

Generators Information Guide



For Anytime & Anywhere,
ONE STOP POWER SOLUTION

Generators Information Guide

KOMAC Generators provides the system to promptly supply power,
and supports design, installation, and maintenance of power supply.

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KOMAC
Technology with Passion



ENGINE



ALTERNATOR



ATS PANEL



KDGC Series _ CUMMINS ENGINE

60HZ

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGC20-2	KDGC20S-2	25	20	23	18	4B3.9-G2	1950X750X1420	765	2600X1130X1537	1320
KDGC30-2	KDGC30S-2	38	30	34	27	4BT3.9-G2	2080X750X1420	800	2600X1130X1537	1360
KDGC38-2	KDGC38S-2	48	38	43	35	4BT3.9-G2	2080X750X1420	800	2600X1130X1537	1360
KDGC60-2	KDGC60S-2	75	60	68	55	4BTA3.9-G2	2200X805X1450	920	2800X1130X1580	1480
KDGC75-2	KDGC75S-2	94	75	85	68	4BTA3.9-G11	2200X805X1450	1000	2800X1130X1580	1530
KDGC100-2	KDGC100S-2	125	100	114	91	6BT5.9-G2	2475X835X1470	1185	3200X1130X1715	1680
KDGC120-2	KDGC120S-2	150	120	136	109	6BTA5.9-G2	2475X835X1470	1280	3200X1130X1715	1680
KDGC150-2	KDGC150S-2	188	150	170	136	6BTAA5.9-G12	2650X850X1470	1420	3200X1130X1715	1820
KDGC190-2	KDGC190S-2	238	190	216	173	6CTAA8.3-G2	2750X1070X1590	1730	3600X1330X2065	2360
KDGC228-2	KDGC228S-2	286	228	260	208	6LTAA8.9-G2	2890X1070X1780	1900	3600X1330X2065	2400
KDGC250-2	KDGC250S-2	313	250	284	227	6LTAA8.9-G3	2890X1070X1780	1900	3600X1330X2065	2400
KDGC310-2	KDGC310S-2	388	310	352	282	QSM11-G2	3420X1050X1650	2650	4300X1422X2175	3520
KDGC350-2	KDGC350S-2	438	350	398	318	6ZTAA13-G3	3390X1360X2010	3220	4600X1622X2530	4950
KDGC390-2	KDGC390S-2	488	390	443	355	6ZTAA13-G2	3390X1360X2010	3220	4600X1622X2530	4950
KDGC400-2	KDGC400S-2	500	400	455	364	QSZ13-G2	3390X1360X2010	3220	4600X1622X2530	4950
KDGC420-2	KDGC420S-2	525	420	477	382	QSZ13-G5	3390X1360X2010	3220	4600X1622X2530	4950
KDGC450-2	KDGC450S-2	563	450	511	409	QSZ13-G3	3390X1360X2010	3220	4600X1622X2530	4950
KDGC500-2	KDGC500S-2	625	500	563	450	KTA19-G3A	3680X1280X2110	4450	4600X1622X2530	5600
KDGC550-2	KDGC550S-2	688	550	588	470	KTAA19-G5	3860X1735X2310	4550	4800X1822X2522	6000
KDGC570-2	KDGC570S-2	710	570	625	500	QSK19-G4	4030X1480X2220	4610	4800X2022X2522	7000
KDGC600-2	KDGC600S-2	750	600	690	550	QSK19-G5	4030X1480X2220	4610	4800X2022X2522	7000
KDGC680-2	KDGC680S-2	850	680	775	620	KT38-G	4350X1750X2210	6600	5800X2000X2550	7800
KDGC800-2	KDGC800S-2	1000	800	906	725	KTA38-G2	4350X1750X2210	6600	5800X2000X2550	7800
KDGC900-2	KDGC900S-2	1125	900	1000	800	KTA38-G2A	4350X1750X2210	6850	5900X2270X2550	8200
KDGC1000-2	KDGC1000S-2	1250	1000	1125	900	KTA38-G4	4300X2090X2210	7150	5900X2270X2550	8300
KDGC1100-2	KDGC1100S-2	1375	1100	NA	NA	KTA38-G9	4350X2090X2210	7210	40HC	11500
KDGC1150-2	KDGC1150S-2	1440	1150	1200	960	QSKTA38-G5	3860X1735X2310	4870	40HC	13110
KDGC1260-2	KDGC1260S-2	1575	1260	1375	1100	KTA50-G3	4960X2070X2330	9140	40HC	13110
KDGC1500-2	KDGC1500S-2	1875	1500	1575	1260	KTA50-G9	5050X2260X2455	9400	40HC	13470
KDGC2000-2	KDGC2000S-2	2500	2000	2281	1825	QSK60-G7	6250X2500X2550	13500	40HC	17400

