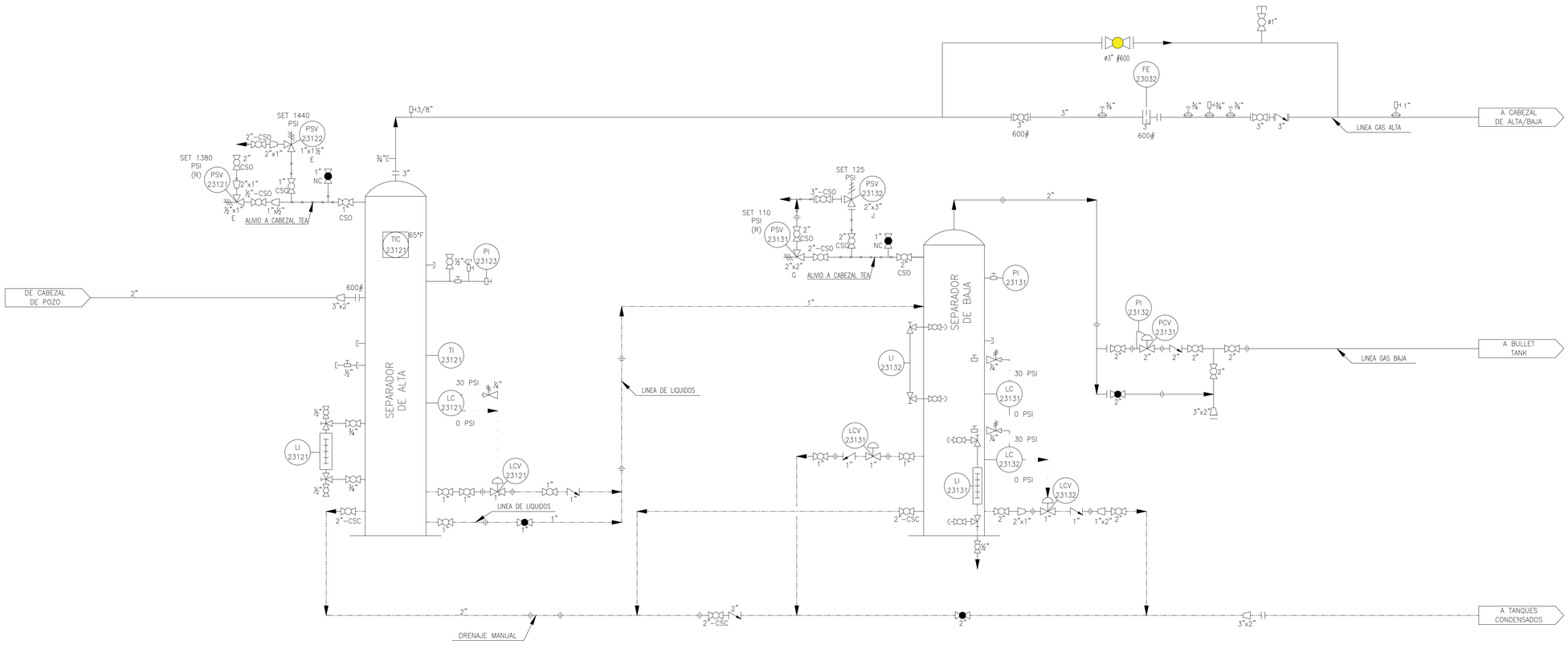
ANEXO A.

DIAGRAMA DE TUBERÍA E INSTRUMENTACIÓN (PI&D) DE SEPARADORES

SEPARADOR DE ALTA	
VOLUMEN	16.3 ft3
DIÁMETRO	20"
LONGITUD	7 ft 6"
PRESIÓN DE DISEÑO	1440 PSIG
TEMP. DE DISEÑO	120°F

SEPARADOR DE BAJA	
VOLUMEN	23.5 ft3
DIÁMETRO	24"
LONGITUD	7 ft 6"
PRESIÓN DE DISEÑO	125 PSIG
TEMP. DE DISEÑO	120°F

VÁLVULA CONTROL DE CONTRAPRESIÓN	
TIPO	GLOBO
DIÁMETRO	2"
REGULADOR	INCORPORADO
PRESIÓN DE DISEÑO	300 PSIG
TEMP. DE DISEÑO	100°F



LOCALIZACION

NOTAS

1. –

PLANOS DE REFERENCIA

–

CONVENCIONES

- GAS DE ALTA
- GAS DE BAJA
- LIQUIDOS

A	16-NOV-20	EMITIDO PARA COMENTARIOS	JRS	COO	COO	PM
△	FECHA	D E S C R I P C I O N	DIBUJÓ	DISEÑÓ	REVISÓ	APROBÓ

REVISIONES

PATIN DE PRODUCCION TIPO

DIAGRAMA DE TUBERIA E INSTRUMENTACION

	NOMBRE	MATRÍCULA	FIRMA	FECHA
DIBUJÓ		–		16-NOV-20
DISEÑÓ		–		16-NOV-20
REVISÓ		–		16-NOV-20
APROBÓ		–		16-NOV-20

PLANO: 1
DE: 1
ESCALA: SIN

No PLANO –P&ID–001 REV. A

FORMATO C (432 x 864)

ARCHIVO CAD: ARCHIVO

ANEXO B.

FORMA30SH Ministerio de Minas y Energía

DISTRIBUCION COPIAS
ORIGINAL Y COPIA SUBD. HIDROCARB.
1 COPIA OFICINA DE ZONA
COPIAS OPERADOR

MINISTERIO DE MINAS Y ENERGIA
DIRECCION GENERAL DE HIDROCARBUROS
SUBDIRECCION DE HIDROCARBUROS

FORMA No 30 SH
REVISADA : Feb-95

INFORME MENSUAL SOBRE PRODUCCION , PLANTAS Y CONSUMOS DE GAS NATURAL Y PROCESADO

OPERADOR: **CONTRATO:** **MES:** **AÑO:**

CAMPOS	GAS DE FORMACION KPC	CONTENIDO DE			GAS DE FORMACION PROCESADO	CONSUMO DE GAS SIN PROCESAR						
		PROPANO Glns/KPCG	BUTANOS Glns/KPCG	GASOLINA Glns/KPCG		CONSUMIDO EN EL CAMPO	*ENTREGADO A GASODUCTO (4)*			QUEMADO AL AIRE	USADO EN BOMBEO NEUMATICO	GAS INYECTADO A YACIMIETOS
							GASODUCTOS	GENERACION ELECTRICA	OTROS			
					K.P.C.	K.P.C.	K.P.C.	K.P.C.	K.P.C.	K.P.C.	K.P.C.	K.P.C.
TOTAL	**0.00**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

TOTAL GAS PROCESADO EN PLANTA K.P.C.	PRODUCTOS OBTENIDOS DEL GAS					CONSUMO DE GAS PROCESADO						
	GLP (Galones)	PROPANO (Galones)	BUTANOS (Galones)	GASOLINA NATURAL (Galones)	GAS TRANSFORMADO EN GASOLINA NATURAL K.P.C.	CONSUMIDO EN EL CAMPO K.P.C.	ENTREGADO A GASODUCTOS K.P.C.	GENERACION ELECTRICA K.P.C.	OTROS K.P.C.	QUEMADO AL AIRE K.P.C.	USADO EN BOMBEO NEUMATICO K.P.C.	GAS INYECTADO A YACIMIETOS K.P.C.

REPRESENTANTE AUTORIZADO DEL OPERADOR
MATRÍCULA No. DE CPIP

REPRESENTANTE AUTORIZADO DE LA ANH
MATRÍCULA No. DE CPIP

Observaciones :

ANEXO C.

Diagrama de tubería e instrumentación (P&ID)

de TEA

LEC-023201-006 (R)	
TAMBOR DE TEA - KOD	
TIPO	HORIZONTAL
VOLUMEN	535 ft3
DIÁMETRO	70"
LONGITUD	20 ft
PRESIÓN MÁXIMA DE OPERACIÓN	60 PSIG
TEMP DE OPERACIÓN	60 °F
PRESIÓN DE DISEÑO	200 PSIG @ 130°F

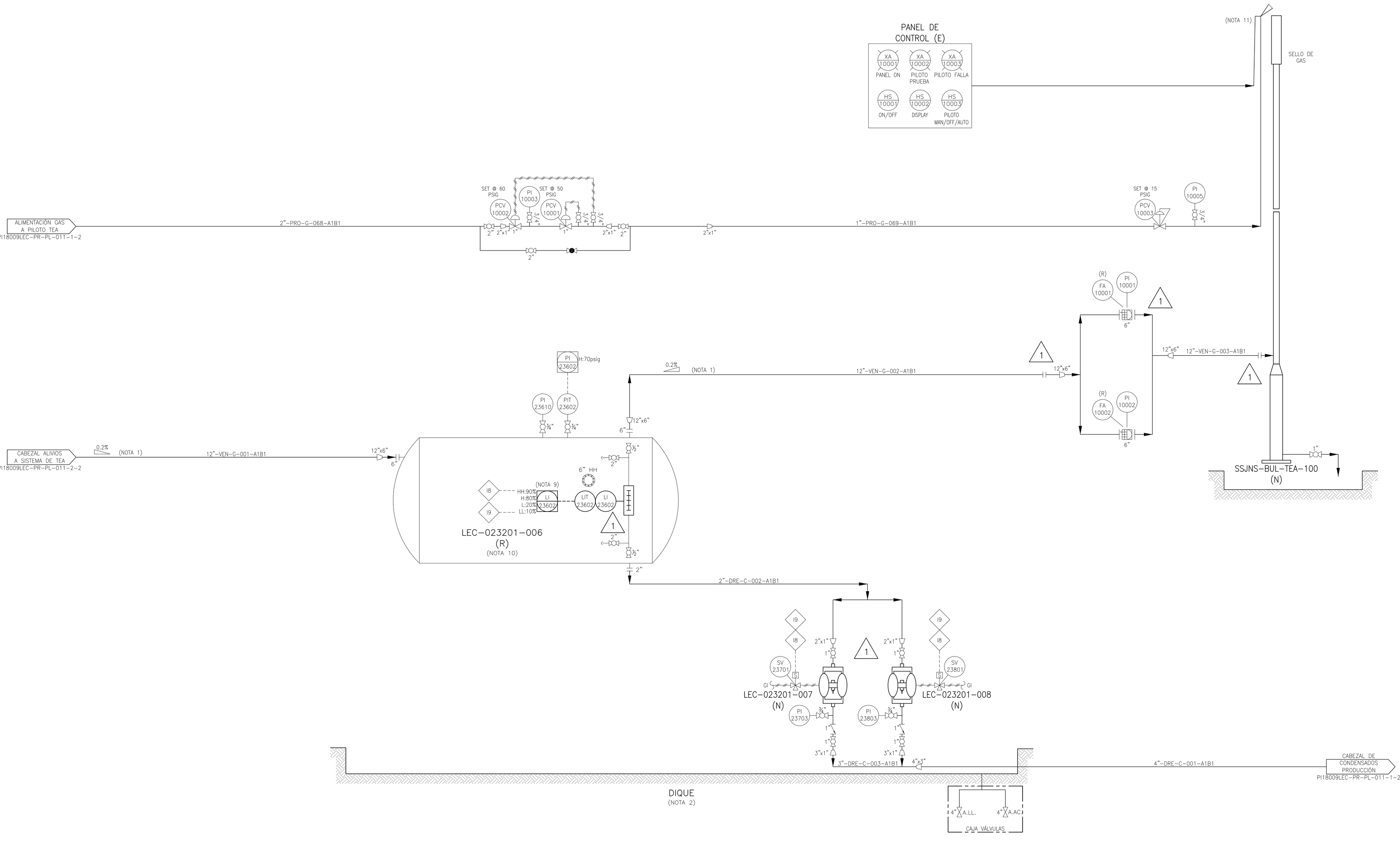
LEC-023201-007/008 (N)	
BOMBA CONDENSADOS KOD	
TIPO	DIAFRAGMA
DIÁMETRO	1"x1"
PRESIÓN DE OPERACIÓN	10 GPM@ 25psig
CAPACIDAD	40 GPM

INTERLOCK	ACCIÓN A EJECUTAR
I8	ENCENDIDO BOMBAS LEC-023201-007/008 POR MUY ALTO NIVEL (90%) EN EL TRANSMISOR DE NIVEL LIT-23602 EN KOD.
I9	APAGADO BOMBAS LEC-023201-007/008 POR MUY BAJO NIVEL (10%) EN EL TRANSMISOR DE NIVEL LIT-23602 EN KOD.

