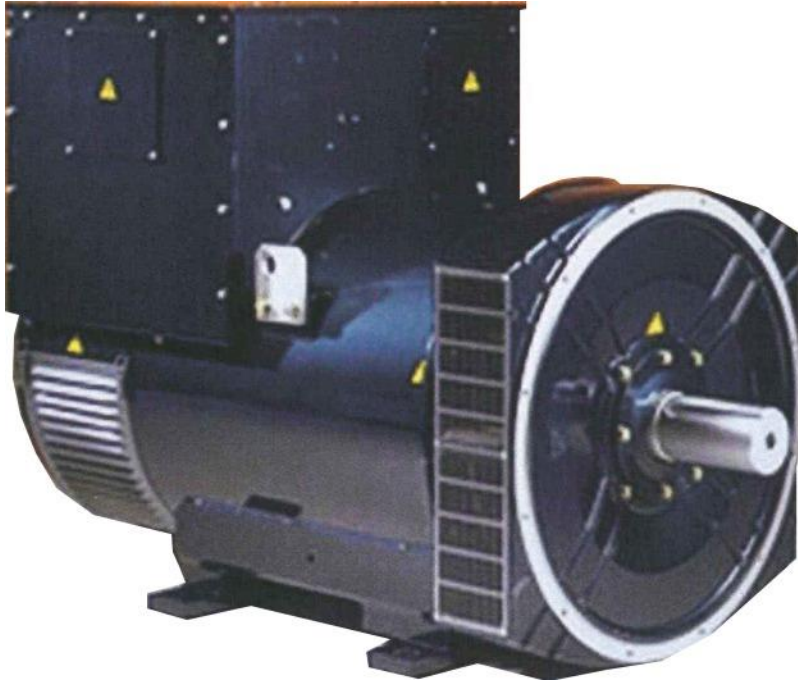




DG 4



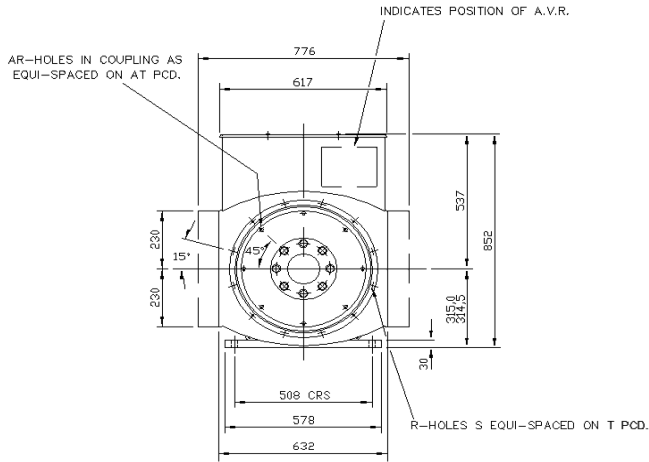
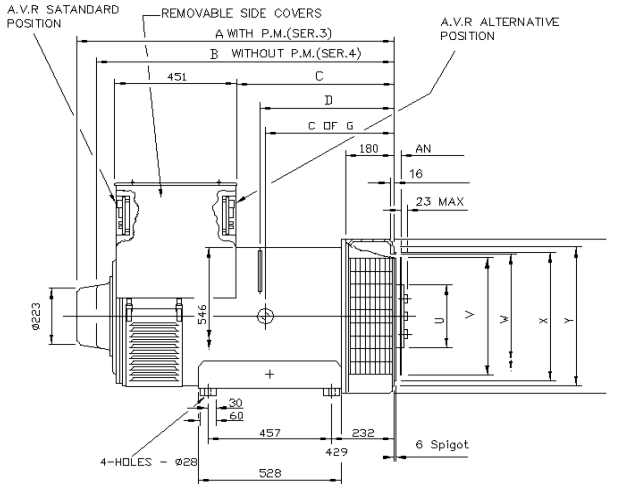
maximizing your energy

Try the best!

