STAMFORD®
AvK®

Alternators for Oil and Gas Applications

The Right Technology

Engineered to last

We know that the operating demands placed on a generating set used in the oil and gas industry are especially high - not least when it comes to robustness and durability. That's why the quality of every STAMFORD and AvK alternator is based on thousands of hours of product development and endurance testing.

Built to withstand the worst. In all conditions

Cummins Generator Technologies' STAMFORD and AvK products are designed, engineered and built to withstand the harshest, most extreme operating conditions in the world, whether they're working on rigs down to -20°C in Siberia or in Saudi Arabia where temperatures can reach as high as +54°C.

You'll find our alternators equally at home in dusty desert conditions or on offshore platforms where we provide total environmental protection, delivering the reliability and durability demanded by operators. Whatever the conditions, wherever you are, we'll provide you with power.

The journey to increased efficiency

The first step towards delivering on our Power Promise begins with our Customer Engineering team. Their job is to make sure that the alternator you buy is 100% aligned to your requirements, and will maximise your operating efficiency. Our Customer Engineering team's unrivalled product knowledge, operating experience and electrical-engineering expertise is brought to bear from the minute we receive the initial customer contact. The team's job is to rapidly analyse and fully understand the power generation application, proposing the right generator to meet your performance criteria and specification.

At Cummins Generator Technologies our business is to provide well-engineered products, specifically focussed on each customer's needs. Working together, we'll make sure you're provided with the perfect alternator to make you and your customer more efficient.

Onshore Oil & Gas Stationary Rig
Case Study

Bentec

Where:

Siberia, Russia

Specified:

16 x AvK DSG 86 alternators

Purpose:

16 AvK alternators, suitable for operation in the harsh environmental conditions found in Siberia, are driven by 16 cylinder Cummins engines to generate 25MW power for an Onshore Oil & Gas Stationary Rig

Land Based Drilling Power Modules

Whether drilling for oil and gas in the arctic-like conditions of Siberia or in the Rocky Mountains of North America, our durable bar wound alternators are designed to supply power where you need it.

Proven 4, 6 and 8 pole AvK alternators will help provide complete power to the entire site, including drilling equipment, stationary rig, lighting, control systems, top drive, draw works and mud pumps.

AvK alternators from Cummins Generator Technologies are designed and robustly built to meet the tough demands that onshore drilling requires. For drilling applications, AvK alternators are supplied with a fully-taped insulation system and dust and water spray inlet filtration.

With features like IP23 enclosure protection as standard, vacuum pressure impregnation and regreasable anti-friction bearings, you can be sure that AvK DSG 86 and DSG 99 alternators are the clear choice to excel in your land based drilling module.

Low voltage Continuous Ratings			50Hz	60Hz
Power Range	DSG 86	kVA	2990	3408
		kW	2392	2726
	DSG 99	kVA	4700	5300
		kW	3760	4240
Voltage Range	400 – 690V			
Speed	1,000 – 1,800rpm			
Enclosure	IP23 with water droplet capture filters on air inlet			
Technology	Bar wound			
Construction	IMB20 Double bearing as standard Single bearing available as an option			
Winding	Fully taped bar (form) wound to increase robustness			

Drilling Power Modules
Case Study

SST Energy Corporation

Where:

Rocky Mountain region of the United States

Specified:

Cummins QSK50 Drilling Power Modules with AvK DSG 86 alternators

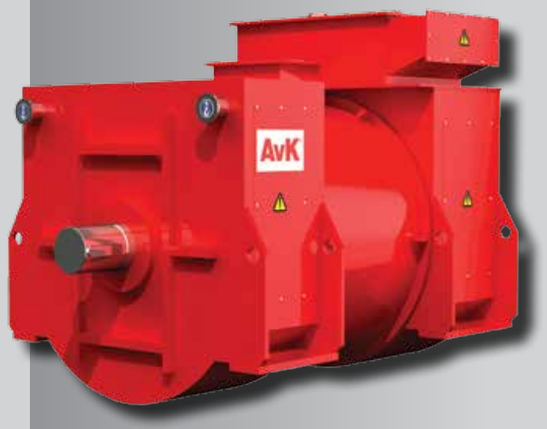
Purpose:

To provide power for the entire site, including lighting, drilling equipment and control systems while operating up to 7,500 hours a year per engine

Offshore Drilling Platforms

The extensive power demands of Offshore Drilling Platforms are no problem for our purpose built, bespoke alternators. Designed for thriving in harsh environments, these AvK alternators will provide reliable power to all aspects of offshore platforms, whether it be drilling equipment, the platform elevating system, onboard cranes, hoisting gear, mud-pumps or living quarters.

