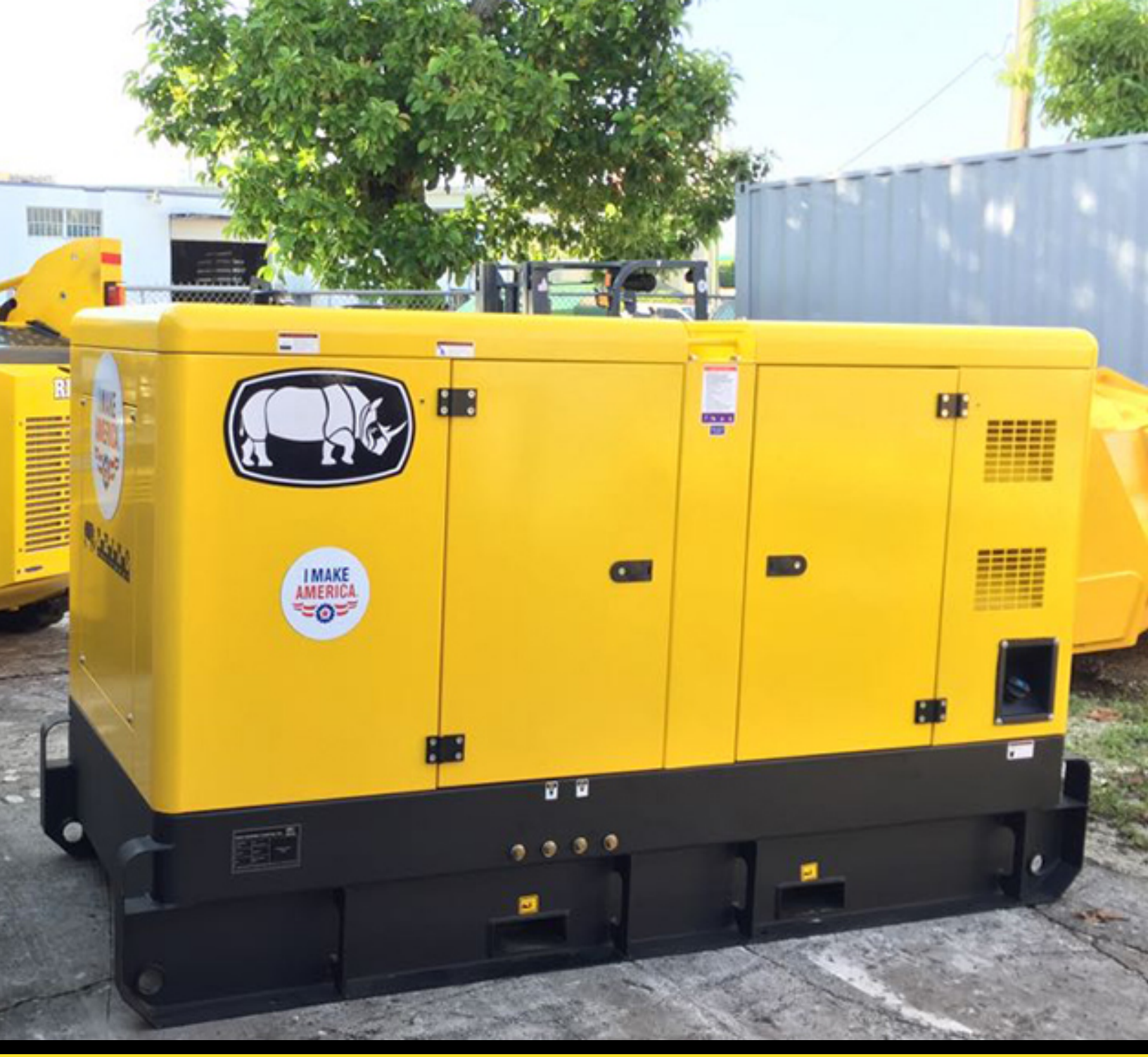


RHINO RG DIESEL GENERATORS

POWERED BY PERKINS





- Composed of Cumminsor Perkins diesel engine and Rhino, Stamford or Marathon alternator
-50 Hz usually used in Africa, Europe, Asia
-60Hz usually used in north America, Latin America
-Brushless, Self-excited, IP23, insulation class H alternator
-Key start panel control system as standard, digital auto-start panel is optional
-8-hour operation base tank
-Optional open type or silent type
-All generator sets are gone through rigorous testing before being released to the market place, including 50% load, 75% load, 100% load , 110% load and all protection function (overspeed stop, high water temperature, low oil pressure, battery charging fail, emergency stop)

