



Quality Driven Energy

Standby Diesel Generator Sets



2007



GESAN Standby Diesel Generator Sets

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GESAN reserves the right to modify any part of its design without prior notice.



Note: Standby power: Power available at variable load for up to a maximum of 500 hours during one year of which 300 hours may be for continuous use. For Cummins range, 200 hours per year. No overload is permitted.

GESAN Standby Diesel Generator Sets

The range of open skid and soundproofed standby generators gives GESAN its desired presence in each of the sectors requiring the use of power generators. The combination of twenty years' experience in the sector, the quality of each of the components assembled into our

units, and a commitment to technological innovation allows us to provide our customers with generator sets which prove to be totally reliable in the most demanding of environments.

Different configurations

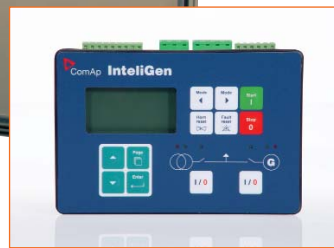
Gesan's range of standby generator sets stands out for its wide variety of options in engine and alternator configuration as well as in the different automatism available: automatic operation in its different configurations in case of mains failure and synchronization between generator sets and/or mains.



Safety

- Electromagnetic protection against overload and short circuits.
- Battery shutoff switch.
- Control card to ensure various functions including: automatic engine shutdown for overheating, low oil pressure, low coolant level, startup failure, emergency shutdown, etc.

These features all guarantee the maximum protection for people as well as the units.



Quality

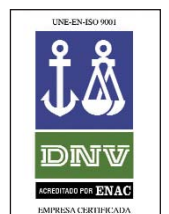
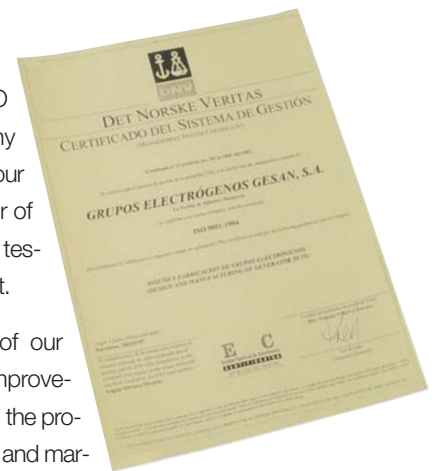
ISO 9001:2000. As an ISO 9001/2000 certified company we can ensure that every one our customer receives a generator of superior quality that has been tested rigorously prior to shipment.

The certification is a result of our commitment to continuous improvement and guarantees quality in the processes of design, manufacture and marketing of all GESAN units.

This standard entails the inspection of each component and meticulous control over every phase from the start of the production line. Each department, from sales to the assembly line, complies with the specifications and has the full participation and involvement on behalf of the GESAN personnel, whose main focus is always customer satisfaction.

GESAN's entire diesel range complies with the EC marking, which includes the following directives:

- 98/37/EC Machine safety.
- 73/23/EEC Low voltage.
- 89/336/EEC Electromagnetic compatibility.
- 2005/88/EC Noise emission by equipment used outdoors.
- 97/68/EC: Emission of gaseous and particulate pollutants.





		DPA 10 E	DPA 15 E	
Output kVA 50 Hz				
Standby		8	13	
Engine				
Model		403C-11G	403C-15G	
Cylinders-Arrangement		3L	3L	
Engine capacity		1.131	1.496	
Regulation type ¹		M	M	
Residential exhaust		OP	OP	
Alternator				
Make		SINCRO	SINCRO	
Model		FT4MBS	FT4MDS	
Insulation		H	H	
Protection level		IP 21	IP 21	
Generator				
Consumption (l/h)		2,9	4,1	
Fuel tank (l)		30	30	
Electric Control Panel				
Control microprocessor		GECO	GECO	
Battery ammeter/Battery voltmeter		—/S	—/S	
3-Phase surveillance		S	S	
Mains&Genset voltmeter		S	S	
Emergency stop button/Battery charger/ Hour meter/Preheating system		S	S	
Earth leakage protection		OP	OP	
Thermal-magnetic protection				
4-pole circuit breaker	Amps	10	16	
	Supply	S	S	
Load transfer panel (ATS)				
Contactors / Motorised Switch ²	Amps	25	25	
	Supply	OP	OP	
Motorised breakers	Amps	—	—	
	Supply	—	—	

S: Standard OP: Optional

Control microprocessor: feature included in the control microprocessor.

Product description

- Stationary set without canopy on a base frame with a 5 mm thick welded steel plate, coated with primer and finishing paint. Corrosion resistance is guaranteed by virtue of the ASTM B-117-57 T, withstanding over 500 hours in the mist chamber.
- PERKINS 1,500 rpm diesel engine water cooled with radiator. Complete with adequate inlet air filtration and moisture separation for the fuel supply.
- Engine regulation: see specifications according to model.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation to guarantee stable voltage at constant load between +/-1.5%, and optionally up to +/-0.5%.
- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. (See individual microprocessor specifications for each model).
- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank built into the base frame with control panel gauge.
- Shock absorbers on engine block/frame.
- Highly robust lifting frame.

	DPA 25 E	DPA 35 E	DPA 50 E	DPA 65 E	DPA 90 E	DPA 110 E	DPA 230 E	DPA 275 E	DPA 400 E
	22,7	33	49,6	63	88	110	229	275	400
	404C-22G	1103C-33G3	1103C-33TG3	1104C-44TG3	1104C-44TAG1	1104C-44TAG2	1306C E87TAG3	1306C E87TAG6	2306C E14TAG2
	4L	3L	3L	3L	4L	4L	6L	6L	6L
	2.216	3.300	3.300	3.300	4.400	4.400	8.710	8.710	14.600
	M	M/E (OP)	M/E (OP)	M/E (OP)	E	E	GE	GE	GE
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
	BCI 184 E1	BCI 184 G1	UCI 224 D1	UCI 224 E1	UCI 224 G1	UCI 274 C1	UCDI 274 J1	UCDI 274 K1	HCI 444 E1
	H	H	H	H	H	H	H	H	H
	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
	6,2	7,9	12	15,4	24,9	24,9	49,1	59,9	81,1
	90	90	157	157	157	157	418	418	554
	GECCO	DS 5220	DS 5220	DS 5220	DS 5220	DS 5220	DS 5320	DS 5320	DS 5320
	—/S	—/Control microprocessor	—/Control microprocessor	—/Control microprocessor	—/Control microprocessor	—/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor
	S	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	S	S	S	S	S	S	S	S
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	32	50	80	100	125	160	400	400	630
	S	S	OP	OP	OP	OP	OP	OP	OP
	40	60	125	125	125	200	350	400	630
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	—	—	80	100	125	160	400	400	630
	—	—	OP	OP	OP	OP	OP	OP	OP

[continue]



Product description

- EC marking including the following directives:
 - 98/37/EC Machine safety.
 - 73/23/EEC Low voltage.
 - 89/336/EEC Electromagnetic compatibility.
 - 97/68/EC: Emission of gaseous and particulate pollutants

	DPA 450 E	DPA 500 E	DPA 550 E	DPA 700 E	DPA 800 E	DPA 1000 E	
Output kVA 50 Hz							
Standby	450	500	520	700	800	996	
Engine							
Model	2306C E14TAG3	2506C E15TAG1	2506C E15TAG2	2806A E18TAG2	4006-23 TAG2A	4008 TAG1	
Cylinders-Arrangement	6L	6L	6L	6L	6L	8L	
Engine capacity	14.600	15.800	15.800	18.100	22.921	30.561	
Regulation type ¹	GE	GE	GE	GE	E	E	
Residential exhaust	OP	OP	OP	OP	OP	OP	
Alternator							
Make	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	
Model	HCI 444 F1	HCI 544 C1	HCI 544 C1	HCI 544 F1	HCI 634 G1	HCI 634 H1	
Insulation	H	H	H	H	H	H	
Protection level	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	
Generator							
Consumption (l/h)	88,3	108	116	141	176	194	
Fuel tank (l)	554	943	943	995	995	—	
Electric Control Panel							
Control microprocessor	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	
Battery ammeter / Battery voltmeter	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	
3-Phase surveillance	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	
Mains&Genset voltmeter	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	
Emergency stop button / Battery charger / Hour meter / Preheating system	S	S	S	S	S	S	
Earth leakage protection	OP	OP	OP	OP	OP	OP	
Thermal-magnetic protection							
4-pole circuit breaker	Amps	800	800	800	1.250	1.250	1.600
	Supply	OP	OP	OP	OP	OP	OP
Load transfer panel (ATS)							
Contactors / Motorised Switch ²	Amps	800	800	800	1.000	1.250	1.600
	Supply	OP	OP	OP	OP	OP	OP
Motorised breakers	Amps	800	800	800	1.250	1.250	1.600
	Supply	OP	OP	OP	OP	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

Models DPA 35 E- NC, 50 E-NC, 65 E-NC y 150 E -NC, do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

	DPA 1100 E	DPA 1660 E	DPA 2050 E	DPA 2200 E	DPA 35 E NC	DPA 50 E NC	DPA 65 E NC	DPA 150 E NC
	1.100	1.660	2.035	2.230	33	49,6	63	150
	4008 TAG2A	4012-46 TAG2A	4016 TAG1A	4016 TAG2A	1103A-33G1	1103A-33TG1	1103A-33TG2	1006 TAG
	8L	12 V 60°	16 V 60°	16 V 60°	3L	3L	3L	6L
	30.561	45.842	61.123	61.123	3.300	3.300	3.300	6.000
	E	E	E	E	M/E (OP)	M/E (OP)	M/E (OP)	E
	OP	OP	OP	OP	OP	OP	OP	OP
	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
	HCI 634 J1	PI 734 C1	PI 734 E1	PI 734 F1	BCI 184 G1	UCI 224 D1	UCI 224 E1	UCI 274 E1
	H	H	H	H	H	H	H	H
	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
	226	362	430	488	7,9	12	15,4	32
	—	—	—	—	90	157	157	250
	DS 5320	DS 5320	DS 5320	DS 5320	DS 5220	DS 5220	DS 5220	DS 5220
	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	—/Control microprocessor	—/Control microprocessor	—/Control microprocessor	—/Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	S	S	S	S	S	S	S
	OP	OP	OP	OP	OP	OP	OP	OP
	1.600	2.500	3.200	3.200	50	80	100	250
	OP	OP	OP	OP	S	OP	OP	OP
	1.600	2.500	3.150	3.150	60	125	125	250
	OP	OP	OP	OP	OP	OP	OP	OP
	1.600	2.500	3.200	3.200	—	80	100	250
	OP	OP	OP	OP	—	OP	OP	OP

Product description

- Stationary set with IP 23 soundproofed canopy mounted on phosphated steel panel and stainless steel boltware with primer and polyurethane powder paint with 100 micra thickness. Withstands saline mist test ASTM B-117-57 T for over 700 hours in the chamber, guaranteeing durability for up to 15 years in industrial areas with high moisture and aggressive environmental conditions, indoor use for buildings or areas with permanent condensation

and high contamination levels. Sound insulated using fireproof fiberglass protected by water-resistant coating and held by a metal profile throughout. Includes spring locks.

