Model:P715D5

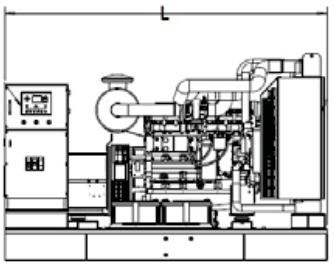
Powered by PERKINS

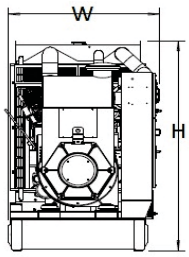
Output Rating

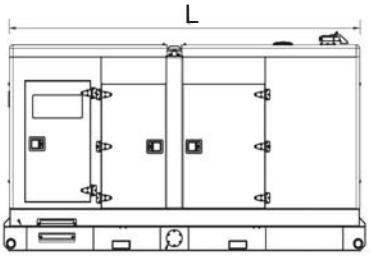
MODEL		Power rating		Voltage available
		PRIME(1)	STANDBY(2)	
P715D5	400V/60HZ	520KW	572KW	380/220V 400/230V 415/240V
	PF:0.8	650KVA	715KVA	

General Information

Model		P715D5
Engine		2806A-E18TAG2
Speed control type		Electronic
Phase		3
Control System		Digital
System voltage		12V/24V
Frequency		60HZ
Engine Speed(RPM)		1800
Fuel Consumption L/hr	Standby power(2)	143
	Prime Power(1)	132
	75% prime power	97
	50% prime power	66







Dimension and Weight

Dimension	Open	Silent
Length (L)	3350mm	4950mm
Width (W)	1540mm	2020mm
Height (H)	1630mm	2502mm
Net Weight	4470KG	6510KG

AGG POWER gensets are compliant with EC mark which include the following directives:

* 2006/42/EC Machinery safety.
* 2006/95/EC Low voltage
* EN 60204-1: 2006+A1:2009, EN ISO 12100:2010, EN ISO 13849-1: 2008, EN 12601: 2010

(1)Prime Power(PRP):

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operation conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24h of operation shall not exceed 70% of the PRP.

(2) Standby Power (ESP):

According to ISO 8528-1:2005, standby power is the maximum power available during a variable electrical power sequence, under the stated operation conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the maintenance intervals and procedures being caried out as prescribed by the manufacturers. The permissible average power output over 24h of operation shall not exceed 70% of the ESP.

Engine Specification

Basic technical data

Number of cylinders ... 6
Cylinder arrangement ... Vertical, in line
Cycle ... 4 stroke, compression ignition
Induction system ... Turbocharged, air to air charge cooling
Compression ratio ... 14·5:1 Nominal
Bore ... 145 mm
Stroke ... 183 mm
Cubic capacity ... 18,13 litres
Direction of rotation ... Anti-clockwise viewed on flywheel
Firing order ... 1, 5, 3, 6, 2, 4
Cylinder 1 ... furthest from flywheel

Overall dimensions

-height ... 1807,5 mm
-length ... 2545 mm
-width ... 1536 mm

Moment of inertia (mk²)

-flywheel @ 1500 rev/min ... 4,74 kgm²
-engine @ 1500 rev/min ... 2,31 kgm
-flywheel @ 1800 rev/min ... 4,74 kgm²
-engine @ 1800 rev/min ... 2,70 kgm

Cooling system

Recommended coolant: 50% clean water with 50% Perkins ELC. Where there is no likelihood of ambient temperature below 10 °C, clean 'soft' water may be used, treated with 1% by volume of Perkins inhibitor in the cooling system. The inhibitor is available from Perkins.
Nominal jacket water pressure in crankcase ... 280 kPa
Maximum top tank temperature (standby) ... 103 °C
Thermostat operating range ... 88 - 98 °C
Ambient cooling clearance maximum duct allowance and resultant minimum airflow (standby power). Based on air temperature at fan 10 °C above ambient

Radiator

-face area ... 1,75 m²
Rows and material ... 2 Aluminium
Fins per inch ... 15

Width and height of matrix

-height ... 1260 mm
-width ... 1390 mm
Total coolant capacity (radiator and engine) ... 61 litres
Pressure cap setting ... 70 kPa

Charge cooler, integral with radiator

Face area ... 1,623 m²
Rows and material ... 1 Aluminium
Fins per inch ... 14

Width and height of matrix

-height ... 1390 mm
-width ... 1180 mm

Coolant pump

Speed ... 18 x e rev/min
Method of drive ... Gear

Fan

Type ... Pusher
Drive ratio ... 0,8 : 1
Diameter ... 965 mm
Number of blades ... 9
Material ... Plastic

Exhaust system

Exhaust outlet size (internal) ... 202 mm
Maximum exhaust back pressure for total system ... 6,9 kPa
For recommended pipe sizes, see installation manual.

