BV | CCS | DNV | GL | KRS | LRS

MARKON®

2 – 10kVA



MARKON alternators are renowned for their versatility, whilst retaining robustness and reliability. The range extends from 2 to 10kVA in brushless, capacitor excited and slip ring, AVR controlled designs. A variety of adaptors are available to ease coupling with petrol or diesel engines. They are suitable for refrigeration vehicle power packs, private marine power supplies, police and fire service incident vehicles and other mobile power applications.

Prime Movers
Designed to couple with: Diesel Engine, Petrol Engine
Engine compatibility: all brands

Common Features
Technology: Wire wound

Designed For
Auxiliary Power Unit, Recreational Vehicles, Recreational Marine, Mobile Construction

Classifications
Compatible with Industrial Standards:
CE | CSA | EN | IEC | UL | VDE

Cummins Generator Technologies | **Power Portfolio**

Quick Alternator Selector

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

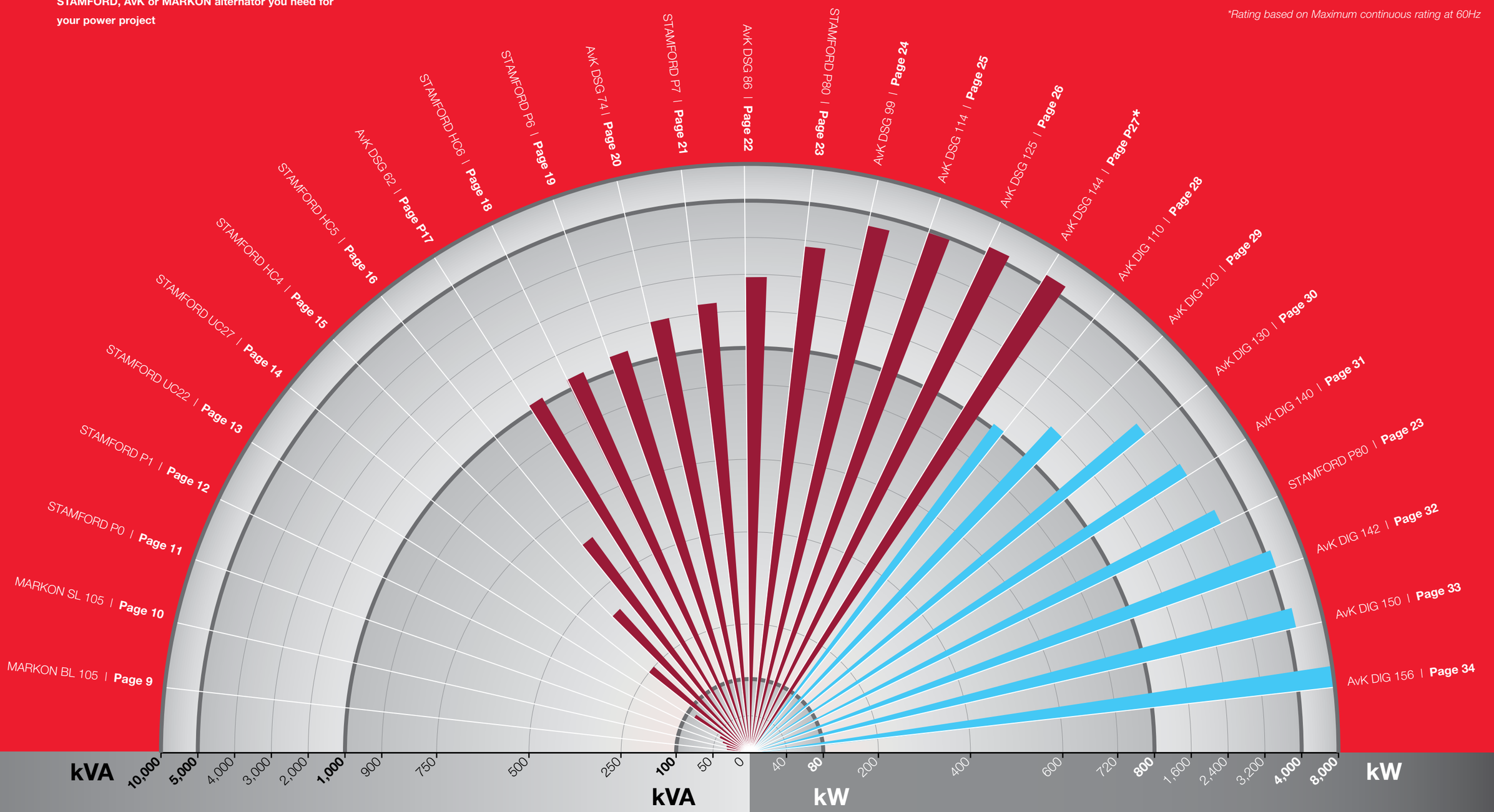
Key

Low Voltage

Medium/High Voltage

Ratings based on Maximum continuous rating at 50Hz

**Rating based on Maximum continuous rating at 60Hz*



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

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

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

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

Customer Support Excellence. Every™ Time.