- PERKINS 1,500 rpm diesel engine water cooled with radiator. With adequate inlet air filtration and moisture separation for the fuel supply.
- Engine regulation: See specifications according to voltage output.
- STAMFORD alternator with 50 Hz fre-

quency, brushless, with AVR electronic voltage regulation to guarantee stable voltage at constant load between +/- 1.5%, and optionally up to +/- 0.5%.

- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the

	DPAS 10 E	DPAS 15 E	DPAS 25 E	DPAS 35 E	DPAS 50 E	DPAS 65 E	
Output kVA 50 Hz							
Standby	8	13	22,7	33	49,6	63	
Noise level- 50 Hz - 50 Hz s/2005/88 EC							
Sound pressure LpA	70	70	70	62	66	66	
Power LwA	90	90	90	90	94	94	
Engine							
Model	403C-11G	403C-15G	404C-22G	1103C-33G3	1103C-33TG3	1104C-44TG3	
Cylinders-Arrangement	3L	3L	4L	3L	3L	3L	
Engine capacity	1.131	1.496	2.216	3.300	3.300	3.300	
Regulation type ¹	M	M	M	M/E (OP)	M/E (OP)	M/E (OP)	
Residential exhaust	S	S	S	S	S	S	
Alternator							
Make	SINCRO	SINCRO	STAMFORD	STAMFORD	STAMFORD	STAMFORD	
Model	FT4 MBS	FT4 MDS	BCI 184 E1	BCI 184 G1	UCI 224 D1	UCI 224 E1	
Insulation	H	H	H	H	H	H	
Protection level	IP 21	IP 21	IP 23	IP 23	IP 23	IP 23	
Generator							
Consumption (l/h)	2,9	4,1	6,2	7,9	12	15,4	
Fuel tank (l)	51,5	51,5	51,5	125	125	125	
Electric Control Panel							
Control microprocessor	GECO	GECO	GECO	DS 5220	DS 5220	DS 5220	
Battery ammeter / Battery voltmeter	—/S	—/S	—/S	—/ Control microprocessor	—/ Control microprocessor	—/ Control microprocessor	
3-Phase surveillance	S	S	S	Control microprocessor	Control microprocessor	Control microprocessor	
Mains&Genset voltmeter	S	S	S	Control microprocessor	Control microprocessor	Control microprocessor	
Emergency stop button/Battery charger/ Hour meter/Preheating system	S	S	S	S	S	S	
Earth leakage protection	OP	OP	OP	OP	OP	OP	
Thermal-magnetic protection							
4-pole circuit breaker	Amps	10	16	32	50	80	100
	Supply	S	S	S	S	OP	OP
Load transfer panel (ATS)							
Contactors/ Motorised Swicht ²	Amps	25	25	40	60	125	125
	Supply	OP	OP	OP	OP	OP	OP
Motorised breakers	Amps	—	—	—	—	80	100
	Supply	—	—	—	—	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. Microprocessor also includes RS 485 port for connecting to PC (see individual microprocessor specifications for each model).

- Emergency stop button with mechanical access on the outside.
- Engine heating system.

- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank may be easily accessed and locked externally, to avoid liquid leaking inside the enclosure.
- Fuel tank built into the base frame with control panel gauge.
- Coolant and engine oil may be drained externally.
- Shock absorbers on engine block/frame.
- Residential exhaust silencer built into canopy.

- Central lifting eyebolt.
- EC marking:
 - 98/37/EC Machine safety.
 - 73/23/EEC Low voltage.
 - 89/336/EEC Electromagnetic compatibility.
 - 2005/88/EC Noise emission by equipment used outdoors in soundproofed models.
 - 97/68/EC: Emission of gaseous and particulate pollutants.

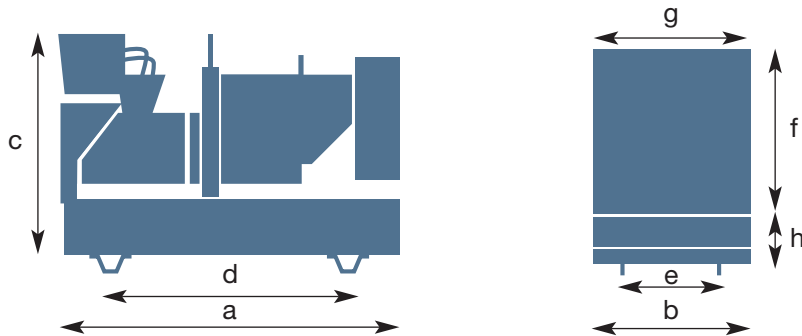
DPAS 90 E	DPAS 110 E	DPAS 230 E	DPAS 275 E	DPAS 400 E	DPAS 450 E	DPAS 500 E	DPAS 550 E	DPAS 700 E
88	110	229	275	400	450	500	520	700
66	69	69	69	69	62	62	62	77
94	97	97	97	97	94	94	94	105
1104C-44TAG1	1104C-44TAG2	1306C E87TAG3	1306C E87TAG6	2306C E14TAG2	2306C E14TAG3	2506C E15TAG1	2506C E15TAG2	2806A E18TAG2
4L	4L	6L	6L	6L	6L	6L	6L	6L
4.400	4.400	8.710	8.710	14.600	14.600	15.800	15.800	15.800
GE	GE	GE	GE	GE	GE	GE	GE	GE
S	S	S	S	S	S	S	S	S
STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
UCI 224 G1	UCI 274 C1	UCDI 274 K1	UCDI 274 K1	HCI 444 E1	HCI 444 F1	HCI 544 C1	HCI 544 C1	HCI 544 F1
H	H	H	H	H	H	H	H	H
IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
24,9	24,9	49,1	59,9	81,1	88,3	108	116	141
154	186	418	418	537	537	964	964	995
DS 5220	DS 5220	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320
—/ Control microprocessor	—/ Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor
Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
S	S	S	S	S	S	S	S	S
OP	OP	OP	OP	OP	OP	OP	OP	OP
125	160	400	400	630	800	800	800	1.250
OP	OP	OP	OP	OP	OP	OP	OP	OP
125	200	350	400	630	800	800	800	1.000
OP	OP	OP	OP	OP	OP	OP	OP	OP
125	160	400	400	630	800	800	800	1.250
OP	OP	OP	OP	OP	OP	OP	OP	OP

Models DPAS 35 E- NC, 50 E-NC, 65 E-NC y 150 E -NC, do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

	DPAS 35 E NC	DPAS 50 E NC	DPAS 65 E NC	DPAS 150 E NC
	33	49,6	63	150
	62	66	66	69
	90	94	94	97
	1103C-33G3	1103C-33TG3	1104C-44TG3	1006TAG
	3L	3L	3L	6L
	3.300	3.300	3.300	6.000
	M/E (OP)	M/E (OP)	M/E (OP)	E
	S	S	S	S
	STAMFORD	STAMFORD	STAMFORD	STAMFORD
	BCI 184 G1	UCI 224 D1	UCI 224 E1	UCI 224 E1
	H	H	H	H
	IP 23	IP 23	IP 23	IP 24
	7,9	12	15,4	57
	125	125	125	418
	DS 5220	DS 5220	DS 5220	DS 5220
	—/ Control microprocessor	—/ Control microprocessor	—/ Control microprocessor	—/ Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	S	S	S
	OP	OP	OP	OP
	50	80	100	250
	S	OP	OP	OP
	60	125	125	250
	OP	OP	OP	OP
	—	80	100	250
	—	OP	OP	OP



