





## **GENERAL CATALOGUE**

DIESEL ENGINE, DIESEL WATER PUMP PORTABLE GENERATOR, ULTRA SILENT WELDING GENERATOR, LIGHT TOWER



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# GENERATORS PORTABLE SERIES

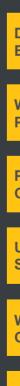
COVAX

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Big or small, simple or complex, any size or shape, in any regulatry environment, when you need power,

COVAX is equal to the challenge.

You can get the power you really need.

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## **DIESEL ENGINE**

Engine is the flagship product of COVAX. Today there are three series engines general-purpose gasoline engine general-purpose diesel engine and multi-cylinder diesel engine. Those engines are not only equipped to COVAX generator sets, but also directly sold to global market. Since the future emission standard demands, COVAX continues the improvement for the fuel and engine structures to reduce the impact on environment. Today, most of COVAX can meet EPA standard. "Green Engine" is the target of COVAX.Due to the requirements of climate protection and environmental protection, which have continually increased in recent years, the industry has now intensified the focus of its research and development divisions on making these engines not only more efficient, but also cleaner. Thus, clean air and the preservation of natural resources have become important objectives of our development work. The challenge is to be able to bring competitive products onto the market, while paying particular attention to the technical and economic framework conditions.





### **DIESEL ENGINE**

As the world leader in mid-range diesel power, we put our heart into your machine. We are producing diesels which are reliable and economical for their users in view of total performance cost. Their advanced technology, well proven quality and minimum fuel consumption, low maintenance cost, very high performance as well as maximum reliability will certainly satisfy all your requirements.

### 1. Single - Cylinder

Unique driving system Excellent injection technology Advanced noise-reduce design

### 2. Two - Cylinder

Firm construction, light weight, improved stiffness and steadiness.Steady and reliable performance

Voltage stabilization tank parts would decrease the inlet noise. The column gear driving is more compact, exact and reliabe. Vertical shaft or horizontal shaft are optional.

### 3. Multi - Cylinder

Good interconvertibility of parts Economic, reliable, durable Low fuel consumption

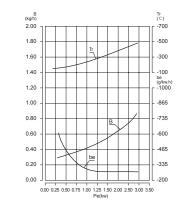
### **Gasoline Engine**

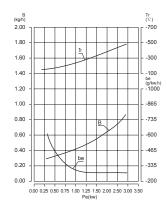
As one of the leading manufacturer of engines, COVAX has earned its reputation for unsurpassed quality, performance and reliability. On the basic of the conventional acclaimed gasoline engines, we launched another three new models, which offers the high torque and fuel economy of a diesel together with extremely clean emissions to meet the demands of our customers through advanced engine technology, quality components and superior manufacturing capability throughout the world.



Model	KM170F	KM170FA
Туре	Single-cylinder,vertical,air-cooled,four- stroke,direct injection	Single-cylinder,vertical,air-cooled, four-stroke,direct injection
Bore×Stroke (mm)	70×55	70×57
Displacement (L)	0.211	0.219
Compression ratio	20	20
Rated power/ Rated speed (kW/r/min)	2.5/3000, 2.8/3600	2.5/3000, 2.8/3600
Lowest rotation speed at zero load (r/min)	≤1300	≤1300
Lubricating system	Pressure splashed	Pressure splashed
Starting system	Recoil starter/Electric starter	Recoil starter/Electric starter
Rotation direction (face to the output axle)	Anticlockwise	Anticlockwise
Fuel type	0#,-10#,-20# diesel	0#,-10#,-20# diesel
Fuel tank capacity (L)	2.5	2.5
Fuel consumption/ Rotation speed (g/kW.h/r/min)	280.2/3000, 288.3/3600	280.2/3000, 288.3/3600
Lube oil type	CD grade or SAE 10W-30, 15W-40	CD grade or SAE 10W-30, 15W-40
Lube oil capacity (L)	0.75	0.75
Starting motor capacity (V, kW)	12V 0.8kW	12V 0.8kW
Charging generator capacity (V, A)	12V 3A	12V 3A
Battery capacity (V, Ah)	12V 24Ah-36Ah	12V 24Ah-36Ah
Overall dimension(L×W×H) (mm)	335X380X415	335X380X415
Dry weight (kg)	≤27	≤27

### Performance Curve

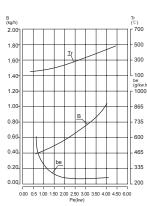


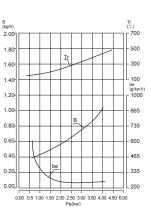


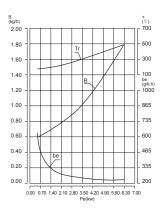
### **Technical Data**

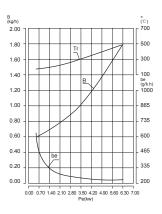
KM178F	KM178FA	KM186F	KM186FA
Single-cylinder,vertical,air-cooled, four-stroke,direct injection	Single-cylinder,vertical,air-cooled, four-stroke,direct injection	Single-cylinder,vertical,air-cooled, four-stroke,direct injection	Single-cylinder,vertical,air-cooled, four-stroke,direct injection
78×62	78×64	86×70	86×72
0.296	0.305	0.406	0.418
20	20	19	19
3.68/3000, 4/3600	3.68/3000, 4/3600	5.7/3000, 6.3/3600	5.7/3000, 6.3/3600
≤1300	≤1300	≤1300	≤1300
Pressure splashed	Pressure splashed	Pressure splashed	Pressure splashed
Recoil starter/Electric starter	Recoil starter/Electric starter	Recoil starter/Electric starter	Recoil starter/Electric starter
Anticlockwise	Anticlockwise	Anticlockwise	Anticlockwise
0#,-10#,-20# diesel	0#,-10#,-20# diesel	0#,-10#,-20# diesel	0#,-10#,-20# diesel
3.5	3.5	5.5	5.5
276.1/3000, 285.6/3600	276.1/3000 , 285.6/3600	275.1/3000, 281.5/3600	275.1/3000, 281.5/3600
CD grade or SAE 10W-30, 15W-40	CD grade or SAE 10W-30, 15W-40	CD grade or SAE 10W-30, 15W-40	CD grade or SAE 10W-30, 15W-40
1.1	1.1	1.65	1.65
12V 0.8kW	12V 0.8kW	12V 0.8kW	12V 0.8kW
12V 3A	12V 3A	12V 3A	12V 3A
Above 12V36Ah	Above 12V36Ah	Above 12V36Ah	Above 12V36Ah
385X420X450	385X420X450	420X440X495	420X440X495
≤33	≤33	≤47	≤47

#### Performance Curve











## WATER PUMP DIESEL

COVAX offers a number of pump models for a wide variety of applications in agriculture, industry, residential, rental, etc. From our clean water pumps to our trash pumps, each of our pumps offers outstanding performance.

Legendary COVAX engines are the heart of our pump line. They start easily and provide sufficient and stable Power for the job at hand. Pumps are powered with either gasoline or diesel engines.

Do you chase after unparalleled water pumps? COVAX pumps are exactly what you want.



#### **Economical Running**

Equipped with COVAX engines, COVAX pump offer superior combustion efficiency and minimal fuel consumption.

#### Portability

A special alloy frame reduces weight and facilitates movement around the work site.

#### A Wide Range of Performance

An advanced impeller design insures a high volume of water ingestion.

#### **Durable Construction**

The principal parts of the pump are designed for reduced wear and corrosion resistance.

#### **Easy Maintenance**

Cleaning the inside of the pumps can be performed by removing just a few bolts.

#### **Delicate Design**

Featuring COVAX commercial grade engine and rugged full frame protection with anti-vibration mounts, these pumps feature a fixed mounted cast iron volute and impeller with a silicon carbide seal. This is the ultimate combination of features to provide unsurpassed performance and durability in the toughest conditions.



## TRASH PUMP DIESEL

For those applications where large solids and other debris are encountered, COVAX offers a line of trash pumps designed to smoothly and safely handles that material. Deep impeller vanes and a large diameter discharge opening can pass suspended twigs, stones and other slids without clogging the pump or harming its internal components. Designed to be user friendly, these selfpriming pumps remain serviceable under the harshest conditions.