For particularly challenging offshore environments, AvK alternators can be fitted with water entrapment filters to add further protection against unwanted moisture and spray.



Low voltage Continuous Ratings		50Hz	60Hz
Power Range	DSG 114 kVA	5000	5940
	DSG 114 kW	4000	4752
Voltage Range	400 – 690V		

Medium/High voltage Continuous Ratings		50Hz	60Hz
Power Range	DIG 110 kVA	1080	1300
	DIG 110 kW	864	1040
	DIG 120 kVA	2050	2600
	DIG 120 kW	1640	2080
	DIG 130 kVA	3850	4000
	DIG 130 kW	3080	3200
	DIG 140 kVA	4600	5300
	DIG 140 kW	3680	4240
	DIG 150 kVA	7400	8500
	DIG 150 kW	5920	6800
	DIG 156 kVA	10800	11200
	DIG 156 kW	8640	8960
Voltage Range	3,300 – 13,800V		
Speed	1,000 – 1,800rpm		
Enclosure	IP23 with water droplet capture filters on air inlet		
Technology	Bar wound		
Construction	IMB20 Double bearing as standard Single bearing available as an option		
Winding	Fully taped bar (form) wound to increase robustness		

Offshore Support Vessels

When it comes to offshore oil and gas exploration, time really is money. That's why Cummins Generator Technologies understand the importance of supplying the right alternator to your offshore support vessel as quickly as possible, wherever you are in the world.

Designed with the right technology, AvK alternators are robustly engineered to ensure OSVs run with a source of reliable power. The AvK DSG 125 and DSG 144 are designed and built to IP44 with a water cooler fitted as standard, maintaining a suitable operating temperature for dependable power in challenging offshore conditions.

	STAMFORD				AvK			
	Low voltage Continuous Ratings		50Hz	60Hz	Low voltage Continuous Ratings		50Hz	60Hz
Power Range	PM7	kVA	2200	2750	DSG 125	kVA	7000	8500
	PM7	kW	1760	2200	DSG 125	kW	5600	6800
					DSG 144	kVA	-	6300
					DSG 144	kW	-	5040
Voltage Range	380 – 690V							
Speed	1,500 – 1,800rpm				720 – 900rpm			
Enclosure	IP23 as standard				IP44 with water cooler as standard IP54 and 55 as options			
Technology	Bar wound				Wire wound			
Construction	Double bearing as standard							
Winding	Wire (random) wound with 2/3rd pitch for flexibility of different loads				Fully taped bar (form) wound to increase robustness			

Offshore Support Vessel
Case Study

Fletcher Shipping

Where:

Peterhead, Scotland

Specified:

1 x STAMFORD PM7 alternator

Purpose:

Replacement marine certified alternator required immediately due to the failure of a non-STAMFORD machine onboard the offshore support vessel, the FS Aquarius.

Auxiliary Power

Where oil and gas projects require auxiliary and hotel power, STAMFORD and AvK alternators provide the perfect solution. Our proven portfolio of low voltage STAMFORD alternators range from 4 to over 2,000 kVA.

Regularly specified because of its superior build quality and solid reliability in all environmental conditiions, the STAMFORD and AvK brands are recognised the world over for being the premium choice of alternators.

We understand that unscheduled downtime is not an option. That's why our alternators offer the dependability and critical protection needed for your oil and gas auxiliary operations.

	STAMFORD				AvK			
	Low voltage Continuous Ratings		50Hz	60Hz	Low voltage Continuous Ratings		50Hz	60Hz
Power Range	P0	kVA	20	22	DSG 62	kVA	1100	1320
		kW	16	18		kW	880	1056
	P1	kVA	45	55	DSG 74	kVA	2000	2400
		kW	36	44		kW	1600	1920
	UC22	kVA	85	103				
		kW	68	82				
	UC27	kVA	250	312				
		kW	200	250				
	HC4	kVA	400	500				
		kW	320	400				
	HC5	kVA	670	825				
		kW	536	660				
	HC6	kVA	1135	1438				
		kW	908	1150				
	P7	kVA	2200	2750				
		kW	1760	2200				
Voltage Range	380 – 690V				400 – 690V			
Speed	1,500 – 1,800rpm				1,000 – 1,800rpm			
Enclosure	IP23 as standard				IP23 as standard IP54 and 55 as options			
Technology	Wire wound				Bar wound			
Construction	Single bearing as standard				Double bearing as standard Sleeve bearing as option			
Winding	Wire (random) wound with 2/3rd pitch for flexibility of different loads				Fully taped bar (form) wound to increase robustness			

