

CONTROL PANEL

The panel is ready provisional for automatic operation. It is made from steel sheet with the thickness of 1,5 mm. This feature saves cost up to one third in labour and material in the conversion from manual to automatic system.

The panel is designed as per IP56 protection class.

The panel is painted by eletrostatic powder coating and has IDP300 type control module , emergency stop button and charging lamp in its frontal side.

The cable glands are used in the entry of the cables.

It is designed such a manner that is very access to all components in the panel. The cables sections are conformed to the currents drawn and all is marked one by one.

It is possible to read historical memories via control module besides the measurements of voltage , current , active power , power factor , frequency , battery voltage, coolant temperature and oil pressure and the monitoring of the mains.

It is also possible to set up remote monitoring via RS232 communication port with the software given free of charge. It can be programmed 155 parameters via control module.

PROTECTIONS

- Low oil pressure – Alarm and Stop
- High water temperature – Alarm and Stop
- Low / Overspeed – Alarm and Stop
- Fail to start – Alarm and Stop
- Overloading – Alarm and Stop
- Over / under voltage -Alarm
- Battery charge- Alarm
- Emergency Push Button Off position-Alarm
- Service time - alarm

ALTERNATOR

The alternator , coupled directly to the engine via flange that is suitable for minimizing torsional tension, is a single bearing ,



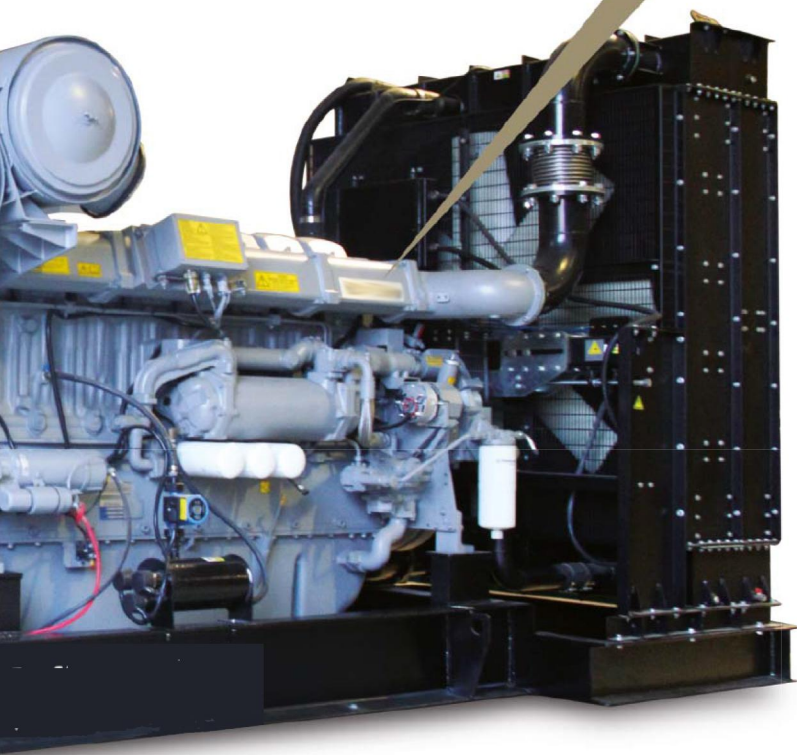
BASEFRAME AND

- The heavy-duty type baseframe is made from steel sheet and incorporated daily fuel tank with the capacity of 8 hours operation.
- The bottom end of the baseframe is completely closed according to European regulation PP2A (pollution prevention)
- There are mechanical type combined fuel level gauge , fuel filling cap , fuel feed and return ports and drain plug for tank cleaning on the fuel tank.

brushless and Class H type and is fitted with AVR. It is conformed to EC60034-1, BS4999-5000, VDE0530, NF51-100/111, OVEM-10 and

DIESEL ENGINE

Industrial type diesel engine which was produced special for application generator with 4-stroke, direct injection, water cooled, naturally aspirated / turbocharged / intercooled, fully complies to the standards of ISO3046, BS5514 and DIN6271



