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# About GnCenergy

## 회사소개

### 에너지의 미래를 이끄는 종합 발전 솔루션 기업, (주)지엔씨에너지

1989년 창립 이래, (주)지엔씨에너지는 디젤 및 가스 엔진 발전기, 열병합발전 시스템, 신재생에너지 발전설비 (LFG, 바이오가스, 태양광 등) 등 전 에너지 분야를 아우르는 종합 발전 시스템 기업으로 성장해 왔습니다.

ISO9001 및 ISO14001, 45001, 50001, 37001인증을 기반으로 엄격한 품질관리와 친환경 경영체계를 구축하고 있으며, 비상발전기 및 상업용 발전설비에 이르기까지 설계부터 제작, 시공, 유지보수까지 토털 솔루션을 제공합니다.

특히, 최근에는 스마트그리드, 분산형 전원 시스템, 원격 모니터링 기반의 발전기 운영관리 플랫폼을 포함한 지능형 에너지 관리 시스템을 도입하며 기술 고도화를 이끌고 있습니다.

당사 기술연구소는 국내 최초로 국산 가스터빈을 활용한 바이오가스 발전 실증사업 및 매립가스를 활용한 친환경 발전기술 개발 등에 주도적으로 참여하며, 국산화 및 에너지 자립화에 기여하고 있습니다.

(주)지엔씨에너지는 고객과의 신뢰를 바탕으로 끊임없이 기술을 혁신하고, 에너지 산업의 지속 가능한 미래를 설계하는 파트너로서, 앞으로도 한 차원 높은 에너지 가치를 제공할 것입니다.

### GNC ENERGY Co., Ltd. — Leading the Future of Power Solutions

Since its establishment in March 1989, GNC ENERGY has grown into a comprehensive power solutions provider, specializing in diesel and gas engine generators, combined heat and power (CHP) systems, and renewable energy generation facilities including LFG, biogas, and solar power systems.

Certified under ISO 9001 and ISO 14001, 45001, 50001, 37001 we deliver total solutions encompassing design, manufacturing, installation, and maintenance of emergency and commercial power systems, built upon stringent quality standards and eco-friendly management practices.

In recent years, we have expanded our capabilities into intelligent energy management systems, incorporating smart grids, distributed power generation, and remote monitoring platforms to enhance operational efficiency and reliability. Our R&D Center plays a leading role in national initiatives such as the development and demonstration of domestic gas turbines powered by biogas, and landfill gas generation systems. We are at the forefront of localizing energy technologies and enhancing energy self-sufficiency.

GNC ENERGY is committed to continuous innovation, trusted partnerships, and the creation of sustainable energy solutions. We will continue to deliver higher energy value as a reliable partner shaping the future of the power industry. to work with customers to contribute for the best of humanity.



# Company History

## 회사연혁

### 1989 ~ 2000

- 1989 · 한국기술서비스 창립(1989년 3월8일)
- 1993 · 법인 전환 (주)한국기술서비스 창립  
· 조달청 외자입찰 등록, 삼성중공업(주) 협력업체 등록
- 1994 · 동아건설(주), 벽산건설(주), 삼성건설(주), 한라건설(주),  
(주)한진, 한진해운(주) 협력업체 등록  
· 국내 최초 POWER PACK 제작 납품 - 한진해운(주),  
(주)한진 KOHLER(G.M USA)와 국내 삼성건설(주), 한솔,  
한라건설(주), 벽산건설(주)와 공급계약
- 1997 · 국제협력단 등록  
· 조달청 내자 / 외자입찰 등록
- 1998 · 현대엔진/발전기 수출 (대만 Jemmytex international  
Corp.사와 대리점 계약 / 월 50대 수출계약)  
· Wanson 'Thermal Oil Heater' 대리점 계약
- 1999 · ISO9001 인증획득, 한국전력공사 입찰참가 등록  
· 중소기업은행 유망중소기업, Family 기업 지정  
· 한국전기공업협동조합 수출표창패

### 2001 ~ 2010

- 2002 · ISO14001 인증획득
- 2004 · 열병합 발전설비 시공  
· 기업부설 연구소 설립
- 2006 · 한국기계연구원(KIMM), 신재생 에너지 기술사업 실증분야  
주관참여기업  
· 자랑스런 중소기업상 수상
- 2006 · 해외 시장 개척단 참여 (중앙아시아, 중국, 베트남, UAE 등)  
· 중앙우체국 가스터빈 열병합 발전 설비시공
- 2007 · 당진공장 준공  
· 수도권 매립지 바이오가스 발전소 700KW 발전사업허가
- 2008 · 이노비즈 선정 기업 등록, 전기공사면허 획득  
· 경방 K-project 열병합 발전설비(4.8MW) 설치공사 시행  
· 천안 청수 지구 구역형 CES(25MW)발전설비 설치 공사 시행
- 2009 · "(주)지엔씨에너지" 사명 변경  
· 특허 및 실용신안 취득  
· (발전기 제어 컨트롤판널용 연속 제습형 제습장치)
- 2010 · 스마트그리드협회 회원가입  
· OHSAS18001 인증 획득  
· 신재생에너지 전문기업 등록  
· 녹색인증(기술) 기업

### 2011 ~ 현재

- 2012 · 수도권매립지 바이오가스발전소 1.9MW로 발전사업증설  
· 해외건설업 신고(전기공사, 기계설비)  
· 특허취득(발전기용 절연애자)
- 2013 · 바이오가스 전처리 장치 특허 획득  
· 코스닥 상장  
· 청주 매립지 바이오가스 발전 사업 취득  
· 대통령 표창 수상
- 2014 · 특허취득(내진스토퍼 외 3종)  
· 충남 서산시 바이오가스발전소 허가 획득  
· MAS협회 회원가입  
· K마크 인증획득  
· 녹색기술 인증획득
- 2015 · 동두천 하수처리장 발전시설 가동  
· 청주 매립가스 발전소 가동  
· 청주 유기성 폐기물 에너지화 발전시설 가동  
· 녹색사업 인증획득
- 2016 · 무역의 날 1000만불탑 수상  
· 새로운 발전기 브랜드 "CENGEN" 등록  
· 김해시 바이오가스 발전사업협약
- 2017 · 순천시 내 매립가스 발전소 인수  
· 여수시 바이오가스발전 사업 협약  
· 김해바이오가스발전소 준공(8월)
- 2018 · 청주 친환경 에너지타운 바이오가스 열병합 발전소 준공  
· 동두천 바이오가스 발전소 추가 증설  
· 석문 제2공장 준공  
· 한빛에너지 인수
- 2019 · 청주친환경에너지타운(발전소) 개소  
· 창립 30주년  
· 바이오가스 열병합발전 시스템 특허등록  
· 캄보디아 투자협약  
· 산업환경설비공사업 등록  
· 화성시 바이오가스 열병합발전소 설치 협약
- 2020 · 속초 바이오가스 발전사업 협약  
· 특허등록\_내진 뎀퍼마운트 / 특허청  
· 우수제품지정\_내진발전기 / 조달청  
· 건설기술공업업 등록
- 2022 · 페플라스틱 열분해유 합성가스 발전사업 협약  
· 석문그린에너지 신설법인  
· 석문연료전지발전소 착공
- 2023 · 마곡 R&D센터 준공  
· 석문연료전지 발전소 준공 및 상업운전
- 2024 · 파푸아뉴기니, Posco International Power (PNGLAE)  
Limited 인수

# Application

적용



**공공기관**  
GOVERNMENTS

GNC supplies backup gensets for government departments



**데이터 센터**  
DATA CENTER

GNC offers backup power for IDC, covered 70% of Internet Data Center in Korea.



**아파트단지**  
APARTMENT COMPLEX

GNC offers backup power for Apartment complex.



**오폐수처리장**  
WASTEWATER TREATMENT PLANT

GNC supplies gensets for Wastewater treatment plant.



**제조현장**  
MANUFACTURING SITES

GNC gensets are widely used in different kind of manufacturing sites.



**건설현장**  
CONSTRUCTION SITES

GNC gensets are widely used in different kind of constructions.



**호텔 & 오피스빌딩**  
HOTEL & OFFICE BUILDING

GNC offers power for hotels and office building, such as LOTTE, HYUNDAI etc.



**병원**  
HOSPITAL

GNC offers backup power for hospitals.



**쇼핑몰**  
SHOPPING MALL

GNC offers backup power for shopping malls.

# Main business

## 주요사업

- 지엔씨에너지는 고객의 선호에 따라 세계 유명 브랜드의 다양한 제품을 공급하고 있습니다.
- 지엔씨에너지는 앞선 기술력으로 비상용뿐만 아니라 상용에 대해서 설계에서 제조, 설치 및 시운전까지 포괄적인 서비스를 제공합니다.
- 발전장비 개발 및 제조에 30년 이상의 풍부한 경험으로 지엔씨에너지는 다양한 용도에 적합한 발전기로 국내, 외 고객들로부터 그 우수성을 인정받고 있습니다.
- GnCenergy provides diverse engines of globally renowned brands in accordance with customer's preference.
- GnCenergy offers comprehensive service from design to production, installation and commissioning test not only in emergency use but also in prime use through advanced technology.
- With 30 years of experience in development and production of power generation equipments, GnCenergy is recognized by domestic and overseas customers for its excellent generator suitable for various use.

### 비상 및 상용 발전기 사업

#### Emergency & Prime Power Generator

- 당사는 국산엔진을 이용한 바이오 가스 발전시설을 상용화 하였습니다.
- 한국기계연구원(KIMM)과 함께 수도권매립지에서 국산엔진을 사용하여 바이오가스발전 실증연구를 진행하였습니다.
- 국내 최초로 순수 국내기술로 400kw급 바이오가스 열병합시스템을 개발하였습니다.
- 수도권매립지의 실증운전을 통해 성능이 검증되어 국내, 외의 매립지와 폐수, 하수 처리장 등에 바이오가스발전사업에 적용하고 있습니다.
- We have commercialized bio-gas power generation facilities using domestic engines.
- We conducted research on biogas power generation using domestic engine at the Seoul metropolitan landfill together with KIMM.
- For the first time in Korea, we developed a 400kW class bio-gas Co-generation system with pure domestic technologies.
- We are applying the bio-gas power generation to landfill sites, wastewater and sweatment plants in Korea and overseas, because the performance of it is verified through the demonstration operation of the metropolitan landfill.

### 친환경발전 사업

#### Eco-Friendly Generation

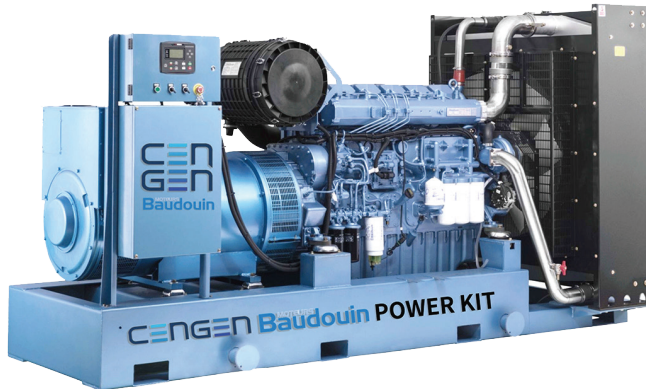
- 열병합발전은 난방, 냉방, 가정내 온수 및 산업공정용수 등으로 사용될 수 있는 스팀과 온수와 같은 유용한 에너지를 공급하기위해 발전시 버려지는 열을 회수하는 현장 발전입니다. 열병합발전은 전통적 기술에대한 효율 50%와 비교하여 80% 이상의 효율을 획득할 수 있습니다.
- CES는 단일 중앙발전소 또는 몇개의 분산발전소가 아닌 상호 연계발전소로부터 다중 건물들에 난방, 냉방 및 전력을 공급한다. 전기를 생산하여 전력시장에 판매하지 않고 특정 공급 구역내 사용자에게 직접 판매하는 전기사업입니다.
- CHP(Combined Heat and Power) is on-site electricity generation that captures the heat that would otherwise be wasted to provide useful thermal energy –such as steam or hot water – that can be used for space heating, cooling, domestic hot water and industrial process. In this way, and by avoiding distribution losses, CHP can achieve efficiencies of over 80%, compared to 50% for conventional technologies.
- CES(Community Energy System) supplies heating, cooling and power to multiple buildings from a centralized plant or from several interconnected but distributed plants. CES is electricity generation business for the direct sale to customers in the community.

### 열병합발전 EPC 사업

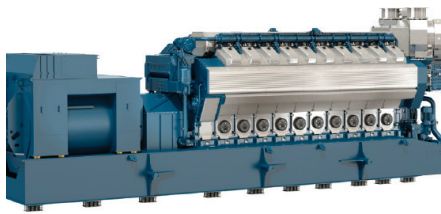
#### Co-Generation EPC

# Emergency & Prime Power Generator

비상 및 상용 발전기



**디젤엔진발전기**  
Diesel Engine Generator  
( 60 ~ 4,000kW )

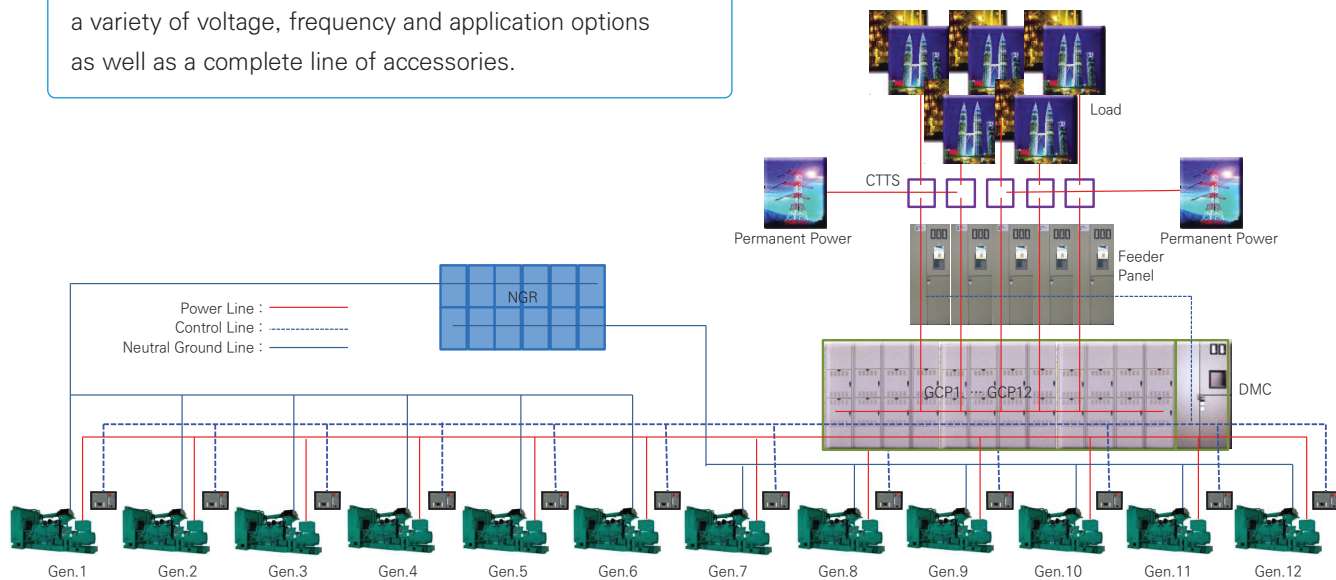


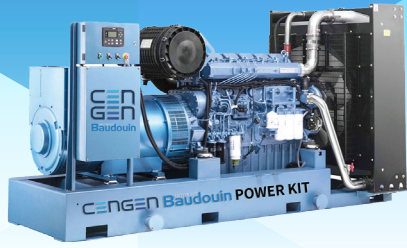
**가스엔진발전기**  
Gas Engine Generator  
( 400 ~ 21,840kW )



**가스터빈발전기**  
Gas Turbine Generator  
( 300 ~ 5,200kW )

**CENGEN** Emergency and Prime Power Generators feature a variety of voltage, frequency and application options as well as a complete line of accessories.