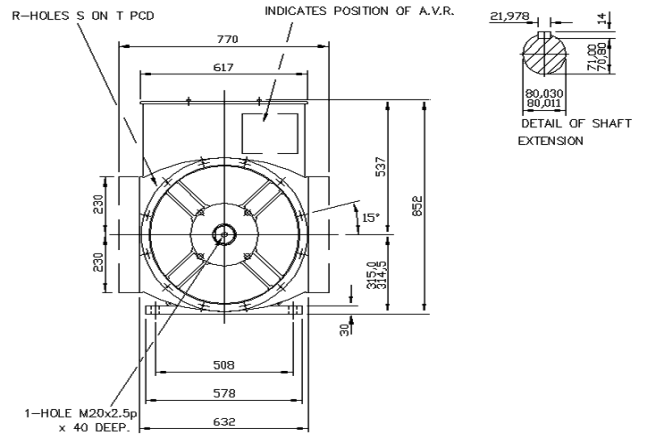
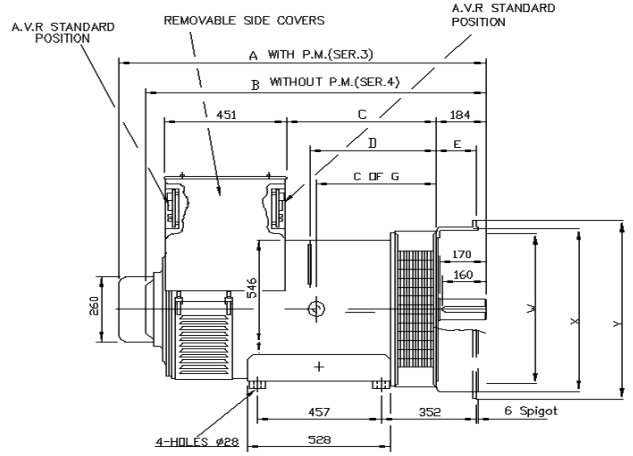
DG4		3 Phase H insulation industrial							
Voltage		50 Hz 1500rpm				60 Hz 1800rpm			
Series star		380	400	415	440	416	440	460	480
Parallel star		190	200	208	220	208	220	230	240
Series Delta		220	230	240	254	240	254	266	277
DG 444C	kVA	250	250	250	250	287.5	300	300	312.5
	kW	200	200	200	200	230	240	240	250
	Efficiency (%)	92	92.4	92.7	93.1	92.1	92.4	92.6	92.8
	Power input (KW)	217	216	216	215	250	260	259	269
DG 444D	kVA	300	300	300	280	340	360	360	375
	kW	240	240	240	224	272	288	288	300
	Efficiency (%)	92.3	92.7	93.0	93.4	92.3	92.6	92.7	93.0
	Power input (KW)	260	259	258	240	295	311	311	323
DG 444E	KVA	325	325	325	325	381	400	400	415
	KW	260	260	260	260	304.8	320	320	332
	Efficiency (%)	93.0	93.3	93.5	93.8	92.8	93.1	93.4	93.5
	Power input (KW)	280	279	278	277	328	344	343	355
DG 444F	KVA	375	375	375	380	444	455	463	475
	KW	300	300	300	304	355.2	364	370.4	380
	Efficiency (%)	92.6	93.0	93.2	93.5	92.6	92.9	93.2	93.4
	Power input (KW)	324	323	322	325	384	392	397	407

DG4		3 phase F insulation marine								
Voltage		50 Hz 1500rpm				60 Hz 1800rpm				
Series Star		380	400	415	440	416	440	450	460	480
Parallel Star		190	200	208	220	208	220	225	230	240
Series Delta		220	230	240	254	240	254	260	266	277
DG 444C	KVA	210	210	215	215	256	262	264	265	269
	KW	170	170	170	170	205	210	213	215	215
	Efficiency (%)	93.1	93.3	93.4	93.6	92.9	93.1	93.2	93.2	93.5
	Power input (KW)	183	182	182	182	221	226	228	231	230
DG 444D	KVA	267	267	267	267	320	320	320	320	320
	KW	213	213	213	213	256	256	256	256	256
	Efficiency (%)	93.8	94	94	94.2	93.8	94.1	94	94	94
	Power input (KW)	230	230	230	230	275	275	275	275	275
DG 444E	KVA	311	311	311	311	374	374	374	374	374
	KW	249	249	249	249	299	299	299	299	299
	Efficiency (%)	93.5	93.5	93.6	93.6	93.6	93.7	93.8	93.8	93.8
	Power input (KW)	267	267	267	267	321	321	321	321	321
DG 444F	KVA	356	356	356	356	427	427	427	427	427
	KW	285	285	285	285	341	341	341	341	341
	Efficiency (%)	93	93	93	93	94	94	94	94	94
	Power input (KW)	306	306	306	306	367	367	367	367	367

SINGLE BEARING



DOUBLE BEARING



SINGLE BEARING DIMENSIONS					
CODE	A	B	C	D	C of G
DG 444C	1172	1101	584	493	463
DG 444D	1172	1101	584	493	483
DG 444E	1172	1101	584	493	504
DG 444F	1262	1191	674	583	530

DOUBLE BEARING DIMENSIONS					
TIPO	A	B	C	D	C of G
DG 444C	1326	1255	554	463	433
DG 444D	1326	1255	554	463	453
DG 444E	1326	1255	554	463	474
DG 444F	1416	1345	644	553	500

FLANGE ADAPTOR						
S.A.E.No.	R	S	T	W	X	Y
0	12	14	679.5	626	647.6	711
½	12	14	619.1	569	584.1	680
1	12	12.7	530.2	496	511.1	617
2	12	11	466.7	432	447.6	617
3	12	11	428.6	394	409.5	617

FLANGE ADAPTOR							
S.A.E.No.	R	S	T	W	X	Y	E
0	16	14	679.5	632	647.6	711	150
½	12	14	619.1	569	584.1	648	150
1	12	12.7	530.2	496	511.1	553	150
12V135	12	14	625.0	590	604.9	660	158

DISC COUPLING						
S.A.E.No.	AN	AR	AS	AT	U	V
11.5	39.68	8	10.3	333.4	250	352.3
14	25.40	8	13.5	438.1	250	466.6
18	15.87	6	16.7	543.0	250	571.1

SINGLE BEARING SHIPPING DETAILS			
CODE	Net weight Kg	Gross weight Kg	packing
DG 444C	850	910	156X79X107
DG 444D	915	975	156X79X107
DG 444E	995	1055	156X79X107
DG 444F	1123	1183	156X79X107

DOUBLE BEARING SHIPPING DETAILS			
CODE	Net weight Kg	Gross weight Kg	packing
DG 444C	850	910	156X79X107
DG 444D	915	975	156X79X107
DG 444E	995	1055	156X79X107
DG 444F	1123	1183	156X79X107

MAIN CHARACTERISTIC DESCRIPTION

GENERAL

Alternator full range covers ratings from 5kVA to 1386kVA, so meeting the most part of needs for industrial, marine, 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%

BELTRAME CSE S.R.L.

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