TEA-100 (N)	
TEA	
TIPO	CILINDRICO VERTICAL
DIÁMETRO	12"
ALTURA	12.5 m
CAPACIDAD	40 MMSCFD
PRESIÓN DISEÑO	15psig@120°F

NOTAS GENERALES

1. PENDIENTE (0.2%) HACIA EL TAMBOR KNOCK-OUT DRUM DE 2,5" (PULGADAS) POR CADA 100 FT.
2. EL DIQUE DEL EQUIPO DEBE CONTENER EL 100% DE SU CAPACIDAD.
3. TANTO EL SISTEMA DE ENCENDIDO DE PILOTOS COMO EL SISTEMA REMOTO DE DETECCIÓN DE LLAMA, DEBERÁN ESTAR LOCALIZADOS A UNA DISTANCIA SEGURA DE LA BASE DE LA TEA Y EN SITIO VIABLE AL OPERADOR
4.
5.
6.
7.
8. L.
9. LOS SETS DEL TRANSMISOR DE NIVEL DEBERÁN AJUSTARSE SEGÚN OPERACIÓN EN CAMPO.
10. EL K.O.D. RELOCALIZADO POR LEC CUENTA CON BOQUILLAS DE ENTRADA Y SALIDA DE GAS EN 6", EL DISEÑO REQUIERE UN CABEZAL DE ALIVIOS DE 12". LA INGENIERÍA RECOMIENDA MODIFICAR LAS BOQUILLAS EXISTENTES DE 6" A 12", PARA EVITAR RESTRICCIONES DE FLUJO EN EL PROCESO. YA QUE EL EQUIPO ESTA REGISTRADO EN LA NATIONAL ONBOARD LEC DEBERÁ IMPLEMENTAR EL CAMBIO DE LAS BOQUILLAS, CONFORME A LO ESTABLECIDO AL CÓDIGO DE MODIFICACIÓN Y DISEÑO DEL RECIPIENTE (ASME SECCIÓN VIII DIVISIÓN 1). LLEVANDO AL EQUIPO AL ESTAMPE ASME R SI LEC MANTIENE SU REGISTRO EN LA NATIONAL ONBOARD O DE LO CONTRARIO SACARLO DE ESTE.
11. TIP DE TEA A SER REUTILIZADO, LEC DEBE GARANTIZAR LA INTEGRIDAD DEL TIP PARA EL FUNCIONAMIENTO DE LA TEA.
12. EL SET DEL TRANSMISOR DE PRESIÓN PIT-23602 DEBERÁ AJUSTARSE SEGÚN OPERACIÓN EN CAMPO.



CONVENCIONES

- EXISTENTE
- NUEVO
- FUTURO
- LIMITE DE EQUIPO
- AG TUBERÍA AÉREA
- UG TUBERÍA ENTERRADA
- (N) NUEVO
- (E) EXISTENTE
- (R) RELOCALIZADO
- (F) FUTURO
- CSC CAR SEAL CLOSE
- CSO CAR SEAL OPEN
- NC NORMALMENTE CERRADA
- NO NORMALMENTE ABIERTO

PLANOS Y DOCUMENTOS DE REFERENCIA

No.	PLANO No.	DESCRIPCION
DR-1	PI18009LEC-PR-FI-001	FILOSOFÍA DE OPERACIÓN Y CONTROL
PR-1	SSJNS-BUL-PRO-PLN-009	TEA P&ID Y PFD

CONTRATO:

DESCRIPCIÓN:

ESTE PLANO FUE ELABORADO POR MEDIOS ELECTRONICOS
NO CORREGIR A MANO

XXXXXXX
XXXXXXX

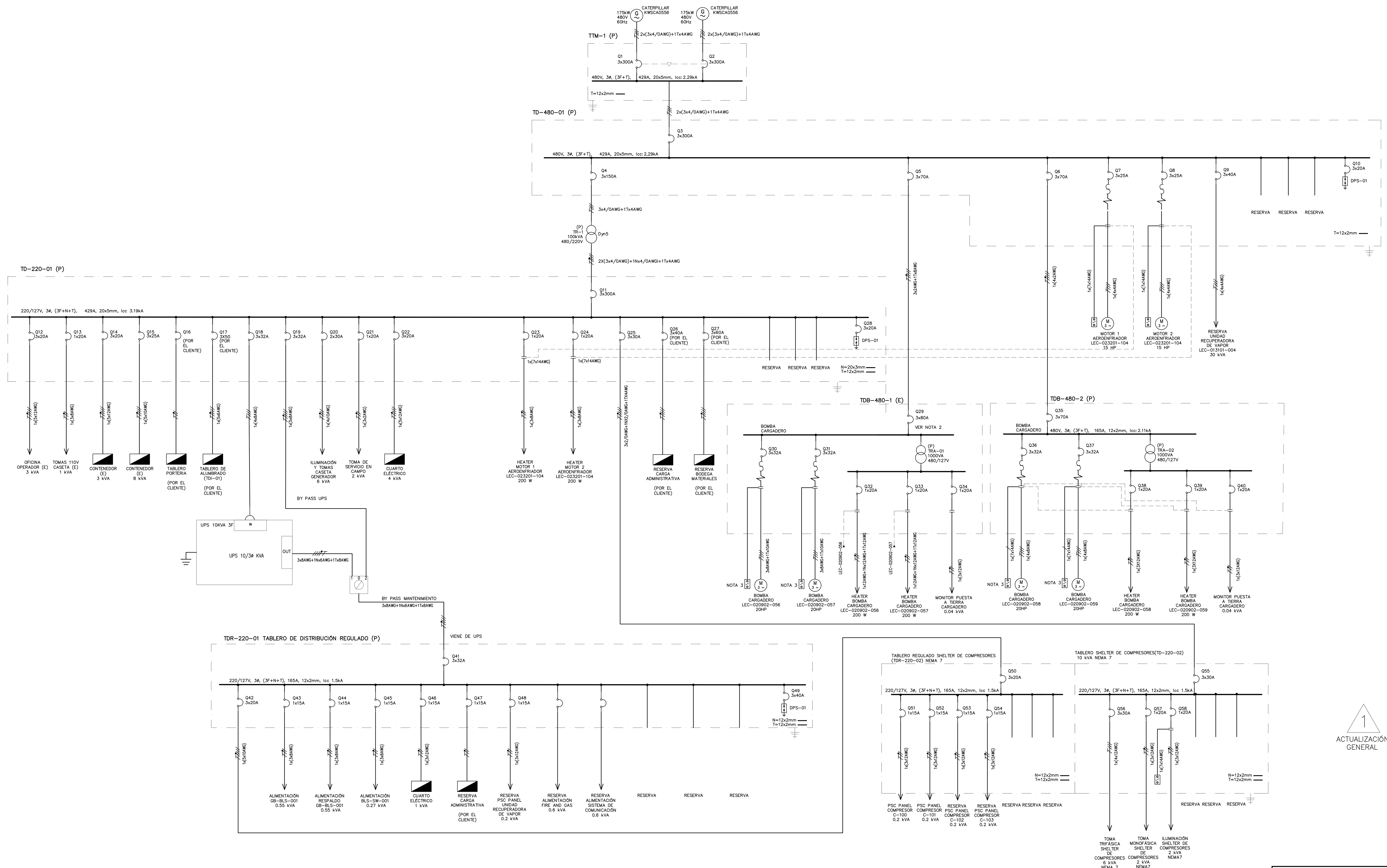
COORD. DE PROY.	
FECHA	

ARCHIVO ACAD	ESCALA:	PLANO No:	HOJA:	REV.
PI18009LEC-PR-PL-007-1-1-R1	SIN	PI18009LEC-PR-PL-007	1 DE: 1	1

FORMATO D1 (864mm x 559mm)

ANEXO D.

Plano unifilar eléctrico de locación



ACTUALIZACIÓN GENERAL (1)

KEY-PLAN

NOTAS GENERALES

CONVENCIONES

- CABLEADO DE CIRCUITOS
- CONDUCTOR DE TIERRA, COLOR VERDE
- CONDUCTOR DE NEUTRO, COLOR BLANCO
- CONDUCTOR DE FASE, COLOR AMARILLO, AZUL O ROJO
- GENERADOR ELÉCTRICO TRIFÁSICO
- INTERRUPTOR TERMOMAGNÉTICO
- DPS-01
- TRANSFORMADOR
- TABLEROS LIMITE DE EQUIPO
- CONTACTOR DE ACCIONAMIENTO
- LIMITE AREA
- TRANSFERENCIA MANUAL
- (E) EXISTENTE
- (P) PROYECTADO
- ARRANCADOR DIRECTO PARA MOTORES
- BOTONERA
- MOTOR TRIFÁSICO
- TABLEROS
- TABLERO SUMINISTRADO CON EL EQUIPO

PLANOS Y DOCUMENTOS DE REFERENCIA

No.	PLANO No.	DESCRIPCIÓN
PR-1	PI18009LEC-EL-PL-006	PLANIMETRÍA DE BANCOS DE DUCTOS ELÉCTRICOS
PR-2	PI18009LEC-EL-PL-005	PLANIMETRÍA DE UBICACIÓN DE EQUIPOS ELÉCTRICOS Y DISTANCIAS DE SEGURIDAD
PR-3	PI18009LEC-EL-PL-006	DIAGRAMA DE CONEXIONADO DE EQUIPOS ELÉCTRICOS
PR-4	PI18009LEC-TU-PL-002	[illegible]
PR-5	PI18009LEC-TU-PL-003	PLOT PLAN BULLERENGUE SUR
DR-1	PI18009LEC-EL-LI-002	LISTADO DE MATERIALES ELÉCTRICOS
DR-2	PI18009LEC-EL-LI-003	CANTIDADES DE OBRA
DR-3	PI18009LEC-EL-MC-002	CÁLCULO DE TRANSFORMADORES INCLUYENDO LOS EFECTOS DE LOS ARMÓNICOS Y FACTORES DE POTENCIA Y DE CARGA.
DR-4	PI18009LEC-EL-MC-005	CÁLCULO Y COORDINACIÓN DE PROTECCIONES CONTRA SOBRECORRIENTES

DISEÑÓ	CÉDULA	MATRICULA PROFESIONAL

REV.	FECHA	DESCRIPCIÓN	DIBUJÓ	DISEÑÓ	REVISÓ	APROBÓ
1	29/03/19	MODIFICADO DONDE SE INDICA	IEB	JDD	JAB	JLV
0	21/03/19	APROBADO INGENIERÍA DE DETALLE - EMITIDO PARA CONSTRUCCIÓN	IEB	JDD	JAB	CCL
C	05/03/19	INCLUIDOS COMENTARIOS DEL CLIENTE- EMITIDO PARA HAZOP	IEB	JAB	CCL	JLV
B	16/01/19	EMITIDO PARA COMENTARIOS CLIENTE	IEB	JAB	CCL	JLV
A	09/01/19	EMITIDO PARA COMENTARIOS CLIENTE	IEB	JDD	JAB	CCL
P	19/12/18	REVISION INTERDISCIPLINARIA	IEB	JAB	CCL	JLV

ESTE PLANO FUE ELABORADO POR MEDIOS ELECTRONICOS
NO CORREGIR A MANO

COORD. DE PROY.	
FECHA	

CONTRATO:

DESCRIPCIÓN:

UN IFILAR

ARCHIVO ACAD	ESCALA:	PLANO No:	HOJA: 2 DE: 2	REV.
PI18009LEC-EL-PL-001-R1	SIN	PI18009LEC-EL-PL-001		1

FORMATO D (864mm x 559mm)

ANEXO E.

Especificaciones técnicas generador

PERKINS – Diésel

@Perkins®

Technical Data

1100 Series

1103A-33G

Gen Set

30,4 kWm @ 1500 rev/min
35,4 kWm @ 1800 rev/min

Basic technical data

Number of cylinders 3
Cylinder arrangement ... ... Vertical in-line
Cycle. ... ... Four stroke
Induction system ... ... Naturally Aspriated
Compression ratio. ... ... 19.25 : 1
Bore .. .. 105 mm (4.13 in)
Stroke .. .. 127 mm (4.99 in)
Cubic capacity .. .. 3.3 litres
Direction of rotation ... ... .Clockwise view from front
Firing order 1,2,3
Total weight (engine only)
-dry ... ...412 kg
-wet ... ...430 kg

Overall dimensions

-height ... ... 951 mm (37.44 in)
-length ... ... 1029 mm (40.51 in)
-width (including mounting brackets) ... ... 629 mm (24.76 in)

Moment of inertia (mk²)

Engine:
- longitudinal. ... ... 23.3 kgm²
- horizontal ... ... 38.1 kgm²
- axial ... ... 24.4 kgm²

Flywheel (polar) ... ... 1.14 kgm²

Centre of gravity (wet)

- forward from rear of block ... ... 210 mm (8.26 in)
- above centre line of block ... ... 120 mm (4.72 in)
- offset of RHS of centre line. ... ... 40 mm (1.57 in)

Performance

Steady state speed stability at constant load:
- G2 ... ... ± 0.75%

Note: All data based on operation to ISO 3046/1, BS 5514 and DIN 6271 standard reference conditions.

Test conditions

Air temperature. . ... 25 °C
Barometric pressure ... ... 100 kPa
Relative humidity 30%

Sound level

Overall sound pressure level (cooling pack and air cleaner fitted):
- at 1500 rev/min 88.1dBA
- at 1800 rev/min 90.7dBA

Sound pressure level from the mean of 4 microphones at the front, left, right and above the engine. Exhaust was piped away out of the test cell.

If the engine is to operate in ambient conditions other than those of the test conditions, suitable adjustments must be made for these changes. For full details, contact Perkins Technical Service Department.