Dimensions, weight and fuel tank capacity



Model	Generator set						Radiator				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Approximate dry weight (kg)	Width g	Height f	Base height h	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DPA 10 E	1.400	700	1.132	1.200	650	347	324	421	341	0,67	100
DPA 15 E	1.400	700	1.132	1.200	650	410	296	457	370	0,61	100
DPA 25 E	1.550	700	1.485	1.150	620	558	319	497	661	1,21	100
DPA 35 E	1.550	700	1.525	1.150	620	762	527	525	713	0,88	120
DPA 50 E	1.965	750	1.732	1.565	670	888	527	525	713	0,88	120
DPA 65 E	1.965	750	1.732	1.565	670	947	527	525	713	1,48	120
DPA 90 E	1.965	750	1.732	1.565	670	1.099	527	525	713	2,75	120
DPA 110 E	1.965	750	1.732	1.565	670	1.118	625	578	682	2,75	120
DPA 230 E	2.900	1.100	2.057	2.320	1.020	2.495	766	750	847	6,25	350
DPA 275 E	2.900	1.100	2.057	2.320	1.020	2.495	766	750	847	6,25	350
DPA 400 E	3.430	1.150	2.207	1.375 + 1.375	1.070	3.760	1.045	920	748	7,3	196
DPA 450 E	3.430	1.150	2.207	1.375 + 1.375	1.070	3.894	1.045	920	748	7,3	196
DPA 500 E	3.800	1.200	2.362	1.565 + 1.565	1.120	4.210	1.049	1.300	619	9	196
DPA 550 E	3.800	1.200	2.362	1.565 + 1.565	1.120	4.273	1.049	1.300	619	9	196
DPA 700 E	3.800	1.550	2.598	1.580 + 1.580	1.490	5.133	1.422	1.260	638	11,7	196
DPA 800 E	4.305	1.710	2.365	1.650 + 1.650	1.490	5.588	1.606	1.600	372	71	196
DPA 1000 E	5.325	2.100	2.562	2.215 + 2.210	1.630	7.991	965+965	1.564	731	73	210
DPA 1100 E	5.325	2.100	2.562	2.215 + 2.211	1.630	8.146	965+966	1.564	731	77	180
DPA 1660 E	5.800	2.200	2.900	To consult	To consult	To consult	To consult	To consult	To consult	110	200
DPA 2050 E	6.300	2.400	3.200	To consult	To consult	To consult	To consult	To consult	To consult	140	170
DPA 2200 E	6.300	2.400	3.200	To consult	To consult	To consult	To consult	To consult	To consult	145	180

These models do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

Model	Generator set						Radiator				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Approximate dry weight (kg)	Width g	Height f	Base height h	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DPA 35 E NC	1.550	700	1.525	1.150	620	762	527	525	713	0,88	120
DPA 50 E NC	1.965	750	1.732	1.565	670	933	527	525	713	0,88	120
DPA 65 E NC	1.965	750	1.732	1.565	670	947	527	525	713	1,48	120
DPA 150 E NC	2.590	900	1.812	1.890	770	1.339	642	621	769	2,56	350

(1) Figures according to position of engine/alternator.

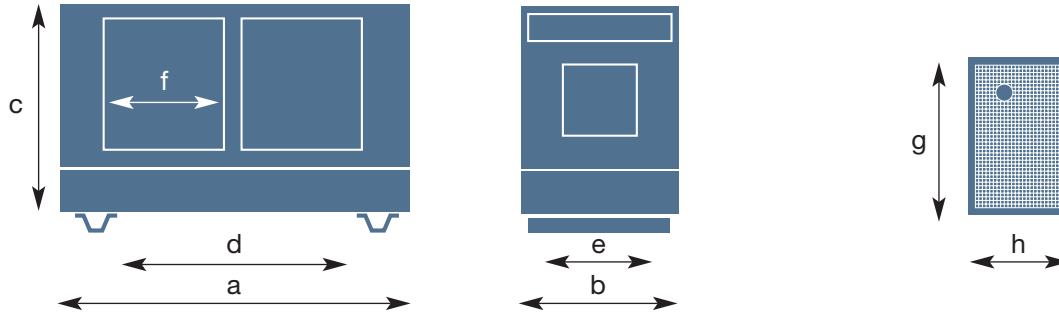


Model	Exhaust								
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Inlet diameter (inches)	Body diameter (mm)	Outlet diameter (inches)	Total length (mm)	Attenuation (dBA)
DPA 10 E	403C-11G	10,2	1,8	420	2	180	2	538	17+-2
DPA 15 E	403C-15G	10,2	2,9	490	2	180	2	538	17+-2
DPA 25 E	404C-22G	10,2	3,9	505	2	180	2	538	17+-2
DPA 35 E	1103C-33G3	10	5,8	520	2,5	129	2,5	755	17+-2
DPA 50 E	1103C-33TG3	10	7,7	537	2,5	129	2,5	755	17+-2
DPA 65 E	1104C-44TG3	10	10,4	571	2,5	129	2,5	755	17+-2
DPA 90 E	1104C-44TAG1	10	16,3	543	3	154	3,3	770	17+-2
DPA 110 E	1104C-44TAG2	15	16,3	543	3	154	3,3	770	17+-2
DPA 230 E	1306C E87TAG3	8,5	36,5	524	3	300	3	1.645	17+-2
DPA 275 E	1306C E87TAG6	8,5	44	528	3	300	3	1.645	17+-2
DPA 400 E	2306C E14TAG2	6,7	60,4	516	6	350	6	1.945	17+-2
DPA 450 E	2306C E14TAG3	6,7	66,3	522	6	350	6	1.945	17+-2
DPA 500 E	2506C E15TAG1	6,7	83	457	6	350	6	1.945	17+-2
DPA 550 E	2506C E15TAG2	6,7	90	459	6	350	6	1.945	17+-2
DPA 700 E	2806A E18TAG2	6,7	123	563	6	500	7,6	1.700	17+-2
DPA 800 E	4006-23 TAG2A	6,7	180	430	6	350	6	1.945	17+-2
DPA 1000 E	4008 TAG1	3	183	422	6	350	6	1.945	17+-2
DPA 1100 E	4008 TAG2A	3	195	450	6	350	6	1.945	17+-2
DPA 1660 E	4012-46 TAG2A	3	277	470	To consult	To consult	To consult	To consult	17+-2
DPA 2050 E	4016 TAG1A	3	353	460	To consult	To consult	To consult	To consult	17+-2
DPA 2200 E	4016 TAG2A	3	393	493	To consult	To consult	To consult	To consult	17+-2

These models do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

Model	Exhaust								
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Inlet diameter (inches)	Body diameter (mm)	Outlet diameter (inches)	Total length (mm)	Attenuation (dBA)
DPA 35 E NC	1103A-33G1	10	5,8	520	2,5	129	2,56	755	17+-2
DPA 50 E NC	1103A-33TG1	10	7,7	537	2,5	129	2,56	755	17+-2
DPA 65 E NC	1103A-33TG2	10	10,4	571	2,5	129	2,56	755	17+-2
DPA 150 E NC	1006 TAG	6	25,7	585	3	154	3,3	770	17+-2

Dimensions, weight and fuel tank capacity

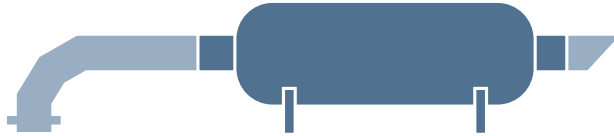


Model	Generator set						Air discharge grill				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Door width ² f	Approximate dry weight (kg)	Width h	Height g	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DPAS 10 E	1.860	840	1.275	1.420	784	751	534	267	695	0,67	75
DPAS 15 E	1.860	840	1.275	1.420	784	751	610	267	695	0,61	75
DPAS 25 E	1.860	840	1.275	1.420	784	751	748	267	695	0,67	75
DPAS 35 E	2.250	1.050	1.505	1.850	990	718	1.282	415	905	0,88	90
DPAS 50 E	2.250	1.050	1.505	1.850	990	718	1.368	415	905	0,88	90
DPAS 65 E	2.250	1.050	1.505	1.850	990	718	1.427	415	905	1,48	90
DPAS 90 E	2.800	980	1.535	2.300	930	790	1.689	450	870	2,75	90
DPAS 110 E	2.800	980	1.535	2.300	930	790	1.708	450	870	2,75	90
DPAS 230 E	3.675	1.400	2.100	2.175	1.340	1.070	3.517	485	1.185	6,25	262,5
DPAS 275 E	3.675	1.400	2.100	2.175	1.340	1.070	3.515	485	1.185	6,25	262,5
DPAS 400 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	4.911	870	1.325	7,3	147
DPAS 450 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	5.044	870	1.325	7,3	147
DPAS 500 E	5.500	1.550	2.435	2.675 + 2.175	1.490	1.120	5.680	835	1.430	9	147
DPAS 550 E	5.500	1.550	2.435	2.675 + 2.175	1.490	1.120	5.743	835	1.430	9	147
DPAS 700 E	5.800	1.900	2.645	2.540 + 2.540	1.840	1.070 + 1.140	6.486	1.380	1.680	11,7	147

These models do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

Model	Generator set						Air discharge grill				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Door width ² f	Approximate dry weight (kg)	Width h	Height g	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DPAS 35 E NC	2.250	1.050	1.505	1.850	990	718	1.282	415	905	0,88	90
DPAS 50 E NC	2.250	1.050	1.505	1.850	990	718	1.413	415	905	0,88	90
DPAS 65 E NC	2.800	980	1.535	1.850	990	718	1.427	415	905	1,48	90
DPAS 150 E NC	3.500	1.100	1.785	2.475	1.020	914	2.169	590	975	2,56	350

(1) Figures according to position of engine/alternator. (2) Includes doors on both sides.



Model	Exhaust					
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Outlet diameter (inches)	Attenuation (dBA)
DPAS 10 E	403C-11G	8,7	1,8	420	2,36	26+ -2
DPAS 15 E	403C-15G	8,7	2,9	490	2,36	26+ -2
DPAS 25 E	404C-22G	8,7	3,9	505	2,36	26+ -2
DPAS 35 E	1103C- 33G3	8,5	5,8	520	3	26+ -2
DPAS 50 E	1103C-33TG3	8,5	7,7	537	3,5	26+ -2
DPAS 65 E	1104C-44TG3	8,5	10,4	571	3,5	26+ -2
DPAS 90 E	1104C-44TAG1	8,5	16,3	543	3,5	26+ -2
DPAS 110 E	1104C-44TAG2	13,5	16,3	543	4,5	26+ -2
DPAS 230 E	1306C E87TAG3	7	36,5	524	5,5	26+ -2
DPAS 275 E	1306C E87TAG6	7	44	528	5,5	26+ -2
DPAS 400 E	2306C E14TAG2	5,2	60,4	516	7,6	26+ -2
DPAS 450 E	2306C E14TAG3	5,2	66,3	522	6	26+ -2
DPAS 500 E	2506C E15TAG1	5,2	83	457	6	26+ -2
DPAS 550 E	2506C E15TAG2	5,2	90	459	6	26+ -2
DPAS 700 E	2806A E18TAG2	5,2	123	563	7,6	26+ -2

These models do not comply with the Directive 97/68/EC relating to measures against the emission of gaseous and particulate pollutants. These models are destined for use outside the EU.