GENSETS	STANDARD		OPTIONAL
	Manual	Auto	
Engine		•	X
Standard radiator		•	X
Tropical type radiator	X		•
Heavy-duty air filter	X		•
Electronic governor	X		•
Water temperature sensor		•	X
The oil pressure sensor		•	X
Low water level sender		•	X
Radiator guard		•	X
Hot surface protection		•	X
Oil drain pump		•	X
Fuel prefilter	X		•
Engine block heater	X		•
Industrial type slencer open	X	•	• (Manual)
Residential type silencer - open		•	X
Residential type silencer - canopied	X		•
Cold start aid		•	X
Remote radiator	X		•
Trailer	X		•
Vibration pads	X		X

ELECTRICAL SYSTEM

• Alternator		•	X
• MCCB - 3 poles	X		•
• MCCB - 4 poles	X		•
• The battery isolator	X		•
• Earth leakage protection	X		•
• Anti-condensation heater	X		•
• Different voltage	X		•
• Class F insulation	X		•
• The emergency stop button		•	X
• Sending SMS messages	X		•
• Battery charger	X	•	(manual)
• AMF Panel - 3 poles	X	•	X
• AMF Panel - 4 poles	X	X	•(auto)
• Synchronization panel	X	X	•(auto)

• : yes X : no

FUEL TANK

- Fuel tank is supported by beams from the sides.
- The baseframe and fuel tank are painted by electrostatic powder coating ensuring high resistance for corrosion and rust.
- Lifting eyebolts bring easy transportation.
- It is fitted with drain plug for cleaning of bottom.
- Vibration isolators between the set and ground are delivered in standard scope of supply.

SOUND PROOF CANOPY

The Sound Proof Canopy protecting against outside weather conditions and providing sound attenuation conformed to international regulations (75 DBA) is designed in modular structure. The canopy made by galvanized in 1,5 mm thickness is entirely painted by electrostatically powder coating providing high resistance for corrosion and rust. The inner surfaces of canopy are furnished by impregnated sound foam with high density ($> 70 \text{ kg/m}^3$) having high absorbing capability. The foam is in non flammable class and anti-bacterial type.

It has been provided easy operation by the drains of oil and fuel extended to the out of Canopy. All hinges and locks used in cabins are made of stainless steel.

Residential type Exhaust Silencer which has around 7 - 10 dBA better attenuation capability than industrial type is mounted horizontally in the section of hot air outlet duct and positioned as to blow in the same direction of hot air. A rain cap is fitted at the end of silencer activated by pressured air.

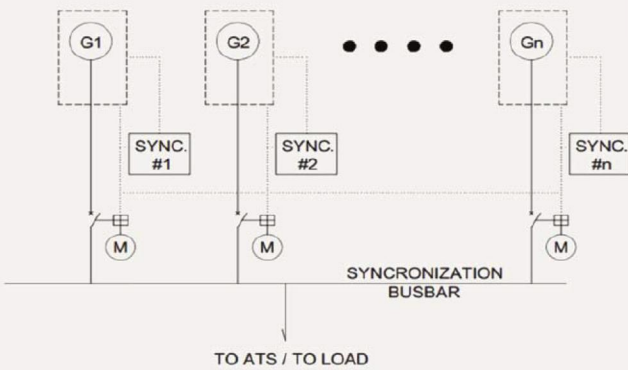


TRAILER

Depending on the weight of the Genset, it is available in one, two or more axles with parking brake, adjustable towing bar, swivel jack, fenders and support legs on the corners.



SYNCHRONIZATION



Synchronization (Parallel Operation) is described as the coupling of two or more Gensets electrically in common bus-bar and deliver load together. The system is much more reliable in the case of parallel operation by multi Gensets. The system stops in case of possible failure in single Genset operation. Whereas, it is possible to deliver power by the others in the case of multi Genset operation. According to the studies made in the United States, the System Reliability is as follows in multi



Quantity of Gensets	System Reliability (%)
1	97,5
2	99,94
3	99,998
4	99,99996

The operating time of Gensets is shorter in multi Genset operation. This will provide long operation and overhauling periods and less maintenance costs.



