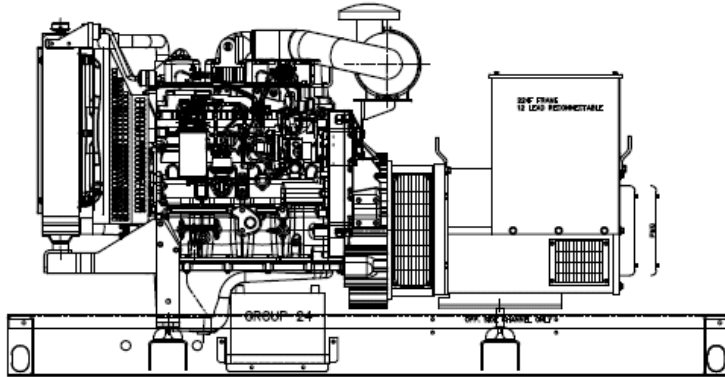


# DR45F4

LIQUID COOLED DIESEL GENERATOR SET

# WINPOWER

Est. 1925



**Standby Rating**  
**45kW 60Hz**

**Powered by ...**



**N45 SM1**  
**4.5 Liter**  
**Turbocharged**

## EXPERIENCED DESIGN

- EXPERIENCE IN THE GENERATOR INDUSTRY SINCE 1925
- DESIGNED FOR LONG LIFE TO MAXIMIZE RETURN ON INVESTMENT
- WELDED AND POWDER COATED STEEL BASE
- RUBBER MOUNTED ENGINE AND GENERATOR: NO NEED FOR ISOLATION PADS AND EXTENDS THE LIFE OF BATTERIES AND HOUSING
- ELECTRICIAN FRIENDLY SINGLE COVER CONNECTION POINTS
- LOAD BANK TESTED
- SINGLE STEP 100% LOAD TESTED
- OPERATOR MANUAL PACKAGE INCLUDING ENGINE AND GENERATOR MANUAL
- STARTING BATTERY NOT INCLUDED (BCI 24 650 CCA)

## ENGINE

- DIVISION OF CNH INDUSTRIAL
- EPA CARB TIER 3 COMPLIANT
- RUGGED SIMPLE DESIGN
- PRECISION ITALIAN MANUFACTURING
- COMPLETE SERVICE NETWORK (INCLUDING MOST CASE AND NEW HOLLAND DEALERS)
- EFFICIENT LOW FUEL CONSUMPTION DESIGN

## DSE 7310 CONTROLLER

- GENERATOR PROTECTION AND METERING
- EVENT FAULT LOG RECORDING
- 9 CONFIGURABLE INPUTS (EXPANDABLE TO 24)
- 6 CONFIGURABLE OUTPUTS (EXPANDABLE TO 80)
- GLOW PLUGS AND STARTER SOLENOID CONTROLS

## GENERATOR

- STANDBY RATED
- BRUSHLESS ROTATING FIELD
- WOUND 2/3 PITCH FOR LOW HARMONIC DISTORTION
- CLASS H WINDING INSULATION FOR PEAK PROTECTION
- MEETS BS EN 60034, BS5000, VDE 0530, NEMA MG1-32, ICE34, CSA C22.2-100, AS1359
- SX460 AUTOMATIC VOLTAGE REGULATION STANDARD STEADY STATE VOLTAGE +/- 1.5%
- OPTIONAL PMG WITH 1% OR .5% VOLTAGE REGULATION ISOLATES THE AVR CONTROL CIRCUIT FROM THE EFFECTS OF NON-LINEAR LOADS, REDUCES TRANSIT VOLTAGE DIP DURING HEAVY MOTOR STARTING. BUILT IN OVER-EXCITATION PROTECTION IN CASE OF A SHORT CIRCUIT