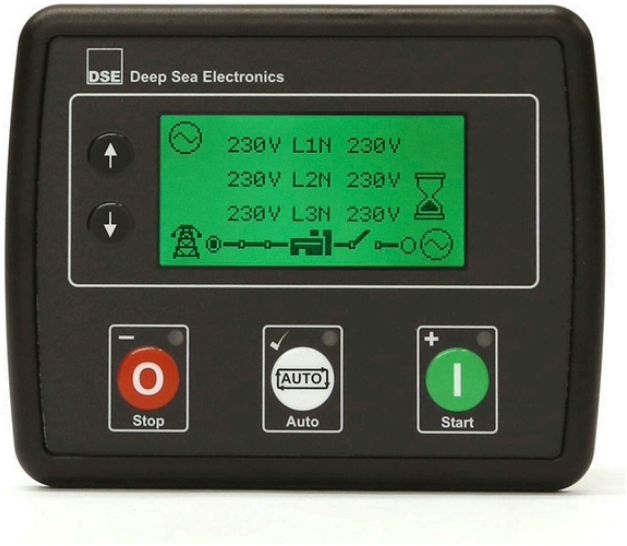
Perkins Engine 50Hz

Model	Prime Power KVA	Prime Power KWe	Engine Model	Max. Power Kw	Alternator Model
RG9-1	11	7.2	403D-11G	39.3	BCI 164B
RG13-1	16	10.4	403D-15G	13.3	BCI 164C
RG20-1	25	16	404D-22G	20.3	BCI184E
RG27-1	34	21.6	404D-22TG	27	BCI 184F
RG30-1	38	24	1103A-33G	30.4	BCI 184G
RG45-1	56	36	1103A-33G1	45.6	UCI 224D
RG60-1	75	48	1103A-33TG2	59.3	UCI 224E
RG65-1	81	52	1104A-44TG1	64.3	UCI 224F
RG80-1	100	64	1104A-44TG2	79.1	UCI 224G
RG100-1	125	80	1104D-E44TAG2	99.5	UCI 274C
RG136-1	170	108.8	1006TAG	133.5	UCI 274E
RG150-1	188	120	1006TAG2	143	UCI 274F
RG185-1	231	148	1106C-E66TAG3	175.5	UCI 224G
RG200-1	250	160	1306C-E87TAG3	199	UCI 274H
RG230-1	288	184	1306C-E87TAG4	217	UCI 274J
RG250-1	313	200	1306C-E87TAG6	239	UCI 274K
RG350-1	438	280	2206-E13TAG2	349	HCI 444E
RG400-1	500	320	2206C-E13TAG3	392	HCI 444F
RG450-1	563	360	2506C-E13TAG3	435	HCI 544C
RG500-1	625	400	2506-E15TAG1	478	HCI 544D
RG600-1	750	480	2806A-E18TAG1	574	HCI 544E
RG650-1	813	520	2806A-E18TAG2	609	HCI 544F
RG730-1	913	584	4006-23TAG2A	685	LVI 634B
RG800-1	1000	640	4006-23TAG3A	760	LVI 634C
RG850-1	1063	680	4008TAG	787	LVI 634D
RG905-1	1131	724	4008TAG1A	839	LVI 634D
RG1022-1	1278	817.6	4008TAG2A	947	HCI 634J
RG1253-1	1566	1002.4	4012-46TWG2A	1166	PI 734A
RG1364-1	1705	1091.2	4012-46TWG3A	1263	PI 734B
RG1505-1	1881	1204	4012-46TAG2A	1395	PI 734C
RG1705-1	2131	1364	4012-46TAG3A	1579	PI 734E
RG1752-1	2190	1401.6	4016TAG	1607	PI 734E
RG1844-1	2305	1475.2	4014TAG1A	1690	PI 734E
RG2058-1	2573	1646.4	4016TAG2A	1886	PI 734F