Model	Exhaust					
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Outlet diameter (inches)	Attenuation (dBA)
DPAS 35 E NC	1103 33G1	8,5	5,8	520	3	26+ -2
DPAS 50 E NC	1103A 33TG1	8,5	7,7	537	3,5	26+ -2
DPAS 65 E NC	1103A 33TG2	8,5	10,4	571	3,5	26+ -2
DPAS 150 E NC	1006TAG	4,5	25,7	585	4,5	26+ -2

Product description

- Stationary set without canopy on a base frame with a 5 mm thick welded steel plate, coated with phosphate primer and finishing paint. Corrosion resistance is guaranteed by virtue of the ASTM B-117-57 T, withstanding over 500 hours in the mist chamber.
- VOLVO 1,500 rpm diesel engine water cooled with radiator. With adequate intake air filtration and a moisture separation for the fuel supply.
- Engine regulation: see specifications according to output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regu-



		DVA 140 E	DVA 165 E	DVA 200 E	DVA 220 E
Output kVA 50 Hz					
Standby		142	167	200	220
Engine					
Model		TAD 532 GE	TAD 731 GE	TAD 732 GE	TAD 733 GE
Cylinders-Arrangement		4L	6L	6L	6L
Engine capacity		4.260	7.150	7.150	7.150
Regulation type ¹		GE	M/GE (OP)	GE	GE
Residential exhaust		OP	OP	OP	OP
Alternator					
Make		STAMFORD	STAMFORD	STAMFORD	STAMFORD
Model		UCI 274 E1	UCI 274 F1	UCI 274 H1	UCI 274 H1
Insulation		H	H	H	H
Protection level		IP 23	IP 23	IP 23	IP 23
Generator					
Consumption (l/h)		20	29	40	43,6
Fuel tank (l)		273	273	418	418
Electric Control Panel					
Control microprocessor		DS 5320	DS 5220	DS 5320	DS 5320
Battery ammeter/Battery voltmeter		—/Control microprocessor	—/Control microprocessor	S/Control microprocessor	S/Control microprocessor
3-Phase surveillance		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Mains&Genset voltmeter		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Emergency stop button/Battery charger/ Hour meter/Preheating system		S	S	S	S
Earth leakage protection		OP	OP	OP	OP
Thermal-magnetic protection					
4-pole circuit breaker	Amps	250	250	400	400
	Supply	OP	OP	OP	OP
Load transfer panel (ATS)					
Contactors/ Motorised Swicht ²	Amps	200	250	315	350
	Supply	OP	OP	OP	OP
Motorised breakers	Amps	250	250	400	400
	Supply	OP	OP	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

lation to guarantee stable voltage between +/- 1.5%, and optionally up to +/- 0.5%.

- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has been properly cooled. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil

pressure, low coolant level, startup failure, etc. (See individual microprocessor specifications for each model).

- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank built into the base frame with control panel gauge.
- Oil sump pump.
- Shock absorbers on engine block/frame.
- Highly robust lifting frame.

- EC marking, which includes the following directives:

- 98/37/EC Machine safety.
- 73/23/EEC Low voltage.
- 89/336/EEC Electromagnetic compatibility.
- 97/68/EC: Emission of gaseous and particulate pollutants.

	DVA 275 E	DVA 330 E	DVA 360 E	DVA 410 E	DVA 450 E	DVA 505 E	DVA 550 E	DVA 630 E	DVA 700 E
	275	330	358	412	450	506	520	630	687
	TAD 734 GE	TAD 941 GE	TAD 941 GE	TAD 1241 GE	TAD 1242 GE	TAD 1640 GE	TAD 1641 GE	TAD 1642 GE	TWD 1643 GE
	6L	6L	6L	6L	6L	6L	6L	6L	6L
	7.280	9.360	9.360	12.130	12.130	16.120	16.120	16.120	16.120
	GE	GE	GE	GE	GE	GE	GE	GE	GE
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
	UCDI 274 K1	HCI 444 D1	HCI 444 E1	HCI 444 F1	HCI 444 F1	HCI 544 C1	HCI 544 C1	HCI 544 E1	HCI 544 F1
	H	H	H	H	H	H	H	H	H
	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
	52	64,1	64,1	78,1	86,6	97,3	99	121	141
	418	554	554	554	554	964	964	964	995
	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320
	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor	S/Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	S	S	S	S	S	S	S	S
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.250	1.250
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.000	1.000
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.000	1.000
	OP	OP	OP	OP	OP	OP	OP	OP	OP

2. Starting at 400 amps.motorized switch supplied.

Product description

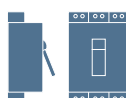
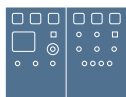
- Stationary set with IP 23 soundproofed canopy mounted on phosphated steel panel and stainless steel boltware with primer and polyurethane powder paint with 100 micra thickness. Withstands saline mist test ASTM B-117-57 T for over 700 hours in the chamber, guaranteeing durability for up to 15 years in industrial areas with high moisture and aggressive environmental conditions, indoor use for buildings or areas with permanent condensation and high contamination levels. Fireproof fiber-

glass sound insulation protected by water-resistant coating and held by a metal profile throughout. Includes spring locks.

- VOLVO 1,500 rpm diesel engine water cooled with radiator. With adequate inlet air filtration and moisture separation for the fuel supply.
- Engine regulation: See specifications according to voltage output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation to guarantee stable voltage

at constant load between +/-1.5%, and optionally up to +/-0.5%.

- Engine regulation: see specifications according to output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation, permanent magnet and special regulation MX 341 to guarantee stable voltage at constant load between +/-1.5%, and optionally up to +/-0.5%.
- Automatic control panel with digital microprocessor for performing automatic star-



	DVAS 140 E	DVAS 165 E	DVAS 200 E	DVAS 220 E	
Output kVA 50 Hz					
Standby	142	167	200	220	
Noise level- 50 Hz - 50 Hz s/2005/88 EC					
Sound pressure LpA	69	69	69	69	
Power LwA	97	97	97	97	
Engine					
Model	TAD 532 GE	TAD 731 GE	TAD 732 GE	TAD 733 GE	
Cylinders-Arrangement	4L	6L	6L	6L	
Engine capacity	4.760	7.150	7.150	7.150	
Regulation type ¹	GE	M/GE (OP)	GE	GE	
Residential exhaust	S	S	S	S	
Alternator					
Make	STAMFORD	STAMFORD	STAMFORD	STAMFORD	
Model	UCI 274 E1	UCI 274 F1	UCI 274 H1	UCI 274 H1	
Insulation	H	H	H	H	
Protection level	IP 23	IP 23	IP 23	IP 23	
Generator					
Consumption (l/h)	20	29	40	43,6	
Fuel tank (l)	250	250	418	418	
Electric Control Panel					
Control microprocessor	DS 5320	DS 5220	DS 5320	DS 5320	
Battery ammeter/Battery voltmeter	—/ Control microprocessor	—/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	
3-Phase surveillance	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	
Mains&Genset voltmeter	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	
Emergency stop button/Battery charger/ Hour meter/Preheating system	S	S	S	S	
Earth leakage protection	OP	OP	OP	OP	
Thermal-magnetic protection					
4-pole circuit breaker	Amps	250	250	400	400
	Supply	OP	OP	OP	OP
Load transfer panel (ATS)					
Contactors/ Motorised Swicht ²	Amps	200	250	315	350
	Supply	OP	OP	OP	OP
Motorised breakers	Amps	250	250	400	400
	Supply	OP	OP	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

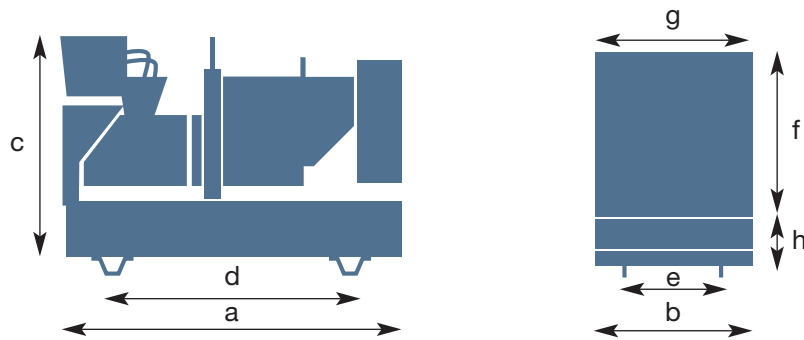
top of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. Microprocessor also includes RS 485 port for connecting to PC.

- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank may be easily accessed and locked externally, to avoid liquid leaking inside the enclosure.
- Fuel tank built into the base frame with control panel gauge.
- Coolant and engine oil may be drained externally.
- Shock absorbers on engine block/frame.
- Residential exhaust silencer built into canopy.
- Central lifting eyebolt in models with canopy.
- EC marking, which includes the following directives:
 - 98/37/EC EC Machine safety.
 - 73/23/EEC Low voltage.
 - 89/336/EEC Electromagnetic compatibility.
 - 2005/88/EC Noise emission by equipment used outdoors in soundproofed models.
 - 97/68/EC: Emission of gaseous and particulate pollutants.