Industry Leading Technical Support

It's what we do
From pre-sales application support all the way through to engineers servicing your STAMFORD, AvK and MARKON 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 contact
applications@cummins.com

Global Customer Service

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

What that means to you

- 24 hour response to service emergencies, 7 days a week
- Trained engineers available locally, speaking the local language
- Commissioning of alternators onsite
- Onsite bearing maintenance and bearing condition monitoring
- Onsite insulation integrity checks
- AVR and accessories set up onsite
- Extensive aftermarket distribution for genuine STAMFORD, AvK and MARKON parts

Vibration Analysis
Alternators coupled to diesel and gas engines are exposed to engine induced vibrations. We use design tools to analyse the impact of linear and torsional vibrations and work with the engine or generator set builders to validate the design of the generator set, as well as to solve end-user vibration issues. This technology is key in enabling customers to improve the innovation and reliability of new and current product designs.

Product Training
Product familiarity will ensure maximum productivity and optimum use of the alternator. Our Customer Service teams offer product 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 customer service contact
service-engineers@cumminsgeneratortechnologies.com

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

Accessories

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

Separate Voltage Trimmer
Provides remote fine adjustment of the alternator output voltage.

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

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

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

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

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

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

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

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

Excitation Circuit Breaker
Circuit breaker which is tripped by a signal from the MX321 AVR overvoltage detection circuit.

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

Cummins Generator Technologies | **Power Portfolio**

AVRs

Analogue
To control the output of a alternator, analogue AVRs allow users to manually control the output of alternators to meet their operating requirements. All analogue STAMFORD and AvK AVRs are encapsulated to provide protection against moisture, salt and sand in the atmosphere and mounted on anti-vibration mounts for mechanical protection from engine vibrations.

Digital
Digital AVRs offer a smart solution to control output of STAMFORD and AvK alternators, whether it is onsite or remotely. The ability to monitor real-time information means that digital AVRs can adjust the output of the alternator depending on the operating conditions, such as the temperature, as well as the application environment.

For ultimate control, operators can set pre-determined settings and user defined protection parameters. Furthermore, users can connect remotely to the AVR via a computer or portable device.

Digital AVRs also come with several accessories built in, such as a Power Factor Controller and Diode Failure Detector and they come as standard for all STAMFORD and AvK Grid Code Compatible alternators.

A Digital STAMFORD and AvK AVR, the DM110

The Right Technology

MARKON® BL105

Model	BL
Maximum continuous rating at 50Hz (kVA)	6.5
Maximum continuous rating at 60Hz (kVA)	7.5

Specifications	
Voltage Range	110-240
Poles	2
Technology	Wire Wound
Voltage sensing	1-Phase
Bearing Arrangement	Single
SAE Adaptors	J609
Terminals	4
Material Insulation Class	F
Excitation System	Self exciting, Brushless
Ingress Protection	IP23

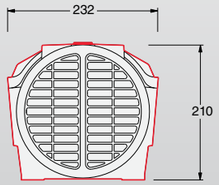
Optional Features	
Bearing Arrangement	Double

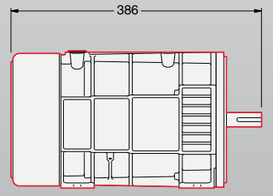
Designed For	
Marine Auxiliary	●
Oil & Gas Auxiliary	
Telecommunications	
Mobile Construction	●
Critical Protection & UPS	
Continuous Power & Standby	
Auxiliary Power Unit	●

Prime Movers	
Diesel Engine	●
Petrol Engine	●

DIMENSIONS

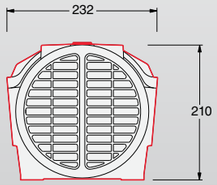
Drawings represent standard design
All dimensions in millimetres (mm)

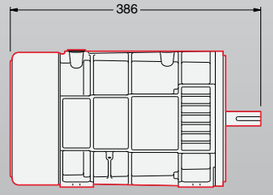




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





SL105 MARKON®

Model	SL
Maximum continuous rating at 50Hz (kVA)	7
Maximum continuous rating at 60Hz (kVA)	9.3

Specifications	
Voltage Range	110-240
Poles	2
Technology	Wire Wound
AVR	Analogue
Voltage sensing	1-Phase
Bearing Arrangement	Single
SAE Adaptors	J609
Terminals	4
Material Insulation Class	F
Excitation System	Self exciting, Slipring
Ingress Protection	IP23

Optional Features	
Bearing Arrangement	Double

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

Prime Movers	
Diesel Engine	●
Petrol Engine	●

STAMFORD® P0

Model	P0
Maximum continuous rating at 50Hz (kVA)	20
Maximum continuous rating at 60Hz (kVA)	22

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

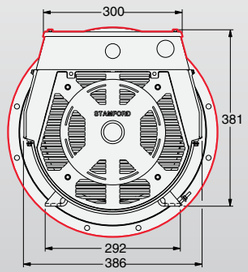
Optional Features	
Excitation System	EBS
Bearing Arrangement	Double
Output configurations	1 phase re-connectable
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

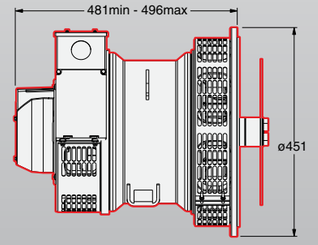
Designed For	
Marine Auxiliary	●
Oil & Gas Auxiliary	●
Telecommunications	●
Mobile Construction	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