#### Reliability

Our technology absolutely sets the standard for reliability. That is why working professionals prefer COVAX equipment. There is virtually no downtime and longevity is unsurpassed.

#### Fuel Efficient and Quiet

Our engines are remarkable fuel efficient and quiet. This counts for a lot on any job site.

#### Easy to Start

The COVAX engines on the pumps are easy to start and easy to use. The engine are perfectly matched to the pumps and are engineered for quality and percision.

#### **Full Frame Protection**

The pumps are enclosed in a full frame to provide ultimate protection and are engineered to minimize vibration.

#### Long Running, Fuel Thrifty Diesels

Fuel-efficient diesel pumps can be operated 1.5-4 times longer than gasoline pumps. This advantage truly shows in night time and other continuous pumping operation at sites where no commercial power is available.

#### **Durable Construction**

The principal parts of each pump are reinforced for superior wear resistance. The trash pumps are further strengthened by adding liners to the inner casings.

#### **Easy Maintenance**

Cleaning the inside of the casing can be done simply by just removing a few bolts. With trash pumps, the casing cover and the inner casing come in one block, so separation and fitting is very easy.









07 | 08

Model	KDP20/KDP20E	KDP30/KDP30E	KDP40
Туре	Diesel pump	Diesel pump	Diesel pump
Suction & discharge port diameter (mm) (in)	50 (2")	80 (3")	100 (4")
Rated capacity (m³/h)	22.0	30.0	40.0
Rated total head (m)	15	13	16
Self-priming time (s/4m)	80	120	180
Max.suction head (m)	8.0	8.0	8.0
Rotation speed (r/min)	3600	3600	3600
Fuel consumption (g/kW.h)	288	285	281
Noise level [dB(A)/7m]	74.0	76.0	79.0
Overall dimension (mm)(LxWxH)	525x410x515	570x445x550	650x480x600
Net weight (kg)	38.5	49	62.5
Engine model	KM170	KM178	KM186
Rated power (kW)	2.8	4.0	6.3
Rated speed (r/min)	3600	3600	3600
Displacement (cm <sup>3)</sup>	211	296	406
Starter system	KDP20: Recoil starter KDP20E: Electric starter	KDP30: Recoil starter KDP30E: Electric starter	KDP40: Recoil starter KDP40E: Electric starter

### **Technical Data**

Model	KDP20T
Туре	Diesel pump
Suction & discharge port diameter (mm) (in)	40 (1.5")
Rated capacity (m³/h)	5.0
Rated total head (m)	42
Self-priming time (s/4m)	40
Max.suction head (m)	8.0
Rotation speed (r/min)	3600
Fuel consumption (g/kW.h)	285
Noise level [dB(A)/7m]	79
Overall dimension (mm)(LxWxH)	570x445x550
Net weight (kg)	43
Engine model	KM178
Rated power (kW)	4.0
Rated speed (r/min)	3600
Displacement (cm <sup>3)</sup>	296
Starter system	Recoil starter

KDP30T	KDP40T
Diesel pump	Gasoline pump
40 (1.5")	40 (1.5")
5.0	5.0
42	42
40	180
8.0	5.0
3600	3600
285	395
79	72
570x445x550	510x432x415
43	29
KM178	KG200P
4.0	4.0
3600	3600
296	196
Electric starter	Recoil starter



## PORTABLE **GENERAL GENERATOR**

### Power, you can trust

COVAX always develops products from the customer's point of view. To facilitate operation, COVAX equips its generator with a user-friendly control panel as well as provisions of a COVAX automatic transfer switch. The new series of generator sets feature the following benefits:

The digital control panel can be applied to dual voltage, single phase and three phase generator sets. When utility power fails, a COVAX automatic transfer switch senses the loss of power and immediately starts the generator. Once utility power is restored, the transfer switch shifts your electric load back to utility power and shuts off the generator.

The automatic transfer switch exercises the generator weekly to ensure it is always in working order, and it can be mounted inside the generator or attached as an optional accessory.

Most generators in this series are equipped with brushless alternators which establish stable voltage in a minimum amount of time. The generator set maintains smooth and quality output.

### **ATS** (AUTOMATIC TRANSFER SWITCH)

The new series of COVAX general purpose generator sets equipped with digital control panels can be equipped with an ATS. The ATS can automatically check and monitor genset running performance to ensure it is in good working condition. The ATS will also monitor utility power. In the event of a power failure or if utility power voltage and frequency is abnormal, the ATS will command the generator set to start automatically.

Once utility power is restored, the ATS shifts the load back to utility power and shuts down the generator.





### **FEATURES & BENEFITS**

#### Low running noise

High efficiency combustion system ensures complete combustion. A large silencer dampens exhaust noise and engine sounds are contained by a double wall structure and liner absorber.

#### **Digital control panel**

All control functions of the generator are on a central panel. A digital display indicates the real time performance data of the generator such as voltage, frequency, oil pressure, and battery condition. The panel also displays any fault that shuts down the genset.

#### Advanced alternator winding

Waveform distortion is kept at a minimum level with a stable output. The winding design protects the generator from short circuit and provides a stable output while running inductive loads.

#### Low oil alarm system

Before the oil level drops to a dangerous level, the generator will stop automatically. It can only be restarted after the proper oil level is restored.

#### Application of new AVR

The automatic voltage regulator (AVR) not only can smooth the output but also provides protection against overload, avoiding expensive damage.

#### Strong power

All generator sets are equipped with COVAX four stroke diesel engines.





















50/60 640x480x530 53/60



KDE4000X/E

50/60 2.8/3.3 655x480x530 65/70

AVR	
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KDE7000E/E3

50/60 50/60 4.5/5.0 5.5/6.3 5.0/5.5 720x492x655 720x492x655 100 100





KDE7500E/E3

KDE8500E/E3





83

83







KDE

DIESEL MODELS

Rated frequency (Hz)

Rated output (kVA)

Max. output (kVA)

Dimensions(mm)

Net weight(kg)

Noise level [dB(A)/7m]

## **KDE** GENERAL

### **FEATURES & BENEFITS**

**Delivering the power you need** Powerful, flexible, versatile, reliable, durable; COVAX generators have it covered on every level.

### **Quieter and more powerful**

A high efficiency combustion system ensures complete combustion. A large silencer dampens exhaust noise and engine sounds are contained in a double-walled structure and absorbed by a special liner.

### Wide application

Various models are available to meet all customers' requirements.

### **Easily portable**

An open frame configuration means it's easy to handle and store when not in use.

### **Control panel**

All operating functions of the generator sets are on the panel. A digital readout displays operating parameters in real time such as output voltage and amperage. Circuit breakers protect the generator from overloads.



### KDE12EA/EA3



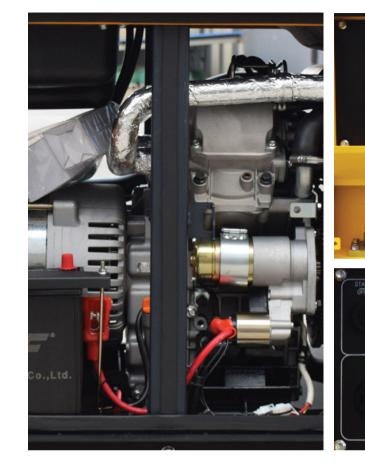
## **KDE** GENERAL

### **COVAX KDE SERIES HAS THE SUPPORT OF** WORKING **PROFESSIONALS EVERYWHERE.**

This diesel powered generator line is produced in three versions to accommodate the most common applications.

All offer great durability, low vibration, quiet operation, and recoil or convenient electric starting.