General installation

Designation	Units	Type of Operation and Application			
		Prime	Stand-by	Prime	Stand-by
		50 Hz	50 Hz	60 Hz	60 Hz
Gross engine power	kWm	28,2	31,0	33,2	36,5
Brake mean effective pressure	kPa (lbf/in²)	684 (99.2)	752 (109.0)	669 (97.0)	736 (106.7)
Mean piston speed	m/s (ft/s)	6,35 (20.8)	6,35 (20.8)	7,62 (25.0)	7,62 (25.0)
ElectropaK net engine power	kWm	27,7	30,4	32,2	35.4
Engine coolant flow 35 kPa restriction	l/min (UK gal/min)	125,5 (27.6)	125,5 (27.6)	151,0 (33.2)	151,0 (33.2)
Combustion air flow	m³/min (ft³/min)	2,16 (76.2)	2,15 (75.9)	2,6 (91.8)	2,57 (90.7)
Exhaust gas flow (max)	m³/min (ft³/min)	5,7 (201.2)	5,8 (204.8)	6,4 (226.0)	6,6 (233.0)
Exhaust gas temperature (max) in manifold	°C (°F)	500 (932)	520 (968)	520 (968)	530 (986)
Cooling fan air flow	m³/min (ft³/min)	53,0 (1871.6)	53,0 (1871.6)	70,0 (2472.0)	70,0 (2472.0)
Overall thermal efficiency	%	39,2	39,2	40,0	37.3
Typical genset electrical unit (0.8 pf 25° C	kWe	24,0	26,4	27,9	30,6
	kVA	30,0	33,0	34,9	38,2
Assumed alternator effiency	%	87			
Energy balance					
Power in fuel (Fuel heat of combustion)	kW (Btu/min)	72,0 (4098.2)	79,0 (4496.6)	83,0 (4724.3)	98,0 (5578.1)
Power output (gross)	kW (Btu/min)	28,2 (1605.1)	31,0 (1764.5)	33,2 (1889.7)	36,5 (2077.5)
Power to cooling fan	kW (Btu/min)	0,5 (28.4)	0,6 (34.1)	1,0 (56.9)	1,1 (62.6)
Power output (net)	kW (Btu/min)	27,7 (1576.6)	30,4 (1730.3)	32,2 (1832.8)	35,4 (2014.9)
Power to coolant and lubricating oil	kW (Btu/min)	16,0 (910.7)	18,0 (1024.5)	18,0 (1024.5)	22,0 (1252.2)
Power to exhaust	kW (Btu/min)	22,0 (1252.2)	25,0 (1422.9)	27,0 (1536.8)	34,0 (1935.2)
Power to radiation	kW (Btu/min)	5,0 (284.5)	6,0 (341.5)	5,0 (284.5)	6,0 (341.5)

Caution: *The airflows shown in this table will provide acceptable cooling for an open power unit operating in ambient temperatures of up to 53 °C (127 °F) or 46 °C (114.8 °F) if a canopy is fitted. If the power unit is to be enclosed totally, a cooling test should be done to check that the engine cooling is acceptable. If there is insufficient cooling, contact Perkins Technical Service Department.*

Cooling system

Radiator

- face area . ... 0.276 m² (2.97 ft²)
- rows and materials .. .. single row aluminium
- matrix density and material . ... Aluminium 12,5 fins/inch
- width of matrix . ... 526 mm (20.7 in)
- height of matrix ... ... 524 mm (20.6 in)
- pressure cap setting ... ... 107 kPa

Fan

- diameter .. .. 457mm (18 in)
- drive ratio ... ... 0.85 : 1
- number of blades 7
- material ... ... Composite
- type . ... Pusher

Coolant

Recommended coolant: 50 % ethylene glycol with a corrosion inhibitor (BS 658 : 1992 or MOD AL39) and 50% clean fresh water.

Total system capacity

- with radiator ... ... 10.2 l (21.5 pt)
- without radiator ... ... 4.4 l (9.2 pt)

Maximum top tank temperature ... ... 110 °C (230 °F)

Thermostat operating range .. .. 82 - 93 °C (180 - 199 °F)

Electrical system

Type .. .. Negative ground

Alternator voltage .. .. 12 V

Alternator output ... ... 65 amps

Starter motor voltage . ... 12 V

Starter motor power .. .. 3 kW

Number of teeth on flywheel 126

Pull in current of starter motor solenoid ... ... 60 amps

Hold in current of starter motor solenoid ... ... 15 amps

Engine stop solenoid . ... 12 V

Stop solenoid (minimum)

- pull in current .. .. 10 amps
- hold in current . ... 10 amps

Cold start recommendations

Minimum cranking speed .. .. 120 rev/min

Starter specification

Starter motor type	Min. starting temp.	Lubricating oil viscosity SAE / battery type - values in CCA				
	°C (°F)	15W/40	15W/40	10W/40	5W/40	5W/30
12 volt 3.0 kW	-7 (19.4)	1 x 770				
	-10 (14) *		1 x 770			
	-15 (5) *			1 x 770		
	-20 (-4) *				1 x 900	
	-25 (-13) *					2 x 570

* - Glow plug start aid fitted.

Note: CCA - Cold Cracking Amps to SAEJ537.

Notes:

- Battery capacity is defined by the 20 hour rate
- If a change to a low viscosity oil is made, the cranking torque necessary at lower ambient temperatures is much reduced. The starting equipment has been selected to take advantage of this. It is important to change the appropriate multigrade oil in anticipation of operating in low ambient temperatures.
- Breakaway current is dependent on battery capacity available. Cables should be capable of handling the transient current which may be up to double the steady cranking current.

Exhaust system

Maximum back pressure

- 1500 rev/min ... ... 8 kPa
- 1800 rev/min ... ... 10 kPa

Exhaust outlet size . ... 56 mm (2.2 in)

Fuel System

Type of injection . ... Direct

Fuel injection pump ... ... Rotary

Fuel atomiser .. .. Multi-hole

Nozzel opening pressure ... ... 29,0 MPa (290 bar)

Fuel lift pump

Type ... ... Electrical

-flow/hour ... ... 120 - 150 l/h (211 - 264 pt/m)

-pressure ... ... 30 - 75 kPa (4.4 - 10.9 psi)

Maximum suction head:

- 1500 rev/min ... ... 17 kPa

Governor type

Electronic governor . ... .Woodward LCS2

Mechnical and electronic governor speed control to .. ISO 8528, G2

Fuel specification

Fuel Specification	European RF75-T-96 / DIN EN590 / BS2869 class A2
Density (kg/l @ 15 °C)	0,835 - 0,845
Viscosity (mm²/s @ 40 °C)	2,5 - 3,5
Sulphur content (%)	0,1 - 0,2
Cetane number	45 - 50

Fuel consumption litres/hour (UK gals/hr)

	Power rating				
Speed	**110%**	**100%**	**75%**	**50%**	**25%**
1500	7,9 (1.73)	7,1 (1.56)	5,4 (1.18)	3,9 (0.85)	2,5 (0.54)
1800	9,5 (2.08)	8,6 (1.89)	6,6 (1.45)	4,9 (1.07)	3,1 (0.68)

Induction system

Maximum air intake restriction

-clean filter .. .. 3,0 kPa

- dirty filter ... ... 6,5 kPa
- air filter type .. .. Dry

Lubrication system

Lubricating oil capacity

Total system ... ... 8,3 l (17.5 pt)

Sump minimum .. .. 6,2 l (13.1 pt)

Sump maximum . ... 7.8 l (16.4 pt)

Maximum engine operating angles:

- front up, front down, right side or left side ... ... 25°

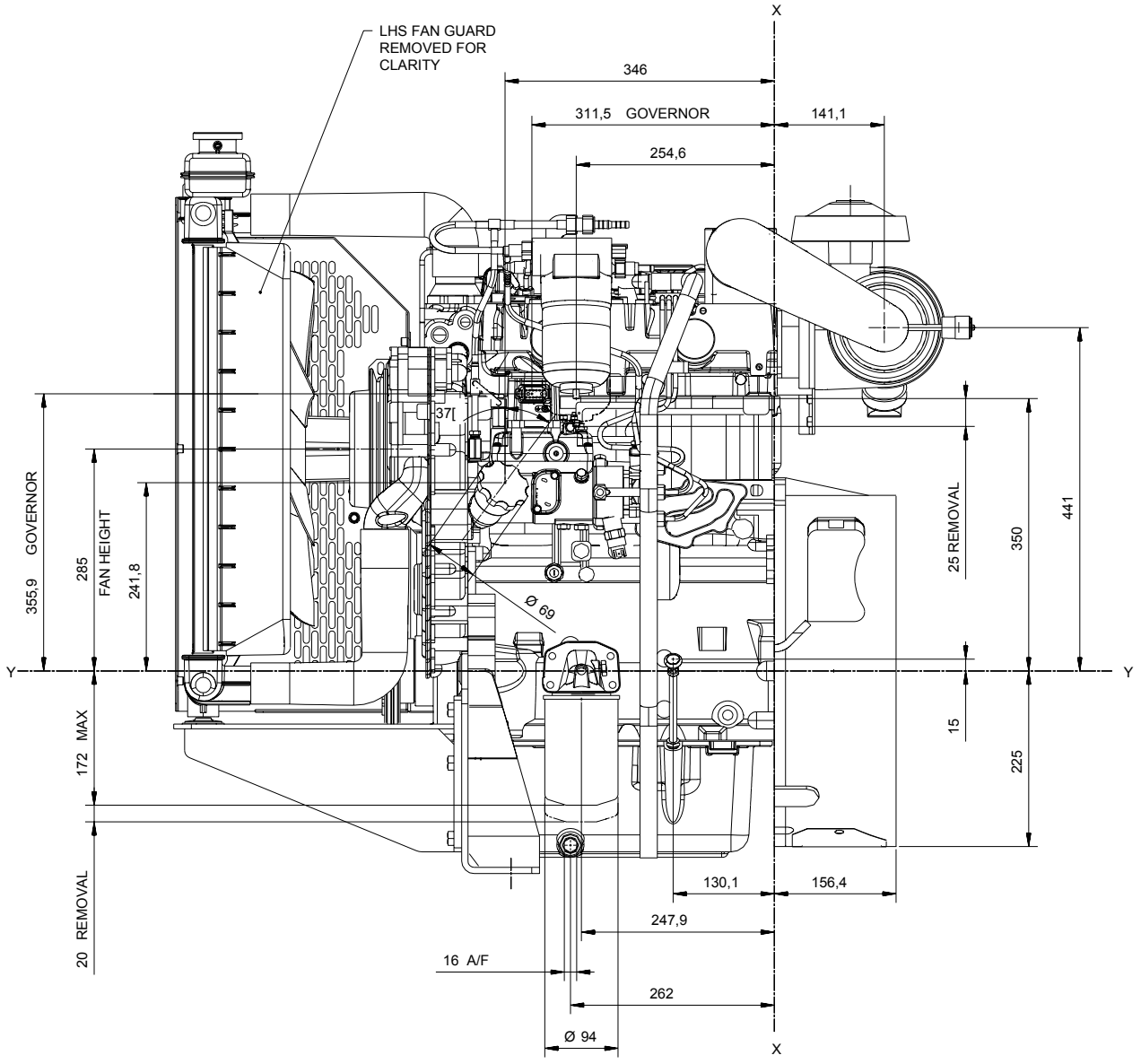
Lubricating oil pressure

- relief valve opens . ... 415 - 470 kPa
- at maximum no-load speed .. .. 276 - 414 kPa

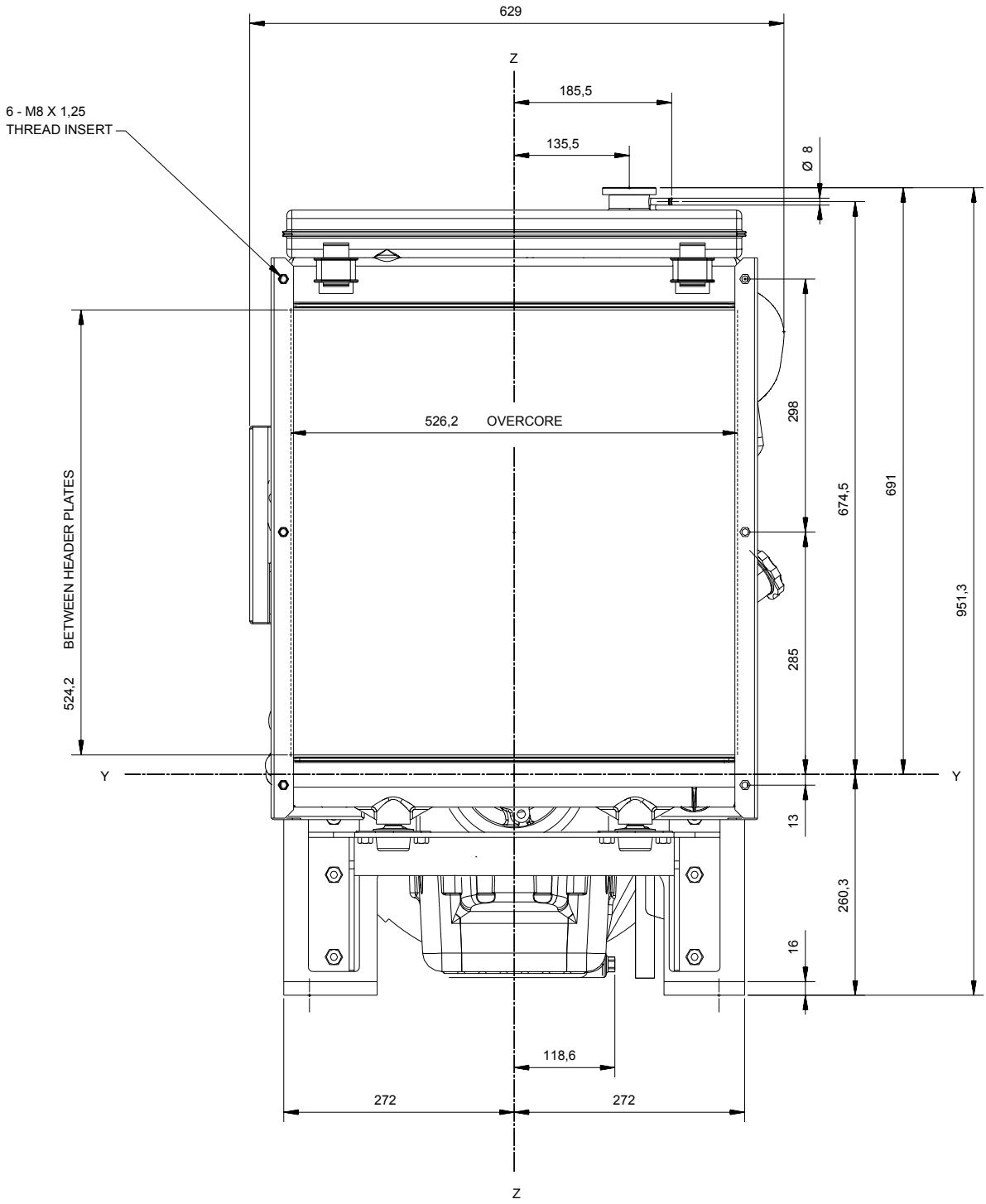
Max continuous oil temperature (in rail) . ... 125 °C (257 °F)