KDGP Series _ PERKINS ENGINE

60HZ

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGP10-2	KDGP10S-2	13	10	11	9	403D-11G	1350X500X1090	335	1850X770X1115	550
KDGP21-2	KDGP21S-2	26	21	24	19	404D-22G	1610X650X1300	550	2100X830X1115	800
KDGP65-2	KDGP65S-2	81	65	74	59	1104A-44TG1	2200X700X1350	1080	2500X1030X1350	1500
KDGP100-2	KDGP100S-2	125	100	114	91	1104C-44TAG2	2375X860X1500	1350	2600X1080X1500	1800
KDGP200-2	KDGP200S-2	250	200	NA	NA	1106D-E70TAG5	2850X855X1530	1790	3430X1130X1750	2620
KDGP250-2	KDGP250S-2	313	250	281	225	1506A-E88TAG3	2980X1055X1730	2370	3750X1350X2150	3500
KDGP300-2	KDGP300S-2	375	300	338	270	1506A-E88TAG5	3080X1090X1730	2500	4000×1450×2150	3600
KDGP350-2	KDGP350S-2	438	350	400	320	2206C-E13TAG2	3460X1150X2030	3060	4400×1500×2250	4250
KDGP400-2	KDGP400S-2	500	400	438	350	2206A-E13TAG6	3480X1150X2030	3300	4400×1500×2250	4250
KDGP450-2	KDGP450S-2	563	450	500	400	2506C-E15TAG1	3850X1250X2030	3650	4650X1580X2250	4880
KDGP500-2	KDGP500S-2	625	500	569	455	2506C-E15TAG3	3850X1250X2030	3650	4650X1580X2250	4880
KDGP550-2	KDGP550S-2	688	550	NA	NA	2506C-E15TAG4	3850X1250X2030	3650	4650X1580X2250	4880
KDGP600-2	KDGP600S-2	750	600	681	545	2806C-E18TAG3	3860X1460X2210	4280	4800×1822×2530	6230
KDGP660-2	KDGP660S-2	825	660	750	600	4006-23TAG2A	4250X1690X2150	6465	5800X2270X2550	7500
KDGP740-2	KDGP740S-2	938	750	850	680	4006-23TAG3A	4250x1690x2150	6465	5800X2270X2550	7500
KDGP880-2	KDGP880S-2	1100	880	1000	800	4008TAG2A	4610X2184X2410	7400	5800X2270X2550	8200
KDGP1100-2	KDGP1100S-2	1375	1100	1250	1000	4012-46TWG2A	4800X2100X2300	9030	40'HC	12900
KDGP1200-2	KDGP1200S-2	1500	1200	1364	1091	4012-46TWG3A	4800X2100X2300	9030	40'HC	12900
KDGP1500-2	KDGP1500S-2	1875	1500	1705	1364	4012-46TAG3A	4900X2100X2300	9600	40'HC	13000