KDE7000T/T3

KDE6700T/T3

KDE7500T/T3 KDE8500T/T3

	20000	
•		

	AVR		0-0	
		\$ <mark>~~</mark> \$	\$%	
	50		50	
	6		7.5	
	6.5		8.1	
780	978x56	65x780	978x565×	
	70		70	
	170		170	



### KDE12STA/STA3

AVR		24
∝ ≁	» N	
50/60	5	60/60

l	∽∽	
50/60		
10/11.5		
11/12.65		
1350x650x760		

158/165

KDE

Noise level [dB(A)/7m]

Net weight(kg)

۲		
	WN	<i>_</i>
50/60	50/60	50
4.5/5.0	5.5/6.3	4.
5.0/5.5	6.0/7.0	5.0
912x532x740	912x532x740	93
72	72	72
	<b>50/60</b> 4.5/5.0 5.0/5.5 912x532x740	\$

<i></i>
)
3
)
35×
7

AVR		
<mark>∽~~</mark>	\$ <mark>~_</mark> \$	WN

50

160

742

950x565x780

**** ***	
50	50
6.3	6
6.9	6.5

950x565x

160

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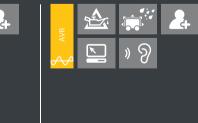
60/60	50/60
.5/9	10/11.
.5/10	11/12.
350x650x760	1350x
°2	72

AVR			2
₹	×	» N	

<i>,</i>		
	50/60	
	10/11.5	
	11/12.65	
	1350x650x760	
	70	

### 15 | 16









KDE7000STA

04

50/60

870x645x710

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### **EATURES AND BENEFITS**

### 1 Stronger power

COVAX newly-developed single engine can be introduced with excellent low speed torque to the structure of gensets, not adding the overall dimension of the gensets; the application of KT5 and KT6 alternators enhances the generating efficiency.

### **3** More convenient maintenance

AVR, air filter and fuel filter are all designed with individual access panels, so that component replacement can be done without dismounting the genset cabinet.

### **2** Remarkable noise reduction

Thanks to persistent research and development of COVAX technical departments, gensets' noise level at no load is decreased to only 65dB(A)/m, which has already been impressive progress for noise reduction.



Rated frequency (Hz) Rated output (kVA) Max. output (kVA) Dimensions(mm) Noise level [dB(A)/7m] Net weight(kg) KDE7000STA3

VR	<b>@</b> 4	» N
AVR	\$ <mark>~_</mark> \$	

50/60
5.25/5.75
5.75/6.25
870x645x710
72
175



### COVAX HAS BROUGHT OUT A NEW SERIES OF GENERAL GENERATOR SETS.

Compared with traditional models, diesel general gensets have been greatly improved by technical breakthrough and innovation, which are featured by impressive noise reduction, easy transportation, higher power, easy maintenance, and so on.





### KDE7500STA



5.0/5.5 5.5/6.0 870x645x710 73 178

### KDE7500STA3



**50/60** 6.25/7.0 6.9/7.7 870x645x710 73 178

Generating set		KDE2	KDE2500X KDE2500E		KDE4000X		
Rated frequency	Hz	50	60	50	60	50	60
Drives a sures	KVA	1.7	2.0	1.7	2.0	2.8	3.3
Prime power	KW	1.7	2.0	1.7	2.0	2.8	3.3
Standby nowor	KVA	2.0	2.2	2.0	2.2	3.2	3.8
Standby power	KW	2.0	2.2	2.0	2.2	3.2	3.8
Rated voltage	V	115/230	120/240	115/230	120/240	115/230	120/240
Rated current	А	14.8/7.4	16.7/8.3	3.9	7.5/3.75	24.3/12.2	27.5/13.8
Rated rotation speed	r/min	3000	3600	3000	3600	3000	3600
Generator							
Generator type		KT	2	K	T2	KT	3.3
Pole No.		2			2	:	2
Phase number		Single	phase	Three	e phase	Single	phase
Excitation mode			Self-ex	citation and cor	stant voltage(with A	AVR)	
Power Factor	COSΦ	1.	0	1	.0	1.	.0
Insulation grade		B	3		В	l	В
Engine							
Engine type		KM17	′0FG	KM1	70FG	KM178FG	
Structure type			Inder, vertical, e, direct injection	Single-cyInder, vertical, four-stroke, direct injection		Single-cylnder, vertical, four-stroke, direct injection	
Bore x stroke	mm	1-70	×55	1-70×55		1-78x62	
Displacement	L	21	1	211		2	96
Compression ratio		20:	1	20:1		2	0:1
Rated power	WK	2.5/30	00 2.8/3600	2.5/3000	2.8/3600	3.68/3000	4.0/3600
Lubrication system		Pressure	e splashed	Pressure splashed		Pressur	e splashed
Lube oil brand		CD grade o	r SAE10W-30, 15W-40	CD grade or SAE10W-30, 15W-40		CD grade or SA	AE10W-30, 15W-40
Lube capacity	L	0.7	75	0	.75		1.1
Starting system		12V Elec	tric system	12V Ele	ctric system	Air cooled	
Starting motor capacity		12V	0.8KW	12V	0.8KW	12V	0.8KW
Charging generator capacity	V-A	12V	3A	12V	3A	12V	ЗA
Battery capacity	V-Ah	12V	36Ah	12V	36Ah	12V	36Ah
Fuel consumption ratio	g/KW.h	≤3	70	≤	370	≤;	370
Fuel type		0#	(summer),-10#(winte	er),-35#(chillne	ss) diesel		
Genset							
Panel type		Gener	al Panel	Gener	al Panel	Genera	al Panel
	Receptacle	Two red	ceptacles	Two red	ceptacles	Two rec	ceptacles
Output	Connection pole	N/	A	Ν	/A	Ν	/A
	DC12V output	Connectio	on pole output	Connection	n pole output	Connection	n pole output
Nosie level(7)m	dB(A)	7	7		77		77
Fuel tank capacity	L	13	3.5	1	3.5	1	3.5
Overall dimensions	mm	640×4	80×530	640×	480×530	655×	480×530
Dry weight	kg	53	3	6	60	65	

### **Technical Data**

	liouri	Data						
KDE4000E		KDE7	000E	KDE7	KDE7000E3		000T	
50	60	50	60	50	60	50	60	
2.8	3.3	4.5	5.0	5.5	6.3	4.5	5.0	
2.8	3.3	4.5	5.0	4.4	5.0	4.5	5.0	
3.2	3.8	5.0	5.5	6.0	7.0	5.0	5.5	
3.2	3.8	5.0	5.5	4.8	5.6	5.0	5.5	
115/230	120/240	115/230	120/240	230/400	240/416	115/230	120/240	
24.3/12.2	27.5/13.8	3.9	7.5/3.75	7.9	8.7	39.1/19.6	41.7/20.8	
3000	3600	3000	3600	3000	3600	3000	3600	
Generator								
KT	F3.3	ł	KT5	K	Т5	K	Т5	
2	2		2		2		2	
Single	e phase	Thre	e phase	Three	phase	Single	e phase	
		Self-e	excitation and cons	stant voltage(with	AVR)			
1.	.0	1	.0	0.	.8(lag)	1	.0	
E	3		В	l	В		В	
Engine								
KM17	78FG	KM1	186FAG	KM1	86FAG	KM186FAGET		
	yInder, vertical, e, direct injection		nder, vertical, direct injection			Single-cylnder, vertical, four-stroke, direct injection		
1-78	-x62	1-8	6x72	1-80	1-86x72		6x72	
29	6	4	18	4	418		418	
20:	:1	1	9:1	1	9:1	1	9:1	
3.68/3000	4.0/3600	5.7/3000	6.3/3600	5.7/3000	6.3/3600	5.7/3000	6.3/3600	
Pressure	e splashed	Pressu	re splashed	Pressur	e splashed	Pressu	re splashed	
CD grade or SAE1	10W-30, 15W-40	CD grade or SA	AE10W-30, 15W-40	CD grade or SA	AE10W-30, 15W-40	CD grade or S/	AE10W-30, 15W-40	
1.1	1	1	.65		1.65		1.65	
Electric s	starter	X: Recoil starter	E: Electric star	ter Air	cooled	Air	cooled	
12V	0.8KW	12V	0.8KW	12V	0.8KW	12V	0.8KW	
12V	ЗA	12V	ЗA	12V	3A	12V	ЗA	
12V	36Ah	12V		12V	36Ah	12V	36Ah	
≤3	370		360 		360 	≤	360	
		0++ (\$	summer),-10#(wir	iter),-35 # (chiline)	ss) diesei			
Genset								
General Panel General Panel		Genera	General Panel		al Panel			
Two receptacles Two receptacles One		ne single-phase & o	one three-phase rece		ceptacles			
N/A N/A			N/A		I/A			
	on pole output		n pole output		/A		n pole output	
	7		77		79		72	
	3.5		13.5		3.5		15	
	180×530		192x655		492x655		532x740	
70	0	X:95	E:100	1	00		158	