Oil consumption at full load as a % of fuel consumption 0.15%

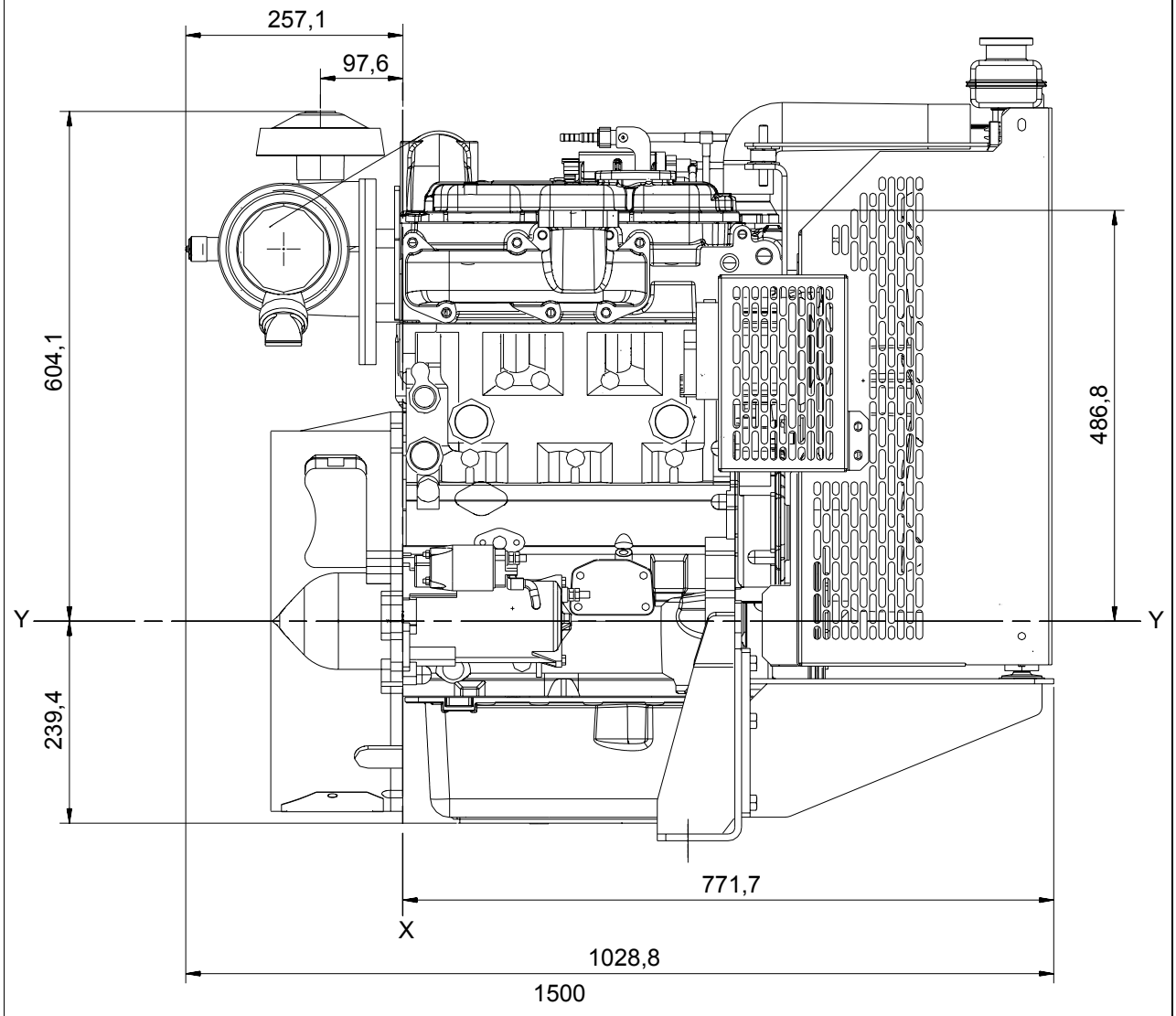
1103A-33G ElectropaK - left view



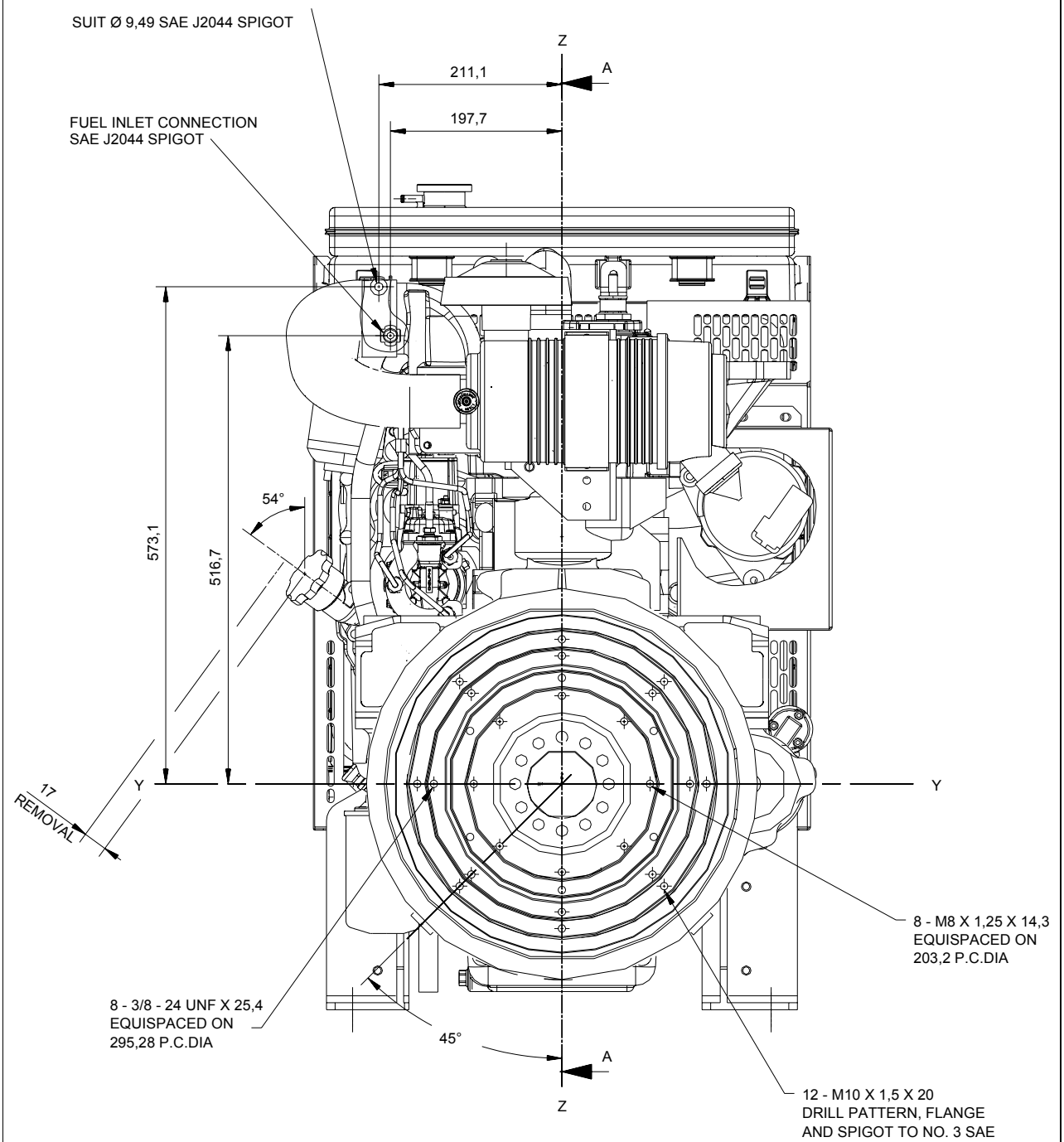
1103A-33G ElectropaK - front view



1103A-33G ElectropaK - right view

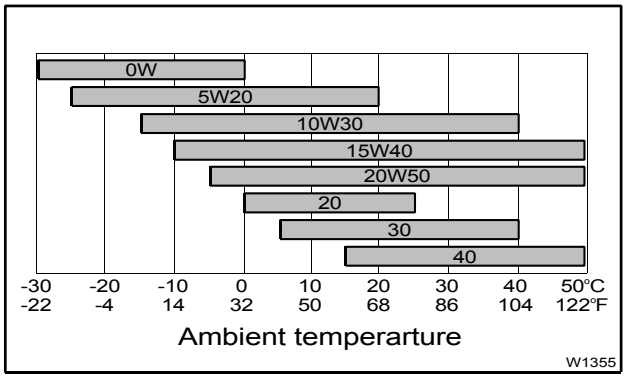


1103A-33G ElectropaK - rear view



Recommended SAE viscosity

A single or multigrade oil must be used which conforms to APi-CG4 / CH4, see illustration below:



Mountings

Maximum static bending moment
at rear face of block ... ... 791 Nm (583 lb/ft)

Load Acceptance

Inital load acceptance when engine reaches rated speed (15 seconds max after engine starts to crank)			
	Units	**1500 rev/min**	**1800 rev/min**
Prime Power	%	90	90
Load	kWm (kWe)	25,7 (21.8)	29,4 (24.7)
Transient Frequency Deviation	%	< -10%	< -10%
Frequency Recovery	Second	<1	<1

The above complies with requirements of Classification 3 & 4 of ISO 8528 - 12 and G2 operating limits stated in ISO 8528 - 5.

The above figures were obtained under test conditions as follows:
- alternator efficiency.. ... ... 87%
- minimum ambient temperature ... ... 15 °C

Isochronous Governing:
- typical alternator inertia ... ... 0.1676 kgm²

All tests were conducted using an engine installed and serviced to Perkins Engine Company Limited recommendations.

The information given in this document is for guidance only.

@Perkins®

Perkins Engines Company Limited

Peterborough PE1 5NA United Kingdom
Telephone +44 (0) 1733 583000
Fax +44 (0) 1733 582240
www.perkins.com

Distributed by

Publication No. TPD1488E, Issue 1. Printed in England. ©Perkins Engines Company Limited.

ANEXO F.

