



MODEL: TD150



Shown with optional features.

Ratings for 3 Φ 60 Hz Operation

Standby:	kW	150
	kVA	188
Prime:	kW	135
	kVA	169

FEATURES

- Single source responsibility for the generator set and accessories.
- Prototype and production tested to insure one step load acceptance per NFPA 110.
- Two year limited warranty on generator sets and accessories. Extended warranties also available.
- Unit conforms to CSA, NEMA, EGSA, ANSI and other standards.
- Heavy duty 4 cycle industrial engine for reliability and fuel efficiency.
- Brushless rotating field generator with class H insulation.
- Heavy duty steel base with integral vibration isolators.
- EPA Tier 3 Certified Engine.
- Tier 3 EPA-Certified for Stationary Emergency Applications.

GEN SET RATINGS

Genset Model Number	Alternator	Voltage L-N / L-L	Phase	Hertz	130° Rise Standby Rating		105° Rise Prime Rating	
					kW / kVA	Amps	kW / kVA	Amps
TD150	431CSL6202	277/480	3	60	150/188	226	135/169	203
		139/240	3	60	150/188	452	135/169	407
		254/440	3	60	150/188	246	135/169	222
		127/220	3	60	150/188	493	135/169	444
		240/416	3	60	150/188	260	135/169	235
		120/208	3	60	150/188	522	135/169	469
		120/240	3	60	150/188	452	135/169	407
		219/380	3	60	140/175	265	126/157	238
	120/240	1	60	121/121	504	110/110	458	
	431PSL6224	120/240	1	60	150/150	625	135/135	563

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor.
 STANDBY RATINGS: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271.
 PRIME POWER RATINGS: Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS5514, AS2789, and DIN 6271. For limited running time and base load ratings consult the factory. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.
 GENERAL GUIDELINES FOR DERATION: Altitude: Derate 0.5% per 100m (328 ft.) elevation above 1000m (3279 ft.) Temperature: Derate 1.0% per 10°C (18°F) temperature above 40°C (104°F).



Application and Engineering Data

Basic Technical Data

Manufacturer	Perkins
Model	1106D-E66TAG3
Number of cylinders	6
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Induction system	Turbocharged, air to air charge cooled
Compression ratio	16.3:1
Bore	4.13 in. (105 mm)
Stroke	5.0 in. (127 mm)
Cubic capacity	402.8 cu in. (6.6 L)
Direction of rotation	Clockwise
Firing order	1,5,3,6,2,4
Governor type	ECM, Isochronous 0.25%
Gross engine power	230 hp (171 kWb)
Electropak net engine power	219 hp (163 kWm)
Brake mean effective pressure	251 psi (1731 kPa)
Engine coolant flow (against 5 psi (35 kPa) restriction)	45 gal/min (170 L/min)
Cooling fan air flow (29 psi (200 kPa) external restriction)	
Combustion air flow (at rated speed)	456 cfm (12.9 m ³ /min)
Exhaust gas flow (max)	1112 cfm (31.5 m ³ /min)
Exhaust gas mass flow (max)	
Exhaust gas temperature in manifold (max)	1157 °F (625 °C)
Boost pressure ratio	
Overall thermal efficiency (net)	37%

Cooling System

Coolant	
Total System Capacity	5.5 gal (21 L)
With radiator	
Without radiator	1.8 gal (7.0 L)
Coolant Pump Drive	Gear
Coolant pump drive ratio	2:1
Maximum top tank temperature	233° F (112° C)
Temperature rise across engine (rating dependent)	43.9-44.9° F (6.6-7.9 °C)
Thermostat operation range	185-203° F (85-95 °C)
Recommended coolant:	50% ethylene glycol with a corrosion inhibitor (BS 658 : 1992 or MOD AL39) and 50% clean fresh water.

Exhaust System

Maximum back pressure	1.8 psi (12.2 kPa)
Exhaust outlet size	3.5 in (90 mm)

Lubrication System

Lubricating oil capacity total system	4.4 gal (16.5 L)
Maximum sump capacity	4.1 gal (15.5 L)
Minimum sump capacity	3.3 gal (12.5 L)
Maximum engine operating angles (front up, front down, right side or left side)	25°

Lubricating Oil Pressure

Oil Temperature (continuous operation)	257 °F (125 °C)
Oil Temperature (maximum intermittent operation)	

