

Diesel Generator Set: P180

Standard Features	
MODEL	P180
Standby Power(50Hz)	158.4KW/198KVA
Prime Power(50Hz)	144KW/180KVA
Engine	PERKINS 1106A-70TAG3
Alternator	LEROYSOMER TAL-A46-A

- Standard control panel, Including controller, Operation lighting, Emergency stop button, Buzzer
- Main line circuit breaker
- One 12V free maintenance battery, battery charger, Battery Ract and Battery Switch
- Industrial silencer, Ripple Flex exhaust pipe, Flange
- Fork lift position and lifting position
- With-8 hours Base Fuel Tank; Fuel Tank Capacity: 380L
- Radiator 50°C max, Fans driven by Belt, with safety Guard
- Hand pump special for take out dirty oil



Open Type

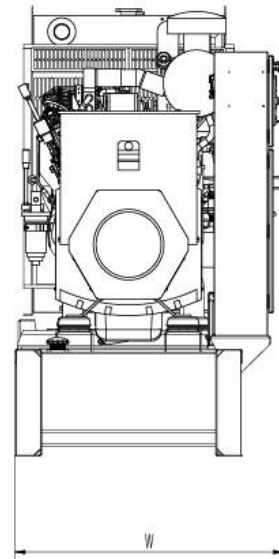
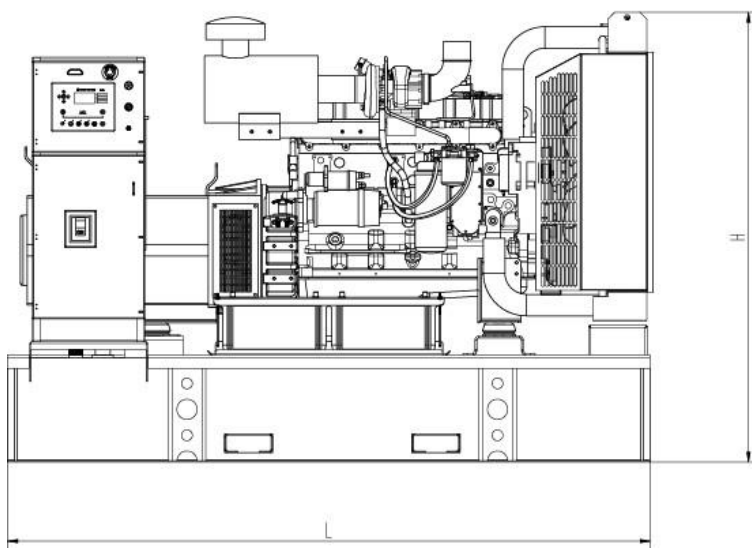
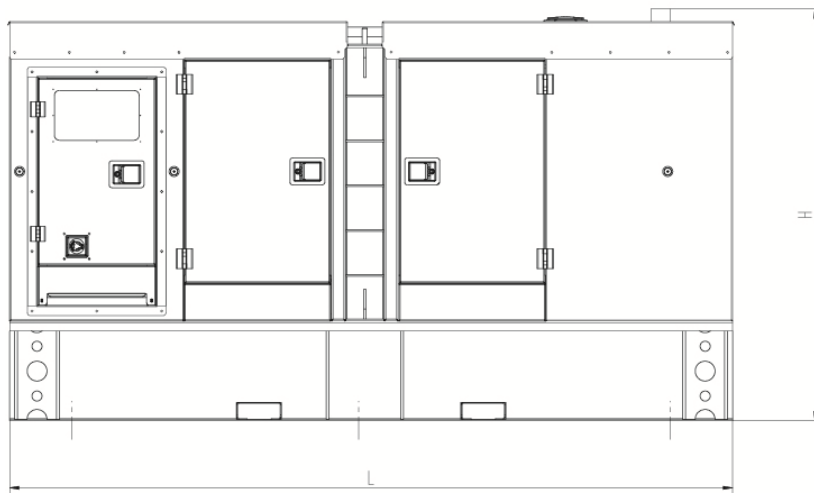
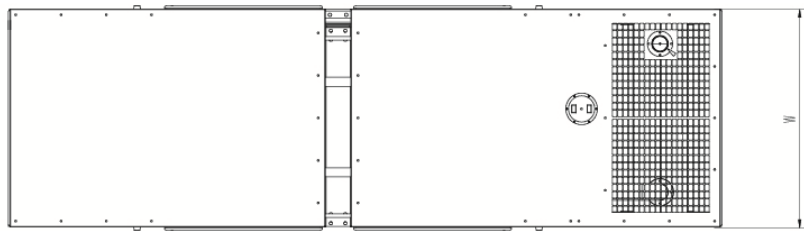