# Diesel Engine Generator

디젤 엔진 발전기

## CENGEN BAUDOUIIN POWERKIT

SET MODEL		GNC-160-BD	GNC-200-BD	GNC-250-BD	GNC-300-BD	GNC-330-BD	GNC-360-BD	GNC-400-BD	GNC-450-BD	GNC-500-BD	GNC-550-BD	GNC-610-BD	GNC-660-BD	GNC-750-BD	GNC-800-BD	GNC-900-BD	
Generator	Stand-by Power	kW	160	200	250	300	330	360	400	450	500	560	610	660	750	800	900
		kVA	200	250	313	375	413	450	500	563	625	700	763	825	938	1,000	1,125
	Prime Power	kW	145	182	227	273	300	327	364	409	455	509	555	600	682	727	818
		kVA	182	228	284	342	375	409	455	512	569	636	694	750	853	910	1,023
	Frequency	Hz	60														
	RPM	RPM	1,800														
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire														
	Insulation Class		F,H CLASS														
	Power Factor		0.8														
	Exciting System		Brushless Self Exciting														
	Bearing		Single Ball Bearing														
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600															
Manufacturer		BAUDOUIIN															
Model		6M11G160/6	6M16G200/6	6M16G250/6	6M16G308/6	6M21G330/6	6M21G390/6	6M21G400/6	6M21G460/6	8M21G520/6	6M33G600/6	6M33G600/6	6M33G660/6	6M31G800/6	6M31G800/6	8M33G900/6	
Stand-by Power	HP	241	319	386	483	516	601	617	684	778	898	898	992	1,143	1,143	1,357	
Prime Power	HP	220	290	351	439	469	546	561	603	711	818	818	898	1,035	1,035	1,220	
RPM	RPM	1800															
No. of Cylinder	EA	6	6	6	6	6	6	6	6	8	6	6	6	6	6	8	
Bore x Stroke	mm	105 x 130	126 x 130	126 x 130	126 x 130	127 x 165	127 x 165	127 x 165	127 x 165	127 x 165	150 x 185	150 x 185	150 x 185	149 x 177	149 x 177	150 x 185	
Displacement	cc	6,750	9,726	9,726	9,726	12,540	12,540	12,540	12,540	16,720	19,600	19,600	19,600	18,500	18,500	26,140	
Compression Ratio		18.0 : 1	17.0 : 1	17.0 : 1	17.0 : 1	16.0 : 1	16.0 : 1	16.0 : 1	15.2 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	14.0 : 1	14.0 : 1	15.0 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)															
Aspiration		Turbocharged & Air intercooled															
Starting System		DC12V	Electric motor by DC24 battery														
Governor		Electronic type						ECU Type				Electronic	ECU Type				
Coolant Cap.(SET)	L	21	35	35	44	47	47	47	52	101	159	159	159	159	159	162	
Lube Oil Capacity	L	18	19	19	19	34	30	30	30	37	36	36	36	60	60	90	
Fuel Consumption	L/hr	43.9	56.5	70.1	88.9	90.9	110.2	114.3	129	142.5	168.8	168.8	189.9	216	216	264.2	
DIM	Length	mm	2,500	2,800	2,900	3,000	3,100	3,200	3,200	3,200	3,200	3,750	3,750	3,600	3,700	3,700	3,900
	Width	mm	980	1,060	1,060	1,100	1,136	1,136	1,136	1,233	1,360	1,700	1,700	1,358	1,400	1,400	1,870
	Height	mm	1,400	1,500	1,500	1,600	1,650	1,650	1,650	1,790	1,777	2,114	2,114	1,882	2,044	2,044	2,200
	Weight	kg	1,907	2,086	2,165	2,405	2,739	2,871	2,923	3,051	3,891	4,495	4,544	4,685	4,692	4,692	6,467
PAD	Length	mm	3,500	3,500	3,500	3,800	3,800	3,800	3,800	3,800	3,800	4,500	4,500	4,500	4,500	4,500	4,500
	Width	mm	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	2,000	2,000	2,000	2,000	2,000	2,000	2,500
	Height	mm	300	300	300	300	300	300	300	300	300	300	300	300	300	300	400
D.A	Radiator air flow	m <sup>3</sup> /min	308	394	394	487	568	568	527	569	673	900	900	900	1,060	1,060	1,201
	Combustion air flow	m <sup>3</sup> /min	11.8	18.6	19.8	24	26.4	31.2	32.4	36.6	40.1	50.8	50.8	57.3	54.4	54.4	74.6
	E.A(OUT - LET)	m <sup>2</sup>	0.6	0.8	0.8	1	1.2	1.2	1.1	1.2	1.4	1.9	1.9	1.9	2.2	2.2	2.5
	O.A(IN - LET)	m <sup>2</sup>	0.8	1	1	1.2	1.4	1.4	1.3	1.4	1.7	2.3	2.3	2.3	2.7	2.7	3

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# Diesel Engine Generator

디젤 엔진 발전기

## BAUDOIN

SET MODEL		WPG1000*76	WPG1100*76	WPG1300*76	WPG1540*76	WPG1650*76	WPG1750*76	WPG2000*76	WPG2200*76	WPG2500*76	WPG2640*76	WPG2800*76	WPG3000*76	WPG3300*76	WPG4200*76	
Generator	Stand-by Power	kW	1,000	1,100	1,300	1500	1,600	1,750	2,000	2,200	2,500	2,600	2,800	3,000	3,300	4,200
		kVA	1,250	1,375	1,625	1,875	2,063	2,188	2,500	2,750	3,125	3,250	3,500	3,750	4,125	5,250
	Prime Power	kW	909	1,000	1,182	1,364	1,455	1,591	1,818	2,000	2,273	2,364	2,545	2,727	3,000	3,818
		kVA	1,137	1,250	1,478	1,705	1,819	1,989	2,273	2,500	2,841	2,955	3,182	3,410	3,750	4,773
	Frequency	Hz	60													
	RPM	RPM	1,800													
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire													
	Insulation Class		F,H CLASS													
	Power Factor		0.8													
	Exciting System		P.M.G – Permanent Magnet Generator													
	Bearing		Single Ball Bearing													
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600														
Manufacturer		BAUDOIN														
Model		12M33G1000/6	12M33G1100/6	12M33G1300/6	16M33G1500/6	16M33G1650/6	16M33G1750/6	20M33G2000/6	12M55G2250/6	12M55G2500/6	16M55G2640/6	16M55G2800/6	16M55G3000/6	16M55G3300/6	20M44G4200/6	
Stand-by Power	HP	1486	1696	1904	2253	2394	2575	2,990	3,299	3,621	3,969	4,224	4,492	4,828	6,097	
Prime Power	HP	1350	1542	1730	2052	2179	2347	2,718	2,950	3,286	3,634	3,849	3,929	4,425	5,548	
RPM	RPM	1800														
No. of Cylinder	EA	12	12	12	16	16	16	20	12	12	16	16	16	16	20	
Bore x Stroke	mm	150 x 185	150 x 185	150 x 185	150 x 185	150 x 185	150 x 185	150 x 185	180 x 215	180 x 215	180 x 215	180 x 215	180 x 215	180 x 215	180 x 215	
Displacement	cc	39,200	39,200	39,200	52,300	52,300	52,300	65,400	65,650	65,650	87,500	87,500	87,500	87,500	109,400	
Compression Ratio		15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)														
Aspiration		Turbocharged & Air-intercooled														
Starting System		Electric motor by DC24 battery														
Governor		Electronic Type														
Coolant Cap.(SET)	L	320	320	320	480	480	480	550	700	700	850	850	850	850	1,184	
Lube Oil Capacity	L	162	162	162	185	185	185	235	460	460	582	582	582	582	705	
Fuel Consumption	L/hr	285.5	285.5	357.5	402.1	435.4	496.6	554.6	586	653.1	706.4	749	801	890.1	1112.9	
DIM	Length	mm	4,800	4,800	5,135	5,900	5,900	5,900	7,000	6,550	6,550	7,610	7,610	7,610	7,810	10,317
	Width	mm	2,195	2,195	2,195	2,200	2,200	2,200	2,760	2,800	2,800	3,000	3,000	3,000	3,000	3,409
	Height	mm	2,476	2,476	2,476	2,800	2,800	2,800	3,250	2,990	2,990	3,580	3,580	3,580	3,580	4,744
	Weight	kg	9,770	9,800	10,490	13,128	13,619	14,491	16,932	20,812	20,812	28,212	28,212	28,212	28,212	42,500
PAD	Length	mm	5,500	5,500	6,000	6,500	6,500	6,500	8,000	7,500	7,500	8,500	8,500	8,500	8,500	11,000
	Width	mm	2,500	2,500	2,500	2,500	2,500	2,500	3,000	3,200	3,200	3,800	3,800	3,800	4,000	
	Height	mm	400	400	400	500	500	500	400	500	500	500	500	500	600	
D.A	Radiator air flow	m <sup>3</sup> /min	1,680	1,680	1,680	2,130	2,130	2,130	2,580	2,964	2,964	3,156	3,156	3,156	4,000	
	Combustion air flow	m <sup>3</sup> /min	88.3	97.2	115.5	128.2	142.9	150	172	178.7	192.6	206.5	231.3	237.1	300	
	E.A(OUT - LET)	m <sup>2</sup>	3.5	3.5	3.5	4.4	4.4	4.4	5.4	6.2	6.2	6.6	6.6	7.7	8.3	
	O.A(IN - LET)	m <sup>2</sup>	4.2	4.2	4.3	5.4	5.4	5.4	6.6	7.5	7.5	8	8.1	3.1	8.1	10.2

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**SCANIA**



SET MODEL		GNC-250-SC	GNC-275-SC	GNC-300-SC	GNC-330-SC	GNC-360-SC	GNC-400-SC	GNC-450-SC	GNC-500-SC	GNC-560-SC	GNC-610-SC	GNC-660-SC	GNC-700-SC	GNC-750-SC	
<b>Generator</b>	Stand-by Power	kW	250	275	300	330	360	400	450	500	560	610	660	700	750
		kVA	313	344	375	413	450	500	563	625	700	763	825	875	938
	Prime Power	kW	227	250	273	300	327	364	409	455	509	555	600	636	682
		kVA	284	313	341	375	409	455	511	569	636	674	750	795	853
	Frequency	Hz	60												
	RPM	RPM	1,800												
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire												
	Insulation Class		F,H CLASS												
	Power Factor		0.8												
	Exciting System		Brushless Self Exciting												
	Bearing		Single Ball Bearing												
	Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600												
Manufacturer		SCANIA													
Model		DC09-072A	DC09-072A	DC09-072A	DC09-072A	DC13-072A	DC13-072A	DC13-072A	DC13-072A	DC13-093A	DC16-093A	DC16-078A	DC16-078A	DC16-078A	
Stand-by Power	HP	375	408	437	487	552	611	662	747	830	902	955	1054	1127	
Prime Power	HP	341	371	397	426	506	558	605	672	747	812	870	949	1015	
RPM	RPM	1800													
No. of Cylinder	EA	5	5	5	5	6	6	6	6	6	8	8	8	8	
Bore x Stroke	mm	130x140	130x140	130x140	130x140	130x160	130x160	130x160	130x160	130x154	130x154	130x154	130x154	130x154	
Displacement	cc	9,300	9,300	9,300	9,300	12,700	12,700	12,700	12,700	12,700	16,400	16,400	16,400	16,400	
Compression Ratio		16.0 : 1	16.0 : 1	16.0 : 1	16.0 : 1	16.3 : 1	16.3 : 1	16.3 : 1	16.3 : 1	16.3 : 1	16.7 : 1	16.7 : 1	16.7 : 1	16.7 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)													
Aspiration		Turbocharged & Air-intercooled													
Starting System		Electric motor by DC24 battery													
Governor		Electric Type													
Coolant Cap.(SET)	L	37	37	37	37	45	45	45	45	68	68	68	68	68	
Lube Oil Capacity	L	36	36	36	36	36	36	36	36	48	48	48	48	48	
Fuel Consumption	L/hr	65.6	73.2	81.1	89.2	91.7	102.8	117.8	124	147.1	161.5	171.1	177.4	192	
<b>DIM</b>	Length	mm	2,900	2,900	2,900	2,900	3,390	3,390	3,390	3,390	3,390	3,300	3,300	3,300	3,300
	Width	mm	1,015	1,015	1,015	1,015	1,128	1,128	1,128	1,128	1,128	1,316	1,316	1,316	1,316
	Height	mm	1,549	1,549	1,549	1,549	1,845	1,845	1,845	1,845	1,845	1,920	1,920	1,920	1,920
	Weight(G-Pac)	kg	2,074	2,193	2,256	2,349	2,727	2,769	2,852	2,919	3,366	3,415	3,536	3,573	3,936
<b>PAD</b>	Length	mm	3,500	3,500	3,500	3,500	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
	Width	mm	1,800	1,800	1,800	1,800	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Height	mm	300	300	300	300	300	300	300	300	300	300	300	300	300
<b>D.A</b>	Radiator air flow	m <sup>3</sup> /min	500	500	500	500	821	821	821	821	821	1079	1079	1079	1079
	Combustion air flow	m <sup>3</sup> /min	24	24	24	24	28	30	30	30	37	42	40	40	40
	E.A(OUT - LET)	m <sup>2</sup>	1	1	1	1	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2
	O.A(IN - LET)	m <sup>2</sup>	1.2	1.2	1.2	1.2	2	2	2	2	2	2.7	2.7	2.7	2.7

