

# PERKINS

## Technical Specifications



### ENGINE

- PERKINS series heavy duty diesel engine
- 4 cycle, water cooled, turbocharged & air to air COOLED /turbocharged & air to water COOLED
- Direct injection
- Electronic governor system
- 24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Tropical type radiator
- Flexible fuel pipe
- Oil discharge valve and extention pipe
- Industrial type silencer, exhaust spiral or compensator
- Maintenance free battery
- Engine block water heater (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

### QUALITY STANDARD

Our generators are manufactured in compliance with VDE 0530, BSE 4999 BS5000, IEC 34, TS ISO 8528, TS EN ISO 3744, TS EN ISO 3746, TS EN 60034-1, TS EN 60204-1, TS EN 60335-1, TS EN 61439-1, EN 61000, TS EN ISO12100 standards.

We have ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and ISO10002:2006 management system certificates from Kiwa & MEYER, an accredited independent quality organization.

Our generators up to 400 kw are manufactured in compliance with 2000/14/EC European noise emission directive and certified from Ente Certificazione Macchine.

We also have TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 flame retardancy and TS EN ISO 9227 certificates against anti-corrosion together with CE Declaration.

### ALTERNATOR

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 protection class
- Self exciter
- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid.

### EXTRA EQUIPMENTS

- Charge ammeter
- Moulded case circuit breaker (in automatic models)
- Hospital/Critical type silencer
- Sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water separator filter
- PMG warning system

### CANOPY

- Modular type sound-proof canopy
- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window

### AUTOMATIC CONTROL PANEL

- LCD display screen	- Hardware and materials needed
- Battery charger	- USB port & RS-485 output

### GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature	- Over current load
- Low oil pressure	- High & low genset voltage
- High & low engine speed	- Start/stop failure
- Low radiator water level	

 Easy maintenance canopy design

 Refilling from the outside of the canopy

 Canopy made of galvanized steel

 Warning system for decreasing fuel with electronic fuel level sender



## PERKINS Series Diesel Generator Sets 165-300 kVA

MODEL			E PR XX 0165	E PR XX 0200	E PR XX 0220	E PR XX 0250	E PR XX 0275	E PR XX 0300	
GROUP GEN-SET POWER	STAND BY	kVA	165	200	220	250	275	300	
		kW	132	160	176	200	220	240	
	PRIME	kVA	150	180	200	230	250	275	
		kW	120	144	160	184	200	220	
CANOPY DIMESNION (W x L x H) mm			1100x3050x1690	1100x3220x1690	1100x3220x1690	1200x3800x2490	1200x3800x2490	1200x3800x2490	
CANOPY WEIGHT kg			2095	2148	2194	2978,6	2978,6	3195,2	
OPEN DIMENSION (W x L x H) mm			1100x2600x1690	1100x2770x1690	1100x2770x1690	1200x3100x2490	1200x3100x2490	1200x3100x2490	
OPEN WEIGHT			1842	1893	1939	2660,6	2680,6	2877,2	
ENGINE	BRAND			PERKINS	PERKINS	PERKINS	PERKINS	PERKINS	
	TYPE			1106A-70TAG2	1106A-70TAG3	1106A-70TAG4	1206A-E70TTAG2	1206A-E70TTAG3	1506A-E88TAG4
	POWER	STAND BY	kW	144,1	175,2	196,3	226,1	248,6	267
		PRIME	kW	131	157,7	178,9	204,2	226,2	244
	SPEED (rpm)			1500	1500	1500	1500	1500	1500
	CYCLE			4	4	4	4	4	4
	DISPLACEMENT (lt)			7,01	7,01	7,01	7,01	7,01	8,8
	NUMBER OF CYLNDERS			6 IN LINE					
	BORE x STROKE (mm x mm)			105 x 135	112 x 149				
	COMPRESSION RATIO			16 : 1	16 : 1	16 : 1	15.8 : 1	15.8 : 1	16,1 : 1
	GOVERNOR TYPE			MECHANIC	MECHANIC	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC
	INDUCTION			TURBOCHARGED - AIR TO AIR COOLED					
	COMBUSTION SYSTEM			DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
	COOLING SYSTEM			WATER	WATER	WATER	WATER	WATER	WATER
	FUEL CONSUMPTION lt / h	%100 PRIME POWER		33,4	41,2	45,8	51	56,9	60,2
		%75 PRIME POWER		24,7	30,9	34,7	38	41,5	45,8
		%50 PRIME POWER		16,4	20,6	23,1	25	28,1	31,6
TOTAL LUBRICATION SYSTEM CAPACITY (lt)			16,5	16,5	21	25,5	25	41	
TOTAL COOLANT CAPACITY (lt)			21	21	16,5	16	16	33,2	
FUEL TANK CAPACITY (lt)			275	275	275	360	360	360	

Emsa reserves the right to make changes in model, technical specifications, color, equipment & accessories without prior notice.