Perkins Engine 60Hz

Model	Prime Power KVA	Prime Power KWe	Engine Model	Max. Power Kw	Alternator Model
RG10-2	11.4	9.1	403D-11G	11.4	PI044E
RG14-2	15.9	12.7	403D-15G	15.9	PI044G
RG20-2	22.7	18.2	404D-22G	23.9	PI144D
RG28-2	31.8	25.5	404D-22TG	32.6	PI144F
RG30-2	34.1	27.3	1103A-33G	35.4	PI144F
RG50-2	56.8	45.5	1103A-33G1	53.9	UCI224D
RG60-2	68	55	1103A-33TG2	67.5	UCI224E
RG65-2	74	59	1104A-44TG1	75.5	UCI224E
RG80-2	91	73	1104A-44TG2	90.2	UCI224F
RG100-2	114	91	1104D-E44TAG2	111	UCI274C
RG135-2	153	123	1006TAG	147	UCI274E
RG140-2	159	127	1106C-E66TAG2	155.3	UCI274E
RG150-2	170	136	1106C-E66TAG3	163.4	UCI274E
RG180-2	205	164	1106C-E66TAG4	196.3	UCI274F
RG200-2	227	182	1306C-E87TAG3	220	UCI274G
RG215-2	244	195	1306C-E87TAG4	235	UCI274H
RG350-2	398	318	2206A-E13TAG5	381	HCI444ES
RG400-2	455	364	2206A-E13TAG6	435	HCI444E
RG450-2	511	409	2506D-E15TAG1	490	HCI444F
RG500-2	568	455	2506C-E15TAG3	543	HCI544C
RG550-2	625	500	2806A-E18TAG1A	598	HCI544D
RG600-2	682	545	2806A-E18TAG3	652	HCI544E

Control System



DSE4520

Auto Mains (Utility) Failure Control Modules

The DSE4510 Auto Start Control Module and the DSE4520 Auto Mains (Utility) Failure Control Module are suitable for a wide variety of single gen-set applications.

Whilst maintaining functions included within higher end controllers, such as generator or load power monitoring, the DSE45xx range of especially compact controllers provide the user with the ultimate size to feature ratio.

Monitoring engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level, the modules will give comprehensive engine and alternator protection. This will be indicated on the largest back-lit LCD icon display in its class via an array of warning, electrical trip and shutdown alarms.

Electronic J1939 (CAN) and non- electronic (alternator frequency sensing) engine support for diesel, gas and petrol engines all in one variant. With a number of flexible inputs, outputs and protections, the module can be easily adapted to suit a wide range of applications.

Through USB Communication both modules can be easily configured using the DSE Configuration Suite PC Software or can be fully configured through the module's front panel editor.

All DSE products are supported by the DSE global technical support team which gives our customers and end users access to 24 hour system help and advice.

IP65 WITH GASKET

KEY BENEFITS

- Ultimate size to feature ratio
- Automatically transfers between mains (utility) and generator (DSE4520 only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored simultaneously which are clearly displayed on the largest back-lit icon display in its class
- The module can be configured to suit a wide range of applications
- Uses DSE Configuration Suite PC Software for simplified configuration
- Compatible with a wide range of CAN engines
- License - free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress

KEY FEATURES

- Alternator frequency & CAN speed sensing in one variant
- Largest back-lit icon display in its class
- Heated display option
- Real time clock provides accurate event logging
- Fully configurable via the fascia or PC using USB communication
- Extremely efficient power save mode
- 3 phase generator sensing
- 3 phase mains (utility) sensing (DSE4520 only)
- Compatible with 600 V ph to ph nominal systems
- Generator/load power monitoring (kW, kV A, kV Ar, pf)
- Accumulated power monitoring kW h, kVA h, kVAr h)
- Generator overload protection (kW)
- Generator/load current monitoring and protection
- Fuel and start outputs (configurable when using CAN)
- 4 configurable DC outputs (2 for DSE4510)
- 3 configurable analogue/digital inputs
- 4 configurable digital inputs Configurable staged loading outputs
- 3 engine maintainance alarms
- Engine speed protection
- Engine hours counter
- Engine pre-heat
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Battery voltage monitoring
- Start on low battery voltage
- Configurable remote start input
- 1 alternative configuration Comprehensive warning, electrical trip or shutdown protection upon fault condition
- LCD alarm indication
- Event log (50)