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# Diesel Engine Generator

디젤 엔진 발전기

**HYUNDAI**

SET MODEL		GNC-60-HD	GNC-80-HD	GNC-170-HD	GNC-200-HD	GNC-230-HD	GNC-250-HD	GNC-275-HD	GNC-300-HD	GNC-330-HD	GNC-360-HD	
Generator	Stand-by Power	kW	60	80	170	200	230	250	275	300	330	360
		kVA	75	100	213	250	288	313	344	375	413	450
	Prime Power	kW	54	73	155	182	209	227	250	273	300	327
		kVA	69	91	194	228	262	284	313	342	375	409
	Frequency	Hz	60									
	RPM	RPM	1,800									
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire									
	Insulation Class		F,H CLASS									
	Power Factor		0.8									
	Exciting System		Brushless Self Exciting									
	Bearing		Single Ball Bearing									
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600										
Manufacturer		HYUNDAI										
Model		SP344CB	SP344CC	P086TI-1	P086TI	DP086LA	P126TI-3	P126TI	P126TI-II	DP126CA	DP126CB	
Stand-by Power	HP	98	123	256	298	339	386	399	458	503	512	
Prime Power	HP	89	111	233	275	305	351	372	412	457	489	
RPM	RPM	1800										
No. of Cylinder	EA	4	4	6	6	6	6	6	6	6	6	
Bore x Stroke	mm	98 x 113	98 x 113	111 x 139	111 x 139	111 x 139	123 x 155	123 x 155	123 x 155	123 x 155	123 x 155	
Displacement	cc	3,400	3,400	8,071	8,071	8,071	11,051	11,051	11,051	11,051	11,051	
Compression Ratio		16.8 : 1	16.8 : 1	16.4 : 1	16.4 : 1	16.7 : 1	17.1 : 1	17.1 : 1	17.1 : 1	16.5 : 1	16.5 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)										
Aspiration		Turbocharged & Air intercooled										
Starting System		Electric motor by DC12 battery			Electric motor by DC24 battery							
Governor		ECU Type			Electronic type						ECU Type	
Coolant Cap.(SET)	L	14.2	14.2	44	44	44	51	51	51	53	53	
Lube Oil Capacity	L	12.6	12.6	15.5	15.5	15.5	23	23	23	44	44	
Fuel Consumption	L/hr	18.1	23	46.7	56.8	62.9	76.5	76.5	89.5	90	96	
DIM	Length	mm	1,950	1,950	2,650	2,650	2,650	3,000	3,000	3,000	3,040	3,040
	Width	mm	745	745	940	940	940	1,120	1,120	1,120	1,165	1,165
	Height	mm	1,450	1,450	1,635	1,635	1,820	1,635	1,635	1,635	1,940	1,940
	Weight	kg	865	865	1,570	1,620	1,700	1,860	1,980	2,046	2,464	2,596
PAD	Length	mm	2,500	2,500	3,200	3,200	3,200	3,500	3,500	3,500	3,500	3,500
	Width	mm	1,500	1,500	1,500	1,500	1,500	1,700	1,700	1,700	1,700	1,700
	Height	mm	300	300	300	300	300	300	300	300	300	300
D.A	Radiator air flow	m <sup>3</sup> /min	141	141	224	224	224	433	433	530	483	483
	Combustion air flow	m <sup>3</sup> /min	6	6	22	23.5	25.5	27.5	28.5	30.5	26.7	27.9
	E.A(OUT - LET)	m <sup>2</sup>	0.3	0.3	0.5	0.5	0.5	0.9	0.9	1.1	1	1
	O.A(IN - LET)	m <sup>2</sup>	0.4	0.4	0.6	0.6	0.6	1.1	1.1	1.3	1.2	1.2

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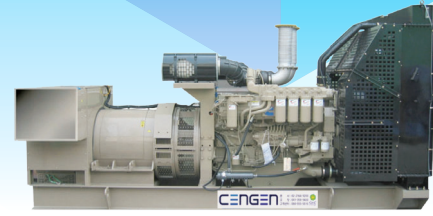


SET MODEL		GNC-400-HD	GNC-450-HD	GNC-500-HD	GNC-550-HD	GNC-610-HD	GNC-660-HD	GNC-700-HD	GNC-750-HD	GNC-800-HD	GNC-900-HD	
Generator	Stand-by Power	kW	400	450	500	550	610	660	700	750	800	900
		kVA	500	563	625	688	763	825	875	938	1,000	1,125
	Prime Power	kW	364	409	455	500	555	600	636	682	727	818
		kVA	455	512	569	625	694	750	796	853	909	1023
	Frequency	Hz	60									
	RPM	RPM	1,800									
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire									
	Insulation Class		F,H CLASS									
	Power Factor		0.8									
	Exciting System		Brushless Self Exciting									
	Bearing		Single Ball Bearing									
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600										
Manufacturer		HYUNDAI										
Model		DP126CD	DP126CE	DP158LD	DP180LA	DP180LB	DP222LA	DP222LB	DP222CA	DP222CB	DP222CC	
Stand-by Power	HP	614	673	745	824	886	988	1,048	1,121	1,193	1,334	
Prime Power	HP	558	601	677	749	805	898	953	1,021	1,085	1,207	
RPM	RPM	1800										
No. of Cylinder	EA	6	6	8	10	10	12	12	12	12	12	
Bore x Stroke	mm	123 x 155	123 x 155	128 x 142	128 x 142	128 x 142	128 x 142	128 x 142	128 x 142	128 x 142	128 x 142	
Displacement	cc	11,051	11,051	14,618	18,273	18,273	21,927	21,927	21,927	21,927	21,927	
Compression Ratio		16.5 : 1	16.5 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	14.6 : 1	14.6 : 1	14.6 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)										
Aspiration		Turbocharged & Air-intercooled										
Starting System		Electric motor by DC24 battery										
Governor		ECU Type			Electric Type				ECU Type			
Coolant Cap.(SET)	L	53	53	79	91	91	114	114	66	66	66	
Lube Oil Capacity	L	44	44	22	34	34	40	40	75	75	75	
Fuel Consumption	L/hr	110	120	139.6	154.1	165.3	179.9	192.8	204	216	241	
DIM	Length	mm	3,040	3,040	3,000	3,200	3,200	3,390	3,390	3,670	3,670	3,670
	Width	mm	1,165	1,165	1,400	1,400	1,400	1,400	1,400	1,640	1,640	1,640
	Height	mm	1,940	1,940	1,820	1,875	1,875	2,120	2,120	2,240	2,240	2,240
	Weight	kg	2,638	2,721	2,784	3,075	3,124	3,458	3,495	4,647	4,647	4,869
PAD	Length	mm	3,500	3,500	3,500	3,800	3,800	4,000	4,000	4,200	4,200	4,200
	Width	mm	1,700	1,700	2,000	2,000	2,000	2,000	2,000	2,200	2,200	2,200
	Height	mm	300	300	300	300	300	300	300	300	300	300
D.A	Radiator air flow	m <sup>3</sup> /min	483	483	850	850	850	1,050	1,050	1,510	1,510	1,510
	Combustion air flow	m <sup>3</sup> /min	30.4	32.5	36.6	43	45.5	53.5	56.8	43	46	49
	E.A(OUT - LET)	m <sup>2</sup>	1	1	1.8	1.8	1.8	2.2	2.2	3.1	3.1	3.1
	O.A(IN - LET)	m <sup>2</sup>	1.2	1.2	2.1	2.1	2.1	2.6	2.6	3.7	3.7	3.7

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# Diesel Engine Generator

디젤 엔진 발전기



**CUMMINS**

SET MODEL		GNC-800-C	GNC-1000-C	GNC-1250-C	GNC-1500-C	GNC-2000-C	
Generator	Stand-by Power	kW	800	1,000	1,250	1,500	2,000
		kVA	1,000	1,250	1,563	1,875	2,500
	Prime Power	kW	727	909	1,136	1,364	1,818
		kVA	909	1,136	1,420	1,705	2,273
	Frequency	Hz	60				
	RPM	RPM	1,800				
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire				
	Insulation Class		F,H CLASS				
	Power Factor		0.8				
	Exciting System		Brushless Self Exciting				
	Bearing		Single Ball Bearing				
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600					
Manufacturer		CUMMINS					
Model		QSK23-G3	KTA38-G4	KTA50-G3	KTA50-G9	QSK60-G6	
Stand-by Power	HP	1,200	1,490	1,850	2,220	2,922	
Prime Power	HP	1,085	1,350	1,742	1,855	2,647	
RPM	RPM	1800					
No. of Cylinder	EA	6	12	16	16	16	
Bore x Stroke	mm	170 x 170	159 x 159	159 x 159	159 x 159	159 x 190	
Displacement	cc	23,150	38,000	50,300	50,300	60,200	
Compression Ratio		16.0 : 1	14.0 : 1	13.9 : 1	13.9 : 1	14.5 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)					
Aspiration		Turbocharged & Air intercooled					
Starting System		Electric motor by DC24 battery					
Governor		Electronic type					
Coolant Cap.(ENGINE)	L	46.5	124	161	174	159	
Coolant Cap.(SET)	L	121.5	254	297	310	445	
Lube Oil Capacity	L	103	135	152	152	378	
Fuel Consumption	L/hr	206	271	330	392	521	
DIM	Length	mm	4,060	4,200	4,950	5,300	5,700
	Width	mm	1,502	2,060	2,057	2,150	2,270
	Height	mm	2,088	2,320	2,317	2,656	2,695
	Weight	kg	6,150	7,856	9,785	11,558	17,425
PAD	Length	mm	4,800	5,000	5,600	6,200	6,600
	Width	mm	2,200	2,400	2,400	2,400	3,000
	Height	mm	400	400	400	500	500
D.A	Radiator air flow	m <sup>3</sup> /min	426	1,140	1,236	1,644	1,536
	Combustion air flow	m <sup>3</sup> /min	67.9	86.1	110.4	125	174
	E.A(OUT - LET)	m <sup>2</sup>	0.9	2.4	2.6	2.8	3.2
	O.A(IN - LET)	m <sup>2</sup>	1.2	2.9	3.2	3.5	4.1

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# CUMMINS

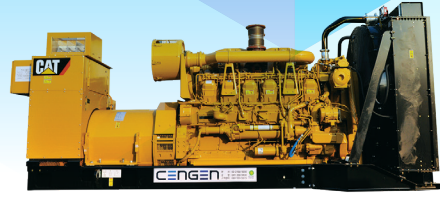


SET MODEL		C800D6	C1000D6B	C1250D6	C1500D6	C2000D6	C2250D6A	DQKAN	DQLD	C3000D6EB	C3250D6	C3500D6	
Generator	Stand-by Power	kW	800	1,020	1,270	1,545	2,000	2,250	2,500	2,750	3,000	3,250	3,500
		kVA	1,000	1,276	1,588	1,931	2,500	2,813	3,125	3,438	3,750	4,063	4,375
	Prime Power	kW	725	928	1,120	1,286	1,825	-	-	2,500	2,750	3,000	3,000
		kVA	906	1,160	1,400	1,608	2,281	-	-	3,125	3,438	3,750	3,750
	Frequency	Hz	60										
	RPM	RPM	1,800										
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire										
	Insulation Class		F,H CLASS										
	Power Factor		0.8										
	Exciting System		P.M.G – Permanent Magnet Generator										
	Bearing		Single Ball Bearing or Double Ball Bearing										
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600											
Manufacturer		CUMMINS											
Model		QSK23-G3	KTA38-G14	KTA50-G3	KTA50-G9	QSK60-G6	QSK60-G9	QSK60-G19	QSK78-G8	QSK78-G37	QSK95-G2	QSK95-G2	
Stand-by Power	HP	1,216	1,511	1,664	2,016	2,671	3,037	3,640	4,060	4,441	4,656	5,051	
Prime Power	HP	1,099	1,369	1,528	1,748	2,516	-	-	3,670	4,049	4,309	4,309	
RPM	RPM	1800											
No. of Cylinder	EA	6	12	16	16	16	16	16	18	18	16	16	
Bore x Stroke	mm	170 x 170	159 x 159	159 x 159	159 x 159	159 x 190	159 x 190	159 x 190	170 x 190	170 x 190	190 x 210	190 x 210	
Displacement	cc	23,150	38,000	50,000	50,000	60,200	60,200	60,200	77,600	77,600	95,300	95,300	
Compression Ratio		16.0 : 1	13.9 : 1	13.9 : 1	13.9 : 1	14.5 : 1	14.5 : 1	14.5 : 1	15.5 : 1	15.3 : 1	15.5 : 1	15.1 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)											
Aspiration		Turbocharged & Air-intercooled											
Starting System		Electric motor by DC24 battery											
Governor		Electric Type											
Coolant Cap.(SET)	L	109.5	229	501	501	494	494	587	455	455	1,120	1,120	
Lube Oil Capacity	L	103	135	152	152	378	378	378	413	405	647	647	
Fuel Consumption	L/hr	204.4	246	330	392	520	569	625	689	773	825	901	
DIM	Length	mm	4,340	4,478	5,143	5,779	6,175	6,175	7,159	7,137	7,328	8,021	8,021
	Width	mm	1,763	1,682	2,000	2,147	2,286	2,494	2,713	2,751	3,064	3,028	3,028
	Height	mm	2,095	2,211	2,518	2,473	2,537	3,201	3,186	3,388	3,614	3,663	3,663
	Weight	kg	6,289	8,416	10,069	10,574	17,471	17,847	22,279	24,237	25,361	30,247	30,247
PAD	Length	mm	5,000	5,200	6,000	6,800	6,800	6,800	8,000	8,000	8,000	9,000	9,000
	Width	mm	2,400	2,400	2,400	2,500	3,000	3,000	3,200	3,800	3,800	3,800	3,800
	Height	mm	300	400	400	400	500	500	500	500	500	500	500
D.A	Radiator air flow	m <sup>3</sup> /min	888	981	1,518	1,362	1,998	2,040	2,649	3,060	2,751	3,135	3,135
	Combustion air flow	m <sup>3</sup> /min	67.92	86.1	110.4	125	174	183	193	236	262	279	284
	E.A(OUT - LET)	m <sup>2</sup>	1.9	2	3.2	2.8	4.2	4.3	5.5	6.4	5.7	6.5	6.5
	O.A(IN - LET)	m <sup>2</sup>	2.3	2.5	3.9	3.5	5.2	5.3	6.8	6.9	7.2	8.1	8.1

