

WINCO[®] GENERATORS



An American Company

We produce our products in our 200,000ft² facility located in Le Center, Minnesota, equipped with modern engineering, fabrication and assembly capabilities.



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



TÜV Certified

The design, construction, and performance of our stationary generators conform to UL2200 & CSA standards



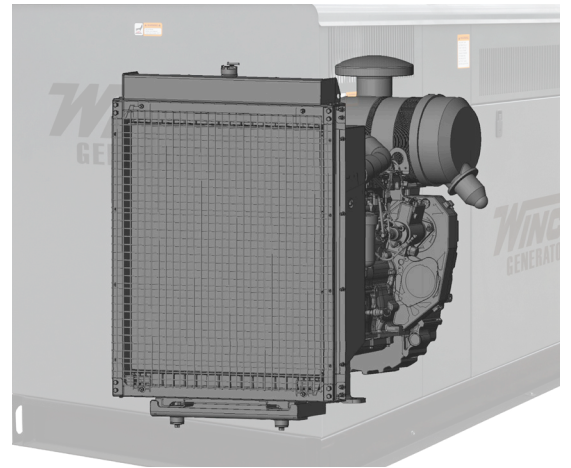
DR90F4

86,000 WATTS

Rugged Design
Galvanealed steel enclosure with powder coat paint



Industrial FPT Engine



Cummins Industrial Genend.



SPECIFICATIONS

ELECTRICAL

VOLTS	POWER FACTOR	STANDBY			PRIME			CIRCUIT BREAKER
		WATTS	KVA	AMPS	WATTS	KVA	AMPS	
120/240 1-PH	1.0	86,000	86	358	77,400	77.4	322	350
120/208 3-PH	0.8	87,000	108	302	78,300	97	274	300
120/240 3-PH	0.8	87,000	108	261	78,300	97	235	300
277/480 3-PH	0.8	87,000	108	130	78,300	97	117	125
346/600 3-PH	0.8	87,000	108	104	78,300	97	94	125

ENGINE

ENGINE BRAND	FPT
ENGINE MODEL	N45 TM2
TIER	III
ENGINE STARTER	12V ELECTRIC
ENGINE SPEED	1800 RPM
ENGINE CYLINDERS	4
STANDBY ENGINE HP	127
FREQUENCY	60 HZ
ALTERNATOR	90 AMPS
FLYWHEEL	11.5"
ROTATION	CCW
ASPIRATION	TURBOCHARGED
COOLANT	2.64 GAL
BORE/STROKE	104 mm x 132 mm
DISPLACEMENT	4.5 L
RECOMMENDED OIL ⁽²⁾	5W-40 SAE
OIL CAPACITY	13.5 QT
INJECTION PUMP	STANADYNE TYPE
GOVERNOR	MECHANICAL
COMPRESSION RATIO	17.5:1
FAN TYPE	PUSHER
INTAKE AIR CONSUMPTION	306 CFM
RADIATOR COOLING AIR	6360 CFM
EXHAUST FLOW	325 CFM
EXHAUST OUTLET SIZE	4"
STARTING TEMP W/BLOCK HEATER	-20° F

NOTES: (1) Steady state frequency regulation. (2) The recommended oil is for normal applications. See operator's manual for the recommended oil for your needs. (3) Without pre-heating

DBA @ 7 METERS

FULL LOAD	74.5
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DR90

MOTOR STARTING (CODE G)	40 HP
TOTAL HARMONIC DISTORTION	< 5%
FLOATING NEUTRAL	YES
FORK LIFT POCKETS	NO
ASSEMBLED IN	USA
EPA APPROVED	TIER III (STANDBY)
CARB APPROVED	TIER III (STANDBY)
TÜV CERTIFICATION	UL2200 CSA
UNIT WARRANTY ⁽¹⁾	2 YEAR/2000 HRS
STANDBY	

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

GENERATOR END

WINDING	
SINGLE PHASE	4 LEAD
THREE PHASE	12 LEAD
WINDING NUMBER	
SINGLE PHASE	06
THREE PHASE	311
VOLTAGE REGULATION	AVR +/- 1%
AVR TYPE	SX460
TEMPERATURE RISE	125/40° C
BRUSHLESS	YES
SPEED	1800 RPM
ROTOR	2/3 PITCH
WINDINGS	100% COPPER
STATOR WINDING	
06	SINGLE LAYER CONCENTRIC
311	DOUBLE LAYER CONCENTRIC
COUPLING	DIRECT/FLEXIBLE DISC
BEARINGS	SINGLE (MAINTENANCE FREE)
EFFICIENCY PEAK	
SINGLE PHASE 1.0 PF	84.9
THREE PHASE 0.8 PF	90.2
INSULATION	CLASS H
INGRESS PROTECTION	IP23