Genset Model	Prime Power kW	Prime Power kVA	Standby Power kW	Standby Power kVA	Engine Model	RPM	Cylinders	Displacement Liter	Fuel Tank Capacity Liter	Fuel Tank Duration Hours *	Open Type				w / Sound Proof Canopy			
											L mm	W mm	H mm	Weight kg	L mm	W mm	H mm	Weight kg
IDJ 10 DW	8	9,5	8	10,5	3DWY-15	1500	L3	1,50	65	19	1450	900	1150	430	2100	900	1600	620
IDJ 15 DW	10	12,7	11	13,7	4DWY-18	1500	L4	1,8	65	16	1450	900	1150	450	2100	900	1600	640
IDJ 17 DW	12	15,2	13	16,7	4DWY-20	1500	L4	2,2	65	16	1450	900	1150	460	2100	900	1600	650
IDJ 22 DW	16	20,4	18	22,5	4DWY-30	1500	L4	2,7	65	11	1450	900	1150	510	2100	900	1600	705
IDJ 35 DW	24	30,5	27	33,7	4DWY-40	1500	L4	4,9	110	13	1750	900	1600	675	2460	900	1700	890
IDJ 40 DW	28	35,4	31	39,2	4DWY-48	1500	L4	4,1	110	11	1750	900	1600	730	2460	900	1700	945
IDJ 55 DW	40	50	44	55	4DWY-60	1500	L4	3,9	130	10	1900	1000	1550	770	2700	1000	1800	985
IDJ 65 DW	46	57	51	64	4DWD-75	1500	L4	4,4	130	8	1900	1000	1550	980	2700	1000	1800	1230
IDJ 80 DW	58	72	64	80	4DWD-110	1500	L4	4,7	130	6	1900	1000	1550	1050	2700	1000	1800	1300
IDJ 100 DW	72	90	78	97	4DWD-110	1500	L4	4,7	130	6	1900	1000	1550	1125	2700	1000	1800	1375
IDJ 110 DW	78	97	86	107	6DWD-115	1500	L6	6,5	195	8	2450	1100	1650	1290	3350	1100	1800	1525
IDJ 125 DW	90	113	97	121	6DWD-140	1500	L6	6,5	195	7	2450	1100	1650	1330	3350	1100	1800	1565
IDJ 135 DW	97	121	106	133	6DWD-150	1500	L6	6,5	195	6	2450	1100	1650	1390	3350	1100	1800	1690
IDJ 165 DW	126	158	132	165	6DWD-180	1500	L6	7,1	195	5	2450	1100	1650	1480	3350	1100	1800	1780
IDJ 200 DW	141	176	155	194	6DWD-235	1500	L6	8,8	420	9	3000	1300	1800	1780	4000	1300	2100	2265
IDJ 230 DW	166	207	184	230	6DWD-235	1500	L6	8,8	420	9	3000	1300	1800	1830	4000	1300	2100	2315
IDJ 275 DW	200	250	220	275	6DWD-275	1500	L6	9,7	420	8	3000	1300	1800	2480	4000	1300	2100	3150
IDJ 300 DW	219	274	242	303	6DWD-310	1500	L6	13,7	450	7	3250	1300	1800	2770	4450	1300	2100	3415
IDJ 350 DW	255	319	282	352	6DWD-358	1500	L6	13,7	450	6	3250	1300	1800	2850	4450	1300	2100	3495
