alimar®

AA SERIES ALTERNATOR GROUPS

AA SERİSİ ALTERNATÖR GRUPLARI

ALİMAR ALTERNATOR

Alimar alternators are specially designed for stand-by and prime applications, long strength and high efficiency industrial alternators. We are manufacturing the industry's top-line alternators with years of the experience

ALİMAR ALTERNATÖR

Alimar alternatörler Stand-by ve Prime uygulamalarda ihtiyaca özel dizayn edilmiş uzun ömürlü ve yüksek verimli endüstriyel alternatörlerdir. Yılların verdiği deneyim ile sektörün öncü alternatörlerini üretmekteyiz.

INTERNATIONAL STANDARDS

Alimar alternator produced according to IEC EN 60034 standard. Complies with standards like BS5000, VDE0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359

ULUSLARARASI STANDARTLAR

Alimar alternatör IEC EN 60034 standartlarına uygun olarak üretilmiş olup, BS5000, VDE0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359 gibi uluslararası standartları karşılamaktadır.

ELECTRICAL DESIGN

- *Self excited, brushless*
- *"H" class insulation*
- *Low voltage winding*
- *Optimized performance*
- *Suitable for 50hz and 60 hz use*
- *Switchable voltage values*
- *Electronic AVR*
- *Interchangeable windings between star or delta connection*
- *High short circuit current resistance*
- *Power factor 0,8*
- *No de-rating up to 1000m and 40°C*

ELEKTRİKSEL DİZAYN

- *Kendinden ikazlı, fırçasız*
- *"H" sınıfı izolasyon*
- *Düşük Gerilim Sargısı*
- *Optimize Performans*
- *50 Hz ve 60 Hz kullanıma uygun*
- *Değiştirilebilir voltaj değerleri*
- *Elektronik AVR*
- *Yıldız veya üçgen bağlantı arasında değiştirilebilir sargılar*
- *Yüksek kısa devre akımı dayanımı*
- *Güç Faktörü 0,8*
- *1000m ve 40°C ye kadar güç düşümsüz*

MECHANICAL DESIGN

- *Compact desing resistance to vibration of the engine*
- *Steel frame*
- *Single bearing design*
- *Clockwise cycle*
- *Easy to access AVR and Terminal Box*

MEKANİK DİZAYN

- *Motorun titreşimlerine dayanıklı kompakt tasarım*
- *Çelik kasa*
- *Tek yataklı tasarım*
- *Saat yönünde çevrim*
- *Ulaşımı kolay AVR ve Terminal kutusu*

alimar®

AA Series / Serisi

THREE PHASE, BRUSHLESS, SYNCHRONOUS ALTERNATOR
ÜÇ FAZLI, FIRÇASIZ, SENKRON ALTERNATÖR

AA 184

TECHNICAL DATA SHEET / TEKNİK ÖZELLİKLER

50 Hz, CLASS / SINIF "H"

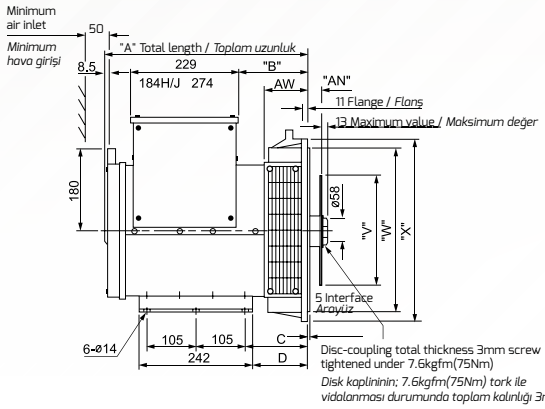
RATINGS / DEĞERLER		POWER FACTOR / GÜÇ FAKTÖRÜ 0.8											
DUTY / ÇALIŞMA TİPİ AMBIENT TEMP. / ORTAM SICAKLIĞI		CONTINOUS / SÜREKLİ 40°C						STANDBY 27°C					
TEMP RISE / SICAKLIK ARTIŞI		H (125°C)						H (163°C)					
PHASE / FAZ		3 PHASE / FAZ						3 PHASE / FAZ					
SERIES STAR YILDIZ BAĞLANTI	Y	380		400		415		380		400		415	
PARALLEL STAR PARALEL YILDIZ BAĞLANTI	YY	190		200		208		190		200		208	
SERIES DELTA ÜÇGEN BAĞLANTI	Δ	220		230		240		220		230		240	
MODEL		kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
AA184E		22.5	18	22.5	18	22.5	18	25	20	25	20	25	20
AA184F		27.5	22	27.5	22	27.5	22	30	24	30	24	30	24
AA184G		31.5	25.2	31.5	25.2	31.5	25.2	35	28	35	28	35	28
AA184H		37.5	30	37.5	30	37.5	30	40	32	40	32	40	32
AA184J		40	32	40	34	40	32	44	35.2	46	36.8	44	35.2