Rated frequencyHz5060506060Prime power $KVA$ 5.56.34.55.05.56.3 $KW$ 4.45.04.55.04.45.0 $KW$ 675.05.567 $Standby power$ $KW$ 4.85.65.05.54.85.6Rated voltageV230/400240/416115/230120/240230/400240/416
Prime power         KW         4.4         5.0         4.5         5.0         4.4         5.0           Standby power         KVA         6         7         5.0         5.5         6         7           KW         4.8         5.6         5.0         5.5         4.8         5.6
KW         4.4         5.0         4.5         5.0         4.4         5.0           Standby power         KVA         6         7         5.0         5.5         6         7           KW         4.8         5.6         5.0         5.5         4.8         5.6
Standby power         KW         4.8         5.6         5.0         5.5         4.8         5.6
KW 4.8 5.6 5.0 5.5 4.8 5.6
Rated voltage         V         230/400         240/416         115/230         120/240         230/400         240/416
Rated current         A         7.9         8.7         39.1/19.6         41.7/20.8         7.9         8.7
Rated rotation speed         r/min         3000         3600         3000         3600         3000         3600
Generator
Generator type KT5 KT5 KT5
Pole No. 2 2 2
Phase number     Three phase     Single phase     Single phase
Excitation mode Self-excitation and constant voltage(with AVR)
Power Factor         COSΦ         0.8(lag)         1.0         0.8(lag)
Insulation grade B B B
Engine
Engine type KM186AGET KM186FAGET KM186FAGET
Structure typeSingle-cyInder, vertical, four-stroke, direct injectionSingle-cyInder, vertical, four-stroke, direct injectionSingle-cyInder, vertical, four-stroke, direct injection
Bore x stroke         mm         1-86x72         1-86x72         1-86x72
Displacement L 418 418 418
Compression ratio         19:1         19:1
Rated power         WK         5.7/3000         6.3/3600         5.7/3000         6.3/3600         5.7/3000         6.3/3600
Lubrication system         Pressure splashed         Pressure splashed         Pressure splashed
Lube oil brand CD grade or SAE10W-30, 15W-40 CD grade or SAE10W-30, 15W-40 CD grade or SAE10W-30, 15W-40
Lube capacity L 1.65 0.75 1.65
Starting system         Air cooled         Electric Start         Electric Start
Starting motor capacity         12V         0.8KW         12V         0.8KW         12V         0.8KW
Charging generator capacity         V-A         12V         3A         12V         3A
Battery capacity         V-Ah         12V         36Ah         12V         36Ah         12V         36Ah
Fuel consumption ratiog/KW.h≤360≤360≤360
Fuel type0# (summer),-10# (winter),-35# (chillness) diesel
Genset
Panel type     General Panel     General Panel     General Panel
Receptacle One single-phase & one three-phase receptacles Two receptacles One single-phase & one three-phase recepta
Output         Connection pole         N/A         N/A
DC12V output N/A Connection pole output N/A
Nosie level(7)m         dB(A)         72         72         72
Fuel tank capacityL1513.5
Overall dimensions         mm         912x532x740         930x535x742         930x535x742
Dry weight kg 165 170 177

### **Technical Data**

KDE7500E	KDE7500E3	KDE7500T	KDE7500T3
50	50	50	50
5.0	6.3	5.0	6.3
5.0	5.0	5.0	5.0
5.5	6.9	5.5	6.9
5.5	5.5	5.5	5.5
115/230	400/230	115/230	400/230
48.5/21.7	9.1	43.5/21.7	9.1
3000	3000	3000	3000
KT6	KT6	KT6	KT6
2	2	2	2
Single phase	Three phases	Single phase	Three phases
		excitation constant voltage	
1.0	0.8	1	0.8
F	F	F	F
KM188FE	KM188FE	KM188FE	KM188FE
	4-stroke, single direct injecti	-cylinder, air-cooled,. ion diesel engine	
88×75	88×75	88×75	88×75
0.456	0.456	0.456	0.456
19.5 : 1	19.5 : 1	19.5 : 1	19.5 : 1
6.6/3000	6.6/3000	6.6/3000	6.6/3000
Pressure splashed	Pressure splashed	Pressure splashed	Pressure splashed
	CD grade 10W-	-30, 15W-40	
1.65	1.65	1.65	1.65
Electric starter	Electric starter	Electric starter	Electric starter
0.8Kw	0.8Kw	0.8Kw	0.8Kw
	14\	/-8.3A	
	12V	/-36Ah	
275	275	275	275
	0#(summer),-10#(win	ter), diesel oil	
Volt meter	Volt meter	Volt + Hour meter	Volt + Hour meter
Three-hole anti-loose socket	Three-hole anti-loose socket	Three-hole anti-loose socket	Three-hole anti-loose socke
Without	Without	Without	Without
12V/8.3A	12V/8.3A	12V/8.3A	12V/8.3A
83	83	70	70
12.5	12.5	14.5	14.5
710×515×630	710×515×630	950×565×780	950×565×780
110.010.000	11040104000	0000000000000	0000000000000

Generating set		KDE8500E	KDE8500E3	KDE8500T
Rated frequency	Hz	50	50	50
	KVA	6.0	7.5	6.0
Prime power	KW	6.0	6.0	6.0
Standby nower	KVA	6.5	8.1	6.5
Standby power	KW	6.5	6.5	6.5
Rated voltage	V	115/230	400/230	115/230
Rated current	А	52.2/26.1	10.8	52.2/26.1
Rated rotation speed	r/min	3000	3000	3000
Generator				
Generator type		KT8	KT8	KT8
Pole No.		2	2	2
Phase number		Single phase	Three phase	Single phase
Excitation mode			Controlled silicon self excitation constant volt	age
Power Factor	COSΦ	1	0.8	1
nsulation grade		F	F	F
Engine				
Engine type		KM192FE	KM192FE	KM192FE
Structure type			4-stroke, single-cylinder, air-cooled,. direct injection diesel engine	
Bore x stroke	mm	92×75	92×75	92×75
Displacement	L	0.499	0.499	0.499
Compression ratio		19.5 : 1	19.5 : 1	19.5 : 1
Rated power	WK	7.6/3000	7.6/3000	7.6/3000
_ubrication system		Pressure splashed	Pressure splashed	Pressure splashed
Lube oil brand			CD grade 10W-30, 15W-40	
Lube capacity	L	1.65	1.65	1.65
Starting system		Electric starter	Electric starter	Electric starter
Starting motor capacity		1.2Kw	1.2Kw	1.2Kw
Charging generator capacity	V-A		14V-8.3A	
Battery capacity	V-Ah		12V-36Ah	
uel consumption ratio	g/KW.h	265	265	265
Fuel type			0#(summer),-10#(winter), diesel oil	
Genset				
Panel type		Volt meter	Volt meter	Volt + Hour meter
	Receptacle		Three-hole anti-loose socket	
Output	Connection pole		Without	
	DC12V output		12V/8.3A	
Nosie level(7)m	dB(A)	83	83	70
Fuel tank capacity	L	12.5 12.5 14.5		14.5
Overall dimensions	mm	720×525×640	720×525×640	978×565×780
Dry weight	kg	110	110	170

