

Perkins 110 kVA

MAIN FEATURES

Silenced, weather proof canopy, made of steel with AL Zn anticorrosion coating	Welded frame with integrated fuel tank and drip tray, protecting environment from leakage of the fluid.
Limited number of screws outside the canopy.	Wide range of fuel tank capacities available.
Electrical box protected by genset canopy, with controller display.	Possibility of increased protection against fuel leakage – fuel tank separated from the frame.
Cable entry protected by rubber cover.	Key locked fuel inlet outside of the canopy.
Power socket available outside of the canopy.	Anchoring points covered by external covers.
Easy maintenance access to major components.	Crane or pallet truck lifting.
High quality noise insulation materials.	High quality mufflers for exhaust system.



GENERAL DATA

OLIVEINAL DATA	
Model	DPX-17656
Standby power E.S.P. [kVA] / [kW]	110,0 / 88,0
Prime power P.R.P. [kVA] / [kW]	100,0 / 80,0
Prime current P.R.P [A]	144,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	stage II
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	11,8
- 75% load [l/h]	17,1
- 100% load [l/h]	22,6
- 110% load [l/h]	24,9
Standard fuel tank capacity [1]	170
Autonomy with 100% load [h]	7,5
Engine control voltage [V]	12
Weight without fuel [kg]	1440
Dimensions L x W x H [mm]	2590 x 1138 x 1442
Guaranteed noise power Lwa [dBA]	97
Acoustic pressure Lpa (dla 7m) [dBA]	$65,2 \pm 1,6$

Nominal power P.R.P:

Prime power available in variable load application in accordance with ISO 8528, 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation. Average power consumption should not exceed 80% P.R.P for each 24h of work.

Stand-by power E.S.P.:

Emergency standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed, limited to 500 operation hours per year. Limited to 300 operation hours of continuous duty.

Remark

Ratings represent the genset performance capabilities to standard conditions specified in ISO 8528-1

Norms and directives:

Machinery directive 2006/42/WE
Low voltage directive 2006/95/WE
EC directive 2004/108/WE
Noise directive 2000/14/WE
Emission directive 97/68/WE
ISO 8528-1/2005, PN-ISO 8528-5/2005
PN-EN 12601

PN-EN 60204-1





STANDARD CONTROLLER

Controller type: AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

AMF function available

Flexible event based history with up to 119 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter

Battery charging alternator circuit connection

Fuel level measurement

Generator protection (over/under frequency, voltage, overcurrent)

Communication with ECU supporting CAN J1939 standard

Communication interface RS 485 and RS 232 supporting Modbus

RTU (IL-NT RS232-485 module required)

GSM modem / wireless internet (IL-NT GPRS module required)

Internet/Ethernet communication (IB-Lite module required)

InteliMonitor software for single gen-set view

WebSupervisor software for Android mobile devices or PC's for fleet management

Active SMS or e-mail (IL-NT GPRS or IB-Lite module required)



ENGINE

ALTERNATOR

		All little on	
Brand	Perkins	Brand	Stamford*
Type	1104C-44TAG2	Type	UCI274C
Made in	Great Britain	Made in	Great Britain
Engine power [kW]	90,1	Power (40 °C, 1000m a.m.s.l.) [kVA]	100,0
Emission standard*	stage II	Stand by power (27 °C, 1000m a.m.s.l) [kVA]	110,0
Rotation per minute [rpm]	1500	Efficiency [%]	90,3
Engine governor	electronic	Voltage regulator type	AVR SX460
Governor class**	G3	Voltage accuracy [%]	+/- 1
Displacement [l]	4,4	IP protection	IP 23
No of cylinder	4	Insulation class	Н
Fuel system	direct injection	Total harmonic content THD [%]	<1,5
Electrical system [V]	12	Reactance Xd'' [%]	13
Coolant	Shell Anti Freeze		
Cooling system capacity [1]	12,6		
Engine oil	Shell Rimula R4L		
Oil pan capacity [1]	8,0		
Fuel type	Diesel (EN 590)		
Fuel consumption at 75% load [l/h]	17,1		
Fuel consumption at 100% load [l/h]	22,6		

According directive 97/68/WE non road mobile machinery engine emission.

^{**} According PN-ISO 8528-5/2005

^{*} STAMFORD or other alternator suppliers on request. Genset general data may change in this case.



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STANDARD EQUIPMENT

OPTIONAL EQUIPMENT

Controller ComAp AMF25	Three phase sensing AVR
Controller switch	Alternator with PMG
3 Pole GCB Eaton LZMC2-VE160	4 Pole GCB Schneider NSX Micrologic 2.3
Shunt GCB release coil	Oil draining hand pump
Analog AVR	Fuel and retention pump
Acoustic alarm	Electronic engine speed governor
Emergency stop button	Oil pressure sensor
Starting batteries 100 Ah	Engine temperature sensor
Battery charger	Drip space level sensor
Engine preheating with thermostat	Dedicated (non-standard) fuel tank *
Engine oil Shell Rimula R4L	External fuel tank 1 000 – 10 000 l
Oil low pressure switch	Fuel tank filling pump and shut-off valve
Engine high temperature switch	Battery disconnection switch
Fuel tank integrated in frame with drip tray	Socket for full power output
Fuel inlet outside of the canopy with lock	Power output – power lock type
Fuel level measurement	Power socket box with appropriate protections *
Fuel filter with water separator	Transfer switch controlled by generator controller
Exhaust compensator and silencer	ATS with ATS controller
Coolant Shell Anti Freeze	GPRS communication card
Coolant inlet outside of the canopy	Ethernet card
Engine and alternator vibro isolators	RS 485, RS 232 card
Silenced canopy made with Al-Zn	Remote display
Standard color RAL 7032	Nonstandard canopy color
Transportation brackets	

^{*}according to individual agreement



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INSTALLATION GUIDELINES

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x50mm2
Recommended cable for do 30m generator heater supply	Flexible 3x2,5mm2
*For additional cabale connection with ATS see ATS wiring diagram	
Exhaust pipe min diameter (max. 7 m, 4 bends)	60,3 mm
Exhaust pipe min diameter (max. 15 m, 4 bends)	76,1 mm

MAINTENANCE GUIDELINES

Fuel filters replacement	500 h / 1 year
Oil replacement	After first 100h, then every 500 h / 1 year
Oil filters replacement	After first 100h, then every 500 h / 1 year
Coolant replacement	1000 h / 2 years
Battery replacement	2 years
Electrical installation supervising	According to local requirements, at least once per year

WARRANTY

WARRANTI	
Back-up power generators	60 months up to 1000 working hours, under condition of required
	maintenance according to the warranty conditions
Continuous work generators	12 months up to 1000 working hours