

## 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 extension 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

### PERKINS Series Diesel Generator Sets 10-50 kVA

MODEL				E PR XX 0010	E PR XX 0015	E PR XX 0022	E PR XX 0033	E PR XX 0050
GROUP	GEN-SET POWER	STAND BY	kVA	10	15	22,3	33	50
			kW	8	12	17,8	26,4	40
		PRIME	kVA	9	13	20,3	30	45
			kW	7,2	10,4	16,2	24	36
	CANOPY DIMENSION (W x L x H) mm			900x1700x1220	900x1700x1220	900x1900x1220	1000x2300x1420	1000x2300x1420
	CANOPY WEIGHT kg			650,1	668	760,6	1056,5	1181,5
	OPEN DIMENSION (W x L x H) mm			900x1400x1220	900x1400x1220	900x1600x1220	1000x1900x1420	1000x1900x1420
	OPEN WEIGHT			503,1	522	606,6	881,5	1006,5
ENGINE	BRAND			PERKINS	PERKINS	PERKINS	PERKINS	PERKINS
	TYPE			403A-11G1	403A-15G1	404A-22G1	1103A-33G	1103A-33TG1
	POWER	STAND BY	kW	9,2	13,2	20,3	30,4	45,6
		PRIME	kW	8,4	12	18,4	27,7	41,3
	SPEED (rpm)			1500	1500	1500	1500	1500
	CYCLE			4	4	4	4	4
	DISPLACEMENT (lt)			1,131	1,496	2,216	3,3	3,3
	NUMBER OF CYLINDERS			3 IN LINE	3 IN LINE	4 IN LINE	3 IN LINE	3 IN LINE
	BORE x STROKE (mm x mm)			77 x 81	84 x 90	4 x 100	105 x 127	105 x 127
	COMPRESSION RATIO			23 : 1	22,5 : 1	23,3 : 1	19,25 : 1	17,25 : 1
	GOVERNOR TYPE			MECHANIC	MECHANIC	MECHANIC	MECHANIC	MECHANIC
	INDUCTION			NATURAL	NATURAL	NATURAL	NATURAL	TURBOCHARGED
	COMBUSTION SYSTEM			INDIRECT	INDIRECT	INDIRECT	DIRECT	DIRECT
	COOLING SYSTEM			WATER	WATER	WATER	WATER	WATER
	FUEL CONSUMPTION lt / h	%100 PRIME POWER		3	3,7	5,3	7,2	10,8
		%75 PRIME POWER		2,3	2,8	4	5,61	8,23
%50 PRIME POWER		1,7	2	2,9	4,06	5,83		
TOTAL LUBRICATION SYSTEM CAPACITY (lt)			4,9	6	10,6	8,3	7,9	
TOTAL COOLANT CAPACITY (lt)			5,2	6	7	10,2	10,2	
FUEL TANK CAPACITY (lt)			82	82	82	101	101	

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



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