KDGK Series _ KUBOTA ENGINE

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGK7-2	KDGK7S-2	8	7	7	6	D905-E2BG	1410X580X1100	330	1850X770X1130	620
KDGK10-2	KDGK10S-2	13	10	11	9	D1105-E2BG	1410X580X1100	350	1850X770X1130	680
KDGK15-2	KDGK15S-2	19	15	17	14	D1703-E2BG	1570X630X1130	460	2000X930X1230	920
KDGK20-2	KDGK20S-2	25	20	23	18	V2203-E2BG	1750X660X1130	600	2100X930X1230	1000
KDGK30-2	KDGK30S-2	38	30	34	27	V3300-E2BG	1900X700X1330	860	2200X980X1270	1100
KDGK37-2	KDGK37S-2	49	39	44	35	V3300-T-E2BG	1900X700X1330	860	2200X980X1270	1130

KDGC Series _ PERKINS ENGINE

50HZ

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGC20-1	KDGC20S-1	22	18	20	16	4B3.9-G1	1950X750X1420	765	2500X1030X1500	1320
KDGC55-1	KDGC55S-1	61	48	55	44	4BTA3.9-G2	2200X805X1450	920	2600X1080X1606	1480
KDGC100-1	KDGC100S-1	110	88	100	80	6BT5.9-G1	2475X835X1470	1185	2922X1080X1737	1680
KDGC150-1	KDGC150S-1	149	119	135	108	6BTAA5.9-G12	2650X850X1470	1420	3122X1080X1737	1820
KDGC200-1	KDGC200S-1	198	158	180	144	6CTAA8.3-G2	2750X1070X1590	1730	3550X1180X1950	2360
KDGC250-1	KDGC250S-1	220	176	200	160	6LTAA8.9-G2	2890X1070X1780	1900	3650X1180X2050	2400
KDGC320-1	KDGC320S-1	275	220	250	200	6LTAA9.5-G1	3300X1150X1780	2700	4000X1422X2050	4450
KDGC360-1	KDGC360S-1	350	280	320	256	QSZ13-G6	3420X1150X2190	3140	4500X1622X2400	4900
KDGC400-1	KDGC400S-1	396	317	360	288	QSZ13-G7	3420X1150X2190	3140	4500X1622X2400	4900
KDGC450-1	KDGC450S-1	440	352	400	320	QSZ13-Z2	3390X1360X2010	3220	4500X1622X2400	4900
KDGC500-1	KDGC500S-1	495	396	450	360	QSZ13-G3	3390X1360X2010	3220	4500X1622X2400	4900
KDGC575-1	KDGC575S-1	550	440	500	460	KTAA19-G6	4055X1550X2235	4550	4800X1822X2530	6600
KDGC650-1	KDGC650S-1	710	570	650	520	QSK19-G4	4030X1480X2220	4610	4800X2022X2522	7000
KDGC750-1	KDGC750S-1	825	660	750	600	KTA38-G2	4350X1750X2210	6600	5800X2000X2550	7800
KDGC800-1	KDGC800S-1	888	710	800	640	KTA38-G2B	4350X1750X2210	6700	5800X2000X2550	7900
KDGC1000-1	KDGC1000S-1	1100	880	1000	800	KTA38-G5	4300X2090X2210	7150	5900X2270X2550	8300
KDGC1250-1	KDGC1250S-1	1375	1100	1250	1000	QSKTA38-G5	3860X1735X2310	4870	40HC	13110
KDGC1500-1	KDGC1500S-1	1650	1320	1475	1180	KTA50-GS8	5200X2170X2540	9600	40HC	13470
KDGC2000-1	KDGC2000S-1	2250	1800	2000	1600	QSK60-G4	6250X2500X2550	13500	40HC	17400

KDGK Series _ KUBOTA ENGINE _ OPEN TYPE

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGK7-1	KDGK7S-1	7	6	6.5	5,2	D905-E2BG	1410X580X1100	330	1850X770X1130	620
KDGK10-1	KDGK10S-1	11	9	10	8	D1105-E2BG	1410X580X1100	350	1850X770X1130	680
KDGK15-1	KDGK15S-1	17	13	15	12	D1703-E2BG	1570X630X1130	460	2000X930X1230	920
KDGK20-1	KDGK20S-1	22	18	20	16	V2203-E2BG	1750X660X1130	600	2100X930X1230	1000
KDGK30-1	KDGK30S-1	33	26	30	24	V3300-E2BG	1900X700X1330	860	2200X980X1270	1100
KDGK37-1	KDGK37S-1	41	33	37	29.6	V3300-T-E2BG	1900X700X1330	860	2200X980X1270	1130