### **Technical Data**

KDE8500T3	KDE <sup>,</sup>	12EA	KDE	12EA3	KDE1	2STA	KDE1	2STA3
50	50	60	50	60	50	60	50	60
7.5	8.5	9	10	11.5	8.5	9	10	11.5
6.0	8.5	9	8	9.2	8.5	9	8	9.2
8.1	9.5	10	11	12.65	9.5	10	11	12.65
6.5	9.5	10	8.8	10.1	9.5	10	8.8	10.1
400/230	115/230	120/240	400/230	416/240	115/230	120/240	400/230	416/240
10.8	73.9/37	75/37.5	14.4	16	73.9/37	75/37.5	14.4	16
3000	3000	3600	3000	3600	3000	3600	3000	3600
KT8	KT	12	KT	S12	KT	12	KT	S12
2	2		:	2	2	2		2
Three phase	Single	phase	Three	phase	Single	phase	Three	phase
Controlled silicon self exc	citation constant v	oltage		Self-excit	ation and const	ant voltage(wi	th AVR)	
0.8	1.	.0	0.8	(lag)	1.	.0	0.8	(lag)
F	E	3	I	В	E	3	I	В
KM192FE	KM2	V80G	KM2	V80G	KM2	/80G	KM2	V80G
4-stroke, single-cylinder air-cooled, direct injection diesel engine	V type cylinder, swirl chamber		V type cylinder, swirl chamber	double 4-stroke, water-cooled	V type d cylinder, 4 swirl chamber,	I-stroke,	V type o cylinder, swirl chambe	
92×75	80>	<79	80	×79	80>	‹79	80	×79
0.499	0.7	'94	0.7	794	0.7	94	0.7	794
19.5 : 1	2	B	2	13	23	: 1	23	3:1
7.6/3000	12.5	14.5	12.5	14.5	12.5	14.5	12.5	14.5
Pressure splashed	Pressure	splashed	Pressure	splashed	Pressure	splashed	Pressure	splashed
CD grade 10W	V-30, 15W-40			A	bove CD SAE 1	0W-30, 15W-4	40	
1.65	2.2	27	2.	27	2.2	27	2.	27
Electric starter	12V Electi	ric system	12V Elect	ric system	12V Electi	ric system	12V Elect	ric system
1.2Kw	12V	1.4KW	12V	1.4KW	12V	1.4KW	12V	1.4KW
14V-8.3A	12V	20A	12V	20A	12V	20A	12V	20A
12V-36Ah	12V	45Ah	12V	45Ah	12V	36Ah	12V	36Ah
265	285	297	285	297	285	297	285	297
0#(summer),-10	# (winter), diese	el oil		0#(sı	ummer),-10#(w	inter),-35 # (cł	nillness) diesel	
Volt + Hour meter	KP310 sn	nart panel	KP310 sr	nart panel	KP310 sn	nart panel	KP310 sr	nart panel
Three-hole anti-loose socket	2-Single	e phase	2-Single	e phase	2-Single	e phase	2-Singl	e phase
Without	Wit	h	Wit	:h	W	ith	W	/ith
12V/8.3A	-		-					-
70	85		85	;	7	2	7	2
14.5	25		25	;	2	6	2	26
978×565×780	1030X6	00X650	1030X6	00X650	1350×6	50×760	1350×6	50×760
170	210	0	21	0	31	10	3	10

## **ULTRA SILENT DIESEL GENERATOR**



## package purpose built to go anywhere

For applications that demand maximum output and minimum size, the ULTRA SILENT Series is what you need. Equipped with COVAX e-AVR Technology, the ULTRA SILENT Series gives you more stable power to start your appliances quickly and efficiently. The e-AVR Control Unit in the generator automatically senses and enters into Constant Output Model to achieve higher load capacity. The ULTRA SILENT Series generates the power and space you require for truly big performance.

### **FEATURES & BENEFITS**

#### Improved output performance

Achieve higher load capacity by using Constant Output function. Enhance reliability by using new microprocessor which equipped with e-AVR Technology.

#### **Reputable PMG alternator**

Offer enhanced motor starting and fault clearing short-circuit capability. Maximum reliability and stringent quality, respond rapidly to load fluctuations and provide stable and sufficient power at all times.

#### **Environmental friendly package**

Adopt split design of input panel to greatly improve safety, and integral silent design to reduce noise.

#### **Reliable engine**

The four valve power pack specially designed with an integrate water cooled engine, built to deliver the reliable and dependable power.











## **ULTRA SILENT**

ONE OR MORE UNITS OF COVAX SILENT EMERGENCY GENERATORS CAN MEET YOUR NEEDS ANYTIME A POWER OUTAGE OCCURS.

Your equipment will be protected with a reliable power supply in an emergency.





KDE11SS3

 $\mathbf{k}$ 

50/60

62

590

1680x800x1047

 $\bigcirc$ 

KDE13SS3

S

50/60

1680x800x1047

KDE17SS3



50/60
14
17
1680x800x1047
62
625





KDE20SS3

KDE23SS3

	))	V	
P			
<b>50</b>			

50/0

20

688

1840x800x1047

e-AVR	» N	
$\sim$	×	

50/60
21
23
1840x800x1047
75
690

KDE

DIESEL

MODELS

Rated frequency (Hz)

Rated output (kVA) Max. output (kVA)

Dimensions(mm)

Net weight(kg)

Noise level [dB(A)/1m]

### 27 28





### KDE30SS3



### 50/60

### KDE35SS3



#### 50/60

## **ULTRA SILENT**

**ONE OR MORE UNITS OF COVAX** SILENT EMERGENCY **GENERATORS CAN MEET YOUR NEEDS ANYTIME A POWER OUTAGE OCCURS.** 

Your equipment will be protected with a reliable power supply in an emergency.





KDE45SS3

KDE60SS3

 $\mathbf{k}$ 

50/60

60

2460x1000x1257



KDE65SS3



KDE75SS3

KDE100SS3

### KDE DIESEL MODELS

Rated frequency (Hz) Rated output (kVA) Max. output (kVA) Dimensions(mm) Noise level [dB(A)/1m] Net weight(kg)

e-AVR	» N	

### 50/60 2100x880x1147

45

990

e-AVR	» P	
<b>~</b>		

50/60 65 2460x1000x1257



1200

e-AVR	» P	
$\sim$	×	

50/60
90
100
2560x1000x125
135
1270



### KDE120SS3



### 50/60

120 2900x1090x1650 1690

Generating set		KDE11SS3	KDE13SS3	KDE17SS3
Rated frequency	Hz	50	50	50
Prime power	KVA	10	11	14
Fillie power	KW	8	8.8	10.8
Standby power	KVA	11	13	17
Standby power	KW	9	9.6	11.9
Rated voltage	V	230/400	230/400	230/400
Rated current	А	14.1	15.8	20.2
Rated rotation speed	r/min	1500	1500	1500
Generator				
Generator type		LA164B	LA164B	LA164C
Pole No.		4	4	4
Phase number		Three Phase	Three Phase	Three Phase
Excitation mode		Bru	shless self-excited constant voltage (A	AVR)
Power Factor	COSΦ	0.8	0.8	0.8
Insulation grade		Н	Н	Н
Engine				
Engine type		LD3210	LD3220	LD4210
Structure type		Three cylinder, in-line, water-cooled, direct injection	Three cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection
Bore x stroke	mm	80 x 90	85 x 95	80 X 90
Displacement	L	1.357	1.532	1.809
Compression ratio		18:1	18:1	18:1
Rated power	WK	10	11	14
Lubrication system		Pressure splashed		
Lube oil brand		SAE10W-30,15W-40 (above CD grade)		
Lube capacity	L	5.6	5.6	6.7
Starting system			12V Electric starter	
Starting motor capacity		12V45Ah x1	12V45Ah x1	12V45Ah x1
Charging generator capacity	V-A	12	12	12
Battery capacity	V-Ah	12V45Ah x1	12V45Ah x1	12V45Ah x1
Fuel consumption ratio	g/KW.h	<230	<230	<230
Fuel type		0# (summer), -10# (winter), -35# (chillness) diesel		
Genset				
Panel type		4020	4020	4020
Nosie level(7)m	dB(A)	62	62	62
Fuel tank capacity	L	65	65	65
Overall dimensions	mm	1680x800x1047	1680x800x1047	1680x800x1047
Dry weight	kg	590	610	625