IDJ 400 DW	292	365	322	403	8DWV-415	1500	V8	14,6	760	9	3000	1650	2000	2770	4100	1650	2450	3780
IDJ 425 DW	306	383	336	420	6DWD-430	1500	L6	12,8	450	5	3250	1300	1800	2795	4400	1300	2100	3445
IDJ 460 DW	328	410	367	459	6DWD-455	1500	L6	12,8	450	5	3250	1300	1800	2860	4400	1300	2100	3505
IDJ 470 DW	328	410	374	468	8DWV-455	1500	V8	14,6	760	9	3000	1650	2000	2870	4100	1650	2450	3840
IDJ 505 DW	366	458	404	505	8DWV-505	1500	V8	14,6	760	7	3000	1650	2000	3260	4100	1650	2450	4270
IDJ 510 DW	369	461	408	510	6DWD-510	1500	L6	12,8	450	5	3250	1300	1800	3215	4400	1300	2100	3855
IDJ 550 DW	402	502	444	555	8DWV-530	1500	V8	14,6	760	7	3000	1650	2000	3340	4100	1650	2450	4460
IDJ 640 DW	464	580	511	639	12DWV-645	1500	V12	21,9	1140	9	3600	1650	2000	3745	4700	1650	2450	4820
IDJ 690 DW	502	628	550	688	12DWV-695	1500	V12	21,9	1140	8	3600	1650	2000	3785	4700	1650	2450	4865
IDJ 795 DW	570	712	635	794	12DWV-790	1500	V12	21,9	1140	7	3600	1650	2000	4240	4700	1650	2450	5470
IDJ 825 DW	595	744	656	820	12DWV-825	1500	V12	21,9	1140	7	3600	1650	2000	4390	4700	1650	2450	5685
IDJ 880 DW	639	799	709	886	16DWV-880	1500	V16	29,2	1140	6	4200	2200	2450	4450	6080	2470	2900	8080
DJ 1000 DW	727	909	807	1009	16DWV-995	1500	V16	29,2	1140	6	4200	2200	2450	4490	6080	2470	2900	8120
DJ 1100 DW	806	1007	886	1108	16DWV-1090	1500	V16	29,2	1500	7	4200	2200	2450	4520	6080	2470	2900	8150
DJ 1315 DW	806	1007	1050	1313	12DWG-1390	1500	V12	53,1	2000	8	5100	2200	2750	9600	9145	2470	3100	14450
DJ 1415 DW	1015	1269	1130	1413	12DWG-1390	1500	V12	53,1	2000	8	5100	2200	2750	10100	9145	2470	3100	14950
DJ 1675 DW	1218	1522	1342	1678	12DWG-1665	1500	V12	53,1	2500	8	5100	2200	2750	10280	9145	2470	3100	15130
DJ 1925 DW	1376	1720	1540	1925	12DWG-1870	1500	V12	53,1	2500	7	5100	2200	2750	11530	9145	2470	3100	16380
DJ 2200 DW	1600	2000	1760	2200	16DWG-2220	1500	V16	70,8	3000	7	5800	2600	3100	12800	9145	2470	3100	17650
DJ 2300 DW	1635	2044	1838	2297	16DWG-2220	1500	V16	70,8	3000	7	5800	2600	3100	13200	9145	2470	3100	18050
DJ 2500 DW	1849	2311	2061	2576	16DWG-2500	1500	V16	70,8	3500	8	5800	2600	3100	14800	9145	2470	3100	19650