KDGP Series _ PERKINS ENGINE

50HZ

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGP9-1	KDGP9S-1	10	8	9	7.2	403A-11G1	1350X500X1090	335	1850X770X1115	550
KDGP60-1	KDGP60S-1	66	53	60	48	1103A-33TG2	2050X700X1350	1220	2500X1030X1270	1400
KDGP100-1	KDGP100S-1	110	88	100	80	1104C-44TAG2	2275X700X1580	1250	2600X1080X1500	1680
KDGP200-1	KDGP200S-1	220	176	200	160	1106A-70TAG4	2850X855X1530	1790	3600X1130X1750	2620
KDGP250-1	KDGP250S-1	275	220	250	200	1506A-E88TAG3	2980X1055X1730	2370	3750X1350X2150	3500
KDGP360-1	KDGP360S-1	385	308	350	280	2206C-E13TAG2	3460X1150X2030	3060	4400X1500X2250	4250
KDGP400-1	KDGP400S-1	440	352	400	320	2206C-E13TAG3	3480X1150X2030	3300	4400X1500X2250	4250
KDGP450-1	KDGP450S-1	495	396	450	360	2506C-E15TAG1	3850X1250X2030	3650	4650X1580X2250	4880
KDGP500-1	KDGP500S-1	550	440	500	400	2506C-E15TAG2	3850X1250X2030	3750	4650X1580X2250	4880
KDGP600-1	KDGP600S-1	660	528	600	480	2806C-E18TAG1A	3860X1460X2210	4280	4800X1822X2530	6230
KDGP750-1	KDGP750S-1	825	660	750	600	4006-23TAG2A	4250X1690X2150	6465	5800X2270X2550	7500
KDGP1000-1	KDGP1000S-1	1100	880	1000	800	4008TAG2	4610X2184X2410	7450	5800X2270X2550	8200
KDGP1500-1	KDGP1500S-1	1650	1320	1500	1200	4012-46TAG2A	4900X2100X2300	9600	40HC	12900
KDGP2000-1	KDGP2000S-1	2200	1760	2000	1600	4016TAG2A	5035X2600X2150	10600	40HC	16100
KDGP2250-1	KDGP2250S-1	2475	1980	2250	1800	4016-61TRG3	5250X2600X2200	11000	40HC	16200

KDGD Series _ DOOSAN ENGINE

Genset Model (발전기 모델)		Power Stanby(비상용)		Power Prime(상용)		Engine Model (엔진모델)	Open Type(개방형)		Silent Type(방음형)	
Open (개방형)	Silent (방음형)	Kva	kWe	Kva	kWe		Dimension (mm)	Weight (Kg)	Dimension (mm)	Weight (Kg)
KDGD150-1	KDGD150S-1	165	132	150	120	DP086TA	2938X998X1888	1780	3650X1180X2050	2650
KDGD200-1	KDGD200S-1	220	176	200	160	P086TI	2954X1098X1752	1890	3650X1180X2050	2700
KDGD225-1	KDGD220S-1	248	198	225	180	DP086LA	2992X1000X1917	1794	3650X1180X2050	2750
KDGD275-1	KDGD275S-1	303	242	275	220	P126TI	3100X1136X1752	2206	4300X1422X2100	3450
KDGD300-1	KDGD300S-1	330	264	300	240	P126TI-II	3100X1136X1752	2400	4300X1422X2100	3650
KDGD350-1	KDGD360S-1	385	308	350	280	DP126LB	3250X1136X1752	2860	4300X1422X2100	3750
KDGD400-1	KDGD400S-1	440	352	400	320	P158LE	3210X1390X1890	2860	4300X1822X2200	4450
KDGD450-1	KDGD450S-1	495	396	450	360	DP158LCS	3379X1489X2003	3720	4300X1822X2200	4750
KDGD500-1	KDGD500S-1	550	440	500	400	P180FE	3475X1300X1890	3720	4800X1822X2530	4800
KDGD575-1	KDGD560S-1	633	506	575	460	DP180LA	3675X1420X2010	3430	4800X1822X2530	5000
KDGD630-1	KDGD605S-1	693	554	630	504	DP180LB	3675X1420X2010	3430	4800X1822X2530	5100
KDGD675-1	KDGD690S-1	743	594	675	540	DP222LB	3680X1550X2060	4740	4800X2022X2530	7100
KDGD740-1	KDGD732S-1	814	651	740	592	DP222LC	3700X1860X2100	4740	4800X2022X2530	7500