	DVAS 275 E	DVAS 330 E	DVAS 360 E	DVAS 410 E	DVAS 450 E	DVAS 505 E	DVAS 550 E	DVAS 630 E	DVAS 700 E
	275	330	358	412	450	506	520	630	687
	69	69	69	69	62	62	62	77	77
	97	97	97	97	94	94	94	105	105
	TAD 734 GE	TAD 941 GE	TAD 941 GE	TAD 1241 GE	TAD 1242 GE	TAD 1640 GE	TAD 1641 GE	TAD 1642 GE	TWD 1643 GE
	6L	6L	6L	6L	6L	6L	6L	6L	6L
	7.280	9.360	9.360	12.130	12.130	16.120	16.120	16.120	16.120
	GE	GE	GE	GE	GE	GE	GE	GE	GE
	S	S	S	S	S	S	S	S	S
	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
	UCDI 274 K1	HCI 444 D1	HCI 444 E1	HCI 444 F1	HCI 444 F1	HCI 544 C1	HCI 544 C1	HCI 544 E1	HCI 544 F1
	H	H	H	H	H	H	H	H	H
	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
	52	64,1	64,1	78,1	86,6	97,3	99	121	141
	418	537	537	537	537	964	964	964	995
	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320	DS 5320
	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
	S	S	S	S	S	S	S	S	S
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.250	1.250
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.000	1.000
	OP	OP	OP	OP	OP	OP	OP	OP	OP
	400	630	630	630	800	800	800	1.000	1.000
	OP	OP	OP	OP	OP	OP	OP	OP	OP

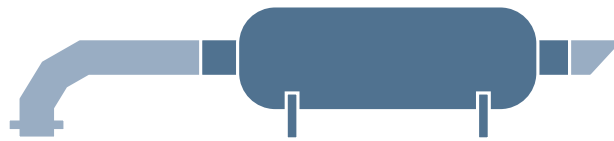
2. Starting at 400 amps.motorized switch supplied.

Dimensions, weight and fuel tank capacity



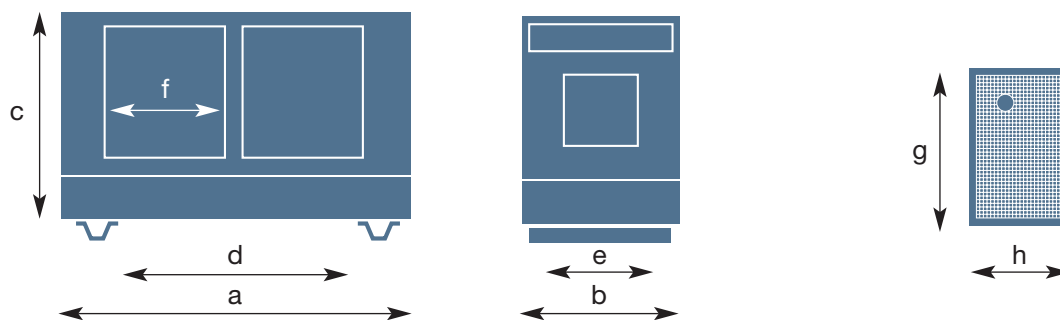
Model	Generator set						Radiator				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Approximate dry weight (kg)	Width g	Height f	Base height h	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DVA 140 E	2.490	850	1.882	1.890	770	1.469	643	631	715	2,2	100
DVA 165 E	2.490	850	1.882	1.890	770	1.557	660	701	646	3,7	200
DVA 200 E	2.900	1.100	2.057	2.320	1.020	2.192	655	1.076	588	3,7	200
DVA 220 E	2.900	1.100	2.057	2.320	1.020	2.265	655	1.076	588	3,7	150
DVA 275 E	2.900	1.100	2.057	2.320	1.020	2.681	885	826	672	3,4	240
DVA 330 E	3.430	1.150	2.207	1.375 + 1.375	1.070	3.234	910	890	655	5,08	730
DVA 360 E	3.430	1.150	2.207	1.375 + 1.195	1.070	3.349	910	890	655	5,08	730
DVA 410 E	3.430	1.150	2.207	1.375 + 1.375	1.070	3.800	910	890	792	6,6	725
DVA 450 E	3.430	1.150	2.207	1.375 + 1.375	1.070	3.505	910	890	776	5,85	685
DVA 505 E	3.810	1.200	2.362	1.565 + 1.565	1.120	4.475	896	1.493	511	7,9	291
DVA 550 E	3.810	1.200	2.362	1.565 + 1.565	1.120	4.475	896	1.493	512	8,1	708
DVA 630 E	3.810	1.200	2.362	1.565 + 1.565	1.120	4.755	896	1.493	512	9,8	616
DVA 700 E	3.810	1.200	2.362	1.566 + 1.565	1.120	4.755	896	1.493	512	9,8	616

(1) Figures according to position of engine/alternator.



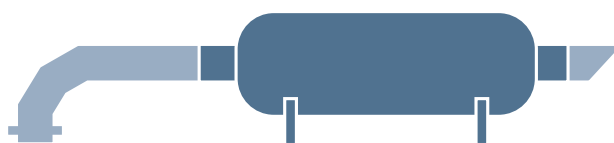
Model	Exhaust								
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Inlet diameter (inches)	Body diameter (mm)	Outlet diameter (inches)	Total length (mm)	Attenuation (dBA)
DVA 140 E	TAD 532 GE	5	16,2	520	3	154	3,3	770	17+ -2
DVA 165 E	TAD 731 GE	5	26,7	476	3	154	3,3	770	17+ -2
DVA 200 E	TAD 732 GE	5	33,9	540	3,5	300	3,5	1.645	17+ -2
DVA 220 E	TAD 733 GE	5	37,2	557	3,5	300	3,5	1.645	17+ -2
DVA 275 E	TAD 734 GE	10	41,8	540	3,5	300	3,5	1.645	17+ -2
DVA 330 E	TAD 941 GE	10	52,2	539	4	300	4	1.705	17+ -2
DVA 360 E	TAD 941 GE	10	52,2	539	4	300	4	1.705	17+ -2
DVA 410 E	TAD 1241 GE	10	63	505	4	300	4	1.705	17+ -2
DVA 450 E	TAD 1242 GE	10	69	525	4	300	4	1.705	17+ -2
DVA 505 E	TAD 1640 GE	10	85,4	456	5	300	5	1.945	17+ -2
DVA 550 E	TAD 1641 GE	10	84	490	5	300	5	1.945	17+ -2
DVA 630 E	TAD 1642 GE	10	100,7	494	5	300	5	1.945	17+ -2
DVA 700 E	TWD 1643 GE	10	111,8	463	5	550	8,62	1.950	17+ -2

Dimensions, weight and fuel tank capacity



Model	Generator set						Air discharge grill				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Door width ² f	Approximate dry weight (kg)	Width h	Height g	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DVAS 140 E	3.500	1.100	1.785	2.475	1.020	914	2.300	590	975	2,2	75
DVAS 165 E	3.500	1.100	1.785	2.475	1.020	914	2.381	590	975	3,7	150
DVAS 200 E	3.675	1.400	2.100	2.175	1.340	1.063 + 863	3.213	485	1.185	3,7	150
DVAS 220 E	3.675	1.400	2.100	2.175	1.340	1.063 + 863	3.285	485	1.185	3,7	113
DVAS 275 E	3.675	1.400	2.100	2.175	1.340	1.063 + 863	3.702	485	1.185	3,4	180
DVAS 330 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	4.384	870	1.325	5,08	548
DVAS 360 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	4.501	870	1.325	5,08	548
DVAS 410 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	4.950	870	1.325	6,6	544
DVAS 450 E	4.580	1.500	2.240	1.865 + 1.865	1.440	1.100	4.655	870	1.325	5,85	514
DVAS 505 E	5.500	1.550	2.335	2.675 + 2.175	1.490	1.120	5.945	835	1.430	7,9	218
DVAS 550 E	5.500	1.550	2.335	2.675 + 2.175	1.490	1.120	5.945	835	1.430	8,1	531
DVAS 630 E	5.500	1.550	2.335	2.675 + 2.175	1.490	1.120	6.225	835	1.430	9,8	462
DVAS 700 E	5.800	1.900	2.645	2.540 + 2.540	1.840	1.070 + 1.070	6.500	1.380	1.680	44	462

(1) Figures according to position of engine/alternator. (2) Includes doors on both sides.



Model	Exhaust					
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Outlet diameter (inches)	Attenuation (dBA)
DVAS 140 E	TAD 532 GE	3,5	16,2	520	4,5	26+ -2
DVAS 165 E	TAD 731 GE	3,5	26,7	476	4,5	26+ -2
DVAS 200 E	TAD 732 GE	3,5	33,9	540	5,5	26+ -2
DVAS 220 E	TAD 733 GE	3,5	37,2	557	5,5	26+ -2
DVAS 275 E	TAD 734 GE	8,5	41,8	540	5,5	26+ -2
DVAS 330 E	TAD 941 GE	8,5	52,2	539	7,6	26+ -2
DVAS 360 E	TAD 941 GE	8,5	52,2	539	7,6	26+ -2
DVAS 410 E	TAD 1241 GE	8,5	63	505	7,6	26+ -2
DVAS 450 E	TAD 1242 GE	8,5	69	525	7,6	26+ -2
DVAS 505 E	TAD 1640 GE	8,5	85,4	456	7,6	26+ -2
DVAS 550 E	TAD 1641 GE	8,5	84	490	7,6	26+ -2
DVAS 630 E	TAD 1642 GE	8,5	100,7	494	7,6	26+ -2
DVAS 700 E	TWD 1643 GE	8,5	111,8	463	7,6	26+ -3

Product description

- Stationary set without canopy on a base frame with a 5 mm thick welded steel plate, coated with primer and finishing paint. Corrosion resistance is guaranteed by virtue of the ASTM B-117-57 T, withstanding over 500 hours in the mist chamber.
- CUMMINS 1,500 rpm diesel engine water cooled with radiator. With adequate inlet air filtration and moisture separation for the fuel supply.
- Engine regulation: see specifications according to output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation to guarantee stable voltage at constant load between +/-1%, and optionally up to +/-0.5%.
- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has been properly cooled. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc.
- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank built into the base frame with control panel gauge.
- Shock absorbers on engine block/frame.
- Highly robust lifting frame.
- EC marking including the following directives:
 - 98/37/EC Machine safety
 - 73/23/EEC Low voltage
 - 89/336/EEC Electromagnetic compatibility.
 - 97/68/EC: Emission of gaseous and particulate pollutants.