SPECIFICATIONS

BLOCK HEATER

VOLTS	120
WATTS	1,800
AMPS	15
THERMOSTAT	
ON	100° F
OFF	120° F

DERATES

ABOVE SEA LEVEL	
3281- 9843 FT	3% EVERY 1641 FT
>9843 FT	6% EVERY 1641 FT
AMBIENT TEMPERATURE	
>104°F	2% PER 10°F

FUEL

TYPE	ASTM D975 NO-2D DIESEL	
FUEL CONSUMPTION	GAL/HR	
100%	6.94	
75%	5.26	
50%	3.57	
25%	2.83	
OPTIONAL FUEL TANK	L x W x H	
180 GAL UL142	108" x 42" x 17"	
320 GAL UL142	108" x 42" x 29"	

DSE 7310 CONTROLLER

ENGINE DISPLAY/PROTECTION

ENGINE RPM	YES
LOW OIL PRESSURE	YES
HIGH COOLANT TEMP	YES
LOW COOLANT	YES
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	FIELD ENABLED
KW, KVA, KVARH DISPLAY	YES
KWH, KVAH, KVARH DISPLAY	YES
GENERATOR PHASE SEQUENCE	OPTIONAL

BATTERY

DC SYSTEM	12V
BATTERY RACK/CABLE	INCLUDED
BATTERY CHARGER	5 AMP
REQUIRED BATTERY ⁽¹⁾	GROUP 31 900 CCA

NOTES: (1) Battery not included.

SHIPPING

SHIPPING DIMENSIONS (L x W x H)	115.5" x 48" x 65"
SHIP WEIGHT	3,875 LBS
FREIGHT CLASS	70

NOTES: Shipping dimensions are for an enclosed unit.

OPTIONAL ACCESSORIES

BATTERY
BATTERY CHARGER UPGRADE
BATTERY HEATER
RECEPTACLE PANEL
MIMIC PANEL
REMOTE MONITORING
NFPA 110 LEVEL 1 UPGRADE

ADDITIONAL DISPLAYS/PROTECTIONS

EXTERNAL E-STOP	FIELD INSTALLED
BATTERY VOLTAGE	YES
BATTERY OVER/UNDER VOLTAGE	YES

COMMUNICATIONS

USB CONNECTABLE	YES
RS232/RS485	YES
REMOTE DISPLAY PANEL	OPTIONAL
DSE WEB NET	OPTIONAL

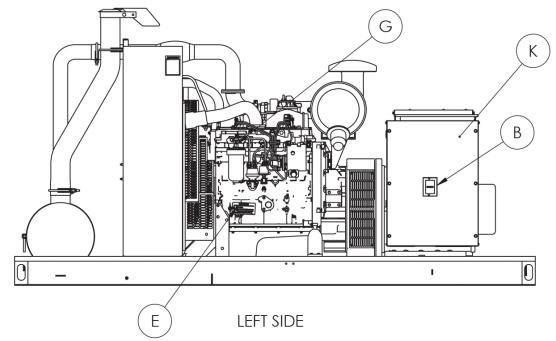
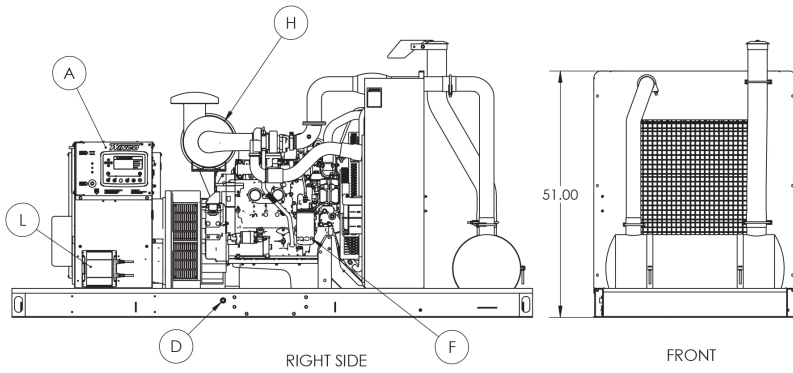
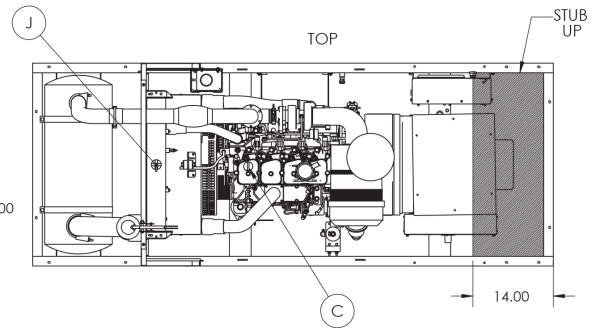
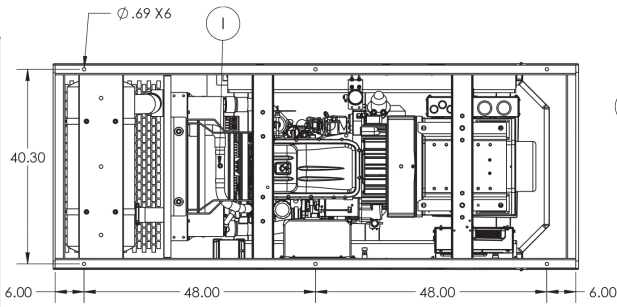
ADDITIONAL FEATURES