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# Diesel Engine Generator

디젤 엔진 발전기



## CATERPILLAR

SET MODEL		GNC-800-CA	GNC-1000-CA	GNC-1250-CA	GNC-1500-CA	GNC-1750-CA	GNC-2000-CA	GNC-2500-CA	GNC-2750-CA	GNC-3000-CA	GNC-3250-CA	GNC-3500-CA	GNC-3900-CA	
Generator	Stand-by Power	kW	800	1,000	1,250	1,500	1,750	2,000	2,500	2,750	3,000	3,250	3,500	3,900
		kVA	1,000	1,250	1,563	1,875	2,188	2,500	3,125	3,438	3,750	4,063	4,375	4,875
	Prime Power	kW	725	910	1,135	1,360	1,600	1,825	2,250	2,500	2,725	3,000	3,180	3,500
		kVA	906	1,137	1,419	1,700	2,000	2,282	2,813	3,125	3,407	3,750	3,975	4,375
	Frequency	Hz	60											
	RPM	RPM	1,800											
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire											
	Insulation Class		F,H CLASS											
	Power Factor		0.8											
	Exciting System		P.M.G - Permanent Magnet Generator											
	Bearing		Single Ball Bearing or Double Ball Bearing											
	Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600											
Manufacturer		CATERPILLAR												
Model		3412C	C32	3512	3512B	3516	3516B	3516C	3516E	C175-16	C175-16	C175-20	C175-20	
Stand-by Power	HP	1,180	1,502	1,818	2,172	2,520	2,876	3,634	4,043	4,423	4,705	5,166	5,647	
Prime Power	HP	1,071	1,341	1,662	1,971	2,304	2,628	3,272	3,695	4,034	4,356	4,710	5,136	
RPM	RPM	1,800												
No. of Cylinder	EA	12	12	12	12	16	16	16	16	16	16	20	20	
Bore x Stroke	mm	137 x 152	145 x 162	170 x 190	170 x 190	170 x 190	170 x 190	170 x 215	170 x 215	175 x 220	175 x 220	175 x 220	175 x 220	
Displacement	cc	27,000	32,100	51,800	51,800	69,000	69,000	78,100	78,100	84,600	84,700	105,800	105,800	
Compression Ratio		13.0 : 1	15.0 : 1	13.5 : 1	14.0 : 1	13.5 : 1	14.0 : 1	14.7 : 1	14.7 : 1	15.3 : 1	15.5 : 1	15.5 : 1	15.5 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)												
Aspiration		Turbocharged & Air-intercooled												
Starting System		Electric motor by DC24 battery												
Governor		Electric Type												
Coolant Cap.(SET)	L	149	91	287	303	377	364	413	417	935.5	1391.8	1285	1,285	
Lube Oil Capacity	L	139	99	333	333	416	416	416	481	606	606	757	757	
Fuel Consumption	L/hr	221.9	262.7	342.7	399	460	514	636	720	781	816.1	914.3	1,006	
DIM	Length	mm	4,125	4,348	5,562	5,566	6,229	5,923	6,799	7,517	7,687	8,339	8,418	8,418
	Width	mm	1,987	2,187	1,984	2,286	2,286	2,286	2,371	2,640	2,984	3,156	3,263	3,264
	Height	mm	1,906	2,175	2,305	2,420	2,410	2,494	2,997	3,382	3,409	3,156	3,824	3,829
	Weight	kg	6,500	8,000	12,000	14,000	16,000	17,000	20,500	21,500	27,000	31,000	34,000	34,000
PAD	Length	mm	5,000	5,000	6,000	6,000	7,000	7,000	7,700	8,400	8,400	9,000	9,000	9,000
	Width	mm	2,500	2,800	2,500	2,500	2,500	2,500	3,000	3,500	3,500	4,000	4,000	4,000
	Height	mm	300	400	500	500	500	500	500	400	500	500	600	600
D.A	Radiator air flow	m <sup>3</sup> /min	923	1,175	1,397	1,611	1,611	1,674	2,356	2,688	2,933	3,296	3,426	3,426
	Combustion air flow	m <sup>3</sup> /min	70	83	106	126	159	164	202	229	264	271	312	339
	E.A(OUT - LET)	m <sup>2</sup>	1.9	2.4	2.9	3.4	2.8	3.5	4.9	5.6	6.1	6.9	7.1	7.1
	O.A(IN - LET)	m <sup>2</sup>	2.1	2.6	3.1	3.6	3.7	3.8	5.3	6.1	6.7	7.4	7.8	7.8

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# PERKINS

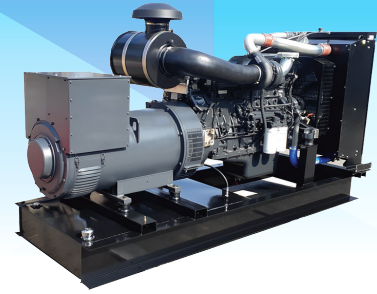


SET MODEL		GNC-500-P	GNC-550-P	GNC-600-P	GNC-750-P	GNC-800-P	GNC-900-P	GNC-1000-P	GNC-1100-P	GNC-1200-P	GNC-1330-P	GNC-1500-P	
Generator	Stand-by Power	kW	500	550	600	750	800	900	1000	1100	1200	1330	1500
		kVA	625	687	750	937	1000	1125	1250	1375	1500	1675	1875
	Prime Power	kW	455	-	545	682	727	819	909	1000	1100	1200	1350
		kVA	569	-	681	853	909	1023	1136	1250	1350	1500	1700
	Frequency	Hz	60										
	RPM	RPM	1,800										
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire										
	Insulation Class		F,H CLASS										
	Power Factor		0.8										
	Exciting System		Brushless Self Exciting										
	Bearing		Single Ball Bearing										
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600											
Manufacturer		PERKINS											
Model		2506C-E15TAG3	2506C-E15TAG4	2806C-E18TAG3	4006-23TAG3	4006-23TAG4	4008-TAG2	5008-30TAG5	4012-46TWG2A	4012-46TWG3A	4012-46TAG2A	4012-46TAG3A	
Stand-by Power	HP	762	835	909	1,140	1,187	1,346	1,485	1,641	1,783	1,978	2,338	
Prime Power	HP	696	-	828	1,031	1,079	1,204	1,342	1,563	1,630	1,808	2,046	
RPM	RPM	1800											
No. of Cylinder	EA	6	6	6	6	6	8	8	12	12	12	12	
Bore x Stroke	mm	137 x 171	137 x 171	145 x 183	160 x 190	160 x 190	160 x 190	160 x 190	160 x 190	160 x 190	160 x 190	160 x 190	
Displacement	cc	15,200	15,200	18,130	22,921	22,921	30,561	30,560	45,482	45,482	45,842	45,842	
Compression Ratio		16.0 : 1	16.0 : 1	14.5 : 1	13.6 : 1	13.6 : 1	13.6 : 1	13.8 : 1	13.0 : 1	13.0 : 1	13.0 : 1	13.0 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)											
Aspiration		Turbocharged & Air intercooled											
Starting System		Electric motor by DC24 battery											
Governor		Electronic type											
Coolant Cap.(SET)	L	58	58	61	120	120	162	140	201	201	210	225	
Lube Oil Capacity	L	60	60	62	113.4	113.4	153	153	177	177	177	177	
Fuel Consumption	L/hr	132	146	158	224	233	249	250	298	325	344	390	
DIM	Length	mm	3,550	3,550	3,400	3,900	3,900	4,550	4,550	4,500	4,700	5,000	5,000
	Width	mm	1,280	1,280	1,536	1,690	1,690	2,050	2,134	1,990	1,990	2,200	2,200
	Height	mm	2,025	2,050	2,128	2,275	2,275	2,380	2,380	2,521	2,521	2,460	2,764
	Weight	kg	3,543	3,875	4,827	5,240	5,440	7,347	7,275	8,259	8,931	9,565	10,100
PAD	Length	mm	4,500	4,500	4,500	4,500	4,500	5,500	5,500	5,500	5,500	5,800	5,800
	Width	mm	2,000	2,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
	Height	mm	300	300	300	300	300	300	300	400	400	400	400
D.A	Radiator air flow	m <sup>3</sup> /min	866	852	1,022	1,140	1,140	1,140	1,140	1,855	1,888	2,160	2,160
	Combustion air flow	m <sup>3</sup> /min	42	52	71	78	80	80	85	117	133	145	145
	E.A(OUT - LET)	m <sup>2</sup>	1.8	1.8	2.1	2.4	2.4	2.6	2.6	3.9	3.9	4.5	4.5
	O.A(IN - LET)	m <sup>2</sup>	2.2	2.2	2.6	2.9	2.9	3.1	3.1	4.7	4.8	5.5	5.5

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# Diesel Engine Generator

디젤 엔진 발전기



FPT

SET MODEL		GNC-100-FP	GNC-130-FP	GNC-150-FP	GNC-175-FP	GNC-200-FP	GNC-250-FP	GNC-300-FP	GNC-330-FP	GNC-360-FP	GNC-450-FP	GNC-470-FP	GNC-550-FP	
Generator	Stand-by Power	kW	100	130	150	175	200	250	310	330	370	450	470	550
		kVA	125	163	188	219	250	313	388	413	463	563	588	688
	Prime Power	kW	85	120	136	155	190	225	280	300	340	409	427	500
		kVA	106	150	170	194	238	281	350	375	425	511	534	625
	Frequency	Hz	60											
	RPM	RPM	1,800											
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire											
	Insulation Class		F,H CLASS											
	Power Factor		0.8											
	Exciting System		Brushless Self Exciting											
	Bearing		Single Ball Bearing											
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600												
Manufacturer		FPT												
Model		NEF45 TM2A	NEF67 SM1	NEF67 TM3A	NEF67 TM4	NEF67 TE3PV	CURSOR87 TE3	CURSOR87 TE4	CURSOR13 TE2A	CURSOR13 TE3A	CURSOR13 TE6W	CURSOR13 TE7W	CURSOR16 TE1W	
Stand-by Power	HP	148	194	231	257	295	375	458	516	567	666	693	817	
Prime Power	HP	135	177	210	235	268	346	422	472	516	605	630	742	
RPM	RPM	1,800												
No. of Cylinder	EA	4	6	6	6	6	6	6	6	6	6	6	6	
Bore x Stroke	mm	104 x 132	104 x 132	104 x 132	104 x 132	104 x 132	117 x 135	117 x 135	135 x 150	135 x 150	135 x 150	135 x 150	141 x 170	
Displacement	cc	4,500	6,700	6,700	6,700	6,700	8,700	8,700	12,880	12,880	12,880	12,880	15,900	
Compression Ratio		17.5 : 1	17.5 : 1	17.5 : 1	17.5 : 1	17.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)												
Aspiration		Turbocharged & Air intercooled												
Starting System		Electric motor by DC12 battery						Electric motor by DC24 battery						
Governor		ECU Type												
Coolant Cap.(SET)	L	18.5	25.5	25.5	25.5	25.5	58	58	67	68	60	60	70	
Lube Oil Capacity	L	12.8	17.2	17.2	17.2	17	28	28	35	35	38.1	38.1	38	
Fuel Consumption	L/hr	29	38.1	44.2	42.2	54.5	65.6	83.5	91	108.7	112	123.3	119.6	
DIM	Length	mm	2,100	2,500	2,650	2,650	2,650	3,000	3,000	3,200	3,200	3,200	3,200	3,200
	Width	mm	790	930	930	930	930	972	972	1,132	1,300	1,223	1,223	1,122
	Height	mm	1,469	1,552	1,552	1,552	1,552	1,479	1,479	1,671	1,672	1,690	1,690	1,821
	Weight(G-Pac)	kg	1,034	1,240	1,379	1,391	1,457	1,981	2,256	2,376	2,598			
PAD	Length	mm	2500	3000	3500	3500	3500	3500	3500	4000	4000	4000	4000	4000
	Width	mm	1500	1500	1500	1500	1500	1500	1500	1500	2000	2000	2000	2000
	Height	mm	300	300	300	300	300	300	300	300	300	300	300	300
D.A	Radiator air flow	m <sup>3</sup> /min	156	234	288	288	288	423	423	510	510	510	510	783
	Combustion air flow	m <sup>3</sup> /min	8.5	10.1	12.1	12.1	12.1	21.2	21.2	29.7	29.7	29.3	31	49.9
	E.A(OUT - LET)	m <sup>2</sup>	0.3	0.5	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.6
	O.A(IN - LET)	m <sup>2</sup>	0.4	0.6	0.7	0.7	0.7	1.1	1.1	1.3	1.3	1.3	1.3	2

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# MITSUBISHI



SET MODEL		GNC-800-MI	GNC-900-MI	GNC-1000-MI	GNC-1200-MI	GNC-1320-MI	GNC-1500-MI	GNC-1750-MI	GNC-2000-MI	
Generator	Stand-by Power	kW	800	900	1,000	1,200	1,320	1,500	1,750	2,000
		kVA	1,000	1,125	1,250	1,500	1,650	1,875	2,187	2,500
	Prime Power	kW	727	818	909	1,091	1,200	1,364	1,591	1,818
		kVA	909	1,023	1,136	1,364	1,500	1,705	1,989	2,273
	Frequency	Hz	60							
	RPM	RPM	1,800							
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire							
	Insulation Class		F,H CLASS							
	Power Factor		0.8							
	Exciting System		Brushless Self Exciting							
	Bearing		Single Ball Bearing							
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600								
Manufacturer		MITSUBISHI								
Model		S12A2-PTA	S12A2-PTA2	S12H-PTA	S12R-PTA	S12R-PTA2	S12R-PTA3	S16R-PTAH	S16R-PTAA2	
Stand-by Power	HP	1,233	1,233	1,448	1,702	1,903	2,157	2,547	2,822	
Prime Power	HP	1,118	1,118	1,314	1,528	1,729	1,961	2,312	2,540	
RPM	RPM	1800								
No. of Cylinder	EA	12	12	12	12	12	12	16	16	
Bore x Stroke	mm	150 x 160	150 x 160	150 x 175	170 x 180	170 x 180	170 x 180	170 x 180	170 x 180	
Displacement	cc	33,930	33,930	37,110	49,030	49,030	49,030	65,370	65,370	
Compression Ratio		15.3 : 1	15.3 : 1	14.0 : 1	14.0 : 1	13.5 : 1	14.0 : 1	14.0 : 1	14.0 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)								
Aspiration		Turbocharged & Aftercooler								
Starting System		Electric motor by DC24 battery								
Governor		Electronic type								
Coolant Cap.(SET)	L	215	235	285	305	305	305	445	413	
Lube Oil Capacity	L	120	120	200	180	180	180	230	230	
Fuel Consumption	L/hr	222	256.9	265	305	358	405	479	521	
DIM	Length	mm	3,825	4,000	4,175	4,553	4,750	4,700	5,300	5,600
	Width	mm	1,600	1,653	1,653	1,820	1,832	2,200	2,200	2,392
	Height	mm	1,992	2,322	2,330	2,389	2,772	2,631	2,532	3,326
	Weight	kg	5,935	6,694	7,758	9,536	9,828	10,851	13,463	13,800
PAD	Length	mm	4,500	4,500	4,800	5,500	5,500	5,500	6,000	6,500
	Width	mm	2,200	2,200	2,200	2,500	2,500	2,500	2,500	2,500
	Height	mm	400	400	400	400	400	500	500	500
D.A	Radiator air flow	m <sup>3</sup> /min	822	822	1,014	1,794	1,686	1,764	2,040	2,500
	Combustion air flow	m <sup>3</sup> /min	78	85	93	109	121	145	160	194
	E.A(OUT - LET)	m <sup>2</sup>	1.7	1.7	2.1	3.7	3.5	3.7	4.3	5.2
	O.A(IN - LET)	m <sup>2</sup>	2.1	2.2	2.6	4.5	4.3	4.5	5.2	6.4