Prime Movers	
Diesel Engine	●
Gas Engine	

DIMENSIONS

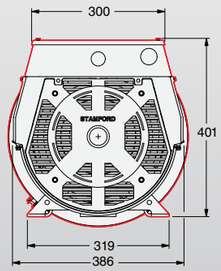
Drawings represent standard design
All dimensions in millimetres (mm)

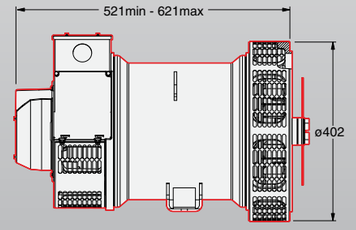




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





P1 STAMFORD®

Model	P1
Maximum continuous rating at 50Hz (kVA)	45
Maximum continuous rating at 60Hz (kVA)	55

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

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

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

Prime Movers	
Diesel Engine	●
Gas Engine	

STAMFORD® UC22

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

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

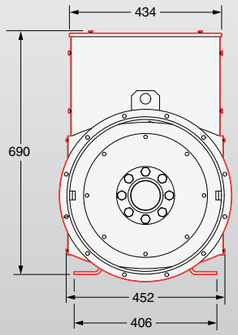
Optional Features	
Excitation System	PMG
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Output configurations	1 phase re-connectable
Voltage sensing	3-Phase sensing
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

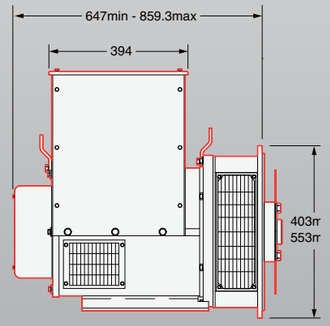
Designed For	
Grid Code Compatible	●
Marine Auxiliary	●
Oil & Gas Auxiliary	●
Telecommunications	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

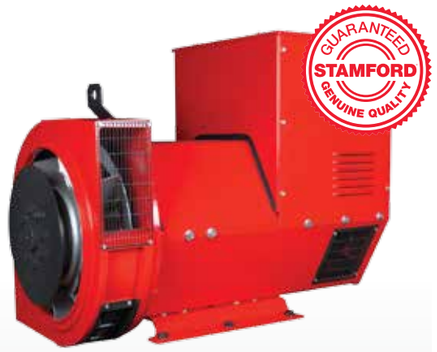
Prime Movers	
Diesel Engine	●
Gas Engine	●

DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)

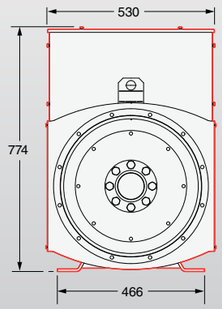


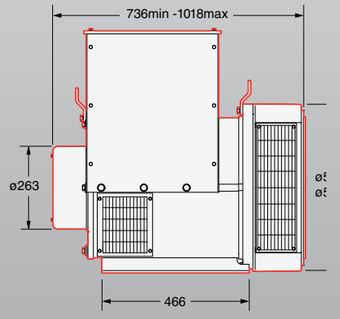




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





UC27 STAMFORD®

Model	UC27
Maximum continuous rating at 50Hz (kVA)	250
Maximum continuous rating at 60Hz (kVA)	312.5

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

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

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

Prime Movers	
Diesel Engine	●
Gas Engine	●

STAMFORD® HC4

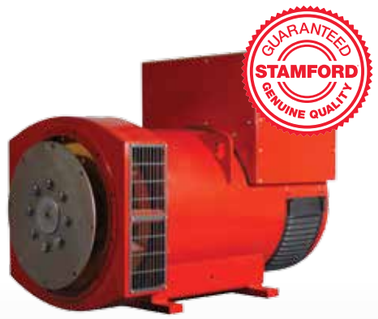
Model	HC4
Maximum continuous rating at 50Hz (kVA)	400
Maximum continuous rating at 60Hz (kVA)	500

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

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

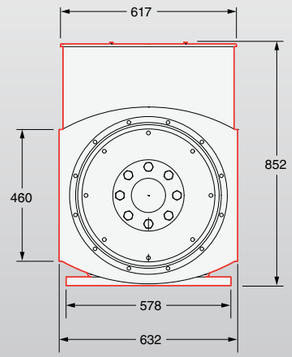
Designed For	
Grid Code Compatible	●
Marine Auxiliary	●
Oil & Gas Auxiliary	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

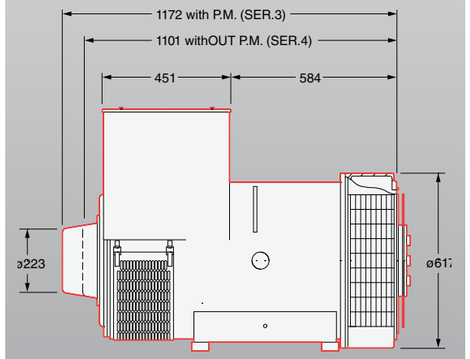
Prime Movers	
Diesel Engine	●
Gas Engine	●