2806A-E18TAG2

Designation	Units	Type of operation and application			
		Prime	Standby	Prime	Standby
		50 Hz @ 1500 rev/min		60 Hz @ 1800 rev/min	
Gross engine power	kWb	584	628	567,7	623
Fan, battery and alternator power	kWm	9		15	
Restriction losses	kWm	9,8	10,4	9,5	10,3
Nett engine power	kWm	565	609	543	598
BMEP gross	kPa	2576	2770	2087	2290
Combustion air flow	m³/min	37	40	43	45
Exhaust gas temperature (after turbo)	°C	555	553	481	489
Exhaust gas flow	m³/min	106	114	109	118
Boost pressure ratio	-	3,04	3,22	2,97	3,18
Overall thermal efficiency (nett)	%	42,6	42,0	43,1	42,7
Friction power and pumping losses	kWm	20		34	
Mean piston speed	m/s	9		11	
Engine coolant flow	l/s	6,1		7,2	
Cooling fan airflow	m³/min	702		852	
Typical gen set electrical output 0.8 pf	kWe	520	560	500	550
	kVa	650	700	625	687
Assumed alternator efficiency	%	92		92	

Alternator

Alternator		
Poles	Num	4
Winding Connections (standard)		Star-serie
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		Brushless
Voltage Regulator		A.V.R.
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)

Options

Engine	Alternator	Generator Sets	Fuel System	Canopy
●Water Jacket Preheater ●Oil Preheater	●Winding Temperature measuring Instrument ●Alternator Preheater ●PMG ●Anti-damp and anti-corrosion treatment ●Anti-condensation heater	●Tools with the machine	● Low fuel level alarm ●Automatic fuel feeding system ●Fuel T-valves	●Rental Type Canopy ●Trailer
Lubricating System	**Exhaust System**	**Cooling System**	**Control Panel**	**Voltages**
●Oil with the machine	●Protection board from hotness	● Front heat protection ● Coolant (-30°C)	●Remote control panel ● ATS ● Remote controller ● Synchronizing controller	● 415/240V ● 380/220V ● 220/127V ● 220/127V ● 200-115V

▪ Control Panel: AMF20

Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- Perfect price/performance ratio

Features

- Support of engines equipped with Electronic Control Unit (J1939 interface)
- Comprehensive diagnostic messages; SPN/FMI codes; KWP2000 support
- Automatic or manual start/stop of the gen-set
- Push buttons for simple control, lamp test
- Graphic back-lit LCD display 128x64 pixels
- 6 LED indicators
- Parameters adjustable via keyboard or PC
- Generator C.B. and Mains C.B. control with feedback and return timer
- RS232 interface (AT-LINK CONV cable is necessary for IL-AMF 20)
- Modem communication support (IL-AMF 25 only)
- Dimensions 180x120 mm (front panel)
- Sealed to IP65

- Mains measurements (50/60 Hz): U1-U3, Hz
- Generator measurements (50/60 Hz): U1-U3, I1-I3, Hz, kW, kVAr, kWh
- Selectable protections alarm/ shutdown
- 3 phase Generator protections
  - Over-/under voltage
  - Over-/under frequency
  - Current/voltage asymmetry
  - Overcurrent/overload
- 3 phase AMF function
  - Over-/under frequency
  - Over-/under voltage
  - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measurement
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions

The Chart of Functions of InteliLite ® Controllers

FUNCTIONS/CONTROLLERS	IL-AMF 20	IL-AMF 25	IL-MRS 10	IL-MRS 15	IL-MRS 11	IL-MRS 16
Binary inputs/outputs	7 / 7	7 / 7	6 / 6	6 / 6	6 / 6	6 / 6
Analog inputs	3	3	3	3	3	3
Pick-up	•	•	•	•	•	•
AMF function	•	•	-	-	-	-
Input configuration	•	•	•	•	•	•
Output configuration	•	•	•	•	•	•
Voltage measurement Gen./Mains	3ph / 3ph	3ph / 3ph	3ph / -	3ph / -	3ph / -	3ph / -
Current measurement	3ph	3ph, IDMT overcurrent	3ph	3ph, IDMT overcurrent	3ph	3ph, IDMT overcurrent
kW/kWh measurement	• / -	• / •	• / -	• / •	• / -	• / •
GCB/MCB control with feedback	• / •	• / •	- / -	- / -	•[1]/ -	• / -
Extension units (periph.)	-	IGL-RA15, IG-IOM, IGS-PTM	-	IGL-RA15, IG-IOM, IGS-PTM	-	IGL-RA15, IG-IOM, IGS-PTM
Communication interfaces	RS232[2]	RS232, CAN[3]	RS232[2]	RS232, CAN[3]	RS232[2]	RS232, CAN[3]
Modem support	-	•	-	•	-	•
Battery charging alternator circuit	•	•	•	•	•	•

Key: • included; - excluded
1) GCB control, but without feedback
2) For IL-AMF 20, IL-MRS 10/11 AT-LINK CONV cable necessary
3) CAN for periph.

Legend: IG-IOM/IGS-PTM: I/O extension modules
IGL-RA15: Remote annunciator
I-RD: Remote display