* Based on Prime Running Consumption



Genset Model	Prime Power kW	Prime Power kVA	Standby Power kW	Standby Power kVA	Engine Model	RPM	Cylinders	Displacement Liter	Fuel Tank Capacity Liter	Fuel Tank Duration Hours *	Open Type				w / Sound Proof Canopy			
											L mm	W mm	H mm	Weight kg	L mm	W mm	H mm	Weight kg
IDJ10P	7	9	8	10	403A-11G	1500	L3	1,13	60	24	1600	750	1170	420	2020	900	1410	585
IDJ15P	10	13	11	14	403A-15G1	1500	L3	1,496	60	18	1520	750	1160	433	2020	900	1410	598
IDJ20P	11	14	13	16	403A-15G2	1500	L3	1,496	60	13	1520	750	1160	443	2020	900	1430	620
IDJ25P	16	20	18	22	404A-22G1	1500	L4	2,216	60	12	1520	750	1150	600	2265	1000	1570	925
IDJ35P	24	30	26	33	1103A-33G	1500	L3	3,3	90	13	1600	750	1170	785	2265	1000	1570	1160
IDJ50P	36	45	40	50	1103A-33TG1	1500	L3	3,3	90	9	1600	750	1170	895	2265	1000	1570	1200
IDJ70P	48	60	53	66	1103A-33TG2	1500	L3	3,3	114	8	2000	750	1270	970	2615	1000	1570	1270
IDJ90P	64	80	70	88	1104A-44TG2	1500	L3	4,4	114	6	2000	750	1270	1105	2615	1000	1570	1520
IDJ110P	80	100	88	110	1104C-44TAG2	1500	L4	4,4	114	5	2000	750	1420	1320	2615	1000	1570	1630
IDJ150P	108	135	120	150	1106A-70TG1	1500	L6	5,99	144	6	2520	750	1520	1500	3265	1050	1700	1930
IDJ170P	120	150	132	165	1106A-70TAG2	1500	L6	5,99	144	4	2520	750	1520	1610	3265	1050	1700	2030
IDJ200P	144	180	160	200	1106A-70TAG3	1500	L6	7,01	144	4	2520	750	1520	1730	3265	1050	1700	2150
IDJ220P	160	200	176	220	1106A-70TAG4	1500	L6	7,01	144	4	2520	750	1520	1800	3265	1050	1700	2250
IDJ275P	200	250	220	275	1506A-E88TAG3	1500	L6	8,7	385	9	3000	950	1580	2115	3920	1250	2050	2750
IDJ330P	240	300	264	330	1506A-E88TAG5	1500	L6	9,3	385	6	3000	950	1580	2155	3920	1250	2050	2790
IDJ400P	280	350	320	400	2206A-E13TAG2	1500	L6	12,5	630	8	3340	1100	1920	3000	4520	1700	2400	3700
IDJ440P	320	400	352	440	2206A-E13TAG3	1500	L6	12,5	630	7	3340	1100	1920	3020	4520	1700	2400	3720
IDJ500P	360	450	400	500	2506C-E15TAG1	1500	L6	15,2	885	9	3700	1150	2030	3850	5020	1700	2400	4800
IDJ550P	400	500	440	550	2506C-E15TAG2	1500	L6	15,2	885	9	3700	1150	2030	3930	5020	1700	2400	4880
IDJ660P	480	600	528	660	2806A-E18TAG1A	1500	L6	18,13	1000	8	3700	1550	2250	4600	5020	1700	2600	5700
IDJ720P	528	660	576	720	2806A-E18TAG2	1500	L6	18,13	1000	7	3700	1550	2250	4720	5020	1700	2600	5820
IDJ800P	584	730	640	800	4006-23TAG2A	1500	L6	22,92	1500	8	4160	1650	2285	4911	6080	2470	2700	9600
IDJ880P	640	800	704	880	4006-23TAG3A	1500	L6	22,92	1500	8	4160	1650	2285	5279	6080	2470	2700	9995
IDJ1100P	800	1000	880	1100	4008TAG2A	1500	L8	30,561	1500	7	4500	2050	2580	7585	6080	2470	2900	12220
IDJ1250P	900	1125	1000	1250	4008-30TAG3A	1500	L8	30,561	1500	7	4500	2050	2580	9470	6080	2470	2900	12330
IDJ1400P	1000	1250	1120	1400	4012-46TWG2A	1500	V12	45,842	1500	6	4700	2050	2430	9770	6080	2470	2950	12460
IDJ1500P	1080	1350	1200	1500	4012-46TWG3A	1500	V12	45,842	1500	6	4700	2050	2430	9810	6080	2470	2950	12495
IDJ1650P	1200	1500	1320	1650	4012-46TAG2A	1500	V12	45,842	2500	8	5100	2250	2470	9880	9150	2470	3100	14830
IDJ1900P	1384	1730	1520	1900	4012-46TAG3A	1500	V12	45,842	2500	7	5100	2250	2470	10670	9150	2470	3100	15820
IDJ2000P	1440	1800	1600	2000	4016TAG1A	1500	V16	61,123	3000	8	6050	2250	2780	12250	12200	2470	3100	19450
IDJ2200P	1600	2000	1760	2200	4016TAG2A	1500	V16	61,123	3500	8	6050	2250	2780	12310	12200	2470	3100	17890
IDJ2500P	1800	2250	2000	2500	4016-61TRG3	1500	V16	61,123	4000	8	6050	2250	2780	12915	12200	2470	3100	18710