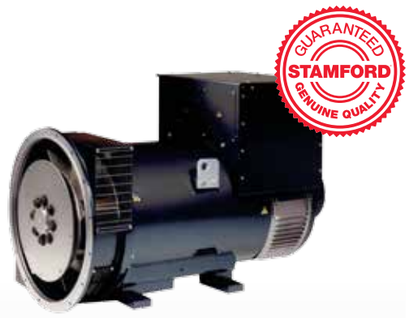


DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)

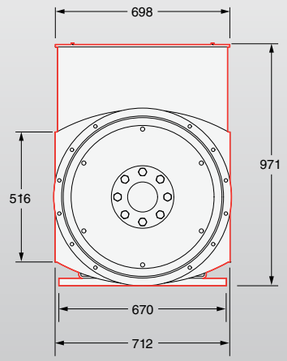


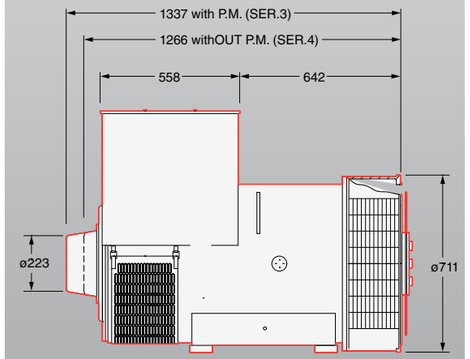




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





HC5 STAMFORD®

Model	HC5
Maximum continuous rating at 50Hz (kVA)	670
Maximum continuous rating at 60Hz (kVA)	825

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

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

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

Prime Movers	
Diesel Engine	●
Gas Engine	●

AvK® DSG 62

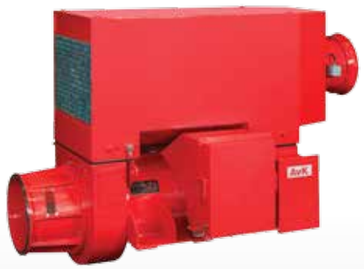
Model	DSG 62
Maximum continuous rating at 50Hz (kVA)	1,100
Maximum continuous rating at 60Hz (kVA)	1,320

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

Optional Features	
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

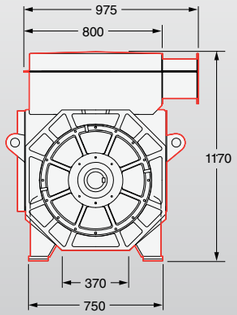
Designed For	
Grid Code Compatible	
Marine Auxiliary	●
Oil & Gas	●
Oil & Gas Auxiliary	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

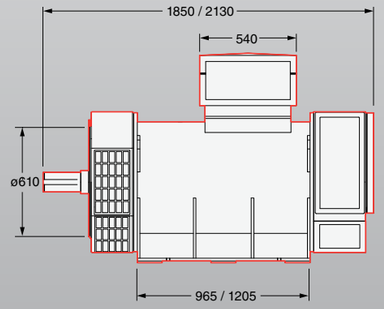
Prime Movers	
Diesel Engine	●
Gas Engine	●

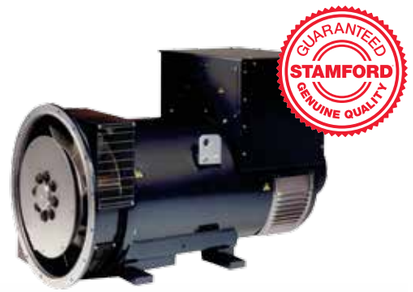


DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)

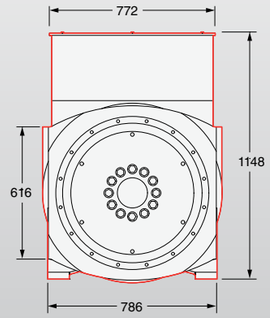


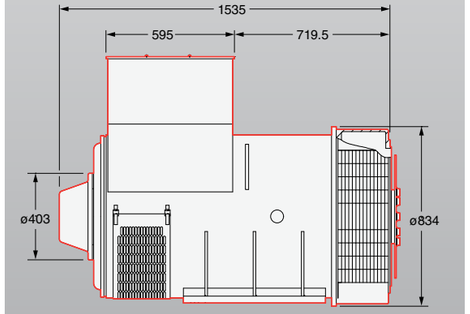




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





HC6 STAMFORD®

Model	HC6
Maximum continuous rating at 50Hz (kVA)	1,135
Maximum continuous rating at 60Hz (kVA)	1,438

Specifications	
Voltage Range	380-690
Poles	4, 6
Technology	Wire Wound
AVR	Analogue
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	00, 0, 0.5
Terminals	6
Material Insulation Class	H
Excitation System	PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44 Air Filters
Output configurations	3 phase re-connectable
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
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® P6

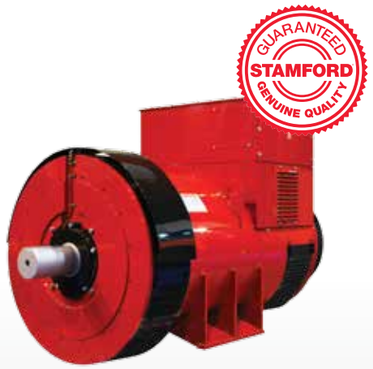
Model	P6
Maximum continuous rating at 50Hz (kVA)	1,250
Maximum continuous rating at 60Hz (kVA)	1,513

