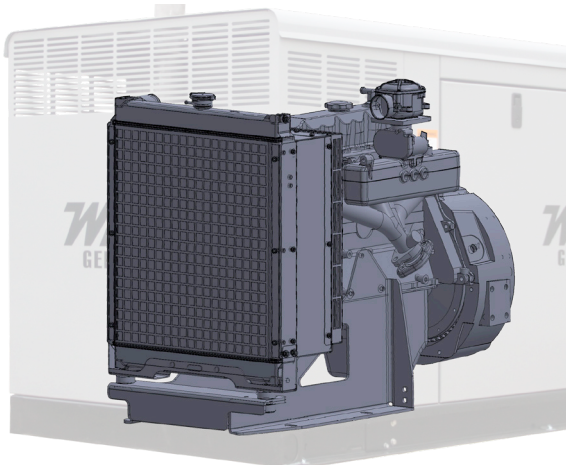




Industrial Zenith Engine



Brushless Industrial Genend



Assembled in the USA  
Engineered, fabricated, and assembled in Minnesota



Full Load Tested  
Every generator is 100% load tested



DSE 7310 Controller  
Provides immediate performance information



Coolant Heater  
120V in-line Hotstart coolant heater with thermostat



Battery Charger  
5 Amp, smart marine charger standard



Galvanealed Steel Enclosure  
Durable design with powder coat paint

UL2200 Listed  
A safety standard for the design, construction, and performance of stationary generators

# SPECIFICATIONS

## ELECTRICAL

VOLTS	POWER FACTOR	LP			NG			MAIN CIRCUIT BREAKER AMPS
		WATTS	KVA	AMPS	WATTS	KVA	AMPS	
120/240 1-PH	1.0	30,000	30,000	125	27,000	27,000	112	125
120/208 3-PH	0.8	30,000	37,500	104	27,000	33,750	93	100
120/240 3-PH	0.8	30,000	37,500	90	27,000	33,750	81	100
277/480 3-PH	0.8	30,000	37,500	45	27,000	33,750	40	45

## ENGINE

ENGINE MANUFACTURER	ZENITH
ENGINE MODEL	428
ENGINE STARTER	12V ELECTRIC
ENGINE SPEED	1800 RPM
ENGINE CYLINDERS	4
HP RATING	
NG	46
LP	52
FREQUENCY	60 HZ
TORQUE	
NG	138 FT/LBS
LP	152 FT/LBS
ALTERNATOR	86 AMPS
FLYWHEEL	7.5"
ROTATION	CCW
ASPIRATION	NATURAL
EXHAUST OUTLET <sup>(1)</sup>	3"
BORE/STROKE	98.4 mm x 91.0 mm
DISPLACEMENT/TYPE	2.8 L
LOW OIL PROTECTION	STANDARD
RECOMMENDED OIL <sup>(2)</sup>	10W-30 SAE
OIL CAPACITY	5.0 QT
GOVERNOR	ELECTRONIC
COMPRESSION RATIO	9.5:1
FAN TYPE	PUSHER
COOLANT CAPACITY	2.5 GAL
HIGH COOLANT TEMP PROTECTION	STANDARD
COMBUSTION AIR	63.5 CFM
RADIATOR COOLING AIR	3974 CFM

NOTES: (1) Muffler ships loose. (2) The recommended oil is for normal applications. See operator's manual for the recommended oil for your needs.

## PSS30

MOTOR STARTING (CODE G)	8 HP
DBA @ 7 METERS	75
TOTAL HARMONIC DISTORTION	< 5%
FLOATING NEUTRAL	YES
ASSEMBLED IN	USA
UL CERTIFICATION	UL2200 LISTED
EPA APPROVED	STANDBY ONLY
CSA APPROVED	YES
UNIT WARRANTY <sup>(1)</sup>	2 YR/2000 HRS

NOTES: (1) For more generator warranty, see operator's manual.

## GENERATOR END

SINGLE PHASE WINDING NUMBER	4 LEAD 706
THREE PHASE WINDING NUMBER	12 LEAD 711
VOLTAGE REGULATION	+/- 1%
AVR TYPE	AS540
TEMPERATURE RISE	125/40°C
TYPE	REVOLVING FIELD
BRUSHLESS	YES
SPEED	1800 RPM
WINDING PITCH	2/3
WINDINGS	100% COPPER
STATOR WINDING	
706	SINGLE LAYER CONCENTRIC
711	DOUBLE LAYER CONCENTRIC
COUPLING	DIRECT/FLEXIBLE DISC
BEARINGS	SINGLE (MAINTENANCE FREE)
EFFICIENCY PEAK @ 0.8 PF	
706 WINDING	84.1%
711 WINDING	79.4%
INSULATION	CLASS H
INGRESS PROTECTION	IP23