* Based on Prime Running Consumption

DHI

Genset Model	Prime Power kW	Prime Power kVA	Standby Power kW	Standby Power kVA	Engine Model	RPM	Cylinders	Displacement Liter	Fuel Tank Capacity Liter	Fuel Tank Duration Hours *	Open Type				w / Sound Proof Canopy			
											L mm	W mm	H mm	Weight kg	L mm	W mm	H mm	Weight kg
IDJ 15 K	12	15	13	16,5	K480Q	1500	4	1,81	67	14	1520	900	1160	490	2120	900	1600	680
IDJ 25 K	18	23	20	25	K490Q	1500	4	2,54	67	12	1520	900	1160	560	2120	900	1600	750
IDJ 35 D	24	30	26	33	K4102D1-1	1500	4	3,75	100	13	1750	900	1300	780	2470	900	1700	995
IDJ 40 K	30	38	32	40	K4102Q	1500	4	3,85	100	12	1750	900	1300	780	2470	900	1700	995
IDJ 40 D	30	38	32	40	K4102D1-1	1500	4	3,75	100	12	1750	900	1300	780	2470	900	1700	995
IDJ 45 K	33	41	36	45	K4105Q	1500	4	4,08	100	11	1750	900	1300	780	2470	900	1700	995
IDJ 50 D	36	45	40	50	K4100ZD1	1500	4	3,61	100	8	1830	900	1300	880	2470	900	1700	1095
IDJ 75 D	54	68	60	75	R4105ZD1-1	1500	4	4,33	130	9	2050	1000	1350	1050	2630	1000	1800	1300
IDJ 90 D	65	81	72	90	R4105IZD1	1500	4	4,67	135	7	2050	1000	1350	1200	2630	1000	1800	1450
IDJ 110 D	80	100	88	110	R6105ZD1-1	1500	6	6,49	145	7	2100	1100	1400	1290	3080	1100	1880	1570
IDJ 150 D	108	135	120	150	R6105AZLD-	1500	6	6,75	180	6	2550	1100	1400	1400	3220	1100	1850	1688
IDJ 175 D	128	160	140	175	R6105IZLD7	1500	6	7,01	180	5	2500	1100	1400	1400	3220	1100	1910	1740
IDJ 200 D	144	180	160	200	R6113ZLD1-1	1500	6	7,52	250	6	2700	1200	1800	1650	3500	1200	2010	2135
IDJ 275 D	200	250	220	275	6126 ZLD	1500	6	9,17	425	8	3000	1300	1750	2450	3850	1300	2150	2940
IDJ 300 D	220	275	240	300	6126 ZLD	1500	6	9,68	425	7	3000	1300	1750	2480	3850	1300	2150	2970
IDJ 330 D	240	300	264	330	6126 IZLD	1500	6	10,34	425	7	3000	1500	1850	2635	4100	1500	2150	3385
IDJ 400 D	288	360	320	400	6126 IZLD	1500	6	12,69	425	6	3250	1500	1850	3025	4300	1500	2150	3965

