



#### **MAIN FEATURES**

Highest quality and reliability.	Wide range of standard and optional equipment.
ComAp InteliLite AMF 25 controller.	Engine heater – ready to load just after start.
Ready to control MAINS – GENERATOR transfer switch.	Drip tray,
Configured for both manual and automatic mode (MRS + AMF).	Anticorrosion coating: frame - Zr, canopy - Zr, Al-Zn.
Wide range of remote communications options.	Brushless alternator.





# **GENERAL DATA**

Standby power E.S.P. [kVA] / [k	:W]	88,0 / 70,0	
Prime power P.R.P. [kVA] / [k	(W)		
Prime current P.R.P [A]		115,0	
Frequency [Hz]		50	
Voltage [V]		400	
Exhaust emission		non-emission	
Fuel type	Diesel (EN 590)		
Fuel consumption - 50% load [1/1	h] 9,7		
- 75% load [1/1	h]	14	
- 100% load [1	l/h]	18,7	
- 110% load [l/h] 20,5		20,5	
Engine control voltage [V]	12		
Standard fuel tank capacity [1]	290		
Autonomy with 100% load [h]	14,7		
Design	S2671T290		
Generator version	open	canopy	
Model	FD 80 P-ST1	FD 80 P-ST	
Weight without fuel [kg]	~930	1380	
Dimensions L x W x H [mm]	2660 x 1110 x 1470	2670 x 1130 x 1700	
Guaranteed noise power Lwa [dBA]	$109,7 \pm 1,7$	~97	
Acoustic pressure L <sub>pa</sub> 7m [dBA]	$79,6 \pm 1,7$	~68	

#### **Prime Power PRP**:

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% PRP for each 24-hour period of

#### Standby power ESP:

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

#### Remarks

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

# Norms and directives:

- Machinery directive 2006/42/EC
- Low voltage directive 2014/35/EU
- EMC directive 2014/30/EU
- Noise directive 2000/14/EC
- Emission directive 97/68/EC
- ISO 8528-1/2018, ISO 8528-5/2018
- ISO 8528-13:2016
- IEC 60204-1





#### STANDARD CONTROLLER

Controller type: ComAp InteliLite AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

Stan-by and Prime power applications, AMF function available

Flexible event based history with up to 350 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter, multipurpose flexible timers

Battery charging alternator circuit connection

Comprehensive gen-set protections

Wide range of communication capabilities including:

- CAN and USB on board
- Internet access using Ethernet, GPRS or 4G module
- Support for Modbus and SNMP protocols

Cloud-based monitoring and control via WebSupervisor

Active SMS or e-mails (module required)

Geofencing and tracking via WebSupervisor

Operating temperature  $-20 + 70^{\circ}$ C

IP65 operator interface protection



#### **ENGINE**

# ALTERNATOR

Brand	Perkins	Nominal Voltage [V]	400
Туре	1104A-44TG2	Nominal power factor (cos phi)	0,8
Made in	Great Britain	Ambient temperature, altitude	40 °C, 1000m n.p.m.
Engine power [kW]	71,9	Nominal Power [kVA]	80,0
Emission standard*	non-emission	IP protection	IP 23
Rotation per minute [rpm]	1500	No of bearing	single bearing
Engine governor	mechanical	Coupling	direct
Governor class**	G2	Technology	brushless
Displacement [1]	4,4	Short circuit maintaining capacity	270% 10s
No of cylinder	4	Efficiency [%]	90,0
Fuel system	direct injection	Insulation class	Н
Electrical system [V]	12	Total harmonic content THD [%]	<2
Cooling system capacity [l]	13,0	Reactance Xd'' [%]	8
Oil pan capacity [1]	8,0	Voltage regulator type	DVR, digital
Fuel type	Diesel (EN 590)	Voltage measurement	3 phases
		Voltage accuracy [%]	+/- 0,25
		AVR supply system	auxiliary winding
		AVR supply optional	PMG
		Made in	EU

<sup>\*</sup> According directive 97/68/WE non road mobile machinery engine emission.

<sup>\*\*</sup> According PN-ISO 8528-5/2018





# **STANDARD EQUIPMENT**

# **OPTIONAL EQUIPMENT**

Perkins 1104A-44TG2 engine	✓	Oil pressure sensor	
Oil low pressure switch	✓	Engine temperature sensor	
Engine high temperature switch	✓	Oil draining hand pump	
Engine preheating with thermostat	✓	Battery disconnection switch	
Engine oil Titan Cargo 15W40	✓	GCB 4P Schneider NSX Micrologic 2.2	
Fuel filter with water separator	✓	Power socket connection *	
Coolant Fuchs Maintain Fricofin LL-50	✓	Power sockets box SOM 104 *	
Coolant inlet outside of the canopy *	✓	Transfer switch controlled by generator controller	
Starting batteries 100 Ah	✓	Transfer switch with ATS controller	
Battery charger	✓	GPRS communication card	
GCB Schneider NSX 160 3P Micrologic 2.2	✓	Ethernet card	
GCB shunt release coil	✓	RS 485, RS 232 card	
Controller ComAp IL-AMF25	✓	Remote display	
Acoustic alarm	✓	Fuel inlet outside of the canopy with lock *	
Emergency stop button	✓	Drip space level sensor	
Silenced canopy made with AlZn. *	✓	Fuel and retention pump	
Standard color 7024	✓	Alternative fuel tank size 720l	
Fuel tank integrated with a frame with drip tray	✓	External fuel tank 1 000 - 10 000 l	
Welded frame with fuel tank	✓	Fuel tank filling pump and shut-off valve	
Fuel inlet inside, protected by canopy locked doors *	✓		
Fuel level measurement	✓		
Engine and alternator vibro isolators	✓		
Exhaust compensator and silencer	✓		
Transportation brackets	✓		

<sup>\*</sup> Applies only for canopied version

# **INSTALLATION GUIDELINES**

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x35 mm <sup>2</sup>
Recommended cable for do 30m generator heater supply	Flexible 3x2,5 mm <sup>2</sup>
*For additional cable 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**

Continuous operation generators	12 months up to 1000 working hours
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