# SPECIFICATIONS

## DERATES

ABOVE SEA LEVEL PER 1,000 FT	3%
TEMPERATURE EVERY 10°F ABOVE 77°F	2%

## FUEL

INLET PRESSURE	4-6 OZ/7-11" WATER COLUMN
FUEL INLET SIZE	3/4"
FUEL CONSUMPTION NG	
100%	407.74 FT³/HR - 407,741 BTU/HR
50%	235.7 FT³/HR - 235,695 BTU/HR
0%	88.38 FT³/HR - 88,379 BTU/HR
FUEL CONSUMPTION LP	
100%	4.74 GAL/HR - 431,441 BTU/HR
50%	2.73 GAL/HR - 248,394 BTU/HR
0%	0.97 GAL/HR - 88,217 BTU/HR

## DBA @ 7 METERS

NO LOAD	
LEFT	68.4
RIGHT	70.2
FRONT	66.9
BACK	71.5
NO LOAD	
LEFT	74.0
RIGHT	74.6
FRONT	75.2
BACK	73.5

## SHIPPING

SHIPPING DIMENSIONS (L x W x H)	86" x 40" x 51"
SHIP WEIGHT	1,570 LBS
FREIGHT CLASS	70

## BATTERY

DC SYSTEM	12V
DC ALTERNATOR	ENGINE MOUNTED
BATTERY RACK/CABLE	INCLUDED
BATTERY CHARGER	5 AMP INCLUDED
REQUIRED BATTERY <sup>(1)</sup>	GROUP 24 650 CC

Notes: (1) Battery not included.

## OPTIONAL ACCESSORIES

GENERATOR STRIP HEATER
AUTOMATIC TRANSFER SWITCH
VAPOR FUEL STRAINER
BATTERY CHARGER UPGRADE
BATTERY HEATER
NFPA 110 LEVEL 1
WEBNET
LP LIQUID WITHDRAWAL

## DSE 7310 CONTROLLER

### ENGINE DISPLAY/PROTECTION

ENGINE RPM	YES
LOW OIL PRESSURE	YES
HIGH COOLANT TEMP	YES
LOW COOLANT	OPTIONAL
OVER/UNDER SPEED	YES
OVER CRANK	YES
CAN ECU SHUTDOWN	YES
ENGINE MAINTENANCE CODES	YES

### GENSET DISPLAY/PROTECTION

VOLTAGE (L-N & L-L)	YES
OVER/UNDER VOLTAGE	YES
FREQUENCY	YES
OVER/UNDER FREQUENCY	YES
AMP DISPLAY/SHUTDOWN	YES
PHASE IMBALANCE	DISABLED
KW, KVA, KVAR DISPLAY	YES
KWH, KVAH, KVARH DISPLAY	YES
GENERATOR PHASE SEQUENCE	OPTIONAL

### ADDITIONAL DISPLAYS/PROTECTIONS

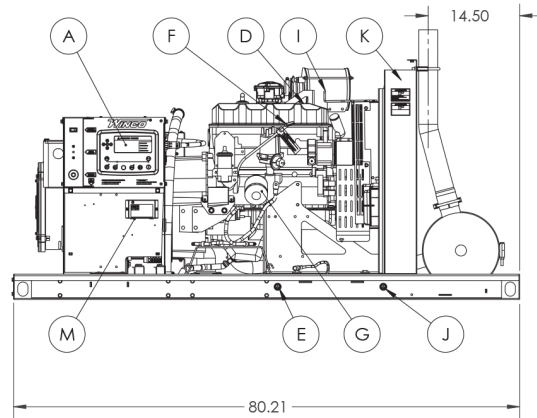
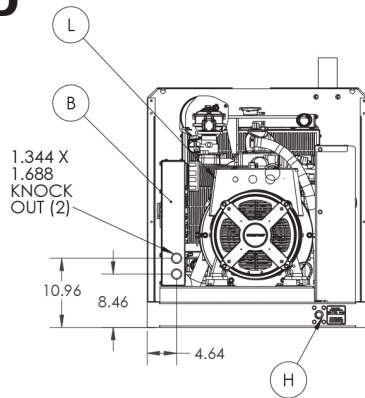
EXTERNAL E-STOP	CUSTOMER SUPPLIED
BATTERY VOLTAGE	YES
BATTERY OVER/UNDER VOLTAGE	YES
<b>COMMUNICATIONS</b>	
USB CONNECTABLE	YES
RS232/RS485	YES
REMOTE DISPLAY PANEL	OPTIONAL
DSE WEB NET	OPTIONAL

