



50Hz Standby 18KVA

DG18KEm DG18KSEm Diesel Generator



All Days | Safty | Reliable | Stability



ITCPower

TECHNICAL SPECIFICATION

DG18KEM OPEN TYPE / DG18KSEM CANOPY TYPE

50Hz
Standby 18KVA

Benefits and Feature

- > Use Chinese best quality vehicle engine, low fuel consumption, running reliable
- > ITCPower high quality and performance brushless alternator, with AVR
- > High quality controller of COMAP IL-NT MRS10
- > Block design electrical control system, easy operate and maintenance
- > Standard 8 hours generator running base frame fuel tank (100% load)
- > With baseframe forklift hole and generator canopy lifting hole
- > Industrial waterproof canopy, ensure generator all days running
- > Industrial silencer (7 meters the noise is lower than 70 dB)
- > Easy operation, IP66 protection industrial sockets and plugs
- > Four pole circuit breaker with RCD earth protection
- > Standard ATS function connector

Technical Specification

Prime Power	KVA / KW	16 / 16
Standby Power	KVA / KW	18 / 18
Power Factor		1
Frequency	Hz	50
Rate Voltage	V	230
Rate Current	A	69.6
Controller	IL-NT MRS10	
Control Voltage	DC / V	12
Battery Capacity	Ah	60
Coolant Capacity	L	10.2
Fuel Tank Capacity(Base frame)	L	77.5
Fuel Consumption	L / hour	6.2
Running Time	Hour	12.5

Voltage

Steady state regulation	%	$\leq \pm 0.5$
Dynamic voltage renewal	%	$\leq +20 \sim -15$
Stable time	Sec	2.0
Waveform distortion	%	≤ 3
Volatility	%	≤ 0.5

Frequency

Steady state regulation	%	$\leq \pm 1$
Dynamic frequency renewal	%	$\leq +10 \sim -7$
Stable time	Sec	≤ 3
Volatility	%	≤ 0.5

Environment require

Temperature	$^{\circ}\text{C}$	≤ 40
Humidity	%	≤ 60
Altitude	m	≤ 1000

Standard

ISO3046、ISO8528

Dimension | Weight | Sound



DG18KEM OPEN TYPE

Length	mm	1510
Width (W)	mm	900
Height (H)	mm	980
Weight net	Kg	505
loading capacity (units/container)		
Sound @7 meter	dB	



DG18KSEM CANOPY TYPE

Length	mm	1900
Width (W)	mm	900
Height (H)	mm	1120
Weight net	Kg	786
loading capacity (units/container)		
Sound @7 meter	dB	

Note

1. Generator continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hours period
2. Every generator strictly test on 0%、25%、75%、100%、110% load、dynamic of the responsiveness ability, and all protections

DIESEL ENGINE



Powerful engine and reliable running quality
Durable running performance and was proofed by vehicle's application

Compact structure
Compact structure and metal materials saving for low cost

Low maintenance and repair cost
Air,fuel and oil tubes are silicone and stainless steel materials, which reduce leakage problems substantially

Excellent start performance
Fuel injector and pump were tested fully in Various environments,which provide excellent start and running performance

Model	D490	
Prime power	Kw	22
Structure	4 cylinder,inline	
Fuel type	Diesel	
Fuel consumption	L/Hour	6.2
Lubricant consumption	L/Hour	0.0315
Governor	Mechanical	
Cooling	Water	
Lubricant capacity	L	6
Air intake flow	m ³ /min	2.3
Exhaust gas flow	m ³ /min	6.5
Exhaust gas temperature	°C	400
Exhaust gas back pressure	KPa	5
Compression ratio	17.5	
Aspiration	Natural	
Bore	mm	90
Stroke	100	
Displacement	L	2.5
SAE	4/7.5	
Dimension	mm	760×543×680
Net weight	Kg	230

ALTERNATOR

Model	184E	
Prime power	kVA	16.6
Structure	1 Bearing	
Excitation mode	Self-excitation	
Insulation class	H	
Protection class	IP23	
TIF	<50	
THF	<2%	
Air flow	m ³ /s	0.095
AVR Model	SX460	



Best structure
Excellent design ensures compact structure and perfect appearance

Excellent performance
Excitation enhanced system improves start and short circuit's protection performance

Economy
Less parts involved and the most market's demand lead to cheap price and fine quality

Easy maintenance and repair
Core parts won't be involved in repair job,AVR can be replaced easily,examining diode doesn't disassemble rotor.

CONTROL PANEL



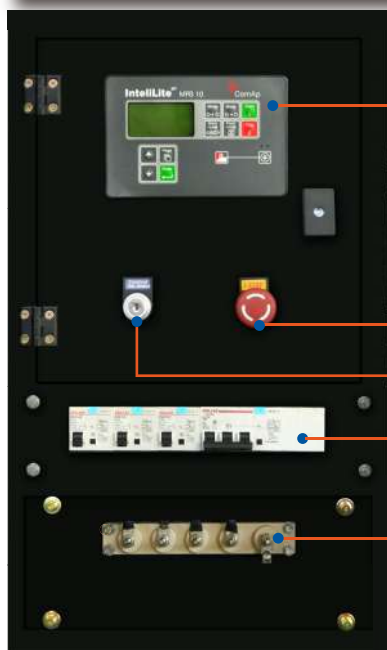
Measurement, displayment	MRS10
Genset prime power Kw	●
Power factor	●
engine speed	●
Phase to neutral voltage	●
Phase to phase voltage	●
Genset frequency	●
Genset current	●
Mains Phase to neutral voltage	×
Mains Phase to phase voltage	×
Mains frequency	×
engine oil pressure	●
engine water temperature	●
fuel level	●
battery voltage	●
genset power KVA	●
Genset running time	●
Genset output KWh	×
History file	×
Alarm, shutdown function	
Low oil pressure warning,shutdown	●
High water temperature warning,shutdown	●
Engine over and under speed shutdown	●
Low fuel level warning, shutdown	●
battery low and high voltage warning	●
battery charging failure	●
Genset low and high voltage warning, shut down	●
Alternator 3 phase voltage unbalance shut down	●
Alternator low and high frequency warning,shut down	●
Genset over load shutdown	●
Alternator3 phase current unbalance shutdown	●
Mains low and high voltage warning	×
Mains low and high frequency warning	×
Optional	
Remote start and stop	●
RS232 card	○
USB card	○
RS485 card	○
Multi language display	○
GPRS communication	○
GPS communication	×

Controller Comap MRS10



Support engine and alterantor monitoring, measurement and protection. This is long-running and back-up unit to integrate the best way to control. support Modbus standard, modem, RS232、RS485、 USB and internet.

Control panel



- Comap MRS10
- ATS connector
- 24 pin Heavy duty connector
- Emergency stop button
- Power switch
- 1x3 phase circuit breaker
- 3xsingle phase circuit breaker
- Wire connect terminal U.V.W.N.PE



Single phase socket

● standard ○ Optional × None

ACCESSORIES



Exhaust system



Residential muffler

Exhaust gas pipe

preheating system



Water preheater

Oil preheater

alternator Anti-condensation heater

Fuel system



Auto filling fuel pump

Manual filling fuel pump

500L base frame fuel tank

1000L base frame fuel tank

500L External fuel tank

1000L External fuel tank

electrical system



AMF20 controller

IC-NT
synchronizing
controller

wireless remote starter

Maintenance spare parts



500 hours genset spare parts

1000 hours genset spare parts