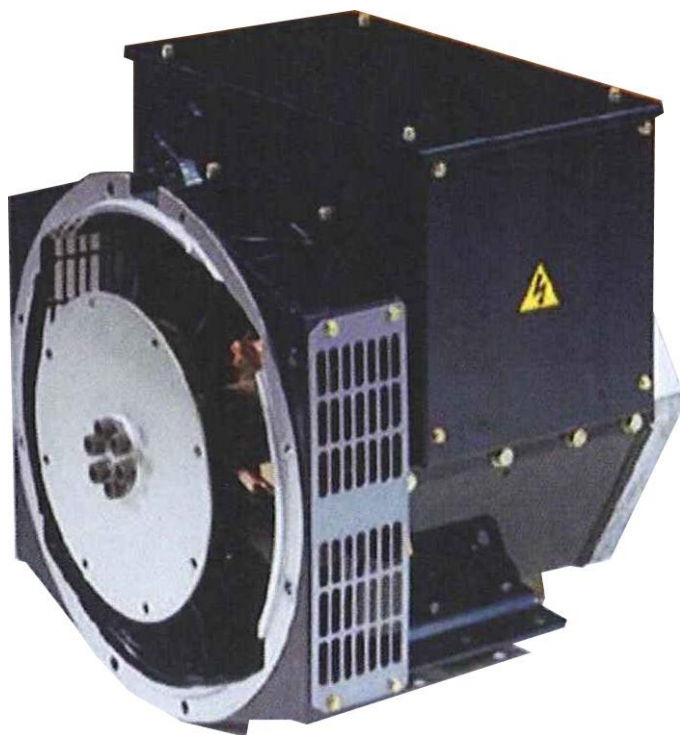




DG 184



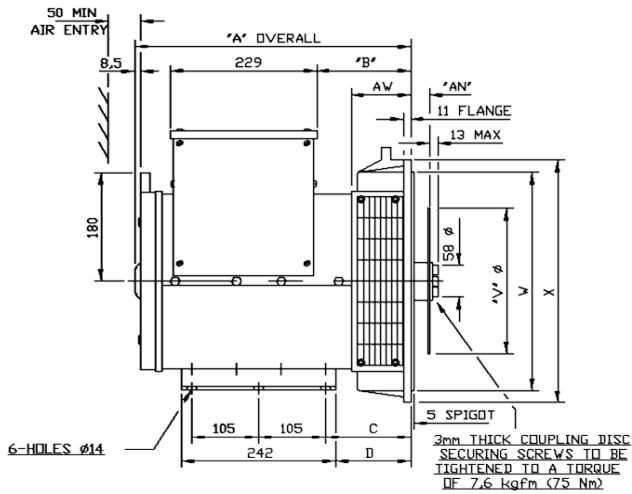
maximizing your energy

Try the best!