Electrical System

Type	12 volt negative earth
Alternator type	Denso A127i
Alternator Voltage	12V
Alternator Output	100A
Starter motor type	Denso P95
Starter motor voltage	12V
Starter motor power	4.0 hp (3.0 kW)
Minimum cranking speed	60 rev/min

Induction System

Maximum air intake restriction

Clean filter	.73 psi (5 kPa)
Dirty filter	1.2 psi (8 kPa)
Air filter type	Paper element

Duct allowance with 50% glycol

Fuel System

Type of injection	Direct
Fuel injection pump	Common rail
Fuel atomizer	Unit injector/ multi-hole

Fuel Lift Pump

Max flow through customer filter	0.4 gal/min (1.5 L/min)
Maximum suction head	30 kPa

Fuel Consumption

110% Load	
100% Load	11.3 gal/hr (42.7 L/hr)
75% Load	9.2 gal/hr (34.8 L/hr)
50% Load	6.9 gal/hr (26.1 L/hr)

Generator Controller Options



- Dashboard Style LCD Panel
- SAE J1939 ECU Communications
- Load Share Synch Features
- Metering, Data Trending, Alarms
- Engine Status Indicators
- Fuel Consumption
- CanBus, ModBus
- Ethernet Communications
- Remote Contacts Form C, RS 232/485

- Internet Bridge Module
- Internet Connection & Web Browser
- Remote Access & Control
- IntelliMonitor Network Management
- SNMP, PC SCADA
- Site Overview & Statistic Settling
- Automatic Downloads, Report Writer
- Receive Emails or IM Text
- CAT 5e, RS232/485, RJ 45
- Ethernet or Dial Up Connection
- Fleet Scalability

Alternator Specifications

Manufacturer	Marathon
Type	Ext. Voltage Regulated, Brushless
Gen Frame	MAGNAPLUS
Insulation	NEMA
Material	Class H
Temperature Rise	130 °C, Standby
Hertz	60
Phase	3
RPM	1800
Exciter	Rotating
# Leads	12 Reconnectable or 4 Single Phase
PF	0.8
Ambient	40°C
Coupling Single Bearing	Flexible
Amortisseur Windings	Full
Cooling Air Volume	250 CFM
Peak Motor Starting	30% Voltage Dip, 235 skVA
Voltage Regulation	1 Phase Sensing 1%
no-load and full-load	Optional 3 Phase Sensing 1/2%

- NEMA MG1, IEEE, AND ANSI standards compliance for temperature and motor starting.
- Sustained short-circuit current of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and drip-proof construction.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Linkboards
- Optimized Electrical Design
- Enhanced Ventilation
- Fully Guarded
- Heavy Duty Bearings

STANDARD FEATURES

- Heavy Duty Steel Base
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery Rack
- Battery Cables
- High Ambient Unit Mounted Radiator
- Battery Charging Alternator
- Factory Paint
- Factory Test Prior to Shipment
- 2 Year Warranty
- Owners Manual

AVAILABLE ACCESSORIES

OPEN UNIT

- Narrow Skid Base
- Radiator Duct Flange
- Ship Loose Flex Exhaust
- Ship Loose Critical Silencer

ENCLOSED UNIT

- Wide Skid Base
- Standard Enclosure With Internal Silencer
- Sound Attenuated Enclosure With Silencer
- Load Center With Lights and GFI Receptacle
- Sub-Base Fuel Tank

CONTROLLER

- IntelliLite Model IL-NT-MRS19
- Ethernet Bridge
- Remote Annunciator



MISCELLANEOUS

- Flexible Fuel Lines
- Coolant Drain Kit
- Water Jacket Heater
- Oil Pan Heater
- Generator Strip Heater
- Battery
- Battery Charger
- Pad Type Battery Heater
- Battery Heater Blanket with Thermostat
- Line Circuit Breaker

WARRANTY

- 3 Year Warranty
- 5 Year Warranty

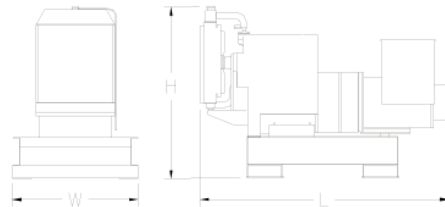
APPROVALS AND LISTINGS

- UL Standard 2200

WEIGHTS AND DIMENSIONS

OVERALL SIZE, L x W x H, in.: 98 in. x 35.5 in. x 62 in.
WEIGHT: 3212 lbs.

Note: Dim and weights reflect standard open unit with no options



Note: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

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