Silent Type

Generator Set Ratings						
Voltage	Frequency	Phase	P.F (COS ϕ)	Prime Current Amps	Standby Power (KW/KVA)	Prime Power (KW/KVA)
440/254	50	3	0.8	236	158.4/198	144/180
415/240	50	3	0.8	250	158.4/198	144/180
400/230	50	3	0.8	260	158.4/198	144/180
380/220	50	3	0.8	274	158.4/198	144/180

Prime Power(PRP):Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97(eqvISO8528);10% overload capability is available for a period of 1 hour within a 12-hour period of operation. Standby Power Rating (STP):The standby power rating is applicable for supplying emergency

Dimension & Weight Of Generator Set	
Dimension(L*W*H)/CM For Open Type	240×98×158 CM
Net Weight/KG For Open Type	1500KGS
Dimension(L*W*H)/CM For Silent Type	340×112×170 CM
Net Weight/KG For Silent Type	2200KGS
Dimension (L*W*H)/MM For Trailer Type	
Net Weight/KG For Trailer Type	



Specification of Engine		
Basic Specific ation	Engine Model	1106A-70TAG3
	Manufacturer	PERKINS Company
	Prime Power	157.7KW/211.5HP
	Standby Power	175.2KW/234.9HP
	Engine Configuration	6Cylinder In Line, 4Stroke,Direct Injection
	Gas Feeding Model	Turbocharged,Air to Air
	Bore×Stroke	105×135(MM)
	Displacement	7.01L
	Rated Speed	1500RPM
	Speed Governor	Mechanical
	Starter Model	12V DC Start
	Cooling System	Water Cool
	Compression Ratio	16:1
Exhaust System	Exhaust Gas Flow	1090L/s
	Exhaust Temperature	499℃
	Max Back Pressure	10kPa
Air Intake System	Max Intake Restriction	6.25kPa
	Burning Capacity	418L/s
	Air Flow	8180L/s
Fuel System	Fuel Consumption (Prime Power 100%) Load	41.6L/H
	Fuel Consumption (Prime Power 75%) Load	31.8L/H
	Fuel Tank Capacity	380L
Lubricat ion System	Oil Capacity	16.5L
	Oil Consumption	≤0.1% of Fuel
	Oil Pressure at Rated RPM	241-345kPa
Cooling System	Total Coolant Capacity	21L
	Thermostat Open Temperature	82-93℃
	Max Coolant Temperature	104℃


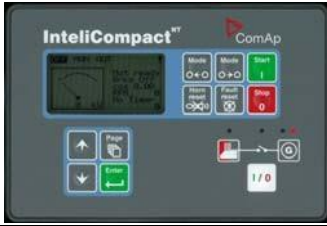
Specification of Alternator		
Basic Specification	Alternator Model	TAL-A46-A
	Manufacturer	LEROYSOMER company
	Prime Output	144KW/180KVA
	Standby Output	158KW/198KVA
	Excitation Model	Brushless, Self-Exciting
	Cooling Method	Air Cooling
	Connection Type	3 Phase and 12 Wires "Star" Connection
	Power Factor	0.8
	Protection Class	IP23
	Insulation Class	H
	Altitude	≤1000m
	Voltage Regulation, Steady State	≤±1%
	Telephone Influence Factor	<50
	Sudden Voltage Warp (100% Sudden Reduce)	≤±1%
	Sudden Voltage Warp (Sudden Increase)	≤±25%
	Voltage Stable Time (100% Sudden Reduce)	≤6S
	Voltage Stable Time (Sudden Increase)	≤6S
	Frequency Reduce	0-5% adjustable
	Frequency Regulation, Stead State	≤1.5%
	Frequency Waving	≤0.8%
	Sudden Frequency Warp (100% Sudden Reduce)	≤+12%
	Sudden Frequency Warp (100% Sudden Increase)	≤-10%
	Frequency Recovery Time (100% Sudden Reduce)	≤5S
	Frequency Recovery Time (Sudden Increase)	≤5S
Compliance GB755,BS5000,VDE0530,NEMAMG1-22,IED34-1,CSA22.2 and AS1359 Stands		