Method for Selecting Generator sets

1. How to Estimate the Capacity of Generators

- Select endurable capacity for the full load (with 30 ~ 40% of extra capacity on the power consumption)
- Select endurable capacity for instant load when starting induction motors (Starting load)

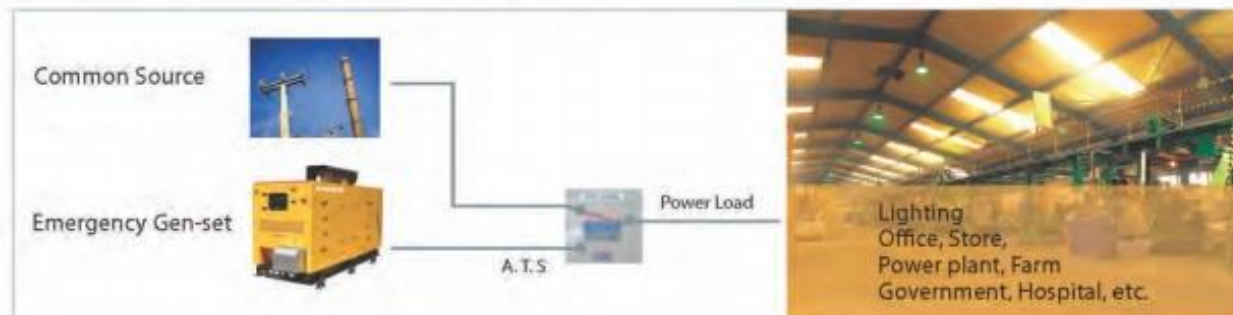
The above conditions must be satisfied to select a proper capacity

Type of load	Incandescent light bulbs & heating appliances	Fluorescent lights & mercury lamps	Sewing machine & Power looms	Induction motors (Y-Δ)	UPS	Submersible (Underwater) motor & direct start motors	Remark
Startup Load	1.0	2.0~3.0	2.0~3.0	2.0~3.0	3.0~4.0	5~8	Generator output should be larger
Driving Load	1.0	1.2~2.0	1.3~1.4	1.3~1.6	1.5~2.0	1.5~2.0	Select a capacity with extra 30 to 40%

Supplying power load evenly for each phase

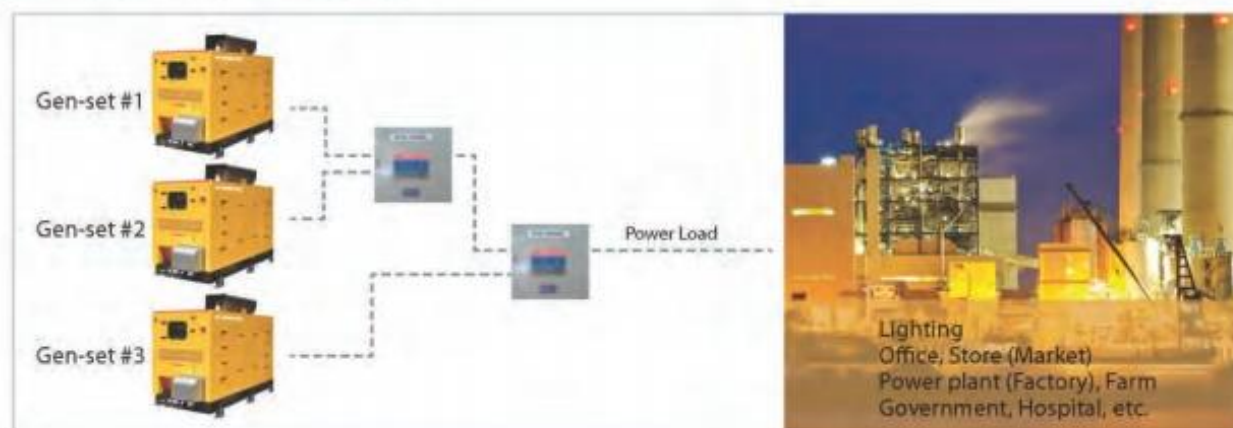
2. For Emergency (including planned power outage)