### **Technical Data**

50					
	50	50	50		
18	21	27	30		
12.8	16.8	21.6	24		
20	23	30	35		
14	18.5	23.8	26.4		
230/400	230/400	230/400	230/400		
25.9	30.3	39	43.3		
1500	1500	1500	1500		
LA164D	LA184E	LA184F	LA184G		
4	4	4	4		
Three Phase	Three Phase	Three Phase	Three Phase		
	Brushless self-excited co	onstant voltage (AVR)			
0.8	0.8	0.8	0.8		
Н	Н	Н	Н		
LD4220	LD4230	LD4240	LD4250		
Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection		
85 X 95	90 X 100	95 X 105	100 X 118		
2.156	2.54	2.977	3.707		
18:1	18:1	18:1	18:1		
17	21	27	30		
Pressure splashed	Pressure splashed	Pressure splashed	Pressure splashed		
	SAE10W-30,15W-40	(above CD grade)			
6.7	7.6	7.6	10.46		
	12V Electri				
12V45Ah x1	12V45Ah x1	12V45Ah x1	12V80Ah x2		
12	12	12	24		
12V45Ah x1	12V45Ah x1	12V45Ah x1	12V80Ah x2		
<230	<230	<230	<260		
	0# (summer), -10# (winter)	), -35# (chillness) diesel			
4020	4020	4020	4020		
62	62	62	62		
75	75	80	95		
1840x800x1047	1840x800x1047	1950x800x1047	2100x880x1147		
688	690	760	950		