		DCA 700 E	DCA 860 E	DCA 1100 E	DCA 1450 E	DCA 1660 E
Output kVA 50 Hz						
Standby		691	860	1.110	1.430	1.684
Engine						
Model		VTA 28 G5	QSK 23 G3	QST 30 G4	KTA 50 G3	KTA50G8
Cylinders-Arrangement		12 V 40°	6L	12 V 50°	12 V 60°	12 V 60°
Engine capacity		28.000	23.150	30.480	50.300	50.300
Regulation type ¹		E	GE	GE	E	E
Residential exhaust		OP	OP	OP	OP	OP
Alternator						
Make		STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
Model		HCI 544 F1	HCI 634 G1	HCI 634 J1	PI734B1	PI734C1
Insulation		H	H	H	H	H
Protection level		IP 23	IP 23	IP 23	IP 23	IP 23
Generator						
Consumption (l/h)		154	178	202	261	345
Fuel tank (l)		995	995	—	—	—
Electric Control Panel						
Control microprocessor		DS 5320	DS 5320	DS 5320	DS 5320	DS 5320
Battery ammeter / Battery voltmeter		S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor
3-Phase surveillance		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Mains&Genset voltmeter		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Emergency stop button / Battery charger / Hour meter / Preheating system		S	S	S	S	S
Earth leakage protection		OP	OP	OP	OP	OP
Thermal-magnetic protection						
4-pole circuit breaker	Amps	1.250	1.250	1.600	2.500	2.500
	Supply	OP	OP	OP	OP	OP
Load transfer panel (ATS)						
Motorised swicht	Amps	1.000	1.250	1.600	2.500	2.500
	Supply	OP	OP	OP	OP	OP
Motorised breakers	Amps	1.000	1.250	1.600	2.500	2.500
	Supply	OP	OP	OP	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

Product description

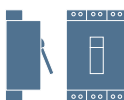
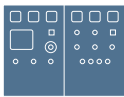
- Stationary set without canopy on a base frame with a 5 mm thick welded steel plate, coated with primer and finishing paint. Corrosion resistance is guaranteed by virtue of the ASTM B-117-57 T, withstanding over 500 hours in the mist chamber.
- DEUTZ 1,500 rpm diesel engine liquid cooled with radiator. Complete with adequate inlet air filtration.
- Engine regulation: see specifications according to output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation to guarantee stable voltage at constant load between +/-1.5%, and optionally up to +/-0.5%.
- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. (See individual microprocessor specifications for each model).
- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank built into the base frame with control panel gauge.
- Shock absorbers on engine block/frame.
- Highly robust lifting frame.
- EC marking including the following directives:
 - 98/37/EC Machine safety.
 - 73/23/EEC Low voltage.
 - 89/336/EEC Electromagnetic compatibility.
 - 97/68/EC: Emission of gaseous and particulate pollutants.

		DZA 20 E	DZA 25 E	DZA 35 E	DZA 45 E
Output kVA 50 Hz					
Standby		17	25	33	44
Engine					
Model		D2009L03	D2009L04	F4M2011F	BF4M2011F
Cylinders-Arrangement		3L	4L	4L	4L
Engine capacity		1.718	2.290	3.110	3.110
Regulation type ¹		M	M	M	M
Residential exhaust		OP	OP	OP	OP
Alternator					
Make		STAMFORD	STAMFORD	STAMFORD	STAMFORD
Model		BCI 184 E1	BCI 184 E1	BCI 184 G1	UCI 224 C1
Insulation		H	H	H	H
Protection level		IP 23	IP 23	IP 23	IP 23
Generator					
Consumption (l/h)		5,4	5,4	7,3	9,9
Fuel tank (l)		90	90	90	157
Electric Control Panel					
Control microprocessor		GECO	GECO	DS 5220	DS 5220
Battery ammeter/Battery voltmeter		—/S	—/S	—/ Control microprocessor	—/ Control microprocessor
3-Phase surveillance		S (external)	S (external)	Control microprocessor	Control microprocessor
Mains&Genset voltmeter		S	S	Control microprocessor	Control microprocessor
Emergency stop button/Battery charger/ Hour meter/Preheating system		S	S	S	S
Earth leakage protection		OP	OP	OP	OP
Thermal-magnetic protection					
4-pole circuit breaker	Amps	25	32	40	63
	Supply	S	S	S	S
Load transfer panel (ATS)					
Contactors	Amps	40	40	60	125
	Supply	OP	OP	OP	OP
Motorised breakers	Amps	—	—	—	125
	Supply	—	—	—	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

- Stationary set with IP 23 soundproofed canopy mounted on 2.5 mm phosphated steel panel and stainless steel boltware with primer and polyurethane powder paint with 100 micra thickness. Withstands saline mist test ASTM B- 117-57 T for over 700 hours in the chamber, guaranteeing durability for up to 15 years in industrial areas with high moisture and aggressive environmental conditions, indoor use for buildings or areas with permanent condensation and high contamination levels. Fireproof fiberglass sound insulation protected by water-resistant coating and held by a metal profile throughout. Includes spring locks. CANOPY FOR DCAS 700 and DCAS 860 MODELS.
- Models DCAS 1100, DCAS 1450 and DCAS 1660 housed in soundproofed containers in accordance with Spanish standard UNE-EN ISO 12079. (Contact factory for more information).
- CUMMINS 1,500 rpm diesel engine water cooled with radiator. With adequate inlet air filtration and moisture separation for the fuel supply.
- Engine regulation: see specifications according to output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation, permanent magnet and special regulation MX 341 to guarantee stable voltage at constant load between +/-1%, and optionally up to +/-0.5%.
- Automatic control panel with digital microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. Microprocessor also includes RS 485 port for connecting to PC.
- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank may be easily accessed and locked externally, to avoid liquid leaking inside the enclosure.
- Fuel tank built into the base frame with control panel gauge.
- Coolant and engine oil may be drained externally.
- Shock absorbers on engine block/frame.
- Residential exhaust silencer built into canopy.
- Central lifting eyebolt in models with canopy.
- EC marking, which includes the following directives:
 - 98/37/EC EC Machine safety.
 - 73/23/EEC Low voltage.
 - 89/336/EEC Electromagnetic compatibility.
 - 2005/88/EC Noise emission by equipment used outdoors in soundproofed models.
 - 97/68/EC: Emission of gaseous and particulate pollutants.






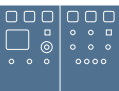
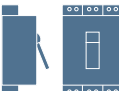

		DCAS 700 E	DCAS 860 E	DCAS 1100 E	DCAS 1450 E
Output kVA 50 Hz					
Standby		691	860	1.110	1.430
Noise level- 50 Hz - 50 Hz s/2005/88 EC					
Sound pressure LpA		77	77	75	—
Power LwA		105	105	103	—
Engine					
Model		VTA 28 G5	QSK 23 G3	QST 30G4	KTA 50G3
Cylinders-Arrangement		12 V 40°	6L	12 V 50°	12 V 60°
Engine capacity		28.000	23.150	30.480	50.300
Regulation type ¹		E	GE	GE	E
Residential exhaust		S	S	S	S
Alternator					
Make		STAMFORD	STAMFORD	STAMFORD	STAMFORD
Model		HCI 544 F1	HCI 634 G1	HCI 634 J1	PI734B1
Insulation		H	H	H	H
Protection level		IP 23	IP 23	IP 23	IP 23
Generator					
Consumption (l/h)		154	178	202	261
Fuel tank (l)		995	995	—	—
Electric Control Panel					
Control microprocessor		DS 5320	DS 5320	DS 5320	DS 5320
Battery ammeter/Battery voltmeter		S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor	S/ Control microprocessor
3-Phase surveillance		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Mains&Genset voltmeter		Control microprocessor	Control microprocessor	Control microprocessor	Control microprocessor
Emergency stop button/Battery charger/ Hour meter/Preheating system		S	S	S	S
Earth leakage protection		OP	OP	OP	OP
Thermal-magnetic protection					
4-pole circuit breaker	Amps	1.250	1.250	1.600	2.500
	Supply	OP	OP	OP	OP
Load transfer panel (ATS)					
Motorised swicht	Amps	1.000	1.250	1.600	2.500
	Supply	OP	OP	OP	OP
Motorised breakers	Amps	1.000	1.250	1.600	2.500
	Supply	OP	OP	OP	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

- Stationary set with IP 23 soundproofed canopy mounted on phosphated steel panel and stainless steel bolt-ware with primer and polyurethane powder paint with 100 micra thickness. Withstands saline mist test ASTM B- 117-57 T for over 700 hours in the chamber, guaranteeing durability for up to 15 years in industrial areas with high moisture and aggressive environmental conditions, indoor use for buildings or areas with permanent condensation and high contamination levels. Sound insulated using fireproof fiberglass protected by water-resistant coating and held by a metal profile throughout. Includes spring locks.
- DEUTZ 1,500 rpm diesel engine liquid cooled with radiator. With adequate inlet air filtration.
- Engine regulation: See specifications according to voltage output.
- STAMFORD alternator with 50 Hz frequency, brushless, with AVR electronic voltage regulation to guarantee stable voltage at constant load between +/-1.5%, and optionally up to +/-0.5%.
- Automatic control panel with microprocessor for performing automatic startup of the generator in the case of mains failure and sending a signal to the automatic transfer switch (ATS) in order to transfer the load from the mains to the generator. When mains power is restored it transfers the load back from the generator to the main power supply and stops the generator once it has cooled down. Additionally, the control microprocessor guarantees, among other functions, automatic engine shutdown for high temperature, low oil pressure, low coolant level, startup failure, etc. (See individual micro-processor specifications for each model).
- Emergency stop button with mechanical access on the outside.
- Engine heating system.
- Electronic battery charger.
- Lead acid batteries and disconnecter.
- Fuel tank may be easily accessed and locked externally, to avoid liquid leaking inside the enclosure.
- Fuel tank built into the base frame with control panel gauge.
- Coolant and engine oil may be drained externally.
- Shock absorbers on engine block/frame.
- Residential exhaust silencer (-35 dB) built into canopy.
- Central lifting eyebolt.
- EC marking:
 - 98/37/ EC Machine safety.
 - 73/23/ EEC Low voltage.
 - 89/336/ EEC Electromagnetic compatibility.
 - 2005/88/EC Noise emission by equipment used outdoors in soundproofed models.
 - 97/68/EC: Emission of gaseous and particulate pollutants.