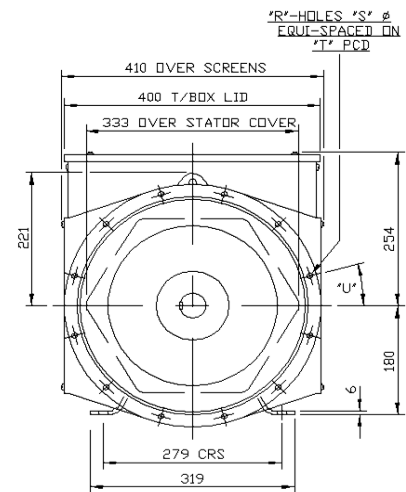
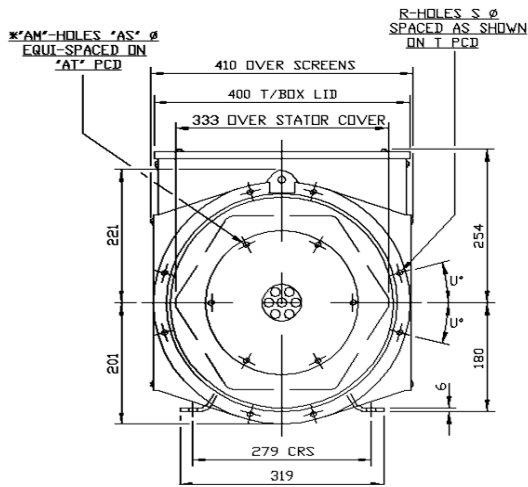
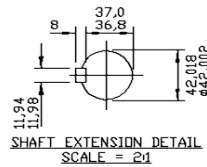
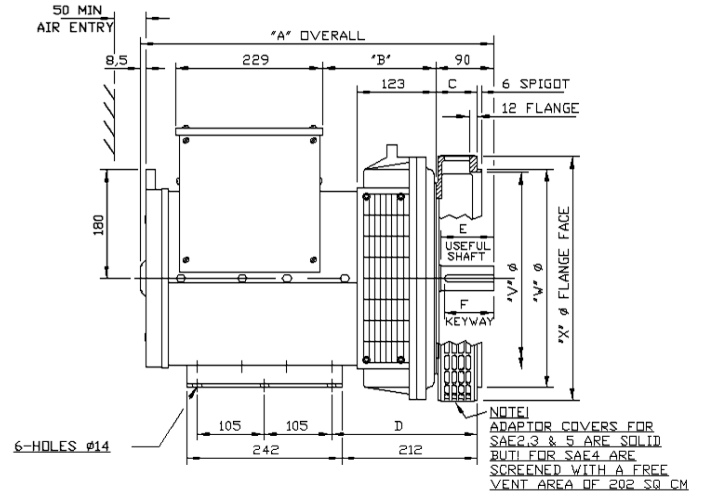
DG184		3 Phase H insulation Industrial								
Voltage		50 Hz 1500rpm				60 Hz 1800rpm				
Series Star		380	400	415	440	416	440	460	480	600
Parallel Star		190	200	208	220	208	220	230	240	300
Series Delta		220	230	240	254	240	254	266	277	346
DG184E	KVA	22.5	22.5	22.5	17.5	27.5	28.8	28.8	30.0	30.0
	KW	18.0	18.0	18.0	14.0	22.0	23.0	23.0	24.0	24.0
	Efficiency (%)	84.3	84.9	85.3	85.8	83.8	84.3	84.9	85.2	85.6
	Power input (KW)	21.4	21.2	21.1	16.3	26.2	27.1	27.1	28.2	28.0
DG184F	KVA	27.5	27.5	27.5	22.5	32.5	34.4	34.4	35.0	35.0
	KW	22.0	22.0	22.0	18.0	26.0	27.5	27.5	28.0	28.0
	Efficiency (%)	85.7	86.2	86.5	87.0	85.5	85.9	86.4	86.7	87.0
	Power input (KW)	25.7	25.5	25.4	20.7	30.4	32.0	31.9	32.3	32.2
DG184G	KVA	31.3	31.3	31.3	27.5	35.0	37.5	37.5	37.5	37.5
	KW	25.0	25.0	25.0	22.0	28.0	30.0	30.0	30.0	30.0
	Efficiency (%)	86.6	87.0	84.3	87.6	86.7	87.0	87.3	87.6	87.8
	Power input (KW)	28.9	28.8	28.7	25.1	32.3	34.5	34.4	34.2	34.2
DG184H	KVA	37.5	37.5	37.5	32.5	44.3	46.9	46.9	46.9	45.8
	KW	30.0	30.0	30.0	26.0	35.4	37.5	37.5	37.5	37.4
	Efficiency (%)	86.2	86.6	86.9	87.2	85.4	85.3	85.6	85.9	85.9
	Power input (KW)	34.8	34.6	34.5	29.8	41.5	44.0	43.8	43.7	43.7
DG184J	KVA	40.0	40.0	40.0	35.0	47.3	50.0	50.0	50.0	50.0
	KW	32.0	32.0	32.0	28.0	37.8	40.0	40.0	40.0	44.0
	Efficiency (%)	87.6	86.6	87.1	87.5	85.9	85.8	86.1	86.4	86.4
	Power input (KW)	36.5	37.0	36.7	32.0	44.0	46.6	46.5	46.3	46.3