Prime powerKVA405560KW324448Standby powerKVA456065KW364852Rated voltageV230/400230/400Rated currentA57.779.486.6Rated rotation speedrmin150015001500Generator typeLLA184HLA224DLA224EPales number4444Poles No.6Three PhaseThree PhaseThree PhasePhase numberCOSФ0.80.80.80.8Insulation gradeCLD4270LD4280LD4290Structure typeCOS0.105-118108+125018+125Bright SpeetThree Phase intertingent intertin	Generating set		KDE45SS3	KDE60SS3	KDE65SS3
Prime powerAAAKW32A448Standby powerKWA4566065KW364852Rated vortageV230400230400230400Rated rotatin speedV150015001600Generator type1150015001600Generator typeLA184HLA224DLA224EPole No.4444Phase numberThree PhaseThree PhaseThree PhaseExclusion modeBrushless self-excited constant voltage (AVR)Power FactorCOSΦ0.80.80.8EngineLD4270LD4280LD4280Structure typeFour cylinder, ineline, water-cooled, direct injection water cooled, direct injection <td>Rated frequency</td> <td>Hz</td> <td>50</td> <td>50</td> <td>50</td>	Rated frequency	Hz	50	50	50
KW324448Standby powerKWA456065KW364862Rated voltageV220/400220/400220/400Rated currentA57.779.486.6Rated rotation speed1/min150015001500GeneratorILA184HLA224ELA224EPole No.4444Poles number1Three PhaseThree PhasePrease numberCOSΦ0.80.80.8Insulation gradeCOSΦ0.80.80.8Structure typeCOSΦ0.4LD428HLD4290Structure typeCOSΦ0.80.80.8Insulation gradeMFour cylinder, in-line, water-cooled, direct friedmentwater-cooled, direct friedmentBreak strokeMm105×118108×135108×125Break strokeMm105×118108×135108×125Break strokeMm105×118108×135108×125Break strokeMm105×118108×135108×125Lubration systemCTTTLubration systemGT12×80Ah x212×80Ah x2Structure typeLubration systemT12×80Ah x212×80Ah x2Lubration systemGT12×80Ah x212×80Ah x212×80Ah x2Structure typeLubration systemT12×80Ah x212×80Ah x212×80Ah x2Lubration system		KVA	40	55	60
KtvV364852Rated voltageV230/400230/400230/400230/400Rated voltageV230/400230/400230/400230/400Rated rotation speedA57.779.486.6Rated rotation speedr/min150015001500Cenerator typeImage: speed spe	Prime power	KW	32	44	48
KW364852Rated voltageV230/400230/400230/400Rated voltageV230/400230/400230/400Rated voltan speedfrim15001500Generator typeIrm15001500Generator typeIrmIfficeIfficePole No.IfficeIfficeIfficePole No.IfficeIfficeIfficePole No.IfficeIfficeIfficePole No.IfficeIfficeIfficePower FactorIfficeIfficeIfficePower FactorIfficeIfficeIfficeRelation modeIfficeIfficeIfficePower FactorIfficeIfficeIfficeRelation gradeIfficeIfficeIfficeBore stokeIfficeIfficeIfficeRotacture typeIfficeIfficeIfficeBola stokeIfficeIfficeIfficeItaliation gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIfficeItaliaton gradeIfficeIfficeIffice	Standby power	KVA	45	60	65
S         Looked         Looked         Looked         Looked           Rated current         A         5.7.7         79.4.4         86.6           Rated current         fmin         1500         1500           Generator         Image: Construct         LA224E         LA224E           Pole No.         4         4         4         4           Phase number         Image: Construct	Standby power	KW	36	48	52
Instrument         Instrument         Instrument         Instrument           Generator         Image: Im	Rated voltage	V	230/400	230/400	230/400
GeneratorInternational and the set of typeGenerator typeLA184HLA224DLA224EGenerator type444Plase numberThree PhaseThree PhaseThree PhaseExcitation modeBrushless self-excited constant voltage (AVR)Power FactorCOSФ0.80.80.8Insulation gradeHHHEngineEngine typeLD4270LD4280LD4290Structure typeFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionBore x strokemm105×118108×135108×125DisplacementL4.14.954.95Compression ratioCompression ratioTr.117.1Rated powerWK384855Lubrication systemFour cylinder, 141414Lube capacityL10.461414Lube capacityL12.V80Ah x212.V80Ah x212.V80Ah x2Lube capacityV-A12121212Starting motor capacityV-A12121212.080Ah x2Fuel consumption ratiogiKW.h<230	Rated current	А	57.7	79.4	86.6
Constraint typeLA184HLA224DLA224EPole No.444Phase numberImage of the phaseThree PhaseThree PhaseExcitation modeCOS 00.80.80.8Insulation gradeImage of the phase0.80.80.8Insulation gradeImage of the phaseImage of the phaseImage of the phaseEngine TypeImage of the phase of the phaseImage of the phaseImage of the phaseStructure typeImage of the phase of the phaseImage of the phase of the phase of the phaseImage of the phase of the pha	Rated rotation speed	r/min	1500	1500	1500
Pole No.444Phase numberThree PhaseThree PhaseThree PhaseExcitation modeThree PhaseBrushless self-excited constant voltage (AVR)Power FactorCOSФ0.80.80.8Insulation gradeHHHEngineLLD4270LD4280LD4290Structure typeCLD4270LD4280LD4290Structure typeFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionBore x strokemm105×118108×135108×125DisplacementL4.14.954.95Compression ratioI17:117:117:1Rated powerWK384855Lubic colon systemI10.461414Starting systemI12V80Ah x212V80Ah x212V80Ah x2Starting systemV-A121212Starting systemV-A121212Starting systemV-A12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Generator				
Phase numberThree PhaseThree PhaseThree PhaseExcitation modeIThree PhaseThree PhaseExcitation modeCOSΦ0.80.80.8Insulation gradeIIHHEngineILD4270LD4280LD4290Engine typeILD4270LD4280LD4290Structure typeFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionBore x strokemm105×118108×135108×125DisplacementL4.14.954.95Lubication systemI17:117:117:1Rated powerWK384855Lubication systemI104.61414Starting systemI12V80Ah x212V80Ah x212V80Ah x2Starting systemV-A121212Starting systemV-A121212Starting systemV-A12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiogrKW.h<230	Generator type		LA184H	LA224D	LA224E
Katel and the function of the set of t	Pole No.		4	4	4
Power Factor         COSΦ         0.8         0.8         0.8           Insultation grade         H         H         H           Engine         Image: Comparison of the comparison ratio         Image: Comparison of the comparison of the comparison of the comparison of the comparison ratio           Bore x stroke         mm         105×118         108×135         108×125           Displacement         L         4.1         4.95         4.95           Compression ratio         mm         17:1         17:1         17:1           Rated power         WK         38         48         55           Lubrication system         Image: Comparison ratio         1         14           Lube capacity         L         10.46         14         14           Starting motor capacity         L         12V80Ah x2         12V80Ah x2         12V80Ah x2           Starting motor capacity         V-A         12         12         12           Battery capacity         V-A         12V80Ah x2         12V80Ah x2         12V80Ah x2           Fuel consumption ratio         g/KW.h	Phase number		Three Phase	Three Phase	Three Phase
Insulation gradeInterval (Interval (Interval)Interval (Interval)Interval (Interval)EngineInterval (Interval)Interval (Interval)Interval (Interval)Interval (Interval)Engine typeInterval (Interval)Interval (Interval)Interval)Interval)Interval)Structure typeInterval (Interval)Four cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionBore x strokemm105 × 118108 × 135108 × 125DisplacementI.L4.14.954.95Compression ratioI.L17.117.117.1Rated powerWK384855Lubrication systemI.L10.461414Starting systemI.L12.04612.VEROAh x212.VEROAh x2Starting systemI.L12.0212.VEROAh x212.VEROAh x2Starting systemV-A121212Starting systemGeneI.L<2.30	Excitation mode		Brus	shless self-excited constant voltage (A	AVR)
EngineImage: Constraint of the second of the se	Power Factor	COSΦ	0.8	0.8	0.8
Engine typeImage: Constraint of the second of t	Insulation grade		Н	Н	Н
Structure typeFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionFour cylinder, in-line, water-cooled, direct injectionBore x strokemm105×118108×135108×125DisplacementL4.14.954.95Compression ratio117:117:117:1Rated powerWK384855Lubrication systemLube capacityL10.461414Starting system12V80Ah x212V80Ah x212V80Ah x2Starting motor capacityV-A121212Battery capacityV-A121212Fuel consumption ratiog/KW.h<30	Engine				
water-cooled, direct injectionwater-cooled, direct injectionwater-cooled, direct injectionBore x strokemm105×118108×135108×125DisplacementL4.14.954.95Compression ratio017:117:117:1Rated powerWK384855Lubrication system0055108×125Lube caip acityL10.461414Starting system110.461414Starting system12V80Ah x212V80Ah x212V80Ah x2Charging generator capacityV-A121212V-A12V80Ah x212V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Engine type		LD4270	LD4280	LD4290
Intervention         Intervention         Intervention         Intervention           Displacement         L         4.1         4.95         4.95           Compression ratio         17:1         17:1         17:1           Rated power         WK         38         48         55           Lubrication system         VWK         38         48         55           Lube oil brand         C         SAE10W-30,15W-40 (above CD grade)         V           Lube capacity         L         10.46         14         14           Starting system         C         12V80Ah x2         12V80Ah x2         12V80Ah x2           Starting motor capacity         V-A         12         12         12           Charging generator capacity         V-A         12 V80Ah x2         12V80Ah x2         12V80Ah x2           Fuel consumption ratio         g/KW.h         <230	Structure type		Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection
Compression ratio         International (Compression ratio)         International (Compression ratio) <thinternational (compression="" ratio)<="" th=""> <thi< td=""><td>Bore x stroke</td><td>mm</td><td>105×118</td><td>108×135</td><td>108×125</td></thi<></thinternational>	Bore x stroke	mm	105×118	108×135	108×125
Rated power         WK         38         48         55           Lubrication system          Fressure splashed         55           Lube oil brand          SAE10W-30,15W-40 (above CD grade)         14           Lube oil brand         1         10.46         14         14           Starting system         L         12V80Ah x2         12V80Ah x2         12V80Ah x2           Starting motor capacity         V-A         12         12         12           Battery capacity         V-A         12         12         12           Fuel consumption ratio         g/KW.h         <230	Displacement	L	4.1	4.95	4.95
Lubrication system         Go	Compression ratio		17:1	17:1	17:1
Lube oil brand C. SAE10W-30,15W-40 (above CD grade) Lube capacity L 10.46 14 14 Starting system C. 12V Electric starter Starting motor capacity V.A 12 12V80Ah x2 12V80Ah x2 12V80Ah x2 Eattery capacity V.A 12 12 12 12 Battery capacity V.A 122 12 12 12 Battery capacity V.A 122 12 12 12 Euclonsumption ratio g/KW.h 2230 2230 2230 Fuel type C.	Rated power	WK	38	48	55
Lube capacityL10.461414Starting systemC12V80Ah x212V80Ah x212V80Ah x2Starting motor capacityV-A121212Charging generator capacityV-A121212Battery capacityV-A12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Lubrication system		Pressure splashed		
Starting systemImage: Construct starterStarting motor capacity1212V80Ah x212V80Ah x2Charging generator capacityV-A121212Battery capacityV-Ah12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Lube oil brand		SAE10W-30,15W-40 (above CD grade)		
Starting motor capacity12V80Ah x212V80Ah x212V80Ah x2Charging generator capacityV-A121212Battery capacityV-Ah12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Lube capacity	L			14
Charging generator capacityV-A121212Battery capacityV-A121212Fuel consumption ratiog/KW.h<230	Starting system			12V Electric starter	
Battery capacityV-Ah12V80Ah x212V80Ah x212V80Ah x2Fuel consumption ratiog/KW.h<230	Starting motor capacity		12V80Ah x2	12V80Ah x2	12V80Ah x2
Fuel consumption ratiog/KW.h<230<230<230Fuel typeGensetCCCCPanel typeMail402040204020Nosie level(7)mdB(A)646565Fuel tank capacityL95135135	Charging generator capacity	V-A	12	12	12
Fuel typeO# (summer), -10# (winter), -35# (chillness) dieselGensetPanel type4020Nosie level(7)mdB(A)GB(A)64GB(A)65L95135135	Battery capacity	V-Ah	12V80Ah x2	12V80Ah x2	12V80Ah x2
GensetImage: Comparison of the comparison	Fuel consumption ratio	g/KW.h	<230	<230	<230
Panel type         4020         4020           Nosie level(7)m         dB(A)         64         65         65           Fuel tank capacity         L         95         135         135	Fuel type		0# (summer), -10# (winter), -35# (chillness) diesel		
Nosie level(7)mdB(A)646565Fuel tank capacityL95135135	Genset				
Fuel tank capacity L 95 135 135	Panel type		4020	4020	4020
	Nosie level(7)m	dB(A)	64	65	65
Overall dimensions MM 2100x880x1147 2460x1000x1257 2460x1000x1257	Fuel tank capacity	L	95	135	135
	Overall dimensions	mm	2100x880x1147	2460x1000x1257	2460x1000x1257
Dry weight kg 990 1160 1180	Dry weight	kg	990	1160	1180

### **Technical Data**

KDE75SS3	KDE100SS3	KDE120SS3
50	50	50
70	90	110
56	72	88
75	100	120
60	80	96
230/400	230/400	230/400
101.1	129.9	158.8
1500	1500	1500
LA224E	LA224G	LA274C
4	4	4
Three Phase	Three Phase	Three Phase
	Brushless self-excited constant voltage (AVR)	
0.8	0.8	0.8
Н	Н	Н
LD4295	LD4298	LD4410
Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection	Four cylinder, in-line, water-cooled, direct injection
108×125	108×125	108×125
4.58	4.58	4.58
17:1	17:1	17:1
60	80	100
Pressure splashed	Pressure splashed	Pressure splashed
	SAE10W-30,15W-40 (above CD grade)	
14	14	14
	12V Electric starter	
12V80Ah x2	12V80Ah x2	12V60Ah x2
12	12	12
12V80Ah x2	12V80Ah x2	12V60Ah x2
<230	<230	<230
	0# (summer), -10# (winter), -35# (chillness) diese	1
4020	4020	4020
65	68	68
	135	300
135	155	500

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## **PORTABLE** WELDING GEN SERIES

### Do more with the portable power

COVAX portable welding generator series is a dual use unit featuring welding and power generation. Power ranges from 2 to 10 kVA. Welding current ranges from 160 to 450A.