Hojas de especificaciones de grupos electrógenos ofertados

CATERPILLAR®

STANDBY 240 ekW
CONTINUOUS 190 ekW

60 Hz

Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

FEATURES

FULL RANGE OF ATTACHMENTS

- Wide range of bolt-on system expansion attachments, factory designed and tested

SINGLE-SOURCE SUPPLIER

- **Fully Prototype Tested** with certified torsional vibration analysis available

WORLDWIDE PRODUCT SUPPORT

- Worldwide parts availability through the Caterpillar dealer network
- With over 1,200 dealer outlets operating in 166 countries, you're never far from the Caterpillar part you need.
- 99.5% of parts orders filled within 48 hours. The best product support record in the industry.
- Caterpillar dealer service technicians are trained to service every aspect of your electric power generation system.
- Preventive maintenance agreements
- The Cat Scheduled Oil Sampling (S•O•S℠) program cost effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products

CAT® G3406 TA GAS ENGINE

- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Low pressure gas

CAT SR4B GENERATOR

- Designed to match performance and output characteristics of Caterpillar engines
- Optimum winding pitch for minimum total harmonic distortion and maximum efficiency
- Segregated AC/DC, low voltage accessory box provides single point access to accessory connections

CAT CONTROL PANELS

- Two levels of controls, designed to meet individual customer needs:

  EMCP II provides digital monitoring, metering, and protection

  EMCP II+ provides EMCP II features along with full-featured power metering and protective relaying

FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

System	Standard	Optional
Air Inlet	Single element canister type air cleaner Service indicator	
Cooling	Radiator with guard Coolant drain lines with valves Fan and belt guards Caterpillar Coolant Low coolant level sensors	Jacket water coolant heater with shutoff valves Radiator removal
Exhaust	Stainless steel exhaust flex with weld outlet flange	15 dBA muffler
Fuel	Gas pressure regulator Low pressure fuel system Energize To Run (ETR) gas shutoff valve	
Generator	Self excited Class H insulation Class F temperature rise (105° C continuous/130° C standby) VR6 Voltage Regulator, 3-phase sensing, with reactive droop 2:1 Volts/Hz or 1:1 Volts/Hz Bus bar termination Extension box	Permanent magnet excited Digital Voltage Regulator Digital Voltage Regulator with KVAR/PF control Anti-condensation space heater Oversize & premium generators Circuit breakers, UL, 3 pole with shunt trip Multiple breaker capability
Governor	Flo-Tech 68 speed control	Electronic load sharing
Ignition	Digital ignition system	
Control Panels	EMCP II	EMCP II+ Customer Communication Module Local alarm & remote annunciator modules
Lube	Lubricating oil and filter Oil drain line with valve Fumes disposal	Manual sump pump
Mounting	Narrow base Linear vibration isolators between base and engine-generator	
Starting/Charging	35 amp charging alternator 24 volt starting motor Batteries with rack and cables Battery disconnect switch	Battery chargers, 5 & 10 amp Oversize batteries
General		Automatic Transfer Switches (ATS) Floor standing circuit breakers

SPECIFICATIONS

CAT SR4B GENERATOR

Frame 447
Type . . . . . Self excited, static regulated, brushless
Construction . . . . . Single bearing, close coupled
Three phase . . . . . 12 lead reconnectable
Insulation . . . . . Class H with tropicalization and antiabrasion
IP rating . . . . . Drip proof 22
Alignment . . . . . Pilot shaft
Overspeed capability
  Prototype tested 150%
  Production tested 125%
Wave form . . . . . Less than 5% deviation
Paralleling capability . . . . . Standard
Voltage regulator . . . . . 3-phasing sensing with Volts-per-Hertz
Voltage regulation . . . . . Less than ± 1/2% (steady state)
Less than ± 1% (no load to full load)
Voltage gain . . . . . Automatic
Telephone Influence Factor (TIF) . . . . . Less than 50
Harmonic Distortion (THD) . . . . . Less than 5%

CAT ENGINE

G3406 TA, 4-stroke-cycle
Bore – mm (in) 137 (5.4)
Stroke – mm (in) 164 (6.5)
Displacement – L (cu in) 14.6 (891)
Compression ratio 10.3:1
Aspiration . . . . . Turbocharged-Aftercooled
Ignition system . . . . . Digital ignition
Governor type . . . . . Woodward Flo-Tech

CAT CONTROL PANEL

24 Volt DC Control
NEMA 1, IP22 enclosure
Electrically dead front
Lockable hinged door
Generator instruments meet ANSI C-39-1
Terminal box mounted
Single location customer connector point

Consult your Caterpillar dealer for available voltages.

CATERPILLAR®

TECHNICAL DATA

Open Generator Set — 1800 rpm/60 Hz/480 Volts			Standby DM5439		Continuous DM5440	
Package Performance						
Power rating	ekW		240		190	
Power rating @ 0.8 PF	kVA		300		238	
Aftercooler temperature	Deg C	Deg F	54	130	54	130
Fuel Consumption						
100% load with fan	N•m³/hr	scf/hr	77	2894	64	2398
75% load with fan	N•m³/hr	scf/hr	61	2291	51	1912
50% load with fan	N•m³/hr	scf/hr	45	1682	37	1418
Cooling System						
Ambient air temperature*	Deg C	Deg F	40	105	40	105
Air flow restriction (system)	kPa	in water	0.12	0.5	0.12	0.5
Air flow (maximum @ rated speed for standard radiator arrangement)	m³/min	cfm	679	23,983	836	29,524
Engine coolant capacity with radiator	L	Gal	57	15	57	15
Jacket water outlet temperature	Deg C	Deg F	99	210	99	210
Exhaust System						
Combustion air inlet flow rate	N•m³/min	scfm	16	572	12	466
Exhaust gas stack temperature	Deg C	Deg F	536	997	525	977
Exhaust gas flow rate	N•m³/min	cfm	16	1749	13	1424
Exhaust flange size (internal diameter)	mm	in	127	5	127	5
Exhaust system backpressure (maximum allowable)	kPa	in water	6.7	27	6.7	27
Heat Rejection						
Low Heat Value (LHV) fuel input	kW	Btu/min	780	44,358	647	36,767
Heat rejection to jacket water (includes oil cooler)	kW	Btu/min	234	13,305	210	11,946
Total heat rejection to exhaust (LHV to 25° C)	kW	Btu/min	217	12,319	174	9892
Heat rejection to exhaust (LHV to 120° C)	kW	Btu/min	167	8180	132	6460
Heat rejection to A/C	kW	Btu/min	25	1395	12	694
Heat rejection to atmosphere from engine	kW	Btu/min	31	1774	26	1471
Heat rejection to atmosphere from generator	kW	Btu/min	20	1162	16	897
Generator						
Motor starting capability @ 30% voltage dip**	kVA		649		649	
Frame			447		447	
Temperature rise	Deg C		130		105	
Emissions* **						
NOx	g/bhp-hr		17.8		19.7	
CO	g/bhp-hr		1.1		1	
HC (total)	g/bhp-hr		3.9		4.2	
HC (non-methane)	g/bhp-hr		0.59		0.63	
Exhaust O_2 (dry)	%		4.0		4.0	

*Ambient capability at 200 m (660 ft) above sea level. For ambient capability at other altitudes, consult your Caterpillar dealer.

**Assumes synchronous driver

***Emissions data measurement is consistent with those described in EPA CFR 40 PART 89 SUBPART D and ISO 8178-1 for measuring HC, CO, CO_2 and NOx. Data shown is based on steady state engine operating conditions of 77° F, 28.43 inches HG and fuel having a LHV of 920 BTU per cubic foot at 30.00 inches HG absolute and 32° F. Not to exceed emission data shown is subject to instrumentation, measurement, facility and engine fuel system adjustments.

RATING DEFINITIONS AND CONDITIONS

Standby — Output available with varying load for the duration of the interruption of the normal source power.

Continuous — Output available without varying load for an unlimited time.

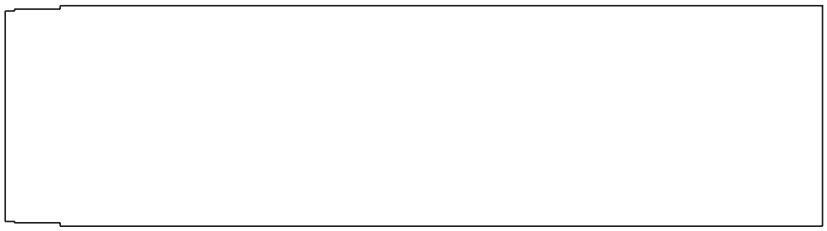
Ratings are based on ISO3046/1 standard reference conditions of 25° C (77° F) and 100 kPa (29.61 in Hg).

Ratings are based on pipeline natural gas having a LHV (low heat value) of 36.2 mJ/N•m³ (920 Btu/cu ft). Variations in altitude, temperature, and gas composition from standard conditions or the use of a three way catalyst may require a reduction in engine horsepower.

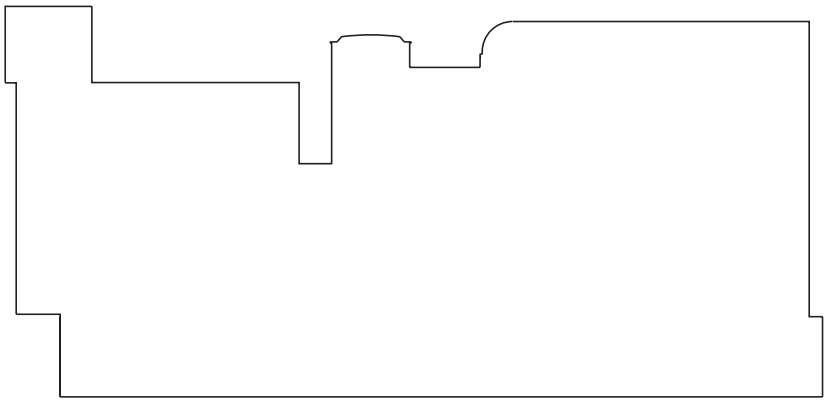
STANDBY 240 ekW
CONTINUOUS 190 ekW
60 Hz

CATERPILLAR®

STANDBY/CONTINUOUS POWER GENERATOR SET PACKAGE — TOP VIEW



STANDBY/CONTINUOUS POWER GENERATOR SET PACKAGE — SIDE VIEW



Package Dimensions		
Length	4074 mm	160.39 in
Width	1398.4 mm	55.05 in
Height	2138.6 mm	84.20 in
Shipping Weight	4318 kg	9500 lb

Note: Do not use for installation design. See general dimension drawings for detail (Drawing #207-4501).

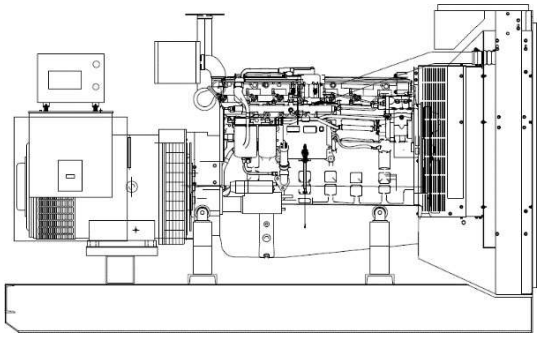
TMI Reference No.: DM5439, DM5440

U.S. sourced

LEHE1430-02 (03-02)

Specification Sheet

Gas Generator Set
Hoja de Especificaciones
Grupo Electrógeno a Gas



Note: Image shown may not reflect actual package genset pictured may include optional accessories.
Nota: Imagen de carácter ilustrativa, ya que los equipos en foto pudieran incluir accesorios opcionales

Standby Power
250 kW • 312.5 kVA • 60Hz

Prime Power
235 kW • 294 kVA • 60Hz

Prime Power al 70%
164 kW • 205 kVA • 60Hz

Rating Power Chart
Tabla de Potencias

Genset Model Modelo del Equipo	**Voltage** Voltaje	**Phases** Fases	**Hertz** Hertz	**Standby Raiting Natural Gas** Potencia Standby		**Prime Raiting Natural Gas** Potencia Prime		**Prime Raiting Natural Gas** Potencia Prime al 70%	
				kW	**kVA**	**kW**	**kVA**	**kW**	**kVA**
S250PSI	220V 440V 480V	3	60	250	312.5	235	294	164	205

Ratings Definitions
Definiciones de Potencia

Prime Power. Applicable for supplying electrical power in lieu of commercially purchased power. The Prime Power rating is applicable for variable loads with ilimited number of operating hours per year. The average power output shall not exceed 70% of the Prime power rating. A 110% overload rating is avaliable one hour in every twelve hours with the total hours al 110% not to exceed 25 hours per year. Maximum number of hours per year is 2,500.

Aplicable para el suministro de energía en ausencia de la comercialmente comprada. Para cargas variables con ilimitadas horas de operación por año. El promedio de carga no debe exceder el 70% de la capacidad en Prime. Es permitida una carga de 110% por una hora cada 12, sin exceder 25 horas por año. Máximo 2,500 horas por año.

Certifications
Certificaciones

RETIE

Genset Features
Características del Grupo Electrógeno

This line of generating sets uses PSI engines brand, all are 4-stroke, this ensures a low fuel consumption, also are water-cooled.

We have engines on either line “L” or “V” configuration on 4, 6, 8, 10 and 12 cylinders, with natural aspiration & turbocharged. The electrical system is 24 Volts D.C., including starter motor and battery charger alternator.

These generating sets are mounted onto a steel base frame; engine and alternator are coupled using plate steel discs to make sure the right alignment for all components, alternator is brushless, includes an AVR (Automatic Voltage Regulator). These sets are designed to operate at 1800 RPM, 60 Hz, at 0.8 power factor, NEMA insulation Class H, 3 phases, 4 poles with neutral grounded onto generator core.

The generating sets are built drip proof and radiator is fitted with a cooling fan

En nuestros grupos electrógenos utilizamos motores PSI, todos son de 4 tiempos, lo que asegura un bajo consumo de combustible, enfriados por agua.

Son motores en línea “L” o “V” de 4, 6, 8, 10 y 12 cilindros en línea. Aspiración natural o turbocargados. El sistema eléctrico es a 24 Volts de DC, incluyendo motor de arranque y alternador de carga de baterías.

Los equipos son montados sobre una base tipo patín de acero estructural, el generador es acoplado al motor por medio de discos flexibles de acero formando una sola unidad, asegurando alineación correcta, el generador es del tipo sin escobillas, con regulador automático de voltaje. Diseñados para trabajar a 1800 RPM, 60 Hz, 0.8 de factor de potencia, aislamiento NEMA, CLASE H, 3 fases, 4 hilos con neutro sólidamente aterrizado a la coraza del generador.

Estos generadores son de construcción robusta a prueba de goteo provistos de un ventilador para enfriamiento.