## ENGINE SPECIFICATIONS

MAKE .....	FPT
MODEL .....	N45 SM1
TYPE .....	DIESEL
KWM @ 1800 RPM-STANDBY .....	.65
INJECTION SYSTEM .....	DIRECT
SPEED GOVERNOR .....	MECHANICAL
CYLINDERS .....	4
TOTAL DISPLACEMENT .....	4.5L
BORE .....	mm 104
STROKE .....	mm 132
ASPIRATION .....	TURBOCHARGED
COMBUSTION AIR REQUIREMENT .....	283 CFM
COOLING .....	LIQUID
RADIATOR CAPACITY .....	2.65 GAL
TOTAL COOLING CAPACITY .....	4.9 GAL
COOLING AIR REQUIREMENT .....	5086 CFM
HOUSING .....	SAE 3
FLYWHEEL (TEETH 125) .....	11½ inches
ROTATION .....	CCW
LUBE OIL SPEC .....	API CF-CH4, ACEA E3-E5
LUBE OIL CONSUMPTION .....	< 0.1% OF FUEL
OIL & FILTER REPLACEMENT .....	600 HRS
TOTAL OIL CAPACITY .....	13.5 QUARTS
FUEL SPEC .....	EN 590
EXHAUST OUTLET SIZE @ MUFFLER .....	3"
ELECTRICAL SYSTEM (NEGATIVE GROUND) .....	12 VDC
ALTERNATOR (BOSCH) .....	90 AMPS
STARTER .....	BOSCH
BATTERY (NOT INCLUDED BCI 24) .....	.650 CCA

## ALTERNATOR SPECIFICATIONS

RATING .....	(125/40°C) STANDBY
TYPE .....	4 POLE – REVOLVING FIELD
SPEED .....	1800 rpm
INSULATION SYSTEM .....	CLASS H
SINGLE PHASE .....	4 LEAD
THREE PHASE .....	12 LEAD
STATOR WINDINGS .....	DOUBLE LAYER CONCENTRIC
PITCH .....	2/3
WAVEFORM DISTORTION .....	1.5%
TELEPHONE INTERFERENCE .....	<2.0%
EFFICIENCY PEAK .....	~92.5%
COUPLING .....	FLEXIBLE DISC
BEARINGS (MAINTENANCE FREE) .....	.1
CONTROL .....	(SX460 STANDARD) SELF EXCITED
REGULATION .....	+/- 1.5%
SINGLE PHASE RATING .....	1.0pf
THREE PHASE RATING .....	0.8pf

**Permanent Magnet Generator Available.**

**If the information that you require is not shown, please contact your dealer.**

## GENERATOR CONTROLLER

### General

Deep Sea digital genset controllers are highly advanced microprocessor controllers. Each model is designed to stand up to the harshest conditions providing timely performance information and safety shutdowns. With so many options it is easy to find a controller flexible enough to meet your application. Some options may require activation through the free interface software or additional accessories. The DSE 7310 is standard.

Feature	DSE7310
<b>Engine Display/Protection</b>	
Engine RPM	X
Low Oil Pressure	X
High Coolant Temperature	X
Low Coolant Level	Optional
Overspeed	X
Underspeed	X
Overcrank	X
Charging Alternator Failure	X
CAN ECU Shutdown	X
<b>Genset Display/Protection</b>	
Voltage (L-N)	X
Voltage (L-L)	X
Overvoltage	X
Undervoltage	X
Frequency	X
Overfrequency	X
Underfrequency	X
Phase Imbalance	Disabled
Amp Display/Shutdown	X
kW, kVa, kVAr, pf Display	X
kWh, kVAh, kVArh Display	X
Generator Phase Sequence	X
Earth Current	Optional
Emergency Stop	X
Fuel Leak/Sender Failure	X
High Fuel Level	Optional
Low Fuel Level	X
Fuel Level	X
Battery Voltage	X
Battery Over/Under Voltage	X
Battery Charger Failure	Optional
<b>Communications</b>	
USB Connectable	X
RS232/RS485	X
NFPA Annunciator	10xDSE2548
Remote Display Panel	3xDSE2510
Ethernet/Modem	Optional
<b>Additional Features</b>	
Audible Alarm	X
Engine Exerciser	X
Maintenance Interval Timer	3 Event
Load Shedding/Dummy	5 Step
Configurable Inputs	9-24w/DSE2130
Configurable Outputs	6-80w/DSE2751
Event Log	250
Alternative Configurations	3
UL/CSA Listed	X