This generator set is developed upon COVAX's latest technology built upon COVAX's 10 year history of manufacturing welders/generators. The power supply for welding is self-driven. It can be used in a host of applications- railroading, highway construction, port operations, oil fields, chemical plants, building construction, agriculture and many more. Self-excitation and constant voltage enhance the generator performance.

The lightweight and compact design facilitates on-site maneuverability and saves storage space.





### **FEATURES & BENEFITS**

#### One unit, dual function

COVAX original technology has been utilized to develop and advanced product with dual functions- welding and power generation.

#### Simultaneous use

Generating and welding can be performed simultaneously. The welding operation won' t impact the waveform and voltage of the generator.

### **Perfect welding**

The unit can achieve a perfect waveform of the welding voltage by utilizing IGBT and PWM technology. The non-fluctuating welding current produces a high quality welding operation.



#### Excellent electricity

A new AVR (automatic voltage regulator) and damper winding further enhance the electricity production with extremely low voltage fluctuation and minimum waveform distortion.

#### Easy maneuver electricity

A lightweight and compact design improves on-site maneuverability and saves storage space. It has four durable casters to facilitate movement.

### Wide application

The welding arc is super smooth to get perfect quality welds. The welding current regulation is broad to accommodate a variety of welding rods.



Generating set			KDE7000EW	KDE7000TW		
Ra		Rated Frequency (Hz)	50	50		
		Rated power (Kw)	2	2		
	Gei	Rated Voltage (V)	230	230		
nera	Rated current (A)	8.7	8.7			
	Generating	Rated rotation speed (r/m in)	3000	3000		
	Q	Phase No.	Single	Single		
G		Power factor (CosΦ)	1	1		
Generator Welder		Rated welding voltage (V)	50-65	50-65		
rato		Rated welding current (A)	160	160		
or M	Vel	Welding voltage (V)	25-30	25-30		
/eld	Welding	Welding load continous ratio	60%	60%		
ler	Q	Welding current adjustment	50-180	50-180		
		Electrode diameter (mm)	1.6-4.0	1.6-4.0		
	Exitation m	ode	self exitation and automation	c voltage adjusting (AVR)		
	Recifying m	ode	IGB+three-phase rectify bridge (PWM)			
	Connection	mode	Single bearing			
	Insulation g	rade	F	F		
	Pole number		2	2		
	Engine mod	lel	KM186FAE	KM186FAE		
	Engine type	2	Inlined single, 4-stroke, air cooled			
	Displacement (L)		0.418	0.418		
	Bore x strol	ke (mm)	86X72	86X72		
_	Compressio	on ratio	19.5:1	19.5:1		
Engine	Rated powe	er (kW)	5.7/3000	5.7/3000		
ine	Lubrication	system	Pressure splashed			
	Lube oil bra	ind	CD grade or 10W-30, 15W-40			
	Lube capac		1.65	1.65		
	Starting system		Electric starter			
	Battery Capacity (V-Ah)		12V-36Ah			
	Fuel type		0 # (summer),-10 # (winter),-35 # (chillness) light diesel			
	Fuel consumpting (g/kW.h)		275	275		
Ge	Fuel tank capacity (L)         Continous running time(hr)         Noise dB(A)7m         Structure type		12.5	14.5		
ner			Continous running time(hr)		6.5	7
ato			75 70			
Generator Set			EW: Open-frame, TW: Silent			
et	Overall dim	entions (mm)(LxWxH)	710x515x630	915x547x742		
	Dry weight (kg)		120	175		

KDE7500EW	KDE8500EW	KDE8500TW		
50	50	50		
4.2	2	2		
230	230	230		
19.6	8.7	8.7		
3000	3000	3000		
Single	Single	Single		
1	1	1		
50-65	50-65	50-65		
160	200	200		
25-30	25-30	25-30		
60%	60%	60%		
50-180	70-220	70-220		
1.6-4.0	1.6-5.0	1.6-5.0		
se	If exitation and automatic voltage adjusting (AVI	R)		
	IGB+three-phase rectify bridge (PWM)			
	Single bearing			
F	F	F		
2	2	2		
KM186FAE	KM192FE	KM192FE		
	Inlined single, 4-stroke, air cooled			
0.418	0.499	0.499		
86X72	92x75	92x75		
19.5:1	19.5:1	19.5:1		
5.7/3000	7.6/3000	7.6/3000		
	Pressure splashed			
	CD grade or 10W-30, 15W-40			
1.65	1.65	1.65		
	Electric starter			
	12V-36Ah			
0#0	(summer),-10 $\#$ (winter),-35 $\#$ (chillness) light die	esel		
275	265	265		
12.5	12.5	14.5		
6.5	6.5	7		
75	75	70		
	EW: Open-frame, TW: Silent			
710x515x630	750x515x640	915x547x742		
120	130	185		



# **PORTABLE**

## The COVAX mobile light towers

After developing various backup and prime power systems, COVAX is increasing its power systems offerings and introducing innovative products for industry.

The COVAX mobile light towers can be utilized in a variety of situations such as construction sites, disaster recovery, industry, mining, and event lighting.

COVAX light towers are equipped with COVAX high quality digital generators. The new mobile light towers feature high wind resistance and a wide area of illumination.

COVAX' s compact mobile light towers are designed for a compact and efficient installation. You can choose the suitable power and light levels to fit your requirements.

Both the telescoping mast and illumination angle of the lights can be easily adjusted giving the operator great flexibility in lighting the area. The tower is designed to be user friendly in terms of both operation and handling.





### **FEATURES & BENEFITS**

#### Wide lighting area

COVAX's light tower parallel lamp structure is more efficient than competitive lighting systems and provides up to 50% more light output. The unique top structure of the lamp shade directs up to 10% of previously wasted upward light directly to the work site.

#### Easy for transportation

The light tower is equipped with automotive quality wheels and tires suitable for any road surface. A connecting hitch and steel cable is provided for connecting to towing vehicles.

#### **Dual application**

The generator inside the light tower can be used as back-up power for emergency applications.

### **TECHNICAL DATA**

Floodlight model		KLB400-4
Lamp power (W) -No. of lamp	W	400-4
Total power of the lamps	W	1600
Luminuous flux	Im	144000
Mast		4 stages lifting mast
Lifting limit of the mast		2100-4900
Dimensions (LxWxH) (after retreating)	mm	1180x790x2100
Inclination		≤10 degrees
Windproof ability		≤6 grade
Dry weight	kg	135
Lamp base type		Metal halide
Standard genset		
Model		IG3000
Prime power	W	2800
Standby power	W	3000
Overall dimensions	mm	685×430×495

#### Advantages of halide lamp

The internal structure of the metal halide lamp is unique. The light is produced through the discharge of its internal gases. There is no filament to break or deteriorate over time and no bulb to throw away.

#### Safe operation

The mast incorporates a safety feature by not permitting the mast to be raised unless the footbrake is on. If the footbrake is released, the mast will automatically lower to the travel position. The light tower trolley has stabilizers to keep the light tower steady on all surfaces.

KLB1000-2	KLB1000-4	
1000-2	1000-2	
2000	4000	
220000	440000	
4 stages lifting mast	4 stages lifting mast	
2100-4900	2100-4900	
1180x790x2100	1180x790x2100	
≤10 degrees	≤10 degrees	
≤6 grade	≤6 grade	
140	135	
Metal halide	Metal halide	
IG3000	IG3000	
2800	5500	
3000	6000	
685×430×495	802×495×655	