DG184		2 Phase H insulation Industrial					
Voltage		50 Hz 1500rpm			60 Hz 1800rpm		
Series Star		220	230	240	220	230	240
Parallel Star		110	115	120	110	115	120
Series Delta		----	----	----	----	----	----
DG184E	KVA	15.0	15.0	15.0	18.4	18.4	18.4
	KW	12.0	12.0	12.0	14.7	14.7	14.7
	Efficiency (%)	81.3	81.7	81.9	79.9	80.6	81.1
	Power input (KW)	14.8	14.7	14.6	18.4	18.3	18.1
DG184F	KVA	18.5	18.5	18.5	21.9	21.9	21.9
	KW	14.8	14.8	14.8	17.5	17.5	17.5
	Efficiency (%)	82.7	83.0	83.3	81.9	81.9	82.8
	Power input (KW)	17.9	17.8	17.8	21.4	21.4	21.2
DG184G	KVA	21.0	21.0	21.0	25.0	25.0	25.0
	KW	16.8	16.8	16.8	20.0	20.0	20.0
	Efficiency (%)	83.7	83.9	83.9	83.0	83.0	83.8
	Power input (KW)	20.1	20.0	20.0	24.1	24.1	23.9
DG184H	KVA	25.0	25.0	25.0	31.3	31.3	31.3
	KW	20.0	20.0	20.0	25.0	25.0	25.0
	Efficiency (%)	82.9	82.9	82.9	82.8	82.8	82.8
	Power input (KW)	24.1	24.1	24.1	30.2	30.2	30.2
DG184J	KVA	28.0	28.0	28.0	35.0	35.0	35.0
	KW	22.4	22.4	22.4	28.0	28.0	28.0
	Efficiency (%)	83.0	83.0	83.0	82.9	83.0	83.0
	Power input (KW)	27.0	27.0	27.0	33.8	33.7	33.7

SINGLE BEARING



DOUBLE BEARING



SINGLE BEARING DIMENSIONS		
Code	A	B
DG184E	431.5	147
DG184F	521.5	237
DG184G	521.5	237

DOUBLE BEARING DIMENSIONS						
Code	A	B	C	D	E	F
DG184E	551.5	177	65	228	82	77
DG184F	641.5	267	65	228	82	77
DG184G	641.5	267	65	228	82	77
DG184H	735	290	105	271	115	110
DG184J	735	290	105	271	115	110

DISC COUPLING					
S.A.E.No.	AN	AM	AS	AT	V
6.5	30.16	6	8.7	200.0	215.8
7.5	30.16	8	8.7	222.2	241.2
8	61.9	6	11	244.5	263.4
10	53.98	8	11	295.3	314.2
11.5	39.68	8	11	333.4	352.3
14	25.4	8	13.5	438.2	466.5

FLANGE ADAPTOR									
S.A.E.No.	AW	R	S	T11	U	W	X	C	D
2	132.3	12	11	466.7	15	447.6	489	172	156
3	105	8	11	428.6	15	409.5	451	145	129
4	93	8	11	381.0	15	361.9	402	133	117
5	93	8	11	333.3	22.5	314.3	356	133	117
6	124.7	8	11	285.8	22.5	266.7	308	164.7	148.7

FLANGE ADAPTOR							
S.A.E.No.	R	S	T	U	V	W	X
1	12	12.7	530.2	15	500	511.17	553
2	12	11	466.7	15	432	446.6	495
3	12	11	428.6	15	396	409.5	451
4	12	11	384.0	15	352	361.9	403
5	8	11	333.3	22.5	301	314.3	356

