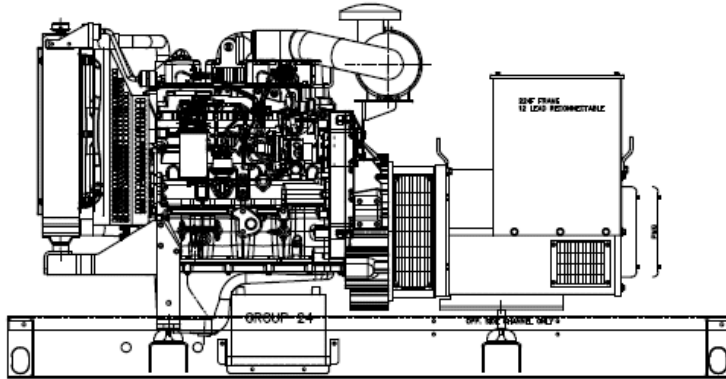


DR45I4

LIQUID COOLED DIESEL GENERATOR SET

WINPOWER

Est. 1925



Standby Rating
45kW 60Hz

Powered by ...

**IVECO
MOTORS**



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 FIAT INDUSTRIAL (IVECO, CASE & NEW HOLLAND)
- 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
- OPTIONAL DSE 3110 AND DSE 7110 CONTROLLERS PROVIDE FLEXIBILITY FOR ANY APPLICATION

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

APPLICATION & ENGINEERING DATA



ENGINE SPECIFICATIONS

MAKE	IVECO
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	DSE 3110	DSE 7110	DSE7310
Engine Display/Protection			
Engine RPM	X	X	X
Low Oil Pressure	Shutdown Only	X	X
High Coolant Temperature	Shutdown Only	X	X
Low Coolant Level	Optional	Optional	Optional
Overspeed	X	X	X
Underspeed	X	X	X
Overcrank	X	X	X
Charging Alternator Failure	Optional	X	X
CAN ECU Shutdown	X	X	X
Genset Display/Protection			
Voltage (L-N)	One L-N or L-L	X	X
Voltage (L-L)	One L-N or L-L	X	X
Overvoltage	X	X	X
Undervoltage	X	X	X
Frequency	X	X	X
Overfrequency	X	X	X
Underfrequency	X	X	X
Phase Imbalance	-	-	Disabled
Amp Display/Shutdown	-	X	X
kW, kVa, kVAh, pf Display	-	-	X
kWh, kVAh, kVAh Display	-	-	X
Generator Phase Sequence	-	-	X
Earth Current	-	-	Optional
Additional Displays/Protections			
Emergency Stop	X	X	X
Fuel Leak/Sender Failure	Optional	X	X
High Fuel Level	-	Optional	Optional
Low Fuel Level	Optional	X	X
Fuel Level	-	X	X
Battery Voltage	-	X	X
Battery Over/Under Voltage	-	X	X
Battery Charger Failure	-	Optional	Optional
Communications			
USB Connectable	X	X	X
RS232/RS485	-	-	X
NFPA Annunciator	-	-	10xDSE2548
Remote Display Panel	-	-	3xDSE2510
Ethernet/Modem	-	-	Optional
Additional Features			
Audible Alarm	-	-	X
Engine Exerciser	-	X	X
Maintenance Interval Timer	-	1 Event	3 Event
Load Shedding/Dummy	-	-	5 Step
Configurable Inputs	6	7	9-24w/DSE2130
Configurable Outputs	4	8	6-80w/DSE2751
Event Log	-	5	250
Alternative Configurations	1	1	3
UL/CSA Listed	X	X	X

Electrical Output 45kW Standby

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

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%

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)
- ☐ 3.5 amp
- ☐ 6 amp
- ☐ 6 amp w/Fail Contact
- ☐ 10 amp
- ☐ 10 amp w/Fail Contact

Enclosure Options

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

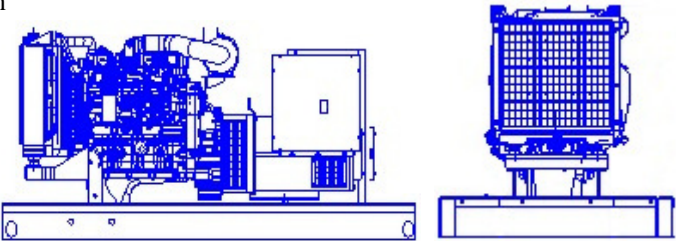
Controller Options

- ☐ DSE 3110
- ☐ DSE 7110
- ☐ 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
- ☐ Oversized Generator
- ☐ 12 Lead (Double Delta) Single Phase

Distributed by



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