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

# Diesel Engine Generator

디젤 엔진 발전기



MTU

SET MODEL		GNC-800-M	GNC-900-M	GNC-1000-M	GNC-1250-M	GNC-1600-M	GNC-1750-M	GNC-2100-M	GNC-2300-M	GNC-2500-M	GNC-2750-M	GNC-3250-M	
Generator	Stand-by Power	kW	800	900	1,000	1,250	1,600	1,750	2,100	2,300	2,500	2,750	3,250
		kVA	1,000	1,125	1,250	1,562	2,000	2,188	2,625	2,875	3,125	3,438	4,063
	Prime Power	kW	725	818	909	-	1,455	1,591	1,909	2,091	2,273	2,500	2,955
		kVA	906	1,023	1,136	-	1,819	1,989	2,386	2,614	2,841	3,125	3,694
	Frequency	Hz	60										
	RPM	RPM	1,800										
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire										
	Insulation Class		F,H CLASS										
	Power Factor		0.8										
	Exciting System		Brushless Self Exciting										
	Bearing		Single Ball Bearing, Double Ball Bearing										
	Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600										
Manufacturer		MTU											
Model		12V2000G45	16V2000G45	16V2000G85	16V2000G86S	12V4000G74S	12V4000G84S	16V4000G74S	16V4000G84S	20V4000G64S	20V4000G74S	20V4000G94S	
Stand-by Power	HP	1,193	1,354	1,495	1,839	2,328	2,561	3,058	3,353	3,674	4,036	4,680	
Prime Power	HP	980	1,118	1,314	-	2,038	2,328	2,709	3,058	3,339	3,674	4,036	
RPM	RPM	1800											
No. of Cylinder	EA	12	16	16	16	12	12	16	16	20	20	20	
Bore x Stroke	mm	130 x 150	130 x 150	130 x 150	135 x 156	170 x 210	170 x 210	170 x 210	170 x 210	170 x 210	170 x 210	170 x 210	
Displacement	cc	23,880	31,840	31,840	35,700	57,200	57,200	76,300	76,300	95,400	95,400	95,400	
Compression Ratio		16.0 : 1	16.0 : 1	16.0 : 1	16.0 : 1	16.4 : 1	16.4 : 1	16.4 : 1	16.4 : 1	16.4 : 1	16.4 : 1	16.4 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)											
Aspiration		Turbocharged & Aftercooler											
Starting System		Electric motor by DC24 battery											
Governor		Electronic type											
Coolant Cap.(SET)	L	90	110	110	188	160	160	175	175	205	205	205	
Lube Oil Capacity	L	77	102	102	114	260	260	300	300	390	390	390	
Fuel Consumption	L/hr	216	240	265	333	404	459	537	609	619	701	878	
DIM	Length	mm	3,900	4,500	4,500	4,550	5,400	5,400	7,341	7,341	8,149	8,149	8,149
	Width	mm	1,448	1,900	1,900	1,900	2,218	2,218	2,377	2,377	2,377	2,377	2,377
	Height	mm	2,182	2,300	2,300	2,411	2,642	2,642	3,285	3,285	3,285	3,285	3,285
	Weight	kg	5,466	6,522	6,675	7,690	12,799	13,082	15,183	15,433	16,182	16,182	20,673
PAD	Length	mm	4,500	5,000	5,000	5,200	6,000	6,000	7,200	7,200	8,000	8,000	8,000
	Width	mm	2,000	2,500	2,500	2,300	2,500	2,500	2,700	2,700	2,700	2,700	2,700
	Height	mm	400	300	300	400	500	500	500	500	500	500	600
D.A	Radiator air flow	m <sup>3</sup> /min	1,080	1,476	1,476	1,709	1,598	1,850	2,141	2,522	2,591	3,643	4,079
	Combustion air flow	m <sup>3</sup> /min	66	84	87	108	138	144	186	192	228	246	270
	E.A(OUT - LET)	m <sup>2</sup>	2.3	3.1	3.1	3.1	3.3	3.9	4.5	5.3	5.4	7.6	8.5
	O.A(IN - LET)	m <sup>2</sup>	2.7	3.7	3.7	3.8	4.1	4.7	5.5	6.5	6.7	9.3	10.4

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

MAN



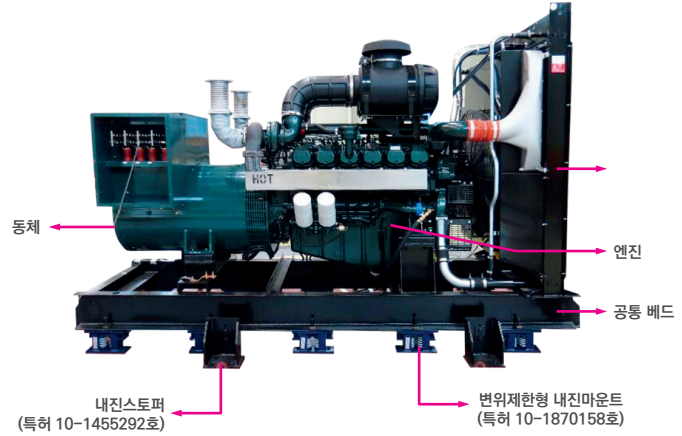
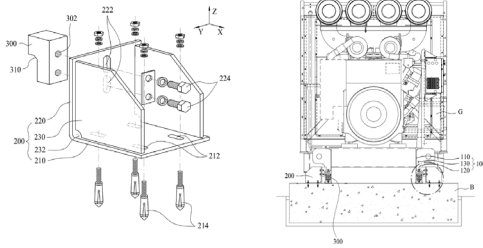
SET MODEL		GNC-400-MA	GNC-500-MA	GNC-595-MA	GNC-650-MA	GNC-700-MA	GNC-1000-MA	
Generator	Stand-by Power	kW	405	525	595	650	730	1,000
		kVA	506	656	743	812	912	1,250
	Prime Power	kW	368	477	540	590	663	909
		kVA	460	596	675	737	828	1,136
	Frequency	Hz	60					
	RPM	RPM	1,800					
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire					
	Insulation Class		F,H CLASS					
	Power Factor		0.8					
	Exciting System		Brushless Self Exciting					
	Bearing		Single Ball Bearing					
	Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600					
Manufacturer		MAN						
Model		D2676LE1/3	D2840LE201/3	D2840LE211/3	D2842LE201/3	D2842LE211/3	D2862LE221/3	
Stand-by Power	HP	600	795	900	975	1,085	1,520	
Prime Power	HP	510	700	765	840	945	1,090	
RPM	RPM	1800						
No. of Cylinder	EA	6	10	10	12	12	12	
Bore x Stroke	mm	126 x 166	128 x 142	128 x 142	128 x 142	128 x 142	128 x 157	
Displacement	cc	12,420	18,270	18,270	21,920	21,920	24,240	
Compression Ratio		15.5 : 1	15.5 : 1	15.5 : 1	15.5 : 1	15.5 : 1	17.0 : 1	
Engine type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)						
Aspiration		Turbocharged & Aftercooler						
Starting System		Electric motor by DC24 battery						
Governor		Electronic type						
Coolant Cap.(SET)	L	58	86	101	98	98	102	
Lube Oil Capacity	L	40	30	30	32	32	102	
Fuel Consumption	L/hr	89	124	139	151	169	219	
DIM	Length	mm	3,250	3,150	3,150	3,620	3,620	3,760
	Width	mm	1,080	1,600	1,600	1,600	1,600	1,542
	Height	mm	1,606	1,990	1,990	1,990	1,990	2,045
	Weight	kg	2,790	2,850	3,410	3,870	3,980	5,053
PAD	Length	mm	3,700	3,700	3,700	4,100	4,100	4,500
	Width	mm	1,400	2,000	2,000	2,000	2,000	2,000
	Height	mm	300	300	300	300	300	400
D.A	Radiator air flow	m <sup>3</sup> /min	334	783	775	850	767	1,283
	Combustion air flow	m <sup>3</sup> /min	31	43	51	48	57	77
	E.A(OUT - LET)	m <sup>2</sup>	0.7	1.6	1.6	1.8	1.6	2.7
	O.A(IN - LET)	m <sup>2</sup>	0.9	2	2	2.1	2	3.2

※ All parameters are for reference only. Final technical data should refer to approval specification for each model.

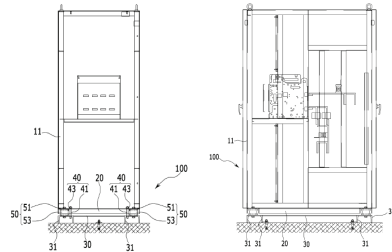
# Vibration-proof Diesel Generator

## 내진형 디젤 발전기

- PATENT NUMBER : 10-1455292
- 특허 번호 : 제 10-1455292호
- TITLE OF THE INVENTION : ANTI-VIBRATION STOPPER
- 발명의 명칭 : 내진 스톱퍼



- APPLICATION NUMBER : 10-2016-0088892
- 출원 번호 : 10-2016-0088892
- TITLE OF THE INVENTION : ELECTRIC PANEL HAVING ASEISMATIC AND ANTI-VIBRATION ARRARATUS.
- 발명의 명칭 : 방진 및 내진 장치가 설치된 전기판넬

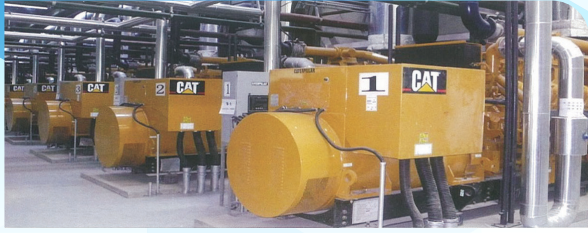


### 내진형 디젤발전기 모델 현황

번호	모델명	용량	비고
1	GNC-PDS50M-RR 외 14개	50kW~400kW	두산엔진(탑재형)
2	GNC-PDS50F-RR 외 20개	50kW~750kW	두산엔진(별치형)
3	GNC-PCU800L-RR 외 9개	800kW~2750kW	커민스엔진 저압
4	GNC-PCU800H-RR 외 9개	800kW~2750kW	커민스엔진 고압
5	GNC-PCA800L-RR 외 9개	800kW~2750kW	캐터필러 저압
6	GNC-PCA800H-RR 외 10개	800kW~2750kW	캐터필러 고압
7	GNC-PCS250M-RR 외 5개	250kW~400kW	스카니아엔진(탑재형)
8	GNC-PCS250F-RR 외 12개	250kW~750kW	스카니아엔진(별치형)
9	GNC-PPK800L-RR 외 5개	800kW~1500kW	퍼킨스엔진 저압
10	GNC-PPK800H-RR 외 5개	800kW~1500kW	퍼킨스엔진 고압
11	GNC-PMT900L-RR 외 9개	900kW~2750kW	MTU엔진 저압
12	GNC-PMT900H-RR 외 9개	900kW~2750kW	MTU엔진 고압
13	GNC-PMI800L-RR 외 8개	800kW~2000kW	미쯔비시엔진 저압
14	GNC-PMI800H-RR 외 8개	800kW~2000kW	미쯔비시엔진 고압

※ 조달 등록된 제품은 총 146개로 본사 영업팀으로 문의 주시기 바랍니다.





# Gas Turbine Generator

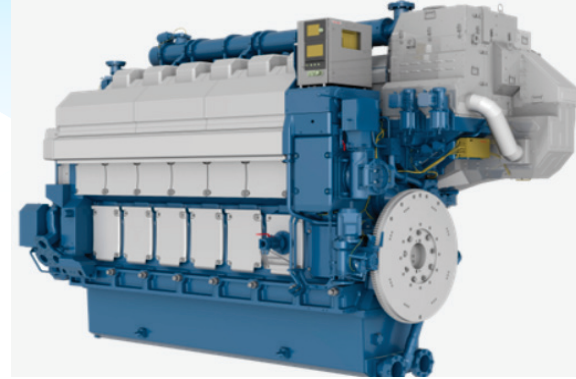
가스 터빈 발전기

## Caterpillar Gas Engine

MODEL		CG260-16	CG260-16	CG260-12	CG170-20	CG170-16	CG170-12	CG132B-16	CG132B-12	CG132B-8	
PERFORMANCE	Electrical power	kW	4,050	4,000	3,000	2,000	1,560	1,200	800	600	400
	Thermal output	kW	3,891	3,866	2,877	1,991	1,589	1,196	856	648	427
	Electrical efficiency	%	44.3	43.8	43.9	43.4	43	43.4	42.6	42.4	42.1
	Thermal efficiency	%	42.6	42.4	42.1	43.2	43.8	43.2	45.5	45.7	45
	Total efficiency	%	86.9	86.2	86	86.6	86.8	86.6	88.1	88.1	87.1
PHYSICAL DATA	Bore/stroke	mm	260/320	260/320	260/320	170/195	170/195	170/195	132/160	132/160	132/160
	Displacement	ℓ	271.8	271.8	203.9	88.5	70.8	53.1	35	26.3	17.5
	Speed	rpm	900	900	900	1,500	1,500	1,500	1,800	1,800	1,800
	Length	mm	9,420	9,420	8,000	7,470	6,640	5,970	4,200	3,830	3,100
	Width	mm	2,790	2,790	2,790	1,710	1,790	1,790	1,780	1,780	1,780
	Height	mm	3,390	3,390	3,390	2,190	2,210	2,210	2,150	2,150	2,150
	Dry weight genset	kg	52,400	52,400	40,650	19,800	14,900	13,000	7,700	7,000	5,720