Specifications	
Voltage Range	380-480
Poles	4
Technology	Wire Wound
AVR	Analogue
Voltage sensing	3-Phase
Bearing Arrangement	Single
SAE Adaptors	0, 00, 18, 21, 24
Terminals	12
Material Insulation Class	H
Excitation System	PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Double
Output configurations	4 phase re-connectable
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

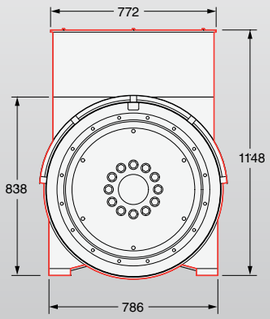
Designed For	
Grid Code Compatible	
Marine Auxiliary	
Oil & Gas	
Oil & Gas Auxiliary	
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	●

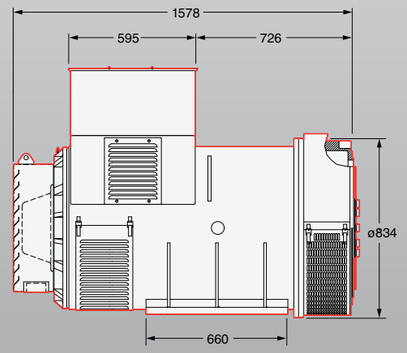
Prime Movers	
Diesel Engine	●
Gas Engine	●



DIMENSIONS

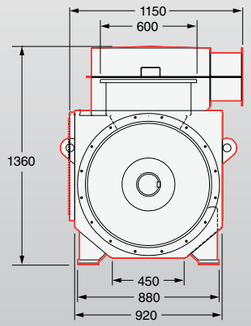
Drawings represent standard design
All dimensions in millimetres (mm)

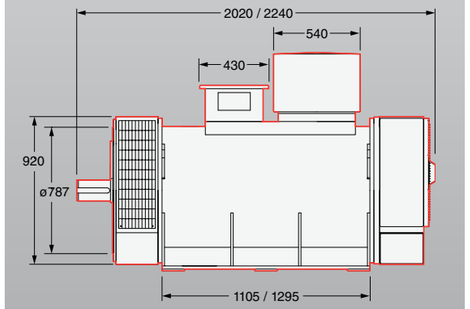




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





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

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

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

Prime Movers	
Diesel Engine	●
Gas Engine	●

STAMFORD® P7

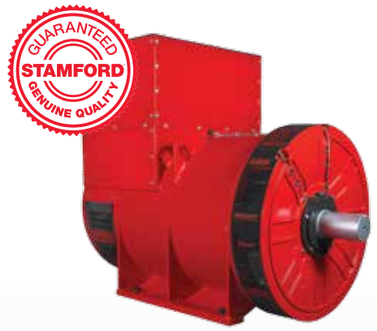
Model	P7
Maximum continuous rating at 50Hz (kVA)	2,200
Maximum continuous rating at 60Hz (kVA)	2,750

Standard Features	
Voltage Range	380-690
Poles	4, 6
Technology	Wire Wound
AVR	Analogue
Voltage sensing	2-Phase
Bearing Arrangement	Single
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	H
Excitation System	PMG
Ingress Protection	IP23
Connection with other machines	Paralleling capability

Optional Features	
Bearing Arrangement	Double
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44 Air Filters
Voltage sensing	3-Phase sensing
AVR	Digital
Temperature monitoring	Winding RTDs
Temperature monitoring	Thermistors
Environmental protection	Anti-condensation Heaters

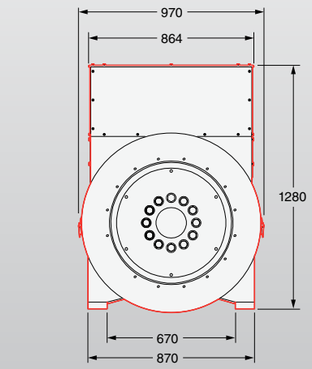
Designed For	
Power Plant	●
Grid Code Compatible	●
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	
Oil & Gas Auxiliary	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

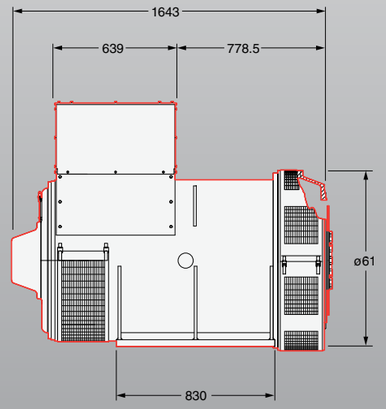
Prime Movers	
Diesel Engine	●
Gas Engine	●
Gas Turbine	●
Steam Turbine	●



DIMENSIONS

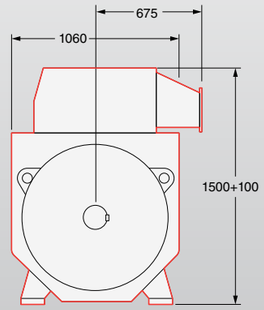
Drawings represent standard design
All dimensions in millimetres (mm)