- Automatic Transfer Switch (ATS) Separate the load for emergency from the distributing board to connect to ATS. (Required) Except for using the full load.



3. For Commercial

- Daytime use : 1 unit.
- 24 hrs/continuous use : 2 ~ 3 units (2units used by turns, 1 unit for preventive maintenance and backup.
- Automatic Transfer Switch (ATS) is required.



4. For Parallel operation



Voltage Selections

50 / 60 Hz) Low Voltage 200 / 115, 220 / 127, 380 / 220, 400 / 230, 440 / 254, 460 / 266, 480 / 277V
Hight Voltage 3000, 3300, 6000, 6600V, Other orders can be produced

Voltage Set-up (3 phase 4 wire)



Selection based on Type of Generators

- For indoors (Standard, Open type)
 - Installation materials required
- For outdoors (Standard, Premium (Stainless))
 - Low-noise type (Soundproof)
 - Vibration-isolating springs required
 - Exhaust pipes (If necessary)
- For mobiles (Trailer type)
- For heat exchanger system (Water cooling type, CHP)



Standard Gen-sets

1. Terminal Box

- Terminal Box should be placed on the right side, in order to easily connect load lines
- It is possible to place terminal box freely based on the direction
- It is designed for a convenient handling, maintenance, and repairs



Soundproof Type

- Low-noise type is manufactured
- Heat-protective casing for internal exhaust pipes
- Soundproof materials with flame-resistant process are used
- Drainage corks for exchanging oils and fuels are installed
- Terminal box is installed inside (Waterproof effect)
- Sufficient ventilators should be installed
- Wide space for maintenance is needed
- Tow hooks should be installed on top of the generator set



Open Type



Silent Type

Installation of Gen-set (sample)



- | | | | |
|-----------------------------|--|--------------------------|------------------------------------|
| 1. Spring hanger | 7. Barrier to prevent fuel leakage | 12. Gen-set | 18. Gate |
| 2. Silencer | 8. Fuel supply pipeline (inlet and outlet) | 13. Anti-vibration | 19. Operator panel (Free standing) |
| 3. Symbol Wall | 9. Radiator | 14. Foundation | 20. Operator panel (Mounting type) |
| 4. Canvas | 10. Battery | 15. Fuel tank (Built-in) | 21. Main circuit breaker (M.C.B.) |
| 5. Exhaust duct | 11. Battery rack | 16. Fire extinguisher | 22. Bellows |
| 6. Fuel tank (for external) | | 17. Intake grille | 23. Exhaust gas pipeline |

Customers' Preparations

1. Equipment entrance
2. Air-inlet and exhaust pipes
3. Chimney for exhaust gas
4. Ground connection of generators (control phase, gen-set)
5. 220V Power platforms. (draws from ATS) or 2kW required at UVR contact point (Recharge, heater)

Check lists for Quotation

Division	Emergency { }	Temporary { }	Commercial { }
Ambient Temperature	Maximun { °C }	Minimun { °C }	
Installation Site	Indoor { }	Outdoor { }	
Type of Load	Motor Type { }	Motor output { hp / kW }	Unit { }
Capacity of Generators	{ } kW / kVA	Frequency { Hz }	Voltage { V }
Exterior Classification	Generators (Indoor use / Outdoor use) Operator Panel (Indoor / Outdoor) A. T. S Panel : (Indoor / Outdoor)		