MODEL		G3520H*	G3520C	G3516H*	G3516C	G3520C	G3512H*	G3516B	G3516	G3516	
PERFORMANCE	Electrical power	kW	2,500	2,082	2,005	1,675	1,626	1,490	1,300	779	755
	Thermal output	kW	2,358	2,662	1,902	2,139	1,765	1,464	1,830	1,087	1,146
	Electrical efficiency	%	45	38.2	44.4	37.7	40.3	44.6	35.6	35	33.9
	Thermal efficiency	%	41	49.4	41.7	48.4	45.2	42	50.2	48.8	51.7
	Total efficiency	%	86	87.6	86.1	86.1	85.5	86.6	85.8	83.8	85.6
PHYSICAL DATA	Bore/stroke	mm	170 / 215	170 / 190	170 / 215	170 / 190	170 / 190	170 / 215	170 / 190	170 / 190	170 / 190
	Displacement	ℓ	97.5	86	78	69	86	59	69	69	78
	Speed	rpm	1,500	1,800	1,500	1,800	1,200	1,500	1,800	1,200	1,200
	Length	mm	7,668	6,367	7,395	5,518	6,312	6,777	4,203	4,913	3,280
	Width	mm	2,173	1,997	2,139	1,830	1,830	1,911	2,155	1,736	1,712
	Height	mm	2,473	2,340	2,402	2,340	2,340	2,328	2,419	1,940	1,860
	Dry weight genset	kg	24,800	17,215	18,315	13,748	17,339	15,740	12,618	12,549	12,549

MODEL		G3520	G3520C	G3516C	G3512	G3512	G3412C	
PERFORMANCE	Electrical power	kW	2,500	2,000	1,500	1,000	750	500
	Thermal output	kW	1,679	2,662	2,005	1,246	1,025	605
	Electrical efficiency	%	37.8	37.3	36.1	35.1	33.4	32.4
	Thermal efficiency	%	45.8	49.4	48.3	49	49.9	43.5
	Total efficiency	%	83.2	86.7	84.4	84.1	83.3	75.9
PHYSICAL DATA	Bore/stroke	mm	170/215	170/190	170/215	170/190	170/190	137/152
	Displacement	ℓ	97.6	86	69	52	52	27
	Speed	rpm	1,800	1,800	1,800	1,800	1,800	1,800
	Length	mm	8,534	6,367	5,553	5,224	5,224	4,140.2
	Width	mm	3,168	1,997	1,828	2,286	2,286	2,057.4
	Height	mm	3,230	2,340	2,340	2,525	2,525	2,616.2
	Dry weight genset	kg	22,000	17,215	14,161	12,500	12,500	6,413

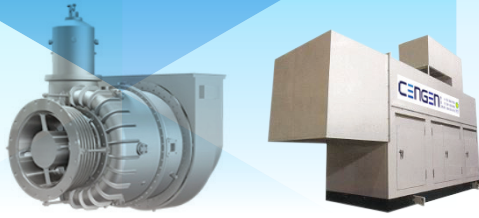


## HiMSEN Gas Fuel

Main Data						Dimensions					
		720rpm		750rpm		Dimension(mm)				Dry Mass(ton)	
		60Hz		50Hz							
		Eng.(kW)	Gen.(kW)	Eng.(kW)	Gen.(kW)	A	B	C	H	Engine	GenSet
H35G	6H35/40G	2,880	2,764	3,000	2,880	5,760	3,130	8,890	3,959	33.7	68.6
	7H35/40G	3,360	3,225	3,500	3,360	6,112	3,374	9,486	4,130	38.6	77.1
	8H35/40G	3,840	3,705	4,000	3,860	6,602	3,594	10,196	4,130	41.5	82.0
	9H35/40G	4,320	4,168	4,500	4,342	7,092	4,097	11,189	4,130	44.6	89.1
H35/GV	12H35/40GV	5,760	5,558	6,000	5,790	6,624	3,760	10,384	4,723	56.0	108.8
	14H35/40GV	6,720	6,518	7,000	6,790	7,295	3,860	11,155	4,723	63.3	121.3
	16H35/40GV	7,680	7,449	8,000	7,760	7,914	3,479	11,393	4,723	69.1	130.9
	18H35/40GV	8,640	8,380	9,000	8,730	8,585	3,859	12,444	4,794	76.3	141.2
	20H35/40GV	9,600	9,312	10,000	9,700	9,344	3,659	13,003	4,794	84.0	153.9
H54GV	12H54GVTSTC	16,800	16,380	16,800	16,380	12,511	4,638	17,149	7,994	294.0	381.0
	14H54GVTSTC	19,600	19,110	19,600	19,110	13,661	4,582	18,243	7,994	324.0	421.0
	16H54GVTSTC	22,400	21,840	22,400	21,840	15,086	4,757	19,843	8,383	361.1	467.0

## HiMSEN Gas Fuel

Main Data						Dimensions					
		720rpm		750rpm		Dimension(mm)				Dry Mass(ton)	
		60Hz		50Hz							
		Eng.(kW)	Gen.(kW)	Eng.(kW)	Gen.(kW)	A	B	C	H	Engine	GenSet
H27DF	6H27DF	1,710	1,624	1,860	1,767	4,414	2,262	6,676	2,835	21.2	30.8
	7H27DF	1,995	1,905	2,170	2,072	4,794	2,262	7,056	3,241	23.5	34.9
	8H27DF	2,280	2,177	2,480	2,368	5,311	2,340	7,651	3,371	25.1	40.5
	9H27DF	2,565	2,462	2,790	2,678	5,691	2,490	8,181	3,371	27.2	46.0
H35DF	6H35/40G	2,880	2,764	2,880	2,764	5,760	3,130	8,890	4,367	34.7	69.6
	7H35/40G	3,360	3,225	3,360	3,225	6,112	3,374	9,486	4,583	39.6	78.1
	8H35/40G	3,840	3,705	3,840	3,705	6,602	3,594	10,196	4,583	42.5	83.0
	9H35/40G	4,320	4,168	4,320	4,168	7,092	4,097	11,189	4,583	45.6	90.1
H35DFV	12H35DFV	5,760	5,558	5,760	5,558	6,624	3,760	10,384	4,723	58.0	110.8
	14H35DFV	6,720	6,518	6,720	6,518	7,295	3,860	11,155	4,723	65.3	123.3
	16H35DFV	7,680	7,449	7,680	7,449	7,914	3,479	11,393	4,723	71.1	132.9
	18H35DFV	8,640	8,380	8,640	8,380	8,585	3,859	12,444	4,794	78.3	143.2
	20H35DFV	9,600	9,312	9,600	9,312	9,344	3,659	13,003	4,794	86.0	155.9
H54DFV	12H54DFV TSTC	16,800	16,380	16,800	16,380	12,511	4,638	17,149	7,994	303.0	391.0
	14H54DFV TSTC	19,600	19,110	19,600	19,110	13,661	4,582	18,243	7,994	335.0	431.0
	16H54DFV TSTC	22,400	21,840	22,400	21,840	15,086	4,757	19,843	8,383	373.0	480.0



# Gas Turbine Generator

가스 터빈 발전기

NIIGATA

SET MODEL		CNT-500ERA	CNT-625ERA	CNT-750ER	CNT-1000ER	CNT-1250E	CNT-1500E	CNT-2000E		
Generator	Rated output	kVA	500	625	750	1,000	1,250	1,500	2,000	
		kW	400	500	600	800	1,000	1,200	1,600	
	Voltage	V	200-6600							
	Frequency	Hz	50/60							
	Rotating Speed	RPM	1500/1800							
	Pole, Phase		4Pole, 3Phase							
	Power Factor		0.8							
	Excitation		AC-excitation / brushless excitation							
	Start-up time		within 40 seconds							
	Load input allowable		100% (resistance load)							
	Instant. frequency fluctuation variability ratio		± within 4% (100% load input and shutoff)							
	Steady frequency fluctuation variability ratio		± within 0.3%							
	Stabilization time		within 8 sec							
	Noise (Machine side)	dB(A)	approx. 85							
Noise (Exhaust silencer)	dB(A)	approx. 90								
Gas turbine	Type	simple open cycle single-shaft type								
			RGT5	RGT8	NGT2A-S	NGTSB-S				
	Compressor		1 stage centrifugal type	2 stage centrifugal type						
	Turbine		1 stage radial type	3 stage axial type						
	Combustor		Single can type							
	Reduction gear		Parallelism gear mechanism				Planetary gear mechanism			
	Governor		Electronic type							
	Rated Output	PS	600	750	900	1,200	1,500	1,800	2,400	
		kW	441	552	662	883	1,103	1,324	1,765	
	Main shaft rotating	RPM	28,800		26,500		22,000			
	Output shaft rotating speed	RPM	1500/1800							
	Fuel		Diesel oil							
	Fuel Consumption	L/Hr	293	340	384	429	516	561	683	
	Lube Oil Capacity	L	60		80		65		90	
DIM	Length	mm	4,900	4,900	5,350	5,350	6,000	6,000	6,500	
	Width	mm	1,450	1,450	1,450	1,570	1,630	1,630	1,600	
	Height	mm	2,800	2,800	3,100	3,100	3,400	3,400	3,500	
	Weight	kg	7,075	7,475	9,690	10,275	10,800	11,600	13,600	
PAD	Length	mm	5,500	5,500	6,000	6,000	6,600	6,600	7,200	
	Width	mm	2,000	2,000	2,000	2,000	2,200	2,200	2,200	
	Height	mm	300	300	400	400	400	400	400	
D.A	Total Intake Air Flow	m³/min	404	416	574	600	728	751	885	
	Total Exhaust Air Flow	m³/min	159	171	234	260	276	299	411	
	O.A (IN-LET)	m²	1.0	1.0	1.4	1.4	1.7	1.8	2.1	
	E.A (OUT-LET)	m²	0.4	0.4	0.6	0.6	0.7	0.7	1.0	

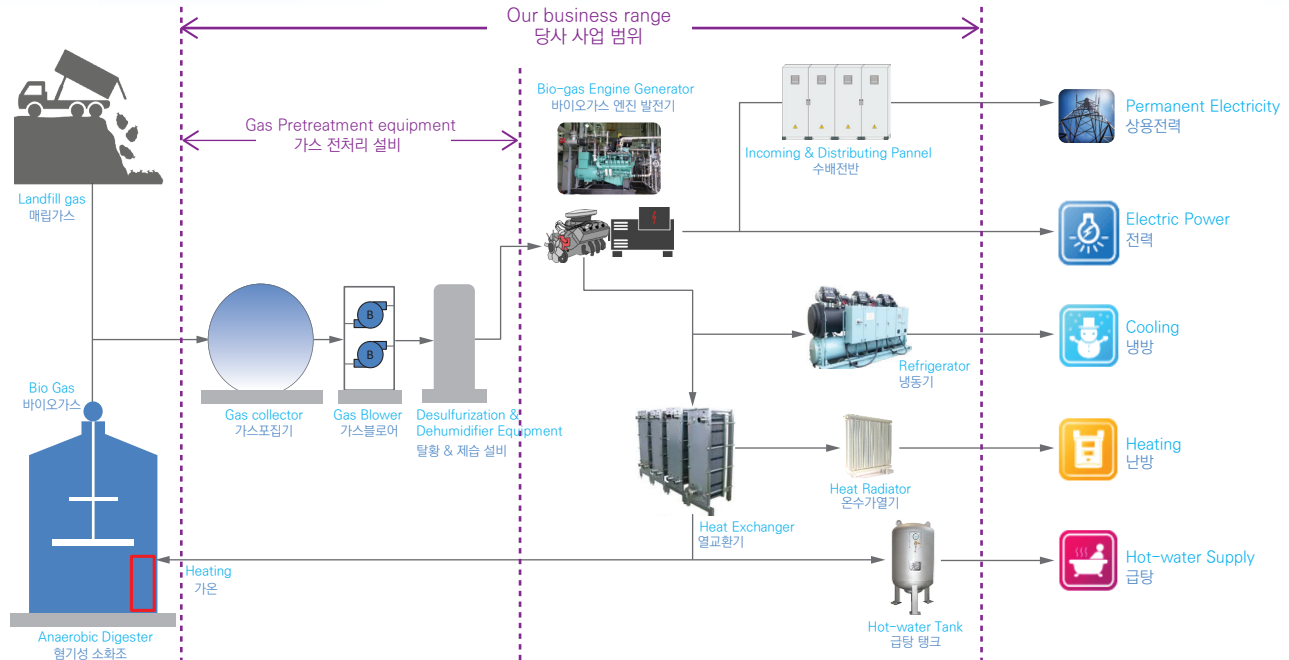
# NIIGATA



SET MODEL		CNT-2500E	CNT-3000EA	CNT-3250E	CNT-4000E	CNT-5000EN	CNT-6000EN	CNT-6500EN	
Generator	Rated output	kVA	2,500	3,000	3,250	4,000	5,000	6,000	6,500
		kW	2,000	2,400	2,600	3,200	4,000	4,800	5,200
	Voltage	V	380 ~ 6600			3300 ~ 6600			
	Frequency	Hz	50/60						
	Rotating Speed	RPM	1500/1800						
	Pole, Phase		4Pole, 3Phase						
	Power Factor		0.8						
	Excitation		AC-excitation / brushless excitation						
	Start-up time		within 40 seconds						
	Load input allowable		100% (resistance load)						
	Instant. frequency fluctuation variability ratio		± within 4% (100% load input and shutoff)						
	Steady frequency fluctuation variability ratio		± within 0.3%						
	Stabilization time		within 8 sec						
	Noise (Machine side)	dB(A)	approx. 85						
	Noise (Exhaust silencer)	dB(A)	approx. 90						
Gas turbine	Type	simple open cycle single-shaft type							
		NGT3A-S	NGT3B-S	NGT3B-S/H	NGT2B-T	NGT3A-T	NGT3B-T	NGT3B-T/H	
	Compressor	2 stage centrifugal type							
	Turbine	3 stage axial type							
	Combustor	Single can type							
	Reduction gear	Planetary gear mechanism							
	Governor	Electronic type							
	Rated Output	PS	3,000	3,600	3,900	4,800	6,000	7,200	7,800
		kW	2,207	2,648	2,868	3,530	4,413	5,296	5,736
	Main shaft rotating	RPM	17,800			22,000	17,800		
	Output shaft rotating speed	RPM	1500/1800						
	Fuel		Diesel oil						
	Fuel Consumption	L/Hr	957	1,075	1,201	1,365	1,835	2,151	2,402
	Lube Oil Capacity	L	150			182	250		
DIM	Length	mm	7,100	7,300	7,400	7,350	8,340	8,950	9,050
	Width	mm	2,140	2,140	2,140	2,500	2,780	2,780	2,780
	Height	mm	4,100	4,100	4,100	4,000	5,100	5,300	5,300
	Weight	kg	19,690	20,160	22,240	26,910	36,520	39,060	44,780
PAD	Length	mm	7,700	7,900	8,000	8,000	9,400	9,600	9,600
	Width	mm	2,800	2,800	2,800	3,100	3,400	3,400	3,400
	Height	mm	400	400	500	500	500	600	600
D.A	Total Intake Air Flow	m³/min	1,213	1,270	1,359	1,666	2,263	2,435	2,658
	Total Exhaust Air Flow	m³/min	521	578	593	719	880	1,052	1,126
	O.A (IN-LET)	m²	2.9	3.0	3.2	4.0	5.4	5.8	6.3
	E.A (OUT-LET)	m²	1.2	1.4	1.4	1.7	2.1	2.5	2.7