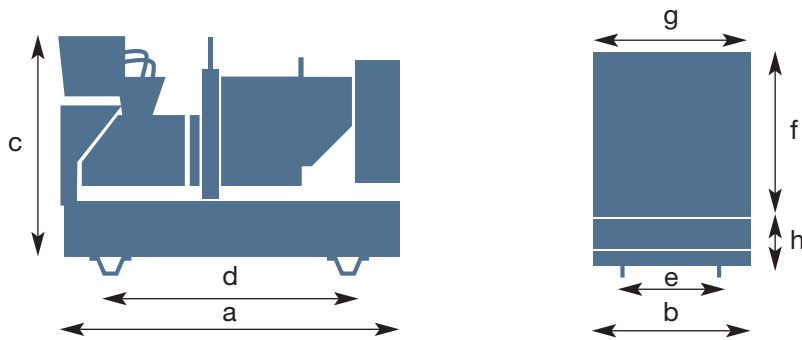


		DZAS 20 E	DZAS 25 E	DZAS 35 E	DZAS 45 E	
Output kVA 50 Hz						
	Standby	17	25	33	44	
Noise level- 50 Hz - 50 Hz s/2005/88 EC						
	Sound pressure LpA	70	70	62	66	
	Power LwA	90	90	90	94	
Engine						
	Model	D2009L03	D2009L04	F4M2011F	BF4M2011F	
	Cylinders-Arrangement	3L	4L	4L	4L	
	Engine capacity	1.718	2.290	3.110	3.110	
	Regulation type¹	M	M	M	M	
	Residential exhaust	OP	OP	OP	OP	
Alternator						
	Make	STAMFORD	STAMFORD	STAMFORD	STAMFORD	
	Model	BCI 184 E1	BCI 184 E1	BCI 184 G1	UCI 224 C1	
	Insulation	H	H	H	H	
	Protection level	IP 23	IP 23	IP 23	IP 23	
Generator						
	Consumption (l/h)	5,4	5,4	7,3	9,9	
	Fuel tank (l)	51,5	51,5	125	125	
Electric Control Panel						
	Control microprocessor	GECO	GECO	DS 5220	DS 5220	
	Battery ammeter/Battery voltmeter	—/S	—/S	—/ Control microprocessor	—/ Control microprocessor	
	3-Phase surveillance	S (external)	S (external)	Control microprocessor	Control microprocessor	
	Mains&Genset voltmeter	S	S	Control microprocessor	Control microprocessor	
	Emergency stop button/Battery charger/ Hour meter/Preheating system	S	S	S	S	
	Earth leakage protection	OP	OP	OP	OP	
Thermal-magnetic protection						
	4-pole circuit breaker	Amps	25	32	40	63
		Supply	S	S	S	S
Load transfer panel (ATS)						
	Contactors	Amps	40	40	60	125
		Supply	OP	OP	OP	OP
	Motorised breakers	Amps	—	—	—	125
		Supply	—	—	—	OP

S: Standard OP: Optional

1. Regulation type: M: Mechanical. E: Electronic. GE: Electronic engine management.

Dimensions, weight and fuel tank capacity



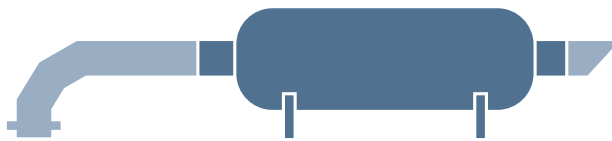
Cummins

Model	Generator set						Radiator				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Approximate dry weight (kg)	Width g	Height f	Base height h	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DCA 700 E	4.140	1.550	2.595	1.750 + 1.750	1.490	6.145	1.327	705	1.575	13,33	196
DCA 860 E	4.440	1.550	2.595	1.650 + 1.650	1.490	6.030	1.572	1.575	500	12	196
DCA 1100 E	4.900	1.860	2.625	1.950 + 1.750	1.630	6.701	1.752	1.595	749	25,5	196
DCA 1450 E	5.725	1.780	2.800	To consult	To consult	10.463	1.650	1.600	792	To consult	To consult
DCA 1660 E	5.800	2.000	2.800	To consult	To consult	10.954	To consult	To consult	To consult	To consult	To consult

Deutz

Model	Generator set						Radiator				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Approximate dry weight (kg)	Width g	Height f	Base height h	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DZA 20 E	1.550	700	1.485	1.150	620	558	370	375	341	0,3	To consult
DZA 25 E	1.550	700	1.485	1.150	620	558	370	375	370	0,4	To consult
DZA 35 E	1.550	700	1.525	1.150	620	635	411	388	620	0,5	150
DZA 45 E	1.965	750	1.732,5	1.565	670	773	411	388	620	0,65	150

(1) Figures according to position of engine/alternator.



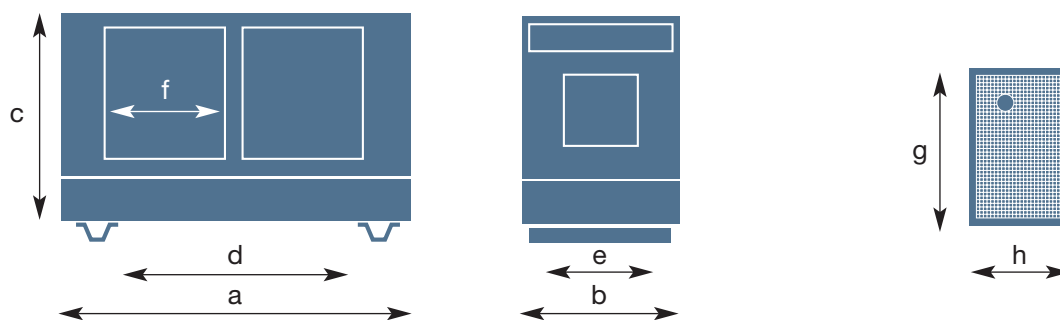
Cummins

Model	Exhaust									
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Inlet diameter (inches)	Body diameter (mm)	Outlet diameter (inches)	Total length (mm)	Attenuation (dBA)	
DCA 700 E	VTA 28 G5	10	122,9	507	5	550	8,62	1.950	17 +/-2	
DCA 860 E	QSK 23 G3	10	147,8	543	6	600	9,44	2.200	17 +/-2	
DCA 1100 E	QST 30 G4	6,8	178	575	6	350	6	1.945	17 +/-2	
DCA 1450 E	KTA 50 G3	6,8	240	977	6	650	10,7	2.600	17 +/-2	
DCA 1660 E	KTA50G8	6,8	261	510	6	650	10,7	2.600	17 +/-2	

Deutz

Model	Exhaust									
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Inlet diameter (inches)	Body diameter (mm)	Outlet diameter (inches)	Total length (mm)	Attenuation (dBA)	
DZA 20 E	D2009L03	2	2,9	508	2	180	2	538	17 +/- 2	
DZA 25 E	D2009L04	2	3,7	480	2	180	2	538	17 +/- 2	
DZA 35 E	F4M2011F	3	5,2	570	2,5	129	2,5	755	17 +/- 2	
DZA 45 E	BF4M2011F	3	7,2	580	2,5	129	2,5	755	17 +/- 2	

Dimensions, weight and fuel tank capacity



Cummins

Model	Generator set						Air discharge grill				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Door width ² f	Approximate dry weight (kg)	Width h	Height g	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DCAS 700 E	5.800	1.900	2.645	2.540 + 2.540	1.840	1.140 + 1.070	7.505	1.380	1.680	13,33	147
DCAS 860 E	5.800	1.900	2.645	2.540 + 2.540	1.840	1.140 + 1.070	7.378	1.380	1.680	16,5	147
DCAS 1100 E	5.895	2.350	2.591	Container ISO 20"	Container ISO 20"	—	14.000	To consult	To consult	27,7	147
DCAS 1450 E	To consult	To consult	To consult	To consult	To consult	To consult	To consult	To consult	To consult	To consult	To consult

Deutz

Model	Generator set						Air discharge grill				
	Length a	Width b	Height c	Distance between supports ¹ d	Width between supports e	Door width ² f	Approximate dry weight (kg)	Width h	Height g	Air flow m ³ /s	Max. allowable pressure loss (Pa)
DZAS 20 E	1.860	840	1.270	1.420	784	751	673	205	695	0,3	To consult
DZAS 25 E	1.860	840	1.270	1.420	784	751	698	205	695	0,4	To consult
DZAS 35 E	2.250	1.050	1.505	1.850	990	718	1.155	415	905	0,5	150
DZAS 45 E	2.250	1.050	1.505	1.850	990	718	1.253	415	905	0,65	150

(1) Figures according to position of engine/alternator. (2) Includes doors on both sides.



