

DG890

10 kVA ~ 120 kVA (3 : 3)
PF 0.9



Features

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Support battery cold start and auto-restart when mains power is restored
- ECO mode operation for energy saving
- Superior protection
- 5.7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement simplified (60 ~ 120 kVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)
- Standard emergency power off (EPO)
- Standard RS232, RS485, dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units
- Optional input filter to improve input power factor

Specifications

MODEL	DG8910	DG8915	DG8920	DG8930	DG8940	DG8960	DG8980	DG89100	DG89120
Capacity	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW	30 kVA / 27 kW	40 kVA / 36 kW	60 kVA / 54 kW	80 kVA / 72 kW	100 kVA / 90 kW	120 kVA / 108 kW
INPUT									
Input wiring	Three-phase five-wire (3Φ + N + PE)								
Rated voltage	380 / 400 / 415 Vac								
Voltage range	± 25%								
Rated frequency	50 / 60 Hz								
Frequency range	50 / 60 Hz ± 5 Hz								
Power factor	≥ 0.95 (with filter)								
Bypass voltage range	± 20% (settable)								
Delayed start of rectifier	1 ~ 300 s (settable via display panel)								
ECO voltage range	± 10% (settable)								
OUTPUT									
Output wiring	Three-phase five-wire (3Φ + N + PE)								
Rated voltage	380 / 400 / 415 Vac								
Output voltage regulation	± 1%								
Output frequency regulation	50 / 60 Hz ± 0.1% in battery mode								
Waveform	Sinusoidal								
Power factor	0.9								
Voltage distortion (THDv)	≤ 1% (linear load), ≤ 5% (non-linear load)								
Crest factor	3:1								
Transfer time	AC mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO mode: 5 ~ 10 ms								
Overload	105%: long time running, 105% ~ 110% for 1h, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200 ms, > 200% for 100 ms								
BATTERIES									
DC Voltage	12 V x configured battery number (settable via display panel)								
Number of batteries	28 ~ 32 pcs (settable)								
Charging current	10 A default / settable								
Charging	Three-stage charging, auto switch floating / equalizing charge								
Battery self-test	Settable periodic self-test; manually configurable test time and voltage								
SYSTEM									
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%								
Max. number of parallel connections	6								
Protections	Short-circuit, overload, overvoltage, undervoltage, low battery, overtemperature, fan failure								
Communications	RS232 / RS485 / dry contacts (standard), SNMP (optional)								
EMI	EN62040-2								
EMS	IEC61000-4-2 (ESD)								
	IEC61000-4-3 (RS)								
	IEC61000-4-4 (EFT) IEC61000-4-5 (surge)								
OTHERS									
Operating temperature	0 ~ 40°C								
Storage temperature	-25°C ~ 55°C (without batteries)								
Relative humidity	0 ~ 95% (non-condensing)								
Altitude	≤ 1000 m (derating 1% for each additional 100 m)								
IP rating	IP 20								
Noise level at 1 m	55 dB			60 dB			65 dB		
Dimensions (W x D x H) (mm)	400 x 800 x 1100				600 x 700 x 1500		700 x 800 x 1700		
Packaged dimensions (W x D x H) (mm)	490 x 920 x 1300				700 x 800 x 1650		800 x 900 x 1850		
Net weight (kg)	158	165	175	210	260	460	590	630	690
Gross weight (kg)	200	207	217	252	302	480	620	660	720

- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.
- This product is applicable to industrial, commercial, financial, rail transit and other industries applications, but not available for life support systems.
- For critical systems related to public safety or significant economic benefits, dual power system is required to power the load.