# Eco-friendly Generation

친환경 발전

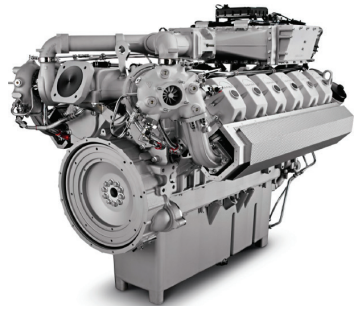


## RECORDS 실적

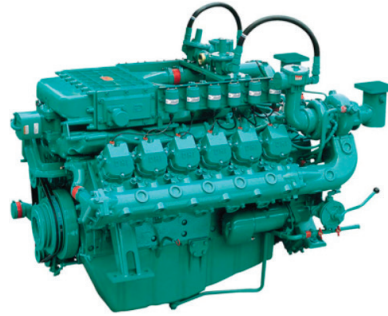
발주처 Client	현장 Site	엔진 Engine	용량(kW) Capacity(kW)	수량 Q'ty	비고 Remarks
수도권매립지 관리공사 Sudokwon Landfill Site Management Corporation	수도권매립지 Metropolitan-landfill	Doosan(gas engine)	400	2	국내최초 국산엔진 매립가스발전 The first Landfill gas power generation in Korea
수도권매립지 관리공사 Sudokwon Landfill Site Management Corporation	수도권매립지 Metropolitan-landfill	Doosan(gas engine)	400	3	바이오가스 발전 Bio-gas power generation
수도권매립지 관리공사 Sudokwon Landfill Site Management Corporation	수도권매립지 Metropolitan-landfill	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation
동서발전 KOREA EAST WEST POWER Co., Ltd.	수도권매립지 Metropolitan-landfill	Doosan(gas turbine)	5,000	1	바이오가스 발전 Bio-gas power generation
에코에너지홀딩스 Eco Energy Holdings Co., Ltd.	마산, 구미 매립지 Masan, Gumi-landfill	Doosan(gas engine)	450	3	매립가스발전 Landfill-gas power generation
한국기계연구원 Korea Institute of Machinery & materials	대전 신대동 Daejeon-city, Sindae-dong	Doosan(gas engine)	100	1	매립가스발전 Landfill-gas power generation
백산엔지니어링 ByuckSan Engineering	청주읍폐수처리장 Cheongju-Waste water treatment plant	Doosan(gas engine)	360	2	바이오가스 발전 Bio-gas power generation
백산엔지니어링 ByuckSan Engineering	청주읍폐수처리장 Cheongju-Waste water treatment plant	Doosan(gas engine)	150	1	바이오가스 발전 Bio-gas power generation
청주시 Cheong-Ju	청주매립지 Cheongju-landfill	Doosan(gas engine)	400	2	매립가스 발전 Landfill Gas power generation
청주시 Cheong-Ju	청주친환경에너지타운 Cheongju-eco friendly energy town	Man D&T(gas engine)	500	2	바이오가스 발전 Bio-gas power generation
동두천시 DongDuCheon	동두천 하수종말처리장 Dongducheon-disposal plant of sewage	Doosan(gas engine)	300	2	바이오가스 발전 Bio-gas power generation
동두천시 DongDuCheon	동두천 하수종말처리장 Dongducheon-disposal plant of sewage	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation
김해시 Gimhae	김해 읍폐수처리장 Gimhae-Waste water treatment plant	Man D&T(gas engine)	500	2	바이오가스 발전 Bio-gas power generation
김해시 Gimhae	장유.화목 하수처리장 Jangyu, Hwamok-sewage treatment plant	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation
한국환경공단(이천) Korea Environment Corporation (Icheon)	이천 바이오가스 발전소 Icheon Biogas Plant	Man D&T(gas engine)	250	1	바이오가스 발전 Bio-gas power generation
순천시 Suncheon	순천 생활폐기물매립장 Suncheon-household waste site	Doosan(gas engine)	300	1	매립가스 발전 Landfill Gas power generation
여주시 Yeosu	여수 읍폐수처리장 Yeosu-disposal plant of sewage	Doosan(gas engine)	300	1	바이오가스 발전 Bio-gas power generation
서산시 Seosan	서산 하수종말처리장 Seosan-disposal plant of sewage	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation

## RECORDS 실적

발주처 Client	현장 Site	엔진 Engine	용량(kW) Capacity(kW)	수량 Q'ty	비고 Remarks
속초시 SokCho	속초 바이오가스발전소 SokCho Biogas Plant	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation
속초시 Sok Cho	속초 바이오가스발전소 SokCho Biogas Plant	Doosan(gas engine)	450	1	바이오가스 발전 Bio-gas power generation
화성시 Hwaseong	화성 바이오가스발전소 Hwaseong Biogas Plant	Man D&T(gas engine)	500	1	바이오가스 발전 Bio-gas power generation
인천환경공단 Environmental Corporation of Incheon	인천 바이오가스발전소 Incheon Biogas Plant	Doosan(gas engine)	250	1	바이오가스 발전 Bio-gas power generation



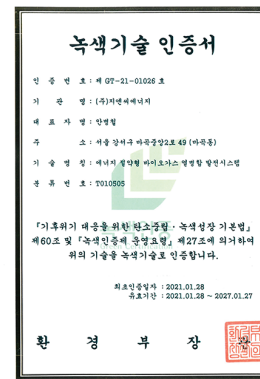
Bare Engine(MAN Diesel & Turbo)



Bare Engine(Doosan Infracore)

### Benefits at a glance

- Proven and fully developed
- Flexibility and individuality
- Robust and compact
- Efficient
- Low emissions



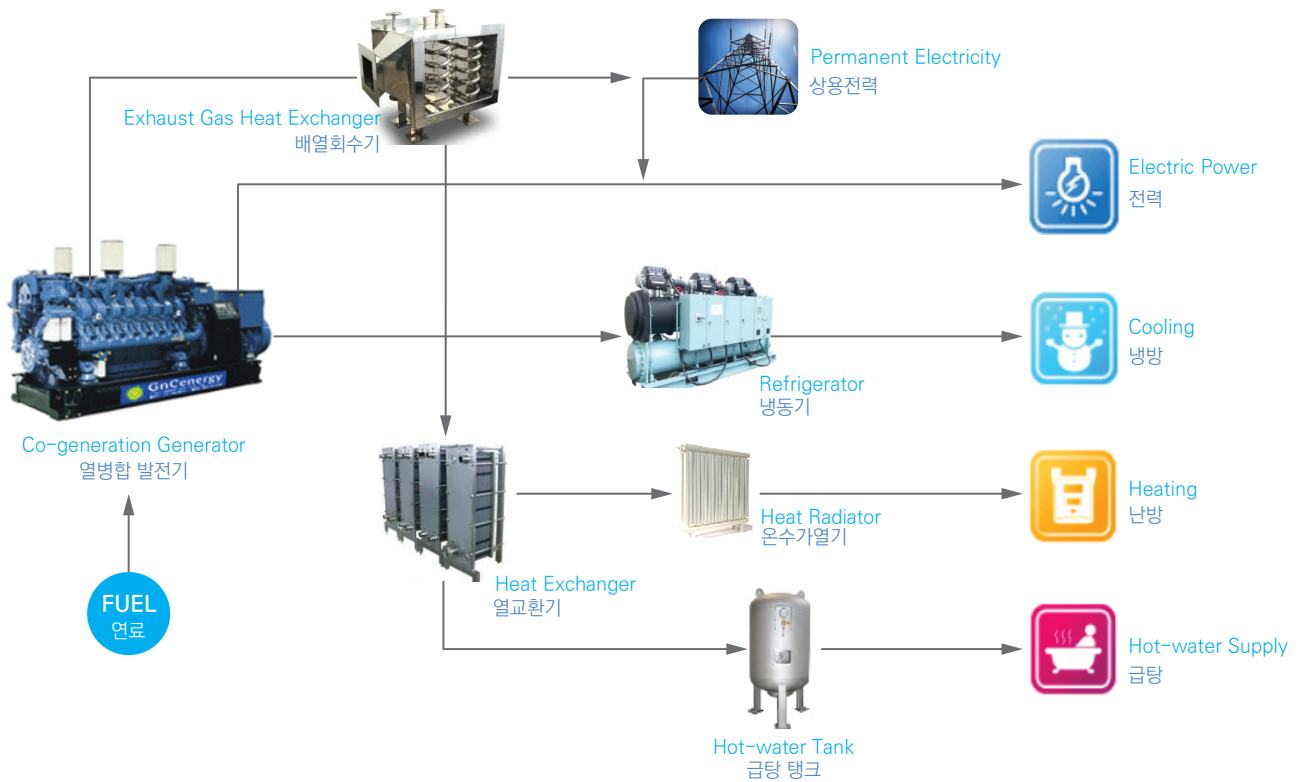
## Model Line-up

Model	Bare Engine	Cylinder	Displacement	Bore x Stroke (mm)	Output(kW)	
					@1800rpm(60Hz)	@1500rpm(50Hz)
BG075D	GE06TI	IN-6	5.8	102 x 118	90	75
BG125D	GE08TI	IN-6	8.1	111 x 139	125	105
BG180D	GE12TI	IN-6	11.1	123 x 155	180	150
BG200D	GV158TI	V-8	14.6	128 x 142	200	170
BG300D	GV180TI	V-10	18.3	128 x 142	300	250
BG400D	GV222TI	V-12	21.9	128 x 142	360	300
BG500M	E3262-LE202	V-12	25.8	132 x 157	530	450



# Co-generation EPC

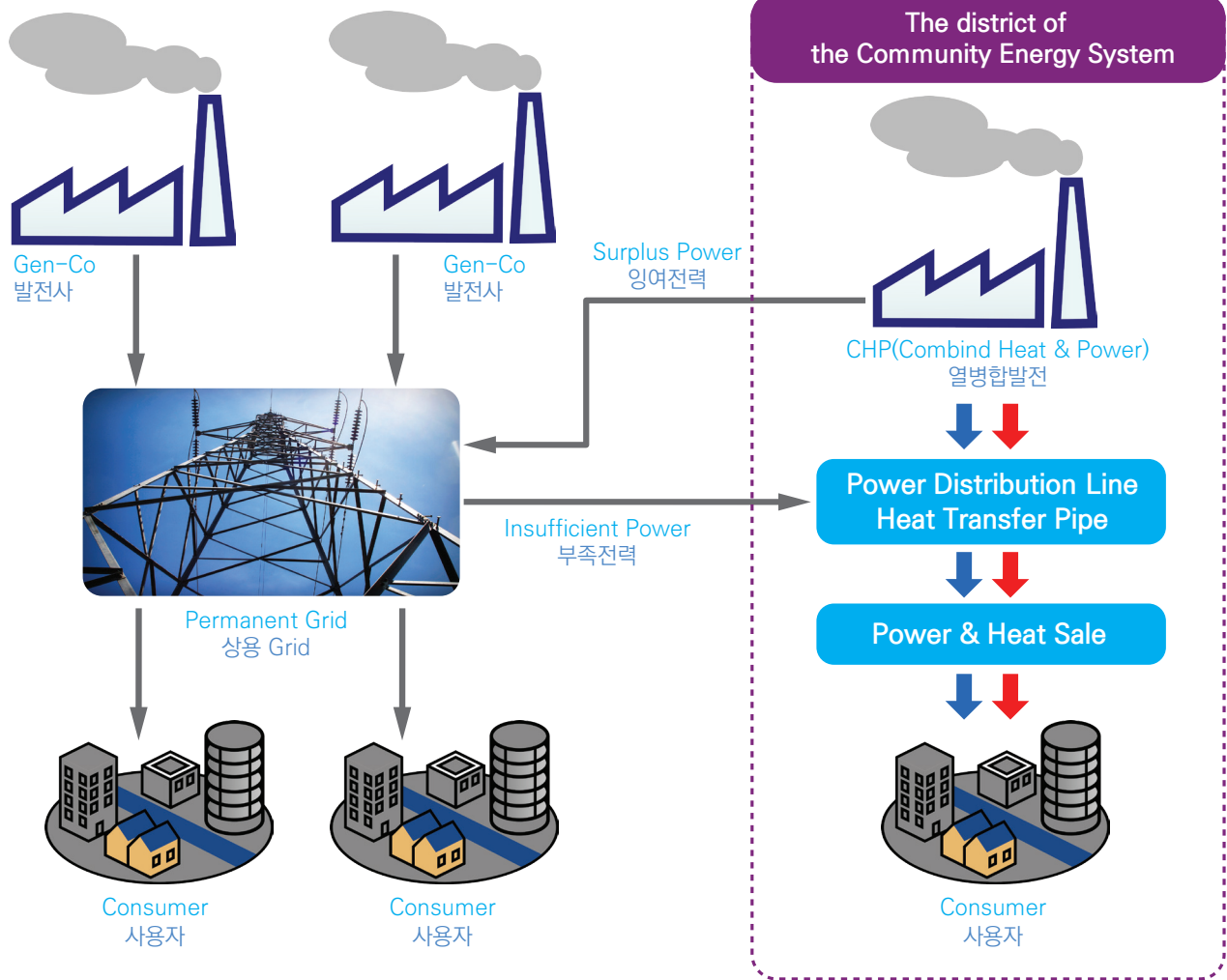
열병합 발전 EPC



## Co - generation EPC Scope 열병합 발전 EPC 범위

- Engine Generator 엔진 발전기
- Heat Exchanger 열교환기
- Auxiliaries 부대품
- Synchro and Control Panel 병렬 및 제어 판넬
- Incoming and Distributing Panel 수배전반





**Central Post Office**

중앙우체국

Gas-turbine Co-Generation,  
for the first time in Korea  
국내 최초 가스터빈 열병합  
(1,040kW x 2set)



**Time Square(K-project)**

타임스퀘어(K-프로젝트)

Gas-engine Co-Generation  
가스엔진 열병합  
(1,635kW x 3set)



**Sin-jeong CES**

신정 CES

Gas-engine Co-Generation  
가스엔진 열병합  
(3,000kW x 2set)