60 Hz, CLASS / SINIF "H"

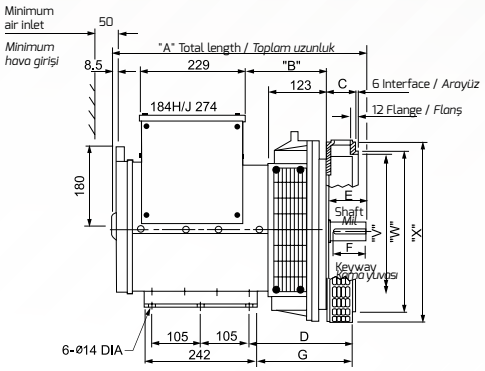
RATINGS / DEĞERLER		POWER FACTOR / GÜÇ FAKTÖRÜ 0.8											
DUTY / ÇALIŞMA TİPİ AMBIENT TEMP. / ORTAM SICAKLIĞI		CONTINOUS / SÜREKLİ 40°C						STANDBY 27°C					
TEMP RISE / SICAKLIK ARTIŞI		H (125°C)						H (163°C)					
PHASE / FAZ		3 PHASE / FAZ						3 PHASE / FAZ					
SERIES STAR YILDIZ BAĞLANTI	Y	416		440		460		416		440		460	
PARALLEL STAR PARALEL YILDIZ BAĞLANTI	YY	208		220		230		208		220		230	
SERIES DELTA ÜÇGEN BAĞLANTI	Δ	240		254		266		240		254		266	
MODEL		kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
AA184E		27.5	22	28.8	23	28.8	23	30	24	32	25.6	32	25.6
AA184F		32.5	26	34.4	27.5	34.4	27.5	35	28	37	29.6	37	29.6
AA184G		35	28	37.5	30	37.5	30	36.9	29.5	40	32	40	32
AA184H		45	36	46.9	37.5	46.9	37.5	47.3	37.8	50	40	50	40
AA184J		47.3	37.8	50	40	50	40	52	41.6	55	44	55	44