Engine Features
Características del Motor

Engine Brand
Motor Marca ..... PSI
Model
Modelo 14.6L

RPM
RPM 1800
Frequency, Hz
Frecuencia,Hz 60
Standby Rating NG, kWm
Potencia Standby GN, kWm 300
Standby Rating NG, bhp
Potencia Standby GN, bhp 402
Standby Rating LP, kWm
Potencia Standby LP, kWm 189
Standby Rating LP, bhp
Potencia Standby LP, bhp 253

Number of Cylinders
Número de Cilindros 8

Aspiration
Aspiración ..... Turbocharchged
Turbocargada
Cylinder Configuration
Configuración de los cilindros V
Bore, in (mm)
Diámetro, in (mm) 5.04 (128)
Stroke, in (mm)
Carrera, in (mm) 5.59 (142)
Displacement, Cylinder, L
Desplazamiento, Cilindro, L 1.82
Displacement, Total, L
Desplazamiento, Total, L 14.6
Air Filter Type
Tipo de filtro de Aire ..... Dry Element/Elemento Seco
Combustion air Flow, m^3/min
Flujo de Aire para Combustión, m^3/min 14

Exahust Gas Flow, m^3/min
Flujo de Gas de Escape, m^3/min 53.6
Compressioin Ratio
Relacion de Compresión 10.5:1
Piston Speed, m/s
Velocidad de Pistón, m/s 8.52
Governor, Type
Tip de Gobernador ..... ECM
Starter, Rated Voltage, V
Arranque, Voltaje Nominal, V 24

Coolant Capacity Without Radiator, L
Capacidad de Refrigerante Sin Radiador, L 43.2
Coolant Capacity With Radiator, L
Capacidad de Refrigerante Con Radiador, L 127
Oil Capacity, Total, L
Capacidad de Aceite, Total, L 31

Alternator Features
Características del Alternador

Alternator Brand
Alternador Marca ..... Stamford
Model
Modelo UCI274K
Frequency, Hz
Frecuencia,Hz 60
Phases
Fases 3

Insulation
Aislamiento ..... H
Air Flow, m^3/s
Flujo de Air, m^3/s 0.7
Voltage Regulation
Regulacion de Voltaje 1%
Total Harmonic TGH/THC
Total de Armónicos TGH/THC (%) ..... < 5%

Output
Amperaje de Salida

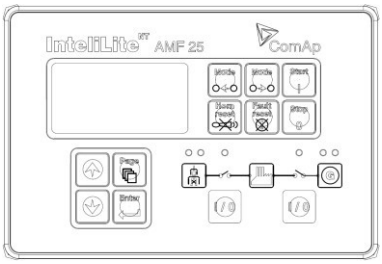
220/127V, 3Ø. 0.8 pf (fp) Standby GN	250KW	820Amp
220/127V, 3Ø. 0.8 pf (fp) Prime GN	235kW	770 Amp
220/127V, 3Ø. 0.8 pf (fp) Standby GLP	160kW	524 Amp

Fuel Consumption
Consumo de Combustible

Fuel Consumption 100% Load-GN Standby **Kg/Hour**
Consumo de Combustible @ 100% Carga- GN Standby ..... Kg/Hora 63

Fuel Consumption 100% Load-LP Standby **Kg/Hour**
Consumo de Combustible @ 100% Carga- LP Standby ..... Kg/Hora 49

Control Module
Módulo de Control



The different solutions of controls that have for our range of gensets, allows a simple operation in manual and automatic mode.

This control provides an automatic start due to network failure. Allows to monitor the power supply.

Las diferentes soluciones de controles que se tienen para nuestra gama de grupos generadores, permite una operación simple en modo manual y automático.

Este módulo de control proporciona un arranque automático por fallo de red. Permite monitorear la red eléctrica.

InteliLiteNT AMF25 is a comprehensive AMF-controller for single generating sets operating in stand-by mode. IL-NT AMF25 features extended support of electronic engines and extension modules.

InteliLiteNT controllers are equipped with a powerful graphic display showing icons, symbols and bar-graphs for intuitive operation, which sets, together with high functionality, new standards in Gen-set controls.

InteliLiteNT automatically starts the Gen-set, closes the Gen-set C.B. when all conditions are met, then stops the engine on external signal or by pressing push buttons.

InteliLiteNT provides gas engine support without ventilation.

The key feature of InteliLiteNT is its easy-to-use operation and installation. Predefined configurations for typical applications are available as well as user-defined configurations for special applications.

Digital generator measurement

- Generator current per phase (amps)
- Generator frequency (Hz)
- Voltage C.A. Between L-L and L-N
- Engine coolant temperature (° C)
- Engine oil pressure (PSI)
- Battery Voltage V.C.D.
- kW per phase and total
- kVAr per phase and total
- kVA per phase and total
- Power factor per phase and total
- kWh and kVARh
- Operation hours counter
- Start counter
- Maintenance hours counter

InteliLiteNT AMF25 es un controlador AMF integral para grupos generadores individuales que operan en modo de espera. IL-NT AMF25 ofrece soporte extendido de motores electrónicos y módulos de extensión.

Los controladores InteliLiteNT están equipados con una potente pantalla gráfica que muestra iconos, símbolos y gráficos de barras para un funcionamiento intuitivo, que establece, junto con una gran funcionalidad, nuevos estándares en los controles Gen-set.

InteliLiteNT inicia automáticamente el conjunto Gen, cierra el conjunto Gen C.B. cuando se cumplen todas las condiciones, luego detiene el motor en una señal externa o presionando los botones.

InteliLiteNT proporciona soporte para motor de gas sin ventilación.

La característica clave de InteliLiteNT es su operación e instalación fáciles de usar. Se encuentran disponibles configuraciones predefinidas para aplicaciones típicas, así como configuraciones definidas por el usuario para aplicaciones especiales.

Medición digital de generador

- Corriente de generador por fase (amperes)
- Frecuencia de generador (Hz)
- Voltaje C.A. entre L-L y L-N
- Temperatura del refrigerante de motor (°C)
- Presión de aceite de motor (PSI)
- Voltaje de Batería V.C.D.
- kW por fase y total
- kVAr por fase y total
- kVA por fase y total
- Factor de potencia por fase y total
- kWh y kVARh
- Contador de horas de operación
- Contador de arranques
- Contador de horas de mantenimiento

Engine warning functions

- Low oil pressure
- Analogue pressure sensor failure
- High coolant temperature
- Analog refrigerant sensor failure
- High battery voltage
- Low battery voltage
- Ineffective Battery
- Necessary maintenance

Engine stop functions

- Low oil pressure (analog)
- High coolant temperature (analog)
- Low Generator Voltage
- High Generator Voltage
- Low generator frequency
- Generator high frequency
- Start failure
- Generator overload
- Low coolant level (optional and configurable as alarm)
- Low digital oil pressure (optional)
- High temperature of the digital refrigerant (optional)
- Emergency Stop button (optional)
- It has 8 programmable digital inputs as alarms or stops of the engine-alternator group

Optionally, remote communication can be provided according to the type of need of the user, being this:

- Through dry contacts, failures and configurable alarms, for example:

1. Low oil pressure.
2. Start attempts.
3. Overload.
4. Generator voltage failure.
5. High temperature
6. Low battery voltage.
7. Group in operation

- Through communication via RS232, RS485, GPRS, ETHERNET / INTERNET, etc., with information through MODBUS RTU (Standard) or some other protocol (BACNET, PROFIBUS, SNMP) for integration to any type of platform.

Funciones de advertencias del motor

- Baja presión de aceite
- Avería de sensor analógico de presión
- Alta temperatura del refrigerante
- Avería de sensor analógico de refrigerante
- Voltaje alto de batería
- Voltaje bajo de batería
- Batería Ineficaz
- Mantenimiento necesario

Funciones de paro del motor

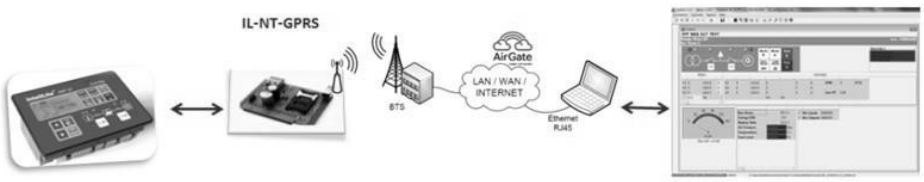
- Baja presión de aceite (analógico)
- Alta temperatura del refrigerante (analógico)
- Bajo Voltaje de Generador
- Alto Voltaje de Generador
- Baja frecuencia de generador
- Alta frecuencia de generador
- Falla de arranque
- Sobrecarga de generador
- Bajo nivel de refrigerante (opcional y configurable como alarma)
- Baja presión de aceite digital (opcional)
- Alta temperatura del refrigerante digital (opcional)
- Botón Paro de emergencia (opcional)
- Cuenta con 8 entradas digitales programables como alarmas o paros del grupo motor-generador.

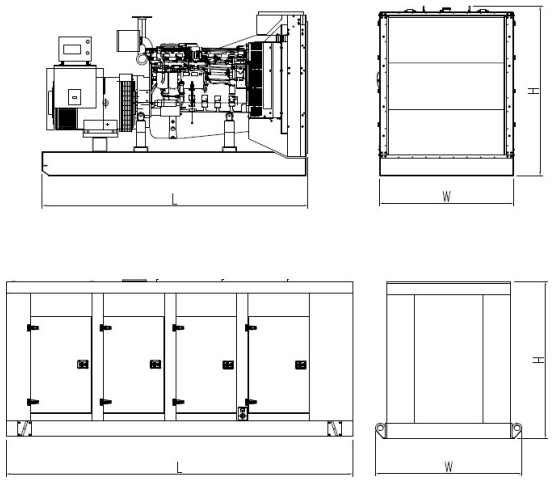
De manera opcional se puede suministrar comunicación remota de acuerdo al tipo de necesidad del usuario, siendo ésta:

- A través de contactos secos, de fallas y alarmas configurables, por ejemplo:

1. Baja presión de Aceite.
2. Intentos de arranque.
3. Sobrecarga.
4. Falla de voltaje del generador.
5. Alta temperatura.
6. Bajo voltaje de batería.
7. Grupo en operación

- A través de comunicación via RS232, RS485,GPRS, ETHERNET/INTERNET, etc., con información a través de MODBUS RTU (Estándar) o algún otro protocolo (BACNET, PROFIBUS, SNMP) para integración a cualquier tipo de plataforma.





Genset Base Frame ● Equipo Base Estructural

Dimensions Dimensiones	cm (in)	260 x 170 x 180 (102 x 66 x 70)
Weight Peso	kg (lbs)	2465 (5435)

Genset Enclosure● Equipo en Caseta

Dimensions Dimensiones	cm (in)	440 x 210 x 210 (173 x 82 x 82)
Weight Peso	kg (lbs)	TBD (TBD)

Dimensions in centimeters, dry weight, do not use for installation design. See general dimension drawings for detail. Please contact the department of engineering for exact dimensions and weight

Dimensiones en centímetros, peso seco, no utilizar para el diseño de la instalación. Vea los planos de dimensiones generales para más detalles. Contacte al departamento de Ingeniería para dimensiones y pesos mas precisos.

References Conditions
Condiciones de Referencia

Standar Reference Conditions 25°C (77°F) air inlet temperature 100 m.(328 ft.) A.S.L. 30% relative humidity. All performance engine data are based on the power mentioned

*Consult for available voltages. Contact factory for more details.

• C/F= Call Factory • N/A= No Apply

Las condiciones de referencia estándar son de 25°C (77°F) temperatura de entrada de aire, altitud 100 m (328 ft) s.n.m. Humedad relativa del 30%. Todos los datos de desempeño de motores son basados en la potencia mencionada.

*Consulte voltajes disponibles. Póngase en contacto con fábrica para obtener más detalles.

• C/F= Consulte a Fabrica • N/A= No Aplica

How to Use Our code
Interpretación de Nuestro Código

Sample ● Ejemplo **S250PSI**

S ..... Selmec
250 ..... 250 kW
PSI..... Engine

Comercialized by ● Comercializado por

Selmec Equipos Industriales S.A. de C.V.
Calz. Mariano Esconedo No. 555 Piso 7
Co. Bosques de Chapultepec, Miguel Hidalgo, CDMX, CP 11580
Tels. 52 55 5122 1200
selmec.com.mx

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

GENERAC® | MOBILE

Prime Power Rating

299 kVA, 237 kW, 60 Hz (NG)
260 kVA, 208 kW, 50 Hz (NG)
221 kVA, 177 kW, 60 Hz (LP)
174 kVA, 139 kW, 50 Hz (LP)

Continuous Power Rating

224 kVA, 180 kW, 60 Hz (NG)
195 kVA, 156 kW, 50 Hz (NG)
165 kVA, 132 kW, 60 Hz (LP)
130 kVA, 104 kW, 50 Hz (LP)

Standby Power Rating

335 kVA, 268 kW, 60 Hz (NG)
287 kVA, 230 kW, 50 Hz (NG)
236 kVA, 189 kW, 60 Hz (LP)
213 kVA, 171 kW, 50 Hz (LP)

Picture shown may not reflect actual configuration.

Codes and Standards

Generac Mobile products are designed to the following standards:

NATM

ISO 8528-5

Power When and Where You Need It

Generac Mobile generators are designed and engineered to power a variety of projects, in the most extreme environments. Gensets are configured to meet customer needs, including choice of containment, cold weather packages, trailer options, and more.

Generac Mobile generators are manufactured to deliver reliable power, when and where you need it.