Control Panel System	
1.SINGLE SET GEN-SET CONTROLLER	
SUM : They meet all possible requirements for AMF applications,including modem control,user configuration and full gen-set monitoring and protection. AMF models enable the combination of manual and remote start application with auto mains fail function.	
KEY FEATURES:	
1. High water Temperature Shutdown	
2. Low Oil Pressure Shutdown	
3. Over Speed Shutdown	
4. Over Crank Shutdown	
5. Function as Emergent Stop	
6. Heated Display Option	
7. Breaker Control Buttons on Front Fascia	
8. Alternative Configuration (50Hz/60Hz)	
9.Support ATS Function	b.ComAp AMF 20
KEY FEATURES:	
1. High Water Temperature Shutdown	
2. Low Oil Pressure Shutdown	
3. Over Speed Shutdown	
4. Over Crank Shutdown	
5. Function as Emergent Stop	
6. With Remote Teleport Communication RS 485	
7. Heated Display Option.	
8. Alternative Configuration (50HZ/60HZ)	c.DSE 7320
9. Support ATS Function	
10. Remote Communications (RS232 & RS485)	
11. Fuel Usage Monitor And Low Level Alarms.	
12. Engine Specific J1939 for All Major Manufacturers	
13. Configurable Display Languages.	
14. Load Switching, Load Shedding&Dummy Load Outputs.	
15. Alternative Configuration (50Hz/60Hz)	d.ComAp AMF 25

2.Multiple paralleling gen-sets with internal load-sharing controller

SUM: Functionality, optimized for ease of use, installation and configuration, includes built-in synchronization and digital isochronous active and reactive load sharer. Native co-operation of up to 32 gen-sets is a standard feature.



KEY FEATURES:

1. The Most up to 32-set Synchronization	
2. Wide Range of Communication Interfaces – RS232, RS485, USB, Modbus, GSM/Analog Modem, GPRS, Ethernet	
3. Direct Governor & AVR Control	
4. kW & kV Ar Load Sharing	
5. Advanced Power Management Function	
Load Dependent Start/Stop	
Load Demand Swap	
Running Hours Equalization	
6. Support of Electronic Controlled Engines (J1939, Modbus)	b.ComAp IC-NT NINT

3.SINGLE GEN-SET IN PARALLEL TO MAINS CONTROLLER

SUM: They are integrated controllers combining AMF and paralleling functions for single gen-sets. This combination allows the gen-set with interrupt-free transfers as well as in continuous parallel-to -mains mode.

KEY FEATURES:

1. Mains (Utility) Failure Detection, Mains (Utility) Power Monitoring (kW, kV Ar, kV A & pf) Monitoring, Mains (Utility) Decoupling Protection, Mains (utility) kW Export Protection.	
2. Remote Communications (RS232, RS485 x2, Ethernet)	
3. High Tariff Avoidance, Peak Shaving, Peak Lopping	
4. Synchronization of MCB (Reverse Synchronization)	
5. Support of Electronic Controlled Engines (J1939, Modbus)	
6. Wide Range of Communication Interfaces – RS232, RS485, USB, Modbus, GSM/Analog Modem, GPRS,	b.ComAp IC-NT SPtM

Ethernet			
Generator Set Options and Accessories			
Generator Set Design		Control System	
Open Type	<input type="checkbox"/>	AMF(Automatic Management Function)	<input type="checkbox"/>
Silent Type	<input type="checkbox"/>	ATS(Automatic Transfer System)	<input type="checkbox"/>
Super Silent Type	<input type="checkbox"/>	ASS(Automatics Synchronization System)	<input type="checkbox"/>
Trailer Type	<input type="checkbox"/>	Remote Control Puma	<input type="checkbox"/>
Fuel System		Alternator	
12 Hour Base Tank(single wall)	<input type="checkbox"/>	PMG(EBS) Excitation	<input type="checkbox"/>
24 Hour Base Tank(single wall)	<input type="checkbox"/>	Space Heater	<input type="checkbox"/>
Dual Wall Base Fuel Tank	<input type="checkbox"/>	Preheater System	
Outside Fuel Tank	<input type="checkbox"/>	Coolant Preheater	<input type="checkbox"/>
Automatic Refueling Compensation System	<input type="checkbox"/>	Oil Preheater	<input type="checkbox"/>
Exhaust System		Battery Preheater	<input type="checkbox"/>
Residential Exhaust Silencer	<input type="checkbox"/>		
Circuit Breaker Brand			
CHNT	<input type="checkbox"/>		
ABB	<input type="checkbox"/>		