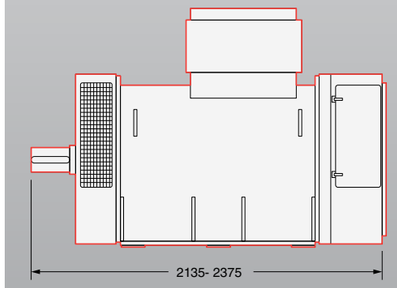




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





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

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

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

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

STAMFORD® P80

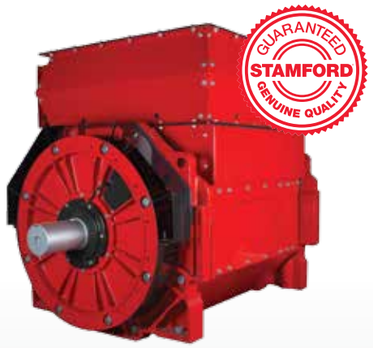
Model	P80 LV	P80 MV	P80 HV
Maximum continuous rating at 50Hz (kVA)	3,900	4,200	3,800
Maximum continuous rating at 60Hz (kVA)	4,400	5,100	4,700

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

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

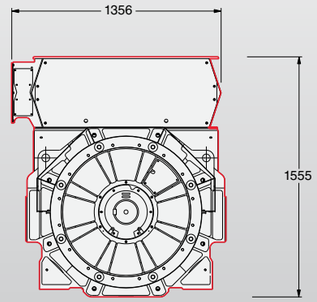
Designed For			
Power Plant	●	●	●
Grid Code Compatible	●	●	●
Marine Propulsion			
Marine Auxiliary			
Oil & Gas			
Combined Heat & Power	●	●	●
Critical Protection & UPS	●	●	●
Continuous Power & Standby	●	●	●

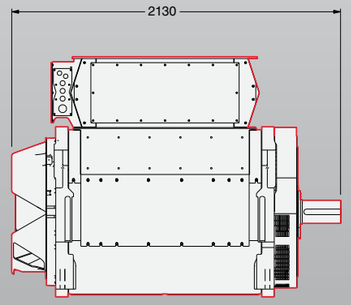
Prime Movers			
Diesel Engine	●	●	●
Gas Engine	●	●	●
Gas Turbine	●	●	●
Steam Turbine	●	●	●



DIMENSIONS

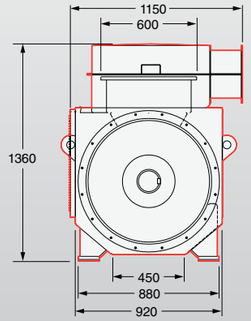
Drawings represent standard design
All dimensions in millimetres (mm)

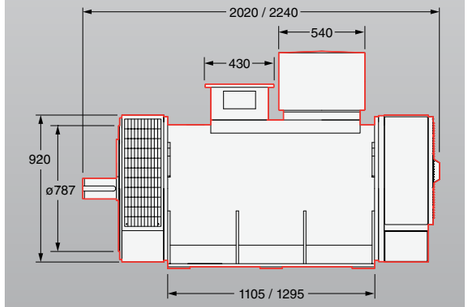




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





DSG 99 AvK®

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

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

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

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

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

AvK®

DSG 114

Model	DSG 114
Maximum continuous rating at 50Hz (kVA)	5,000
Maximum continuous rating at 60Hz (kVA)	5,940

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

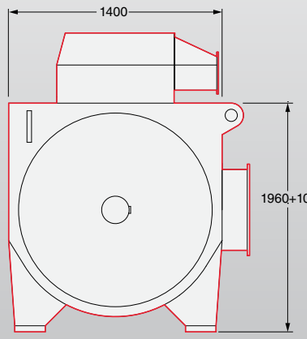
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

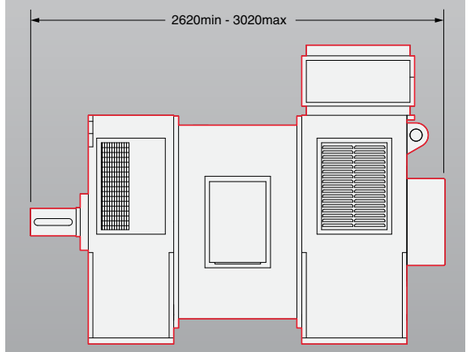
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	●
Critical Protection & UPS	●
Continuous Power & Standby	●

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

DIMENSIONS

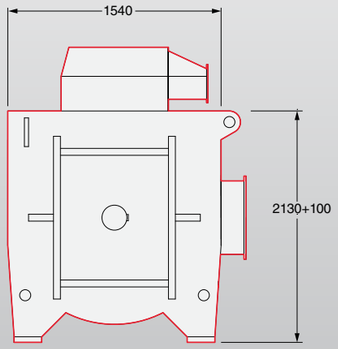
Drawings represent standard design
All dimensions in millimetres (mm)

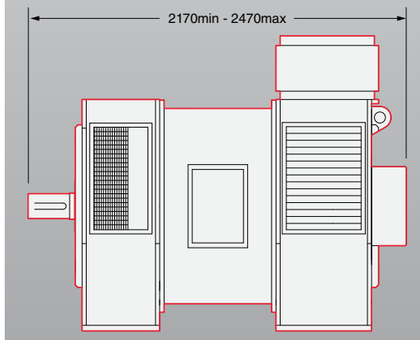




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





DSG 125

AvK®

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

Specifications	
Voltage Range	690
Poles	8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	H
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