Cummins

Model	Exhaust					
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Outlet diameter (inches)	Attenuation (dBA)
DCAS 700 E	VTA28 G5	8,5	122,9	507	7,6	26±2
DCAS 860 E	QSK23 G3	8,7	147,8	543	7,6	26±2
DCAS 1100 E	QST30 G4	8,7	178	575	8,6	26±2
DCAS 1450 E	KTA 50 G3	8,5	240	510	To consult	26±2

Deutz

Model	Exhaust					
	Engine	Maximum allowable back pressure (kPa)	Exhaust gas flow (m ³ /min)	Gas temperature (°C)	Outlet diameter (inches)	Attenuation (dBA)
DZAS 20 E	D2009L03	2	2,9	508	2,36	26±2
DZAS 25 E	D2009L04	2	3,7	480	2,36	26±2
DZAS 35 E	F4M2011F	3	5,2	570	3	26±2
DZAS 45 E	BF4M2011F	3	7,2	580	3,5	26±2

Residential exhaust (Open skid models)

- Attenuation level up to 35-40 dBA, depending on model.
- Silent, reactive/absorption type for greater effectiveness in attenuation at both high and low frequencies.
- The outer body is made of aluminized steel or steel with heat-resistant paint, depending on model, and is assembled using a mechanical joint crimping and sealing technique, minimizing the amount of external soldering needed.
- Inlet may be axial or radial.
- Materials used for absorption are fiberglass and biosil mineral wool, the latter being highly attenuating and completely innocuous.

Accessories

- Flexible, stainless tubing and optional flanges, counterflanges, joints, hardware, mount and spark arresters.



Retention Bath

- Holds up to 110% of the volume of liquids contained in the generator (fuel, oil, coolant).
- Built with 5 mm electrowelded steel profiles.
- Excellent anticorrosion protection due to surface treatment through a hot-drip galvanizing or painting process.
- Includes slots for forklift arms for easy transport of generator set. Additionally, its parallel base supports and notches on the ends allow for sliding of the unit if needed.



Mounts-Shock absorbers

- **Suction mounts:** Range of rubber mounts for machines with a rated frequency of 1,500 or 3,000 rpm and a load capacity between 80 and 3,750 kg per support bearing.
- **Components:** stud bolt, standard nut, levelling nut, rubber, washer and mount.
- **Spring dampers:** Range of spring-rubber vibration isolators for machines with a rated frequency of 1,500 or 3,000 rpm and load capacity between 150 and 3,000 kg per support bearing.
- **Components:** tempered steel spring, rubber shock absorbers, fittings and protective features: zinc-plated mechanical components.



Silencer for covered facilities

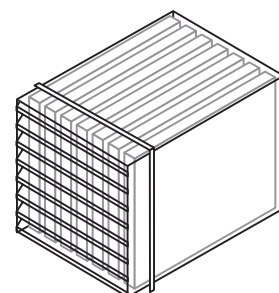
GESAN uses absorption-type silencers with a straight-through design. Their function is to muffle the sound produced by the generator and prevent its transmission into the environment.

Installation options:

- Complete silencer, body and set of phonoabsorbent panels.
- Independent panels on a shell plate or in a pre-existing conduct from the public works.
- These silencers may be used for aspiration as well as for the air outlet.

Dimensions needed:

- Air flow.
- Maximum pressure drop allowed by the generator.
- Desired noise attenuation attained: between 10 and 50 dBA, depending on selected length.



Automatic pump system and auxiliary tank

- **SAB-BE+EV:** Consists of an electric pump, electrovalve, fuel tank senders and level relay in electrical panel
- **SAB-EV:** Consists of electrical valve, fuel tank senders and level relay in electrical panel.
- **SAB:** Consists of fuel tank senders and level relay in electrical panel.



Double Walled Fuel Tanks

- Inner tank is made of blowmolded, high-density polyethylene that is seamless and absolutely leakproof and corrosion-resistant.
- The outer tank is made of leak-proof corrosion resistant steel which is capable of containing at least 110% of the capacity of the inner tank for maximum protection.
- The outer tank is made of galvanized steel, rollseamed (no welds) with an oil and fire resistant seal.

GESAN tanks meet the strictest European safety standards and exceed the most recent industry safety regulations.

Indication/measurement	GPM2	GECO	DS 5210	DS 5310	DS 5220	DS 5320	IG-CU
Generator							
Generator voltage (L-N)	NA (2)	NA (2)	✓		✓		✓
Generator voltage (L-L)	NA (2)	NA (2)	✓		✓		✓
Generator frequency	NA (2)	NA (2)	✓		✓		✓
Generator current	NA (2)	NA (2)	✓		✓		✓
kW	NA	NA	✓		✓		✓
kVA	NA	NA	✓		✓		✓
kWh	NA	NA	NA	NA	NA	NA	✓
kVAh	NA	NA	NA	NA	NA	NA	✓
Mains							
Correct Voltage/Frequency LED	NA (1)	✓	NA (1)		✓		✓
Mains voltage (L-N)	NA (1)	NA	NA (1)		✓		✓
Mains voltage (L-L)	NA (1)	NA (2)	NA (1)		✓		✓
Mains frequency	NA (1)	NA	NA (1)		✓		✓
Line current	NA	NA	NA		NA		•
kW	NA	NA	NA		NA		•
kVA	NA	NA	NA		NA		•
Cos φ	NA	NA	NA		NA		•
ATS Synoptic	NA (1)	✓	NA (1)		✓		✓
Engine							
r.p.m.	NA (2)	NA (2)	✓		✓		✓
Water temperature	NA (2)	NA (2)	✓		✓		✓
Oil pressure	NA	NA	✓		✓		✓
Hour meter	NA (2)	NA (2)	✓		✓		✓
Battery voltage	NA (2)	NA (2)	✓		✓		✓
No. of starts	NA	NA	✓		✓		✓
Fuel level (%)	NA (2)	NA (2)	✓		✓		✓
J1939 Protocol/Modbus*	NA/NA	NA/NA	NA/NA	✓/✓	NA/NA	✓/✓	✓/NA
Genset protections							
Startup failure	S	S	S		S		S
High temperature	S	S	W & S		W & S		W & S
Low oil pressure	S	S	W & S		W & S		W & S
Low fuel level	W	W	W		W		W
Low water level in radiator	S	S	S		S		S
Overload	S	S	S		S		S
Correct battery voltage	NA	✓	NA		NA		NA
High battery voltage	NA	W	W		W		W
Low battery voltage	NA	W	W		W		W
Battery charge alternator	S	W (2)	W		W		W (2)
Generator under frequency	S	W	W & S		W & S		W & S
Generator over frequency	S	W	W & S		W & S		W & S
Low generator voltage	S	W	W & S		W & S		W & S
High generator voltage	NA	W	W & S		W & S		W & S
Emergency stop	S	S	S		S		S
Maintenance interval	W	NA	NA		NA		✓
Events log	NA	NA	✓ (15)		✓ (15)		✓ (120)
Communication							
Volt-free contact card	•	•	• (8)	• (8+8)	• (8)	• (8+8)	• (15-CAN bus)
Windows soft. for indiv./multiple sets	NA	NA	✓/•		✓/•		WinEdit/MultiEdit
RS 232	NA	NA	•		•		✓ (ModBus)
RS 485	NA	NA	✓		✓		NA
Analog modem	NA	NA	•		•		•
GSM modem	NA	NA	•		•		•
Remote screen	NA	NA	•		•		•
Application							
Manual start	✓	✓	✓		✓		✓
Remote start and/or via signal	✓	✓	✓		✓		✓
Automatic Mains Failure	NA (1)	✓	NA (1)		✓		✓
Automatic via signal	✓	✓	✓		✓		✓
Synchronization	NA	NA	NA		NA		✓
Features							
Load distribution	NA	NA	NA		NA		✓
Voltage and cos φ regulation	NA	NA	NA		NA		✓
Reverse voltage protection	NA	NA	NA		NA		✓
Applications							
Multiple generators	NA	NA	NA		NA		✓ (32 ucds)
Automatic with/without synchronization upon return	NA	NA	NA		NA		✓
Peak load	NA	NA	NA		NA		✓
Export to mains and/or generator	NA	NA	NA		NA		✓
Regulation							
Operating temperature	-20 to 70 °C				-30 to 70 °C		(-30 to 80 °C) -20 to 70 °C
Protection level	IP 52				IP 65		IP 65
Max. moisture level	<90 %				93% RH at 40degC for 48 hours as per EN 2011-2-1		95%
Regulations compliance	EN 61000-6-4 ECM EN 61000-4-3 ECM		Low Voltage: EN 60950. Vibration: Ten sweeps (up and back down) at 1 octave/minute in each of three major axes. 8 Hz to 8 Hz @ +/- 7,5 mm constant displacement. 5 Hz to 500 Hz @ 2gn constant acceleration. Shock: EN 60068-2-27 Three half sine shocks in each of the three major axes 15 gn amplitude, 11 ms durations. Electromagnetic Compatibility: EN 50081-2:1992 EN 61000-6-4:2000 EMC Emissions Standards for the Industrial Environment. EN 61000-6-2:1999 EMC Immunity Standards for the Industrial Environment.		Low Voltage: EN 61010-1:95 + A1:97 Vibration: 5-25 Hz, +/- 1,6 mm 25-100 Hz, +/- 1,6 mm Shock: (a: 4 g) Electromagnetic Compatibility: EN 50081-1:1994 EN 50081-2:1996 EN 50082-1:1999 EN 50082-2:1997		



- ✓ Standard.
- Optional.
- NA: Not available.
- W: Warning Alarm.
- S: Shutdown Alarm.
- * Reading and no. of parameters depend upon diesel engine.
- (1) Requires external AMF system.
- (2) Included, external to the control module.



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