* Based on Prime Running Consumption

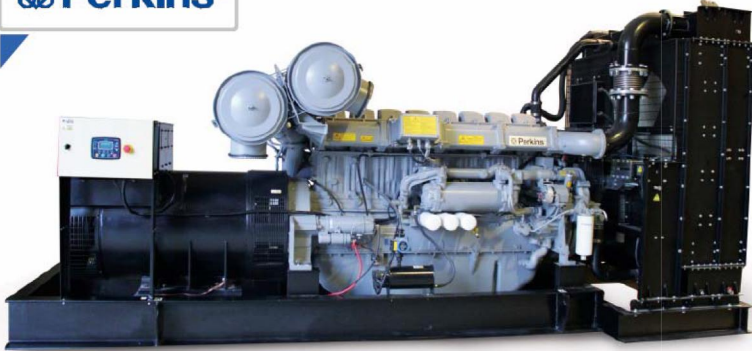


Genset Model	Prime Power kW	Prime Power kVA	Standby Power kW	Standby Power kVA	Engine Model	RPM	Cylinders	Displacement Liter	Fuel Tank Capacity Liter	Fuel Tank Duration Hours *	Open Type				w / Sound Proof Canopy			
											L mm	W mm	H mm	Weight kg	L mm	W mm	H mm	Weight kg
IDJ33I	24	30	26	33	F32 AM1A	1500	L4	3,20	67	7	1830	900	1260	680	2120	900	1600	870
IDJ35I	26	32	28	35	S8000 AM1	1500	L3	2,9	67	8	1830	900	1260	660	2120	900	1600	850
IDJ45I	33	41,8	37	46	F32 SM1A	1500	L4	3,2	100	8	1830	1000	1265	780	2470	1000	1900	970
IDJ55I	40	50	44	55	N45 AM2	1500	L4	4,5	100	7	1830	1000	1265	830	2470	1000	1900	1020
IDJ70I	48	60,1	53	66,3	N45 SM1A	1500	L4	4,5	135	9	2050	1100	1265	890	2630	1100	1900	1140
IDJ85I	60	74,9	66	82,4	N45 SM2A	1500	L4	4,5	135	7	2100	1100	1480	920	2800	1100	1800	1170
IDJ90I	67	83,8	74	92,6	N45 SM3	1500	L4	4,5	135	6	2100	1100	1480	920	2800	1100	1800	1170
IDJ110I	81	100,8	89	110,9	N45 TM2A	1500	L4	4,5	145	6	2400	1100	1480	1100	3080	1100	1880	1380
IDJ130I	96	120	105	131	N45 TM3	1500	L4	4,5	200	6	2400	1100	1480	1230	3080	1100	1880	1510
IDJ190I	136	170	150	187	N67 TM4	1500	L6	6,7	320	7	2500	1100	1480	1520	3220	1100	1910	1820
IDJ220I	160	200	176	220	N67 TM7	1500	L6	6,7	320	6	2500	1200	1550	1570	3550	1200	2010	2055
IDJ280I	203	254	222	277	C87 TE3	1500	L6	8,7	500	8	3000	1300	1680	2620	3850	1300	2150	3265
IDJ335I	244	305	266	332	C87 TE4	1500	L6	8,7	500	7	3000	1300	1680	2690	3850	1300	2150	3335
IDJ440I	320	400	352	440	C13 TE3A	1500	L6	12,9	515	5	3250	1500	2255	3040	4250	1500	2475	3685
IDJ550I	400	493	440	542	C13 TE7	1500	L6	12,9	515	5	3250	1500	2255	3350	4250	1500	2475	4380
IDJ660I	480	600	528	660	CR16 TE1W	1500	L6	15,9	825	7	3250	1500	2755	3645	4250	1500	2975	4675

* Based on Prime Running Consumption

POWER RANGE

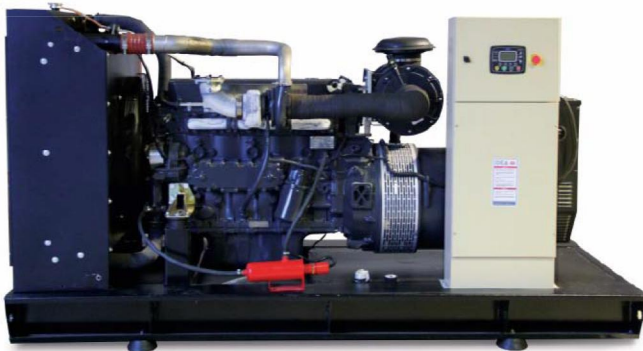
Perkins



DAEWOO



FPT
POWERTRAIN TECHNOLOGIES



DHI



3 ph
400 V
50 Hz
1500 rpm
Stand-By



PERKINS
IVECO(FPT)
DAEWOO
DHI