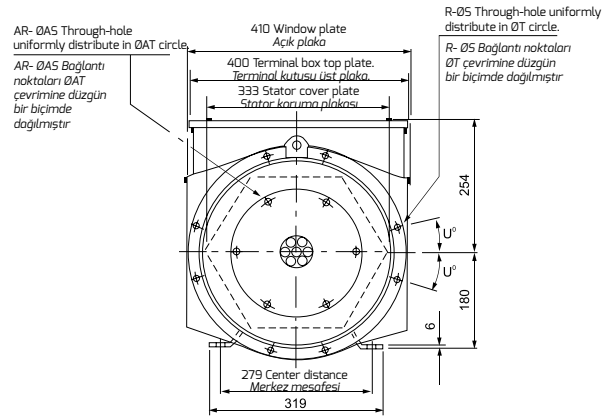
AA 184
OVERALL DIMENSIONS / ÖLÇÜLER

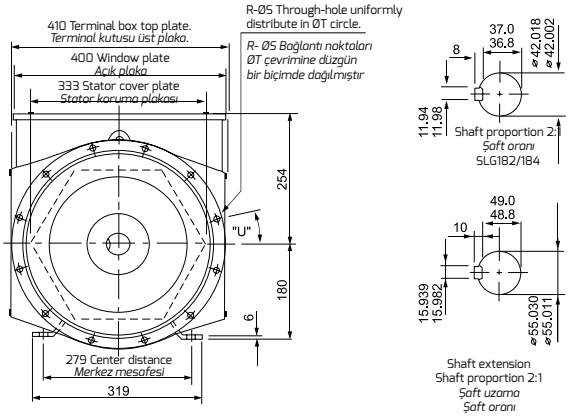
SINGLE BEARING / TEK YATAKLI



DOUBLE BEARING / ÇİFT YATAKLI







DIMENSIONS / BOYUTLAR (mm)									SHIPPING DIMENSIONS SEVKİYAT BOYUTLARI		
Model	A				B				Net Weight Net Ağırlık (kg)	Gross Weight Brüt Ağırlık (kg)	LxWxH (mm)
	SAE2	SAE3	SAE4	SAE5	SAE2	SAE3	SAE4	SAE5			
AA184E	471	443.5	431.5	443.5	186	159	147	159	120	133	565x485x620
AA184F	561	533.5	521.5	553.5	276	249	237	269	150	156	675x510x620
AA184G	561	533.5	521.5	553.5	276	249	237	269	156	172	675x510x620
AA184H	620.5	593.5	581.5	613.5	291	264	252	284	216	226	740x510x620
AA184J	620.5	593.5	581.5	613.5	291	264	252	284	226	236	740x510x620

DIMENSIONS / BOYUTLAR (mm)								SHIPPING DIMENSIONS SEVKİYAT BOYUTLARI		
Model	A	B	C	D	E	F	G	Net Weight Net Ağırlık (kg)	Gross Weight Brüt Ağırlık (kg)	LxWxH (mm)
AA184E	551.5	177	65	228	82	77	212	131	141	675x510x620
AA184F	641.5	267	65	228	82	77	212	154	164	740x510x620
AA184G	641.5	267	65	228	82	77	212	170	180	740x510x620
AA184H	734.5	282	105	268	110	100	252	220	230	820x510x620
AA184J	734.5	282	105	268	110	100	252	230	240	820x510x620

FLANGE / FLANŞ (mm)									
S.A.E.NO.	AW	R	S	T	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	125(105)***	8	11	333.3	22.5	314.3	356	165(145)***	149(129)***
6*	136.7	8	11	285.8	22.5	266.7	308	176.7	160.7

FLANGE / FLANŞ (mm)							
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	447.6	495
3	12	11	428.6	15	396	409.5	451
4	12	11	381.0	15	352	361.9	403
5	8	11	333.3	22.5	301	314.3	356

(*) "A" dimensions should extend 31.77 mm corresponding to an additional spacer plate added on SAE 6.
"A" toplam uzunluğu, SAE 6 flanş modelinde ara levha kullanılması durumunda 31,77 mm daha uzayacaktır.
(**) 8 holes of SAE 3 uniformly distrubute the circle spaced as 12.
SAE 3 disk kaplin modelinde, 12 bağlantı noktası yerine 8 adet bağlantı noktası eşit dağıtılmıştır.
(***) The AW dimension of 184E should be 105,C dimension is 145,D dimension is 129.
184E alternatör modelinde AW uzunluğu 105, C uzunluğu 145, D uzunluğu 129 mm'dir.

DISC COUPLING / DİSK KAPLİN (mm)					
S.A.E.NO.	AN	AR	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

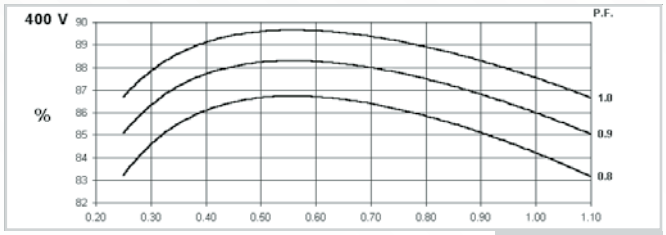
SINGLE BEARING SAE NO SELECTOR / TEK YATAK SAE NO SEÇİMİ					
SAE NO	SAE 6.5	SAE 7.5	SAE 8	SAE 10	SAE 11,5
SAE 3	•	•		•	•
SAE 4	•	•	•	•	
SAE 5	•	•			
SAE 6	•				

NOTE: ΔSAE14 is applicable for SLG184H/J iron core; SAE6.5&7.5 are not applicable for SLG184H/J iron core.
NOT: ΔSAE14 disk kaplini SLG184H/J modeli için uygulanabilir; SAE6.5&7.5 disk kaplinleri SLG184H/J modeli için uygulanamaz.