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

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

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

AvK® DSG 144

Model	DSG 144
Maximum continuous rating at 60Hz (kVA)	6,600

Specifications	
Voltage Range	690
Poles	10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
SAE Adaptors	0, 00
Terminals	6
Material Insulation Class	H
Excitation System	Auxiliary Winding
Ingress Protection	IP44
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

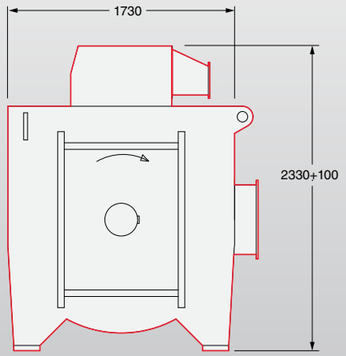
Optional Features	
Ingress Protection	IP54/55 Totally enclosed
Cooling options	CACW
Environmental protection	Anti-condensation Heaters

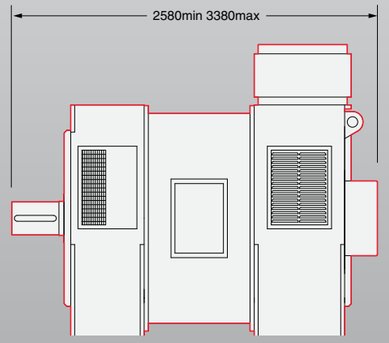
Designed For	
Power Plant	
Grid Code Compatible	
Marine Propulsion	●
Marine Auxiliary	●
Oil & Gas	●
Combined Heat & Power	
Critical Protection & UPS	
Continuous Power & Standby	●

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

DIMENSIONS

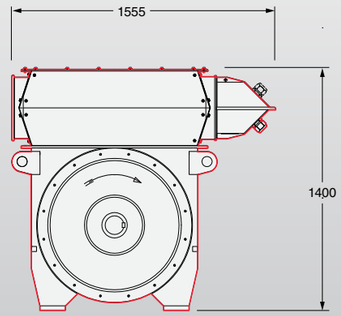
Drawings represent standard design
All dimensions in millimetres (mm)

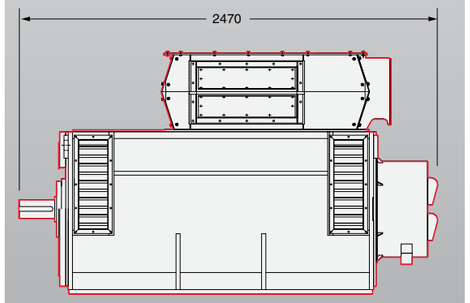




DIMENSIONS

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

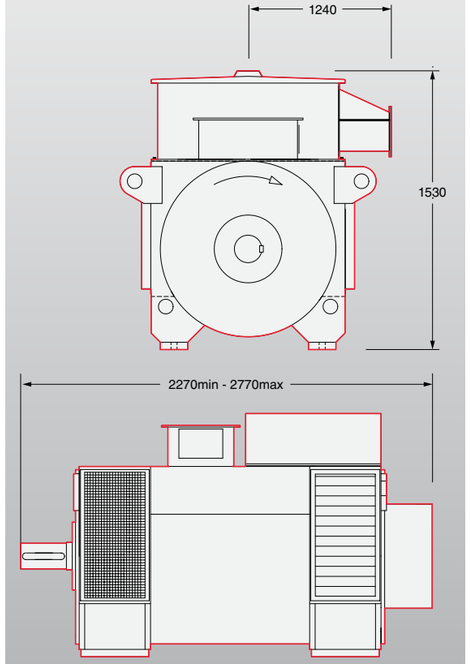
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54/55 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

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	●

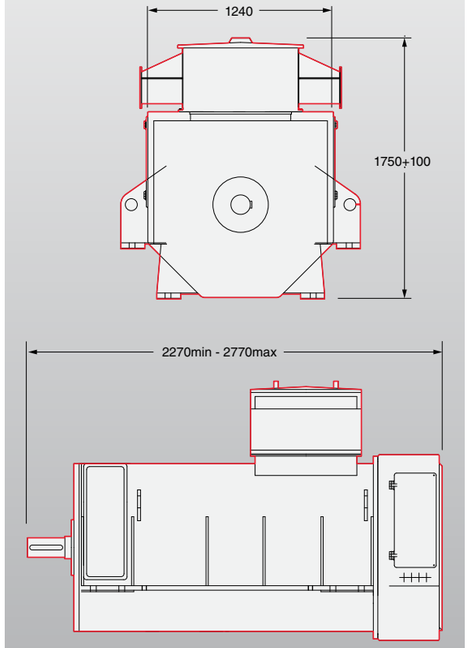
DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)



DIMENSIONS

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 50Hz (kVA)	4,600
Maximum continuous rating at 60Hz (kVA)	5,300

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

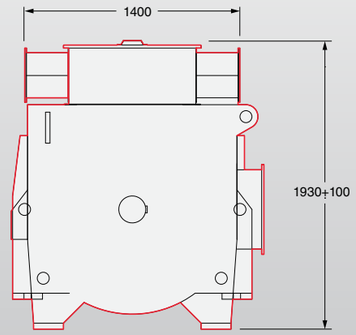
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