**Cheonan Cheongsu CES**

천안청수 CES

Gas-engine Co-Generation  
가스엔진 열병합  
(8,430kW x 3set)

# Supply Scope

## 공급 범위

### Standard 표준

- Generator set(w/ base frame & radiator)
- Silencer(industrial type)
- Flexible connector
- Battery(lead-acid type)
- Filters(Fuel, Lube oil etc. spare portion)

발전기세트(베이스프레임 및 라디에터 포함)

소음기(산업용)

플렉시블 연결자

배터리(연축전지)

필터류(연료, 오일 등 예비품분)



### Options 선택

- Fuel oil Daily Tank
  - Free standing type  Mounted base type
- Exhaust reduction system
- Enclosure
  - Weather-proof  Weather&sound-proof

연료탱크

자립형  탑재형

배기가스 저감장치

엔클루저

옥외형  옥외 방음형



### Control panel 운전반

- Mounted Engine Instrument Panel
- Mounted Generator set Panel
- Free-standing Generator set Panel

탑재 엔진 판넬

탑재 발전기 판넬

별치 발전기 판넬



탑재 엔진 판넬 (기계식 | 전자식)



탑재 발전기 판넬 (기계식 | 전자식)



별치 발전기 판넬

# Installation Information

## 설치 정보

### Gen. Foundation 발전기 기초대

If a concrete foundation is required, minimum design guidelines include :

- Strength must support wet weight of units plus dynamic loads.
- Outside dimensions exceed that of the generator set a minimum of 300mm(1ft) on all sides.
- Depth sufficient to attain a minimum weight equal to generator set wet weight (only if large mass, ie., inertia block, is specified for vibration control)

$$FD = W / (D \times B \times L)$$

FD = foundation depth, m(ft)

W = total wet weight of generator set, kg(lb)

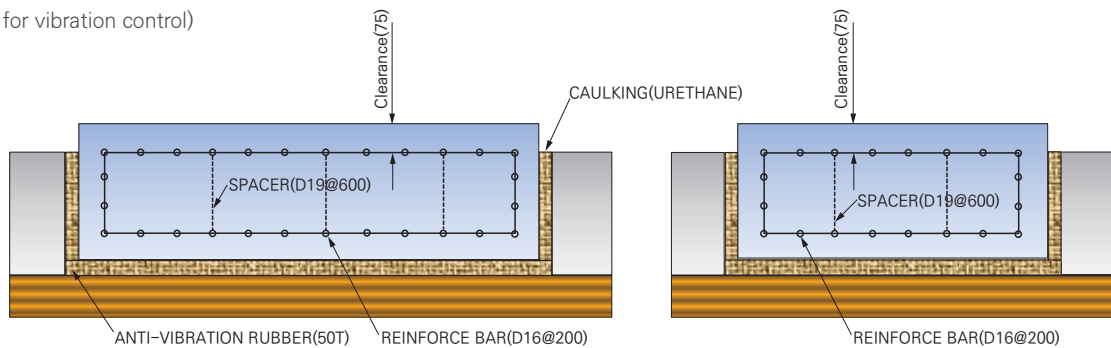
D = density of concrete, kg/m<sup>3</sup>(lb/ft<sup>3</sup>)  
note : use 2403 for metric units and 150 for English units.

B = foundation width, m(ft)

L = foundation length, m(ft)

콘크리트 기초대가 사용될 경우, 최소 설계 기준은 다음과 같다 :

- 강도는 유니트의 습중량에 동하중을 더한 하중을 견뎌야 한다.
- 외곽 치수는 발전기의 모든 외곽에서 300mm(1ft)를 벗어나야 한다.
- 깊이는 발전기세트의 습중량과 최소 동등 이상의 중량이 되어야 한다.



### Miscellaneous Inform. 기타 정보

CAPACITY(kW)	EXHAUST GAS PIPE SIZE	SPRING ISOLATER	STARTING BATTERY
3,000 kW Class	20 INCH(500A)	2,000 kg x 16EA	DC24V, 1200AH (DC12V - 200AH x 6EA)
2,500 kW Class	20 INCH(500A)	2,000 kg x 14EA	
2,250 kW Class	16 INCH(400A)	2,000 kg x 12EA	DC24V, 800AH (DC12V - 200AH x 4EA)
2,000 kW Class	16 INCH(400A)	2,000 kg x 12EA	
1,750 kW Class	16 INCH(400A)	2,000 kg x 12EA	
1,500 kW Class	14 INCH(350A)	2,000 kg x 10EA	
1,250 kW Class	12 INCH(300A)	1,500 kg x 10EA	DC24V, 400AH (DC12V - 200AH x 2EA)
1,000 kW Class	10 INCH(250A)	1,500 kg x 10EA	
900 kW Class	10 INCH(250A)	1,000 kg x 10EA	
750 kW Class	8 INCH(200A)	750 kg x 10EA	
650 kW Class	8 INCH(200A)	750 kg x 10EA	
500 kW Class	6 INCH(150A)	500 kg x 10EA	DC24V, 400AH (DC12V - 200AH x 2EA)
400 kW Class	6 INCH(150A)	500 kg x 10EA	
300 kW Class	5 INCH(125A)	500 kg x 6EA	
200 kW Class	4 INCH(100A)	500 kg x 6EA	
100 kW Class	3 INCH( 80A)	500 kg x 6EA	

# Generator Set Power Ratings

## 발전기 출력 정격

### 비상 출력(ESP)

#### 정격 정의 : 변동 부하, 연간 200시간 제한

이 정격은 정상적으로 이용 가능한 전기 공급 망 또는 그리드(grid)가 고장나는 장소에 부하가 변동하며 운전 시간이 연간 200시간 미만일 경우의 비상출력 적용으로 사용되는 발전기에 사용 가능하다.

### 상용 출력 (PRP)

#### 정격 정의 : 변동 부하, 무제한 운전 시간

이 정격은 공급망이나 그리드 이용이 가능하지 못한 장소에 일년 365일, 하루 24시간 전력을 공급하기 위하여 사용되는 발전기세트에 사용 가능하다. 평균 출력은 상용출력(PRP)의 70%이다. 12시간중 최대 1시간 기술적인 목적으로 10% 과부하가 가능하다. 과부하 운전은 연간 50시간을 초과해서는 안된다.

예 : 도서지역이나 고립지에 위치한 발전기세트

### 연속 출력 (COP)

#### 정격 정의 : 일정 부하, 무제한 운전 시간

이 정격은 모선 측, 국가 전력 공급 망(network) 또는 그리드(grid)와 병렬되는 발전기세트로 일년 365일, 하루 24시간 100%로 운전되며 잉여 전력은 그리드(grid)로 내보내어지는 발전기세트에 적용 가능하다.

예 : 열병합 발전기세트(Combined Heat & Power (CHP) )

☞ 상기 정격은 ISO8528 및 ISO3046에 따릅니다.

### EMERGENCY STANDBY POWER (ESP)

#### Rating definition: variable load : limited to 200 hours per year

This rating is appropriate for a generator set used in standby power applications where the normally available electrical supply network or grid fails and where it has been determined that the load will be varying and the running hours will be less than 200 hours a year.

### PRIME POWER (PRP)

#### Rating definition: variable load : unlimited running hours

This rating is appropriate for a generator set used to supply power 24 hours a day, 365 days a year where there is no supply network or grid available. Average power output is 70% of the prime power rating. With 10% overload capability for technical purposes for a maximum of one hour in twelve. Overload operation cannot exceed 50 hours per year.

Example: Generator set located on an off-shore island or in the middle of a desert.

### CONTINUOUS POWER (COP)

#### Rating definition: constant load : unlimited running hours

This rating is appropriate for a generator set paralleled with an infinite bus e.g. a national electrical supply network or grid where the generator set is run at 100% load, 24 hours a day, 365 days a year and any surplus power is exported into the grid.

Example: Combined Heat & Power (CHP) generator set.

☞ Ratings are in accordance with ISO8528, ISO3046

### Unit Conversions

1Hp = 0.746kW	1PS = 0.735kW	1HP = 1.0138PS	1PS = 0.986HP
1CMM = 1m <sup>3</sup> /min	1CFM = 35.3m <sup>3</sup> /min	1kWh = 860kcal	1kWh = 3,412BTU
1kWh = 3,600 KJ	1kgf/m <sup>2</sup> = 98kPa	1g/PS-H = 1.36g/kW-h	1Liter = 0.833kg(경유)



지엔씨에너지

## 디젤엔진 비상발전기 30년 사용을 위한 유지관리 프로그램

### 비상발전기 유지보수 왜 필요할까요?

“ 전원이 안정적인 대한민국에서의 비상발전기는 다른 전기 장비(UPS, 배전반 등)에 비해 관리가 소홀합니다. 이로 인해 방치되는 비상발전기는 정작 필요시(화재, 정전) 제 기능을 하지 못하는 상황이 발생할 수 있으며 고장 수리 시 예상치 못한 큰 지출이 필요합니다. ”

#### 디젤엔진 발전기에 대한 오해

1. 사용하지 않는 비상발전기는 소모품 교체 및 유지보수가 필요 없다.

디젤엔진 발전기는 자동차와 마찬가지로 운전 (운행) 하지 않더라도 기본 소모품에 대한 교체가 필요합니다. (배터리, 냉각수, 엔진오일, 필터류 등) 또한 소모품 교체와 함께 전문가의 점검이 필요합니다. (소음 및 진동, 매연 상태, 냉각계통 상태 등)

2. 자체적으로 기본 소모품 교체 및 시운전을 진행하며 관리 중으로 전문가의 점검은 필요하지 않다.

비상발전기의 소모품 교체와 시운전을 통하여 관리를 하고 있다 하더라도 전문가의 점검은 반드시 필요합니다. 디젤엔진 발전기의 기본 소모품 외에도 연료 상태 점검, 라디에이터 오염 상태 점검, 운전반 점검, 볼트 조임 상태 점검 등 전문가가 필요한 점검 항목이 있으며, 이를 소홀히 할 시 발전기 기동 불능 및 안전사고를 초래 할 수 있습니다.

#### 디젤엔진 발전기 방치로 인한 사고사례



사례 1 : 냉각수방치로 인한 히터 및 라디에이터 손상교체



사례 2 : 팬벨트 점검 미흡으로 벨트 풀림으로 인한 파손, 탈락



사례 3 : 진동으로 인한 볼트 풀림으로 쇼트, 먼지 방치로 인한 화재 발생



지엔씨에너지는 30년 전통의 국내 비상발전기 업체로서 최고의 기술력과 서비스정신으로 고객과 함께 성장하여 인류에 공헌하는 기업입니다.

문의전화 :

지엔씨에너지 CS본부 / CS 영업팀 : 직통전화 02-2164-7200 (내선번호 2)

# 소모품교체, 유지보수의 종류 및 방법

## 기본 소모품 교체 품목 및 교환주기

교체 품목		교환 주기	교체 품목		교환 주기
1	냉각수	1,000시간또는3년	6	엔진오일필터	250시간또는3년
2	RADIATOR 청소	1,000시간또는10년	7	엔진오일	250시간또는3년
3	RADIATORFANBELT	500시간또는10년	8	에어필터	250시간또는3년
4	연료필터	250시간또는3년	9	배터리	500시간또는3년
5	냉각수히터및호스	250시간또는3년	10	배터리충전기	고장시교환

## 정기 유지보수 점검의 종류 및 방법

점검 내용	비고	점검 내용	비고	점검 내용	비고
엔진점검 : 윤활유 레벨 점검	상태점검	엔진의 손상, 누설, 조임의 풀림, 벨트의 마모여부에 대한 육안 검사 및 비정상적인 소음 점검	상태점검	일간, 월간 점검 항목(24가지) 진행	
엔진점검 : 냉각수 레벨 점검	상태점검			팬 허브 점검	상태점검
연료 레벨 점검	상태점검	냉각수 호스 및 각종 라인 점검	상태점검	드라이브 풀리 점검	상태점검
연료 누유 점검	상태점검	냉각수 레벨 점검	상태점검	냉각수 펌프 점검	시운전
엔진오일 누유 점검	상태점검	부동액 및 부식방지제 농도 점검	상태점검	에어필터 크랭크케이스 브리더 청소 또는 엘리먼트교체	상태점검 청소
냉각수 누수 점검	상태점검	팬 벨트 상태 및 장력 점검	상태점검	가버너 점검	시운전
냉각 계통 검사	상태점검	에어필터 공기 저항 점검	상태점검	연료라인 연결 및 부식상태 점검	상태점검
에어 크리너 오염상태 점검	상태점검	소음기 침전물 및 배수 점검	상태점검	연료탱크내 침전물 점검	상태점검
엔진 시동 및 비정상 소음 점검	상태점검	충전계통 누전 점검	상태점검	엔진 및 발전기 보호장치 작동 점검	시운전
냉각수 히터 운전상태 점검	상태점검	발전기 냉각용 급,배기 저항 점검	상태점검	권선 및 전기적 결선상태 점검	상태점검
시동용 배터리 점검 (전압, 충전상태)	상태점검	무부하 시운전 점검 (전압, 전류, 주파수, 병렬속도 등)	시운전	베어링 구리스 주입 및 점검	상태점검 주입
배터리 충전기 점검	상태점검			계기류 정상 동작 상태 점검	시운전
엔진 판넬 점검 (선택스위치, 회로전원 등)	상태점검			발전기 부하 시운전	로드뱅크 필요
연료 탱크와 연료 필터 및 유수 분리기의 침전물, 수분점검 및 배출	상태점검				



소모품 교체 및 유지보수 서비스 진행  
최상의 컨디션 유지

최대 30년 최고성능 유지

지엔씨에너지와 함께하는  
안정적인 "30년 운영"

# Company Culture

기업 문화

## 꿈을 키우는 지엔씨에너지

### 소외계층 후원과 자원봉사 참여

1993년 설립 이후, 갈 곳 없는 독거노인, 치매노인 및 장애인 등 소외계층을 후원하며, 매년 전국 각지의 자원봉사에 적극 참여하고 있습니다.

### 첨단 기술 개발 및 유능한 인재 개발 육성 사업

We 우리사주 제도를 통한 주인 의식 고취와, 꿈과 희망을 공유하는 기업을 지향하며, 끊임없는 연구 개발 및 교육프로그램을 통한 인재 개발 육성에 투자를 아끼지 않고 있습니다.



## GnCenergy growing the dreams

### Participation in voluntary support and support for the underprivileged

Since its foundation in 1993, we have been supporting the underprivileged, including the elderly living alone, the elderly with dementia and the disabled, and actively participating in volunteer activities around the country every year.

### High-tech development and talented human resource development business

We aim to become a company that shares our dreams and hopes with our employees through our employee stock ownership system. We are investing in endless research and development, training and development of human resources.



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