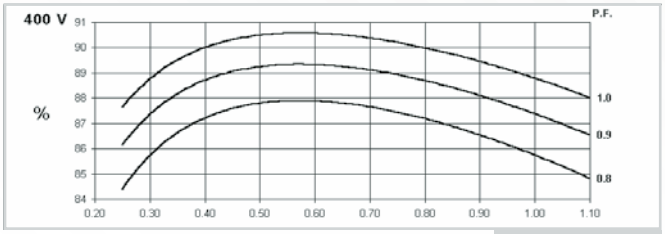
AA 184

EFFICIENCY CURVES / VERİM GRAFİKLERİ

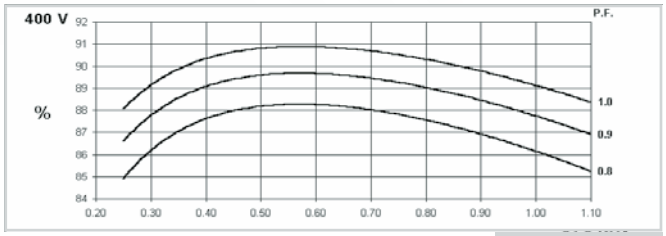
50 Hz



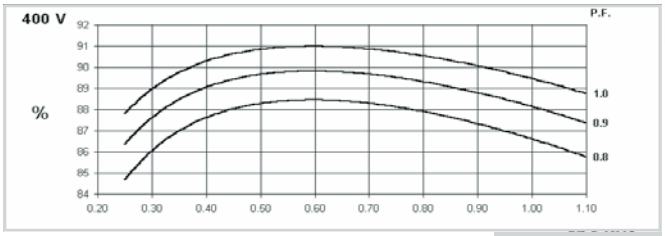
AA184E



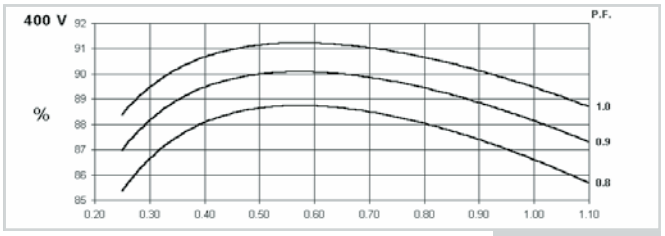
AA184F



AA184G



AA184H



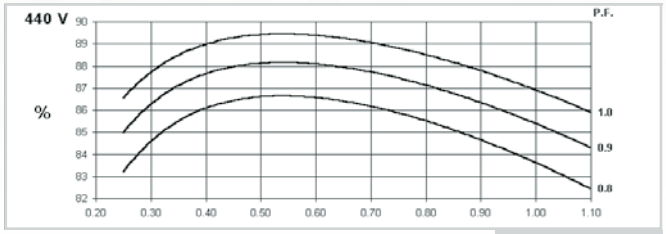
AA184J

VOLTAGE SERIES STAR 400/230 50Hz					
MODEL	**AA184E**	**AA184F**	**AA184G**	**AA184H**	**AA184J**
Xd DIR. AXIS SYNCHRONOUS	1.690	1.650	1.560	2.000	2.051
X'd DIR. AXIS TRANSIENT	0.170	0.170	0.150	0.152	0.156
X"d DIR. AXIS SUBTRANSIENT	0.110	0.110	0.110	0.083	0.085
Xq QUAD. AXIS REACTANCE	0.840	0.830	0.780	0.967	0.990
X"q QUAD. AXIS SUBTRANSIENT	0.190	0.191	0.170	0.169	0.173
XL LEAKAGE REACTANCE	0.068	0.066	0.063	0.062	0.064
X2 NEGATIVE SEQUENCE	0.160	0.150	0.140	0.127	0.130
X0 ZERO SEQUENCE	0.073	0.072	0.067	0.030	0.032
T'd TRANSIENT TIME CONST. (s)	0.02 s	0.022 s	0.024 s	0.024 s	0.025 s
T"d SUB-TRANSTIME CONST. (s)	0.005 s	0.0055 s	0.006 s	0.015 s	0.016 s
T"do O.C. FIELD TIME CONST. (s)	0.4 s	0.45 s	0.55 s	0.57 s	0.59 s
Ta ARMATURE TIME CONST. (s)	0.006 s	0.0065	0.007 s	0.01 s	0.0105 s
SHORT CIRCUIT RATIO	1/Xd	1/Xd	1/Xd	1/Xd	1/Xd