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

GENERAC® | MOBILE

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Dual Stage Air Cleaner
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Industrial Exhaust Silencer
- Air Filter Restriction Indicator
- Full Flow Gear Pump
- Oil Make-Up System with Floating Valve
- Oil Make-Up Tank 60L

COOLING SYSTEM

- Close Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory Installed Radiator
- 50/50 Coolant (50% Ethylene Glycol)
- Radiator Drain Extension

FUEL SYSTEM

- Automatic Changeover NG/LP
- Fuel Shutoff Solenoid
- Fuel Line NPT Connection

CONTROL SYSTEM

- Battery Disconnect Switch
- Solenoid Activated Starter Motor

GENERATOR SYSTEM

- Full-Load Capacity Alternator
- Four Pole
- 2/3 Pitch
- Class H Insulation
- Permanent Magnet Generator (PMG) Excitation System

POWER DISTRIBUTION

- Connection Lugs

ENCLOSURE

- Heavy Gauge Aluminum Sound Attenuated Enclosure
- Skid-Mounted
- High Performance Sound Absorbing Material
- Gasketed Doors
- Upward Facing Discharge Hood (Exhaust)
- Stainless Steel Hinges
- Internal Genset Vibration Isolation

- Wrapped Exhaust Piping
- Bottom (Floor) Power Cable Outlet
- Exhaust Silencer Mounted in Discharge Hood

TRAILER

- Three 7,000 lb (3,175 kg) Axles
- Electric Brakes
- 3 in (76.2 mm) Ring Hitch
- Transportation Tie Downs
- Safety Chains with Spring Loaded Safety Hooks
- Tongue Jack with Footplate – 10,000 lb (4,536 kg)
- Tires: 16 in (40.64 cm), 10-Ply, Tubeless
- Dot Approved Tail, Side, Brake, and Directional Lights; Recessed Rear Lights
- Illuminated License Plate Holder

WARRANTY

- 1 Year or 2,000 Hours

CONTROL SYSTEM

InteliGen NT™ Display

PROGRAM FUNCTIONS

- Genset START/STOP
- Operation Mode MAN/AUTO/TEST
- Manual Open/Close GCB
- Manual Open/Close MCB
- Horn Deactivation
- Fault Reset
- Menu Navigation
- E-Stop Button

CONNECTIONS AND COMMUNICATION

- CAN J1939
- RS485
- Modbus®

FULL SYSTEM STATUS DISPLAY

- Power Output (kW)
- Power Factor
- kWh Total and Last Run
- Active / Reactive / Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Mains Present
- Mains Failure
- Genset Voltage Present
- Genset Failure
- Genset Circuit Breaker ON
- Mains Circuit Breaker ON

ALARMS AND WARNINGS

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure
- Engine Over Speed
- Battery Voltage
- Alarms and Warnings Times and Date Stamped
- Snap Shot of Key Operation Parameters During Alarms and Warnings

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- ○ Engine Coolant Heater

FUEL SYSTEM

- ○ Parker Fuel Scrubber
- ○ Van Air Fuel Scrubber

TRAILER

- ○ Spare Tire

ENGINEERED OPTIONS

ENGINE SYSTEM

- ○ Closed Crankcase Ventilation (CCV) Heater with Blanket
- ○ Murphy Oil Gauge

CONTROL SYSTEM

- ○ Control Panel Lights
- ○ Digital Controls

POWER DISTRIBUTION

- ○ Cam Locks

RATING DEFINITIONS

Prime: Applies to supplying power to a varying load in lieu of utility for an unlimited amount of running time.

Continuous: The maximum power the generator is capable of delivering continuously while supplying a constant electrical load when operated.

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	PSI
Cylinder #	8
Type	V
Displacement: in^3 (L)	892 (14.6)
Bore: in (mm)	5.04 (128)
Stroke: in (mm)	5.59 (142)
Compression Ratio	10.5:1
Intake Method	Turbocharged / Aftercooled
Connecting Rods	Steel Alloy
Cylinder Heads	Cast Iron OHV
Cylinder Liners	Cast Iron Alloy
Ignition	Electronic
Piston Type	Aluminum Alloy
Crankshaft Type	Forged Steel Alloy
Lifter Type	Solid
Intake Valve Material	High-Temperature Steel Alloy
Exhaust Valve Material	High-Temperature Steel Alloy
Hardened Valve Seats	High-Temperature Steel Alloy

Engine Governing

Governor	Electronic

Lubrication System

Oil Pump	Gear
Oil Filter Type	Twin Full Flow
Engine Oil Capacity: qt (L)	32.7 (31)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Diameter: in (mm)	45 (1,143)

Fuel System

Fuel Type	Natural Gas / Wellhead Gas/ Liquid Propane
Carburetor	Down Draft
Secondary Fuel Regulator	EPR
Fuel Shutoff Solenoid	Standard (Dual)
Engine Operating Fuel Pressure - in H_2O (kPa)	7–11 (1.7–2.7)
Inlet Gas Supply Pressure	TBD

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index A0001839766
Battery Voltage	2×12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	Stamford (UCI274)
Poles	4
Field Type	Revolving
Insulation Class	H
Total Harmonic Distortion (THD)	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	PMG
Bearings	Single
Coupling	Direct via Flexible Disc
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±1%

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

GENERAC® | MOBILE

OPERATING DATA

POWER RATINGS

	Prime NG: kVA/kW (A)	Continuous NG: kVA/kW (A)	Standby NG: kVA/kW (A)
Three-phase, 400/231 VAC @ PF 0.8 50 Hz	260/208 (375)	195/156 (282)	287/230 (415)
Three-phase, 480/277 VAC @ PF 0.8 60 Hz	299/237 (355)	224/180 (270)	335/268 (403)
	Prime LP: kVA/kW (A)	Continuous LP: kVA/kW (A)	Standby LP: kVA/kW (A)
Three-phase, 400/231 VAC @ PF 0.8 50 Hz	174/139 (251)	130/104 (188)	190/152 (274)
Three-phase, 480/277 VAC @ PF 0.8 60 Hz	221/177 (265)	165/132 (198)	203/163 (245)

FUEL CONSUMPTION RATES

	50 Hz						60 Hz					
	Natural Gas: scfh (m^3/hr)			Propane: scfh (m^3/hr)			Natural Gas: scfh (m^3/hr)			Propane: scfh (m^3/hr)		
Load	Prime	Continuous	Standby	Prime	Continuous	Standby	Prime	Continuous	Standby	Prime	Continuous	Standby
100%	2,771 (78)	2,134 (60)	3,041 (86)	710 (20)	549 (16)	860 (24)	3,245 (92)	2,544 (72)	3,582 (101)	983 (28)	733 (21)	952 (27)
75%	2,134 (60)	1,656 (47)	2,336 (66)	549 (16)	426 (12)	664 (19)	2,546 (72)	2,020 (57)	2,799 (79)	733 (21)	577 (16)	754 (21)
50%	1,496 (42)	1,178 (33)	1,631 (46)	395 (11)	337 (10)	468 (13)	1,847 (52)	1,496 (42)	2,015 (57)	530 (15)	448 (13)	556 (16)
25%	859 (24)	700 (20)	926 (26)	259 (7)	195 (6)	271 (8)	1,147 (32)	972 (28)	1,231 (35)	372 (11)	322 (9)	358 (10)

COOLING

	50 Hz	60 Hz
Cooling Fan Air Flow cfm (m^3/min)	25,714 (728)	30,000 (849)
Coolant Flow gal/min (L/min)	151 (570)	180 (680)
Coolant System Capacity gal (L)	33.5 (127)	33.5 (127)
Heat Rejection to Coolant BTU/min (kcal/sec)	13,904 (55)	16,189 (68)
Cooling Intake Air Temperature	122 (50)	122 (50)
Maximum Allowable Pressure Cap PSI (bar)	14.7 (1)	14.7 (1)

COMBUSTION AIR REQUIREMENT

	50 Hz	60 Hz
Flow at Rated Power cfm (m^3/min)	502 (14)	603 (17)

ENGINE

	50 Hz	60 Hz
Rated Engine Speed (RPM)	1,500	1,800
Horespower at Rated RPM (NG PRP) hp (kW)	308 (230)	362 (270)
BMEP (NG PRP) PSI (kPa)	183 (1,262)	179 (1,234)

EXHAUST

	50 Hz	60 Hz
Exhaust Flow lb/hr (kg/hr)	2,094 (950)	2,782 (1,141)
Max. Allowable Backpressure inHG (kPa)	3 (10.2)	3 (10.2)
Exhaust Temperature (Pre Catalyst) °F (°C)	1,350 (732)	1,350 (732)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

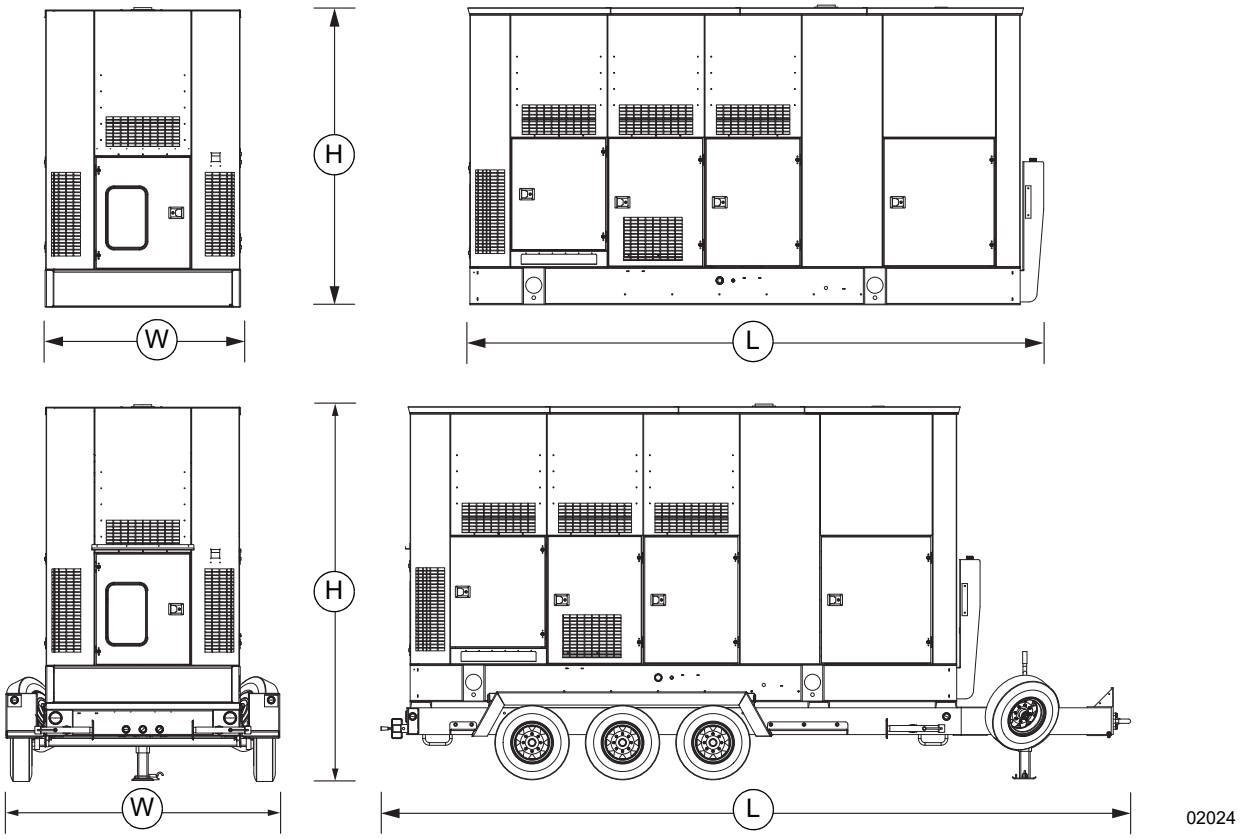
Please consult a Generac Mobile Authorized Service Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, ISO8665, ISO3046, SAE J1228, SAE J1995, and DIN6271 standards.

MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

DIMENSIONS AND WEIGHTS*



Skid Mounted	
Operating Weight (Dry / Operating) - lb (kg)	10,914 (4,950) / 11,291 (5,121)
L×W×H: in (m)	192×66×92 (4.87×1.67×2.33)
Trailer Mounted	
Operating Weight (Dry / Operating) - lb (kg)	14,085 (6,388) / 14,462 (6,559)
L×W×H: in (m)	285×102×122 (7.25×2.59×3.09)
Noise Level - Prime (NG PRP), 60 Hz	78 dB(A) @ 23 ft (7m)

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC MOBILE DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Mobile Authorized Service Dealer for detailed installation drawings.