### ADDITIONAL FEATURES

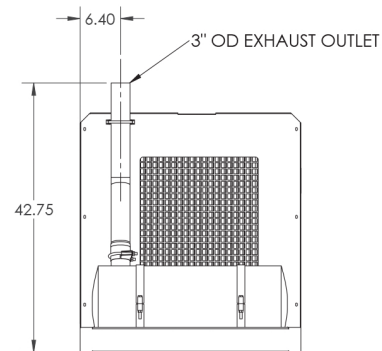
AUDIBLE ALARM	YES
ENGINE EXERCISER	DISABLED
MAINTENANCE INTERVAL TIMER	DISABLED
LOAD SHEDDING/DUMMY	DISABLED
CONFIGURABLE INPUTS	4 (EXPANDABLE)
CONFIGURABLE OUTPUTS	4 (EXPANDABLE)
EVENT LOG	250

# DRAWINGS

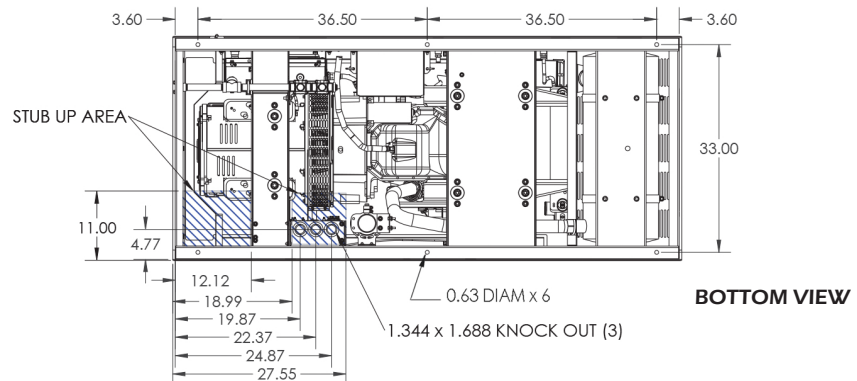
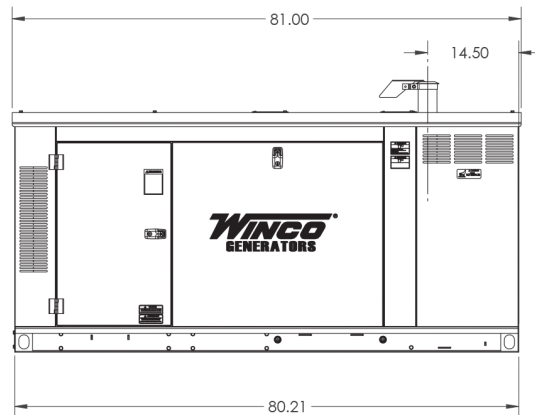
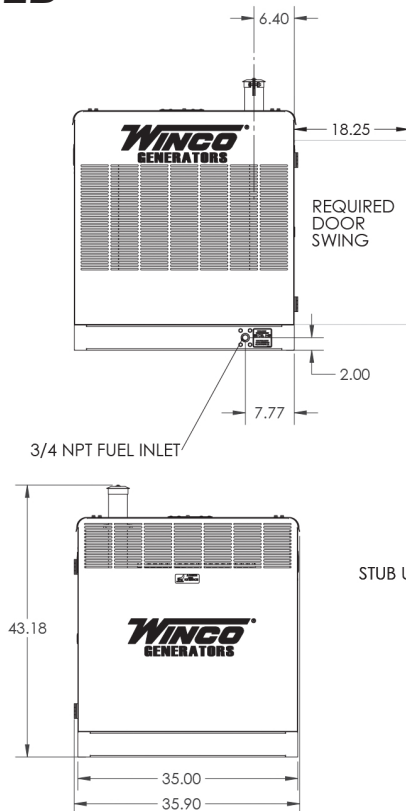
## OPEN SKID



KEY COMPONENTS	
A	ENGINE CONTROL
B	MAIN LINE CIRCUIT BREAKER
C	GROUP 24 BATTERY (NOT INCLUDED)
D	OIL FILL
E	OIL DRAIN
F	OIL DIPSTICK
G	OIL FILTER
H	FUEL INLET
I	AIR FILTER
J	COOLANT DRAIN
K	COOLANT FILL
L	AVR
M	BATTERY CHARGER



## ENCLOSED



Specifications are subject to change without notice.