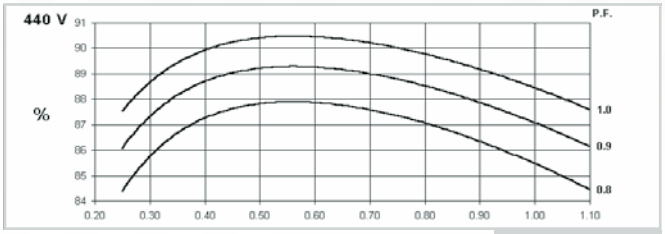
AA 184

EFFICIENCY CURVES / VERİM GRAFİKLERİ

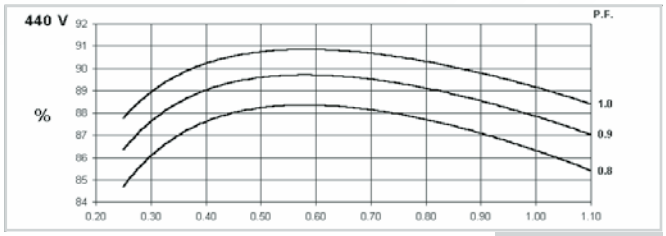
60 Hz



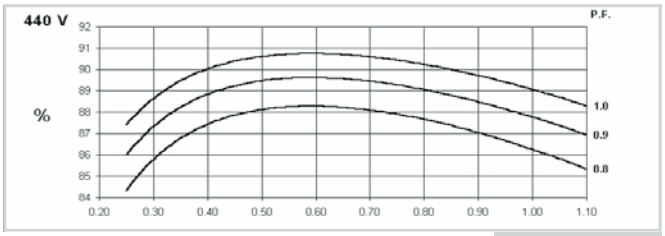
AA184E



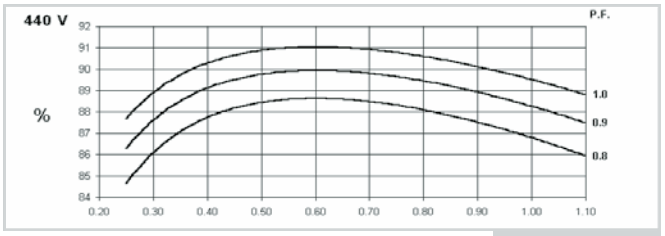
AA184F



AA184G



AA184H



AA184J

VOLTAGE SERIES STAR 440/254 60Hz					
MODEL	**AA184E**	**AA184F**	**AA184G**	**AA184H**	**AA184J**
Xd DIR. AXIS SYNCHRONOUS	2.148	2.047	1.857	2.380	2.297
X'd DIR. AXIS TRANSIENT	0.217	0.199	0.190	0.181	0.175
X"d DIR. AXIS SUBTRANSIENT	0.137	0.140	0.119	0.099	0.095
Xq QUAD. AXIS REACTANCE	1.063	1.029	0.916	1.151	1.109
X"q QUAD. AXIS SUBTRANSIENT	0.240	0.234	0.202	0.201	0.194
XL LEAKAGE REACTANCE	0.087	0.082	0.075	0.074	0.071
X2 NEGATIVE SEQUENCE	0.194	0.187	0.179	0.151	0.145
X0 ZERO SEQUENCE	0.093	0.089	0.080	0.036	0.036
T'd TRANSIENT TIME CONST. (s)	0.02 s	0.022 s	0.024 s	0.024 s	0.025 s
T"d SUB-TRANSTIME CONST. (s)	0.005 s	0.0055 s	0.006 s	0.015 s	0.016 s
T"do O.C. FIELD TIME CONST. (s)	0.4 s	0.45 s	0.55 s	0.57 s	0.59 s
Ta ARMATURE TIME CONST. (s)	0.006 s	0.0065	0.007 s	0.01 s	0.0105 s
SHORT CIRCUIT RATIO	1/Xd	1/Xd	1/Xd	1/Xd	1/Xd