SINGLE BEARING SHIPPING DETAILS			
Code	Net weight Kg	Gross weight Kg	Packing
DG184E	131	141	52X50X67
DG184F	154	164	63X50X67
DG184G	162	172	63X50X67
DG184H	220	230	74X50X73
DG184J	230	240	74X50X73

DOUBLE BEARING SHIPPING DETAILS			
Code	Net weight Kg	Gross weight Kg	Packing
DG184E	131	141	84X59X75
DG184F	154	164	84X59X75
DG184G	170	180	84X59X75
DG184H	220	230	85X55X85
DG184J	230	240	85X55X85

MAIN CHARACTERISTIC DESCRIPTION

GENERAL

Alternator full range covers ratings from 5kVA to 1386kVA, so meeting the most part of needs for industrial, marin, commercial, construction, mining and telecommunications, both for prime or standby power generation.

ALTERNATOR CONSTRUCTURE

Ac generators are self-excited, self-regulated, and supplied with regulator and inbuilt booster.

COMPLIANCE WITH STANDARDS

The generators are designed in compliance with IEC60034-1/60034-2, BS4990 & 5000, VDE0530, NEMA MG1-2006, CSA C/UL. Certificate ISO 2000, CE conform to the requirements of IEC60034, certificate no. No. 01157 by NQA Certification Co., Ltd.

MECHANICAL FEATURES

The generators are available in either single-bearing or double-bearing.

Single-bearing construction has international general SAE flange adaptors and SAE disc couplings. It ensures the alignment during the assembly operation of generator to the engine.

Double-bearing construction has IMB34 standard forms. It has all SAE adaptors for option. Special constructions on request. Double bearing alternators are balanced with 1/2 key.

All alternators can operate in both directions: clockwise and counterclockwise.

ELECTRICAL FEATURES

OVERLOADS & SHORT CIRCUIT CURRENT

Followings overloads are allowed:

10% for 1 hour

14% for 15 minutes

25% for 5 minutes

50% for 2 minutes

With the addition of an optional Permanent Magnet, alternators can sustain 300% short circuit current for 10 seconds.

UNBALANCED LOAD

The alternators permit an unbalanced load of 25% rated current. The deviation of line voltage is less than 5%.

INSULATION

The insulation system is class 'H'

Vacuum pressure Impregnation

Windings and Electrical Performance

Generator stator is wound to 2/3 pitch. This eliminates triplen (3rd, 9th, 15th...) harmonics on the voltage waveform and is found to be the optimum design for trouble-free supply of non-linear loads.

TELEPHONE INTERFERENCE

TIF (as defined by BS4999 Part 40) is better than 2%. TIF (as defined by ASAC50.12) is better than 50.

RADIO INTERFERENCE

The alternators are supplied with interference suppression grade N to VDE 0875.

DAMPER WINDING

This arrangement provides the alternator with excellent damping against torsional vibrations that occurs during changes in load and when running in parallel.

ACCESSORIES & OPTION

Droop kit for sharing of reactive current during parallel operation

- Remote voltage potentiometer
- PT100 thermal protection embedded in stator windings
- Anti condensation heaters
- IP23 protection
- Special treatment for damp-saline or corrosive environment
- Permanent Magnet
- Control panel with LCD digital meter

GENERAL NOTES

All ratings are base in 40C° ambient temperature at 1000m altitude.

Site altitude exceeds 1000m above the sea level, (ambient temperature 40C°)

1000 mt. A.s.l.= 100%; 1500 mt. A.s.l.= 97%; 2000 mt. A.s.l.= 94%; 2500 mt. A.s.l.= 91%;

3000 mt. A.s.l.= 87%; 3500 mt. A.s.l.= 82%

Power factor cos. Φ < 0.8

Cos. Φ 0.8~1= 100%; Cos. Φ 0.7= 96%; Cos. Φ 0.6= 92%; Cos. Φ 0.5= 91%; Cos. Φ 0.4= 90%