<b>Electrical Output 45kW Standby</b>				
<b>Output Voltage – 60Hz</b>	<b>kW</b>	<b>kVa</b>	<b>Amperes</b>	<b>CB Size</b>
<b>120/240, 1-phase, 1.0 pf</b>	<b>45</b>	<b>45</b>	<b>187</b>	<b>175</b>
<b>120/208, 3-phase, 0.8 pf</b>	<b>45</b>	<b>56</b>	<b>156</b>	<b>150</b>
<b>120/240, 3-phase, 0.8 pf</b>	<b>45</b>	<b>56</b>	<b>135</b>	<b>125</b>
<b>277/480, 3-phase, 0.8 pf</b>	<b>45</b>	<b>56</b>	<b>68</b>	<b>70</b>

Consult factory for switchable voltage and 50hz.

### Fuel Consumption

100% Load .....	4.09 Gallons/Hr
80% Load .....	3.09 Gallons/Hr
50% Load .....	2.16 Gallons/Hr

Winpower offers three UL142 double wall fuel tank options for this model. This includes removable stub-up end plate as well as leak detection and digital fuel level indication.

### NFPA 110 Level 1 Package Option

This option provides a higher state of readiness in accordance with NFPA 110. Option includes a dual rate battery maintenance charger with failure indication, 16-light remote annunciator, low coolant level indication, block heater upgrade that maintains 100°-120°F and enhanced genset controller pre-alarm settings.

### Derating Factors

Temperatures > 104°F .....	3% per 10°F
Altitude .....	3% per 1000 ft
Prime Power .....	10%
Max Operating Temp .....	50°C/122°F

### Engine Block Heater Specifications

- Volts – 120
- Watts – 1000
- Thermostat On/Off - 100°/120°F

### Limited Warranty

Winpower warrants its product from material defects for a period of one year or 1000 hrs. FPT warrants the engine for standby generator applications for 60 months or 2000 hours. Contact Winpower for copies of full warranty statements.

## OPTIONS AND ACCESSORIES

### Optional Fuel Accessories

- 100 gal UL142 Tank
- 210 gal UL142 Tank
- 310 gal UL142 Tank
- DOT Trailer w/Integrated Tank

### Battery Chargers

- 2 amp (Standard)
- 5 amp w/Fail Contact
- 10 amp w/Fail Contact
- 10 amp NFPA compliant

### Enclosure Options

- POWR-PAK (Open skid, no enclosure)
- SOUND-PAK

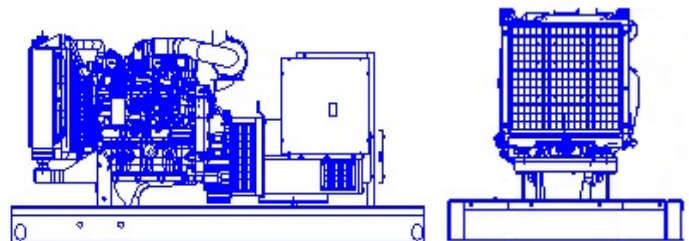
### Controller Options

- DSE 7310 (Standard)
- NFPA 110 Level 1
- 16 Light Remote Annunciator
- Remote Display Panel (DSE 2510)
- Ethernet
- DSE 2130 Input Expansion
- DSE 2751 Output Expansion

### Generator Accessories

- Anti-condensation Heater
- PMG
- 12 Lead (Double Delta) Single Phase

Distributed by



84"      41"

\*\*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE\*\*