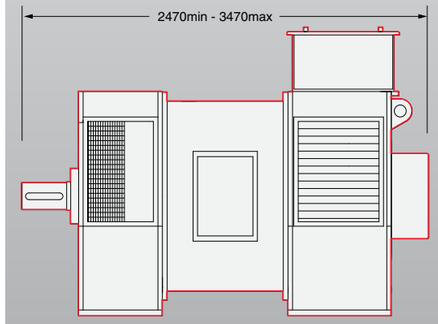
Designed For	
Power Plant	●
Grid Code Compatible	
Marine Propulsion	●
Oil & Gas	●
Combined Heat & Power	●
Continuous Power & Standby	●

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

DIMENSIONS

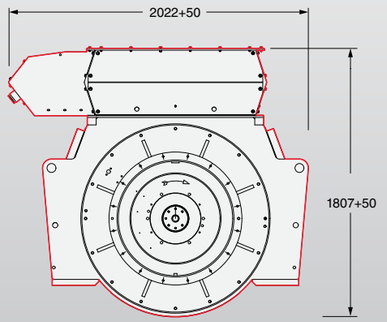
Drawings represent standard design
All dimensions in millimetres (mm)

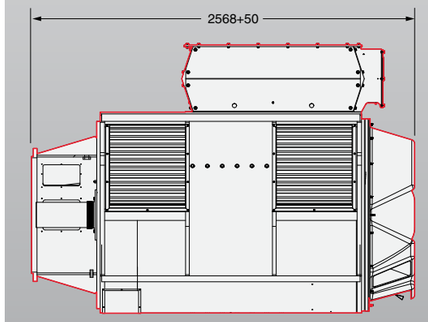




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





DIG 142

AvK®

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

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

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

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

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

Cummins Generator Technologies | **Power Portfolio**

High Voltage
1,000 - 6,000 kVA

AvK® DIG 150

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

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

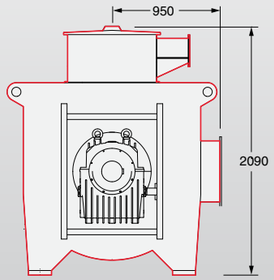
Optional Features	
Bearing Arrangement	Sleeve Bearings
Ingress Protection	IP23 Air Filters
Ingress Protection	IP44/54 Totally enclosed
Cooling options	CACA/CACW
Environmental protection	Anti-condensation Heaters

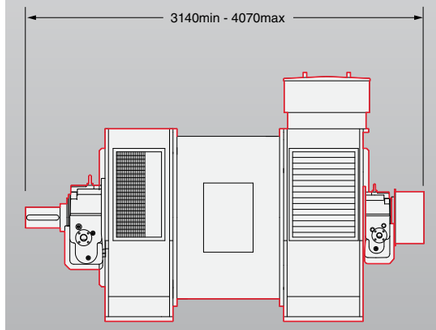
Designed For	
Power Plant	●
Grid Code Compatible	●
Marine Propulsion	●
Oil & Gas	●
Combined Heat & Power	●
Continuous Power & Standby	●

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

DIMENSIONS

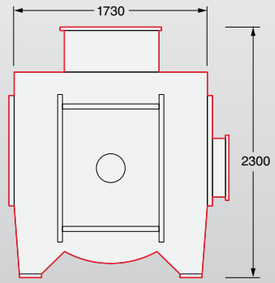
Drawings represent standard design
All dimensions in millimetres (mm)

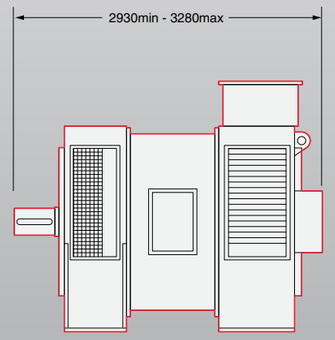




DIMENSIONS

Drawings represent standard design
All dimensions in millimetres (mm)





DIG 156 AvK®

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

Specifications	
Voltage Range	3,300-13,800
Poles	4, 6, 8, 10
Technology	Bar Wound
AVR	Digital
Voltage sensing	3-Phase
Bearing Arrangement	Double (Sleeve Bearings)
Terminals	6
Material Insulation Class	F
Excitation System	Auxiliary Winding
Ingress Protection	IP23
Temperature monitoring	Winding RTDs
Connection with other machines	Paralleling capability

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

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

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

Cummins Generator Technologies | **Power Portfolio**

Delivering the Right Technology

to our customers globally for over 100 years

EST. 1904

One Global Standard

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

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

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

Cummins Generator Technologies | **Power Portfolio**

Our Promise

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

Cummins Generator Technologies manufactures the world's broadest range of alternators from 2 to 10,000 kVA.

There for you™

Follow us @stamfordavk

STAMFORD | AvK Alternators

youtube.com/stamfordavk

For Applications Support:
applications@cummins.com

For Customer Service:
service-engineers@cumminsgeneratortechnologies.com

For general enquiries:
info@cumminsgeneratortechnologies.com

Part No. PG_PP_P_EN_GS_Rev.02.0

Cummins Generator Technologies