Onshore Oil & Gas Stationary Rig
Case Study

PSM – Industrial Power Units

Where:

Yugorsk, Russian Federation

Specified:

20 x STAMFORD P1 alternators

Purpose:

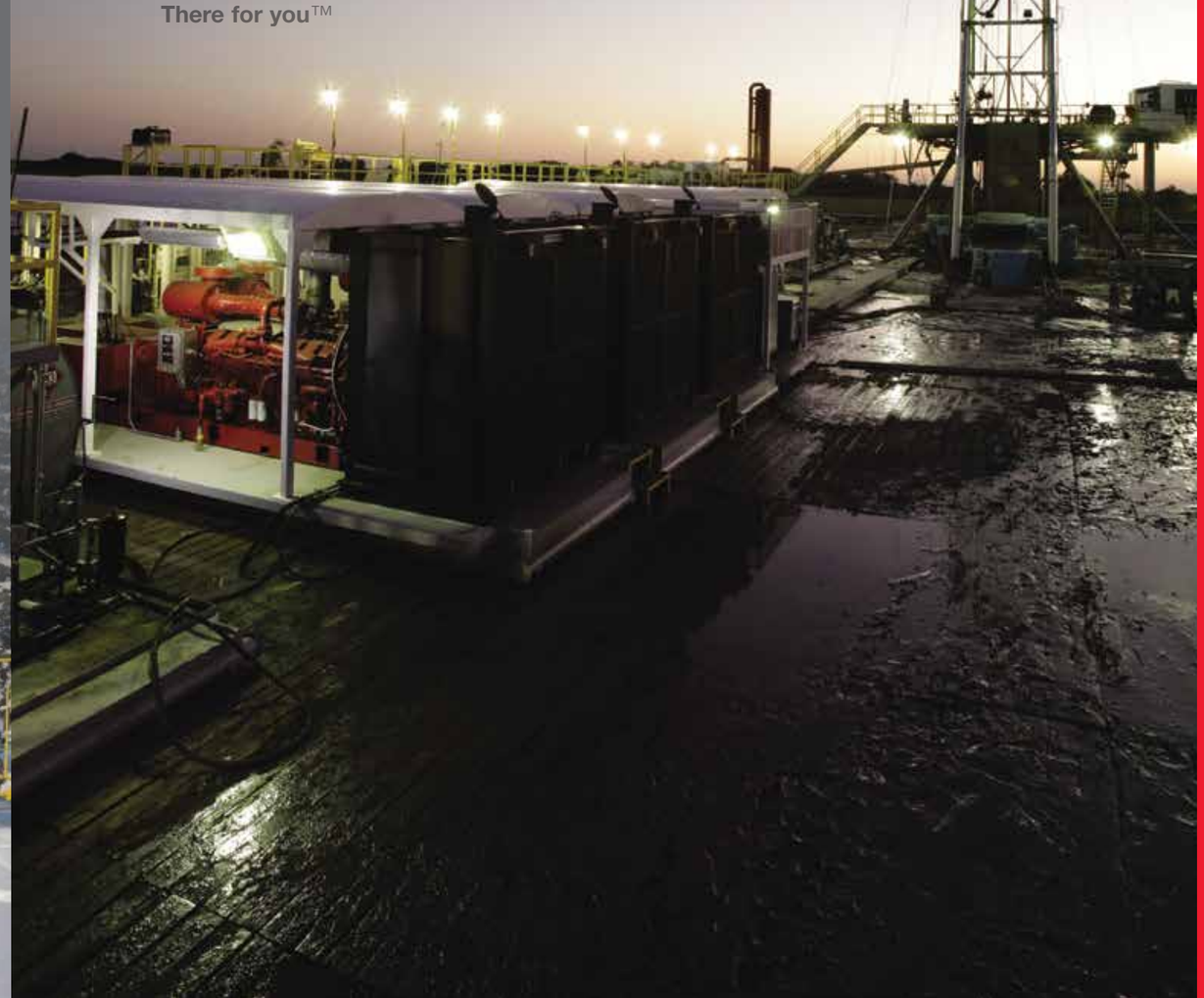
Combined with locally manufactured engines for oil and gas specification generator sets supplied to Gazprom

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_O&G_P_EN_GS_Rev.01

Generator Technologies