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

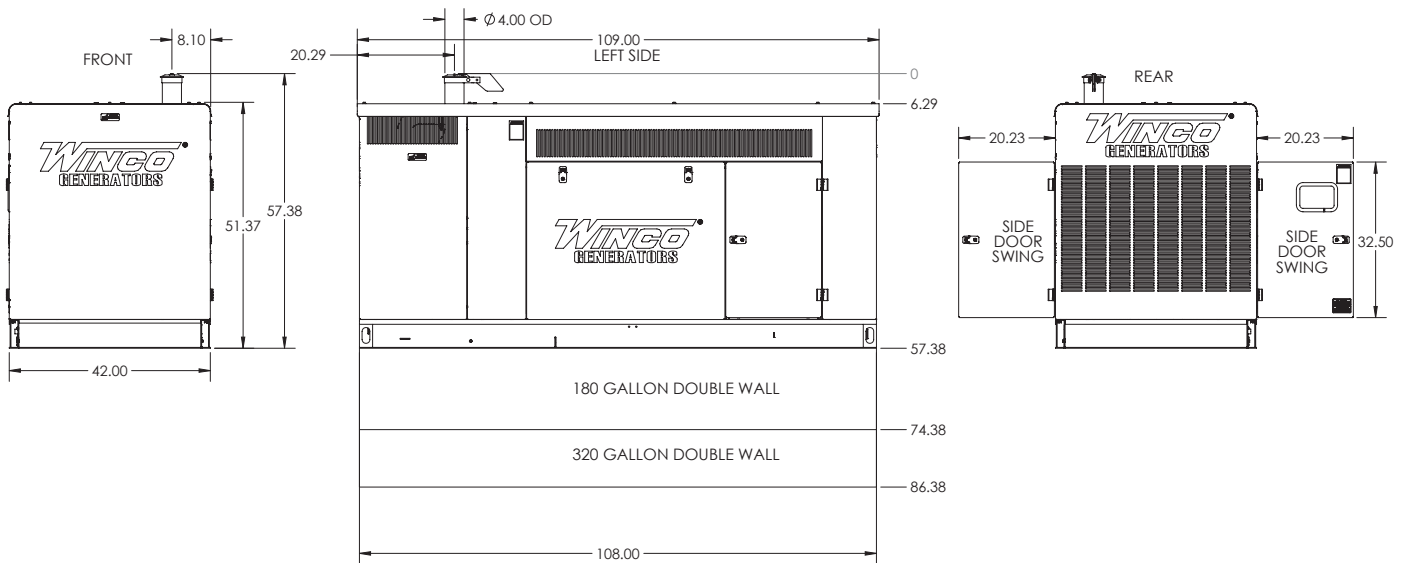
DRAWINGS

OPEN SKID

KEY COMPONENTS	
A	ENGINE CONTROL
B	MAIN LINE CIRCUIT BREAKER
C	OIL FILL
D	OIL DRAIN
E	OIL DIPSTICK
F	OIL FILTER
G	FUEL INLET
H	AIR FILTER
I	COOLANT DRAIN
J	COOLANT FILL
K	AVR
L	BATTERY CHARGER



ENCLOSED



Specifications are subject to change without notice.

