

# Perkins 1106A-70TAG4 Diesel Generator Set



PRIME POWER

**200 kVA / 160 kW**

STANDBY POWER

**220 kVA / 176 kW**

## Specifications

<b>Voltage / frequency</b>	400/230 V, 50 Hz
<b>Power factor</b>	0,8
<b>Rated current</b>	288 A
<b>Model name</b>	P220
<b>Engine</b>	Perkins 1106A-70TAG4
<b>Alternator</b>	Leroy Somer TAL-A44-M
<b>Control panel</b>	DSE 6120
<b>Fuel type</b>	Diesel
<b>Autonomy at 75% load</b>	6,5 h
<b>Dimensions</b>	331 x 113 x 160 cm
<b>Weight</b>	1.989 kg

## Ratings definitions

### PRIME POWER PRP

Prime power available in variable load application in accordance with ISO 8528. A 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 h of work.

### 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 operating hours per year and 300 operating hours of continuous duty.

### STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25 °C air inlet temperature, barometric pressure 100 kPa and relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 50 °C), humidity (up to 70%) and higher altitudes. Under specific site conditions, genset output power may derate.

## Directives, Standards & Certifications

Category	References
<b>EU Directives</b>	2006/42/EC, 2014/30/EU
<b>Product standards</b>	EN 60204-1:2018, EN ISO 12100:2010, EN 55012:2007+A1:2009, EN ISO 8528-13:2016, EN 61000-6-1:2019, EN IEC 61000-6-4:2019
<b>Manufacturer certifications</b>	ISO 9001:2015 / GB/T 19001-2016, ISO 14001:2015 / GB/T 24001-2016, ISO 45001:2018 / GB/T 45001-2020



# Technical Data

## Engine

<b>Model</b>	1106A-70TAG4
<b>Brand</b>	Perkins
<b>Number of cylinders</b>	6
<b>Aspiration</b>	Four-stroke, water-cooled, in-line, turbocharged aftercooled
<b>Fuel system</b>	Direct injection
<b>Displacement</b>	7,01 L
<b>Bore x stroke</b>	105x135 mm
<b>Compression ratio</b>	16:1
<b>Rated speed</b>	1500 r/min
<b>Rotation</b>	Anti-clockwise, viewed on the flywheel
<b>Engine power</b>	202 kWm
<b>Emission standard</b>	Fuel Optimised (non-Stage V)
<b>Coolant capacity</b>	21 L
<b>Oil capacity</b>	16,5 L
<b>Recommended oil</b>	Perkins 15W-40 API CI-4

## Alternator

<b>Model</b>	TAL-A44-M
<b>Alternator brand</b>	Leroy Somer
<b>Phase</b>	3
<b>Voltage</b>	230/400 V
<b>Wiring type</b>	12 wires
<b>Bearing</b>	1
<b>Power factor</b>	0,8
<b>Frequency</b>	50 Hz
<b>Prime power</b>	200 kVA
<b>Excitation type</b>	Brushless, self-excitation
<b>Voltage regulation</b>	±0,5 %
<b>Protection grade</b>	IP 23
<b>Insulation class</b>	H

## Fuel consumption

<b>110% load (Standby power)</b>	49,4 L/h
<b>100% load (Prime power)</b>	45,8 L/h
<b>75% load (Prime power)</b>	34,7 L/h
<b>50% load (Prime power)</b>	23,1 L/h
<b>Fuel capacity</b>	224 L

## Warranty

12 months from date of purchase or 1000 hours.

# Features & Control

## Standard features

Radiator (50 °C max.), belt-driven fan

12 V charging alternator

Single-bearing alternator, IP23

Insulation class H/H

Standard automatic control system

Main line circuit breaker / ACB

Base fuel tank

12 V batteries, rack and cables

Exhaust system

User manual

Battery charger

Jacket water heater

## Controller

Model: DSE 6120

7 configurable digital inputs

Built-in governor and AVR control

Base load (kW export) functionality

Mains (utility) de-coupling protection

Generator power (kW, kVA) monitoring

Overload (kW & kV Ar) protection

Emergency stop

Start failure