Generac Mobile Products, LLC. | 215 Power Drive | Berlin, WI 54923
P: (920) 361-4442

Part No. 10000017858
Rev. C 12/27/2021

SG200/PG180 | 14.2L | 250 kVA

INDUSTRIAL SPARK-IGNITED GENERATOR SET

Generac International Products

Standby Power Rating - SG200
250 kVA, 200 kW, 50 Hz

Prime Power Rating - PG180
225 kVA, 180 kW, 50 Hz

*Assembled in the USA using domestic and foreign parts

Image used for illustration purposes only

Codes and Standards

Generac products are designed to the following standards:

- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41

Powering Ahead

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

SG200/PG180 | 14.2L | 250 kVA

INDUSTRIAL SPARK-IGNITED GENERATOR SET

Generac International Products

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Critical Exhaust Silencer (Enclosed Only)

Fuel System

- Fuel Line - NPT Connection
- Primary and Secondary Fuel Shutoff

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Amortisseur Winding
- Full Load Capacity Alternator

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping (Enclosed Only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

CONTROL SYSTEM

Digital H Control Panel—Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- 3-Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure Alarm
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- ○ Engine Coolant Heater
- ○ Oil Heater
- ○ Air Filter Restriction Indicator
- ○ Stone Guard (Open Set Only)
- ○ Critical Exhaust Silencer (Open Set Only)

ELECTRICAL SYSTEM

- ○ 10A Battery Charger

ALTERNATOR SYSTEM

- ○ Alternator Upsizing
- ○ Anti-Condensation Heater
- ○ Tropical Coating

CIRCUIT BREAKER OPTIONS

- ○ Main Line Circuit Breaker
- ○ 2nd Main Line Circuit Breaker
- ○ Shunt Trip and Auxiliary Contact
- ○ Electronic Trip Breaker

GENERATOR SET

- ○ GenLink® Communications Software (English Only)
- ○ Extended Factory Testing (3-Phase Only)
- ○ 8 Position Load Center

ENCLOSURE

- ○ Weather Protected Enclosure
- ○ Level 1 Sound Attenuation
- ○ Level 2 Sound Attenuation
- ○ Steel Enclosure
- ○ Aluminum Enclosure
- ○ Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- ○ AC/DC Enclosure Lighting Kit
- ○ Door Open Alarm Switch

CONTROL SYSTEM

- ○ 21-Light Remote Annunciator
- ○ Remote Relay Assembly (8 or 16)
- ○ Oil Temperature Indicator with Alarm
- ○ Remote E-Stop (Break Glass-Type, Surface Mount)
- ○ Remote E-Stop (Red Mushroom-Type, Surface Mount)
- ○ Remote E-Stop (Red Mushroom-Type, Flush Mount)
- ○ Remote Communication - Modem
- ○ 10A Run Relay
- ○ Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- ○ Coolant Heater Ball Valves
- ○ Fluid Containment Pan

ALTERNATOR SYSTEM

- ○ 3rd Breaker System

CONTROL SYSTEM

- ○ Spare Inputs (x4) / Outputs (x4)
- ○ Battery Disconnect Switch

GENERATOR SET

- ○ Special Testing
- ○ Battery Box

ENCLOSURE

- ○ Motorized Dampers

SG200/PG180 | 14.2L | 250 kVA

INDUSTRIAL SPARK-IGNITED GENERATOR SET

Generac International Products

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
Cylinder #	6
Type	Inline
Displacement - L (in^3)	14.17 (864.71)
Bore - mm (in)	135 (5.31)
Stroke - mm (in)	165 (6.50)
Compression Ratio	9.5:1
Intake Air Method	Turbocharged/Aftercooled
Number of Main Bearings	7
Connecting Rods	Carbon Steel
Cylinder Head	Cast Iron GT250, OHV
Cylinder Liners	Ductile Iron
Ignition	Electronic
Piston Type	Aluminum
Crankshaft Type	Ductile Iron
Lifter Type	Solid
Intake Valve Material	Special Heat-Resistant Steel
Exhaust Valve Material	High Temp Steel Alloy
Hardened Valve Seats	High Temp Steel Alloy

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow Spin-On Cartridge
Crankcase Capacity - L (qt)	34.3 (36.2)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed - rpm	1,581
Fan Diameter - mm (in)	762 (30)

Fuel System

Fuel Type	Natural Gas
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure - kPa (in H_2O)	1.7 - 2.7 (7 - 11)

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	(2) - 12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	Generac 520 mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50
Standard Excitation	Permanent Magnet
Bearings	Sealed Ball
Coupling	Direct via Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SG200/PG180 | 14.2L | 250 kVA

INDUSTRIAL SPARK-IGNITED GENERATOR SET

Generac International Products

OPERATING DATA

POWER RATINGS - NATURAL GAS

	Standby		Prime	
Three-Phase 231/400 VAC @0.8pf	250 kVA/200 kW	Amps: 361	225 kVA/180 kW	Amps: 325

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

231/400 VAC

Alternator	kVA	10%	15%	20%	25%	30%	35%
Standard	250	218	328	437	546	656	765
Upsize 1	300	251	377	502	628	754	879

FUEL CONSUMPTION RATES*

Natural Gas – m^3/hr (ft^3/hr)

Percent Load	Standby	Prime
25%	25.9 (915)	23.3 (824)
50%	1,568 (44.4)	1,411 (40.0)
75%	59.9 (2,117)	53.9 (1,905)
100%	74.0 (2,613)	66.6 (2,352)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby	Prime
Air Flow (Inlet Air Combustion and Radiator)	m^3/min (ft^3/min)	228.3 (8,062)	228.3 (8,062)
Coolant Flow	lpm (gpm)	333 (88)	333 (88)
Coolant System Capacity	L (gal)	54.9 (14.5)	54.9 (14.5)
Heat Rejection to Coolant	BTU/hr (kW)	654,209 (191.7)	542,993 (159.1)
Maximum Operating Ambient Temperature	°C (°F)	50 (122)	50 (122)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 019927ASSD	
Maximum Radiator Backpressure	kPa (in H_2O)	0.12 (0.5)	0.12 (0.5)

COMBUSTION AIR REQUIREMENTS

	Standby	Prime
Flow at Rated Power m^3/min (cfm)	4.0 (140)	3.6 (124)

ENGINE

Natural Gas

		Standby	Prime
Rated Engine Speed	rpm	1,500	1,500
Horsepower at Rated kW	hp	268	242
Piston Speed	m/min (ft/min)	450 (1,477)	450 (1,477)
BMEP	(kPa) psi	1,524 (221)	1,220 (177)

EXHAUST

		Standby	Prime
Exhaust Flow (Rated Output)	m^3/min (cfm)	35.4 (1,250)	33.3 (1,175)
Maximum Exhaust Backpressure	kPa (inHg)	2.54 (0.75)	2.54 (0.75)
Exhaust Temp (Rated Output - Post Silencer)	°C (°F)	723 (1,334)	664 (1,227)

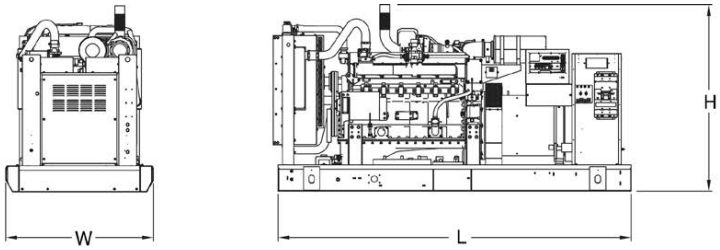
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.
Standby - See Bulletin 0187500SSB
Prime - See Bulletin 0187510SSB

SG200/PG180 | 14.2L | 250 kVA

INDUSTRIAL SPARK-IGNITED GENERATOR SET

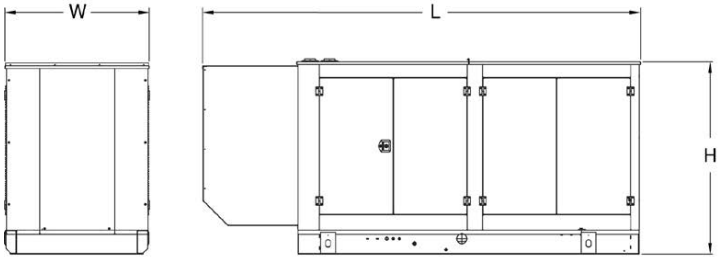
Generac International Products

DIMENSIONS AND WEIGHTS*



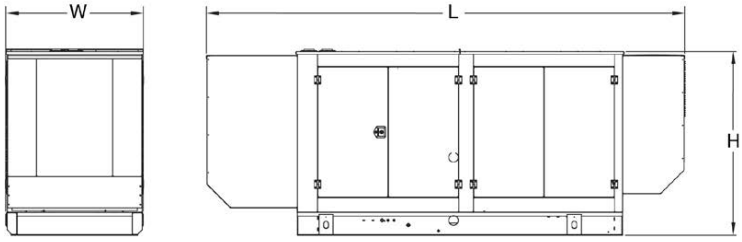
OPEN SET (Includes Exhaust Flex)

L x W x H - mm (in)	3,455 (136.0) x 1,463 (57.6) x 1,724 (67.9)
Weight - kg (lbs)	2,736 (6,031)



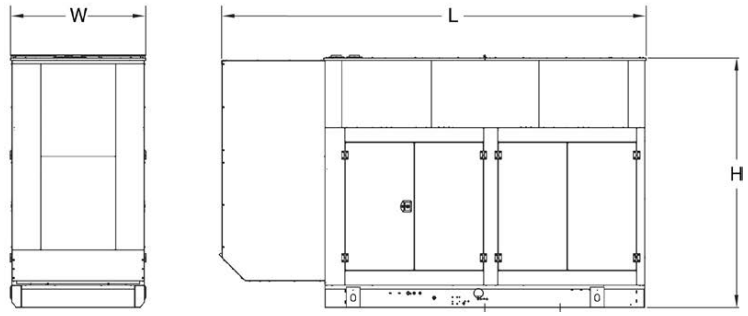
STANDARD ENCLOSURE

L x W x H - mm (in)	4,437 (174.7) x 1,460 (57.5) x 1,976 (77.8)
Weight - kg (lbs)	Steel: 3,445 (7,596) Aluminum: 3,085 (6,801)



LEVEL 1 ACOUSTIC ENCLOSURE

L x W x H - mm (in)	5,085 (200.2) x 1,460 (57.5) x 1,976 (77.8)
Weight - kg (lbs)	Steel: 3,655 (8,059) Aluminum: 3,175 (7,000)



LEVEL 2 ACOUSTIC ENCLOSURE

L x W x H - mm (in)	4,588 (180.7) x 1,460 (57.5) x 2,725 (107.3)
Weight - kg (lbs)	Steel: 3,915 (8,632) Aluminum: 3,287 (7,247)

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

Part No. 0L0030B
Rev. C 11/09/17

ANEXO G. DEFINICIONES Y SIGLAS

AGA: Asociación Americana de Gas

Blowdown: Sistema de seguridad de un equipo o proceso, que al activarse da inicio a una purga o alivio de presión

CAPEX: Costos de inversión de capital

CDO: Formación Ciénaga de Oro

City Gate: Corresponde a la estación donde el productor entrega el gas a un transportador que hace parte de la red de distribución nacional (SNT), generalmente son instalaciones donde se odoriza y reduce la presión del gas para transferirlo al consumidor.

CPF: Facilidad central de procesos, por sus siglas en inglés, corresponde a las plantas centrales de procesamiento de hidrocarburos

Downstream: Corresponde a la fase de transporte, distribución, refinamiento, procesamiento y comercialización de los hidrocarburos dentro de su cadena de valor

Emisiones fugitivas: Emisiones de gas que no han sido planeadas ni controladas en la actividad industrial, presentes en eventos como fugas o evaporaciones, difíciles de detectar y cuantificar

Gas asociado: Gas que se encuentra disuelto en crudo o de forma libre en los yacimientos de aceite, que al alcanzar la superficie se gasifica debido a la caída de presión; este tiene la oportunidad de ser empleado en la industria, quemado o liberado a la atmosfera.

Gas de flasheo: Gas producido a partir de la despresurización o caída de presión de la mezcla multifásica de fluidos, en el cual se vaporizan los componentes volátiles del fluido y se liberan a la atmosfera como gas de venteo o se dirigen a cabeza de alivios para ser quemado en tea.

Gas residual: Gas o vapor venteado o aliviado durante el proceso productivo de hidrocarburos, el cual se quema en tea, también se conoce como gas de alivio o gas de venteo.

GE: Grupo electrógeno, generador eléctrico a través de motor de combustión interna

GGFR: Gas Flaring Reduction Partnership, asociación publico privada de apoyo de la industria O&G y gobiernos nacionales en sus esfuerzos para reducir la quema de gas

GMI: Iniciativa global de metano, asociación publico privada que se enfoca en reducir las emisiones de metano a nivel mundial, promoviendo la disminución, recuperación y uso del metano como fuente de energía.

GN: Gas natural, fuente de energía no renovable, constituida por mezcla de hidrocarburos gaseosos

GTL: Proceso de refinación, para convertir gas en hidrocarburos líquidos de cadena más larga como gasolina o diésel.

IAM: Gestión integrada de activos

KOD: Knockout drum, equipo acumulador de líquidos, el cual es instalado aguas arriba de una tea

MCF: Miles de pies cúbicos de gas

MCFD: Miles de pies cúbicos de gas por día

MMCFD: Millones de pies cúbicos de gas por día

OPEX: Costos de operación

O&G: Oil and Gas, sector de hidrocarburos

O&M: Operación y mantenimiento

Overhaul: Mantenimiento mayor de un equipo

SCADA: Sistema informático dedicado principalmente a la supervisión del funcionamiento de la estación de tratamiento y el punto de entrega de transferencia y custodia, compuesto por sistemas de medición, sensores de presión y temperatura, que se conectan a una red informática inalámbrica que permite el monitoreo de las condiciones del proceso.

Shutdown: Sistema de seguridad de la planta, que al activarse cierran los procesos o

interrumpen el flujo de fluidos

SNT: Sistema Nacional de transporte de gas

TEA: Equipo empleado en facilidades de producción, que garantiza la quema de gas de alivio de manera controlada y menos agresiva ambientalmente

TEG: Trietilenglicol.

UPME: Unidad de Planeación Minero Energética

VIM: Valle Inferior del Magdalena