



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 B55000, VDE0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359

ULUSLARARASI STANDARTLAR

Alimar alternatör IEC EN 60034 standartlarına uygun olarak üretilmiş olup, B55000, 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



AA Series / Serisi

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



AA 164

TECHNICAL DATA SHEET / TEKNİK ÖZELLİKLER

50 Hz, CLASS / SINIF "H"

RATINGS / DEĞERLER		POWER FACTOR / GÜÇ FAKTÖRÜ 0.8											
DUTY / ÇALIŞMA TİPİ		CONTINUOUS / SÜREKLİ						STANDBY					
AMBIENT TEMP. / ORTAM SICAKLIĞI		40°C						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	380	400	415	380	400	415
PARALLEL STAR PARALEL YILDIZ BAĞLANTI	YY	190	200	208	190	200	208	190	200	208	190	200	208
SERIES DELTA ÜÇGEN BAĞLANTI	Δ	220	230	240	220	230	240	220	230	240	220	230	240
MODEL		kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
AA164A		8.1	6.5	8.1	6.5	8.1	6.5	9	7.2	9	7.2	9	7.2
AA164B		11	8.8	11	8.8	11	8.8	12	9.6	12	9.6	12	9.6
AA164C		13.5	10.8	13.5	10.8	13.5	10.8	15	12	15	12	15	12
AA164D		16	12.8	16	12.8	16	12.8	17.5	14	17.5	14	17.5	14

60 Hz, CLASS / SINIF "H"

RATINGS / DEĞERLER		POWER FACTOR / GÜÇ FAKTÖRÜ 0.8											
DUTY / ÇALIŞMA TİPİ		CONTINUOUS / SÜREKLİ						STANDBY					
AMBIENT TEMP. / ORTAM SICAKLIĞI		40°C						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	416	440	460	416	440	460
PARALLEL STAR PARALEL YILDIZ BAĞLANTI	YY	208	220	230	208	220	230	208	220	230	208	220	230
SERIES DELTA ÜÇGEN BAĞLANTI	Δ	240	254	266	240	254	266	240	254	266	240	254	266
MODEL		kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
AA164A		9.6	7.7	9.6	7.7	9.6	7.7	12	9.6	12	9.6	12	9.6
AA164B		13	10.4	13	10.4	13	10.4	16	12.8	16	12.8	16	12.8
AA164C		16	12.8	16	12.8	16	12.8	18.5	14.8	18.5	14.8	18.5	14.8
AA164D		18.9	15.1	18.9	15.1	18.9	15.1	22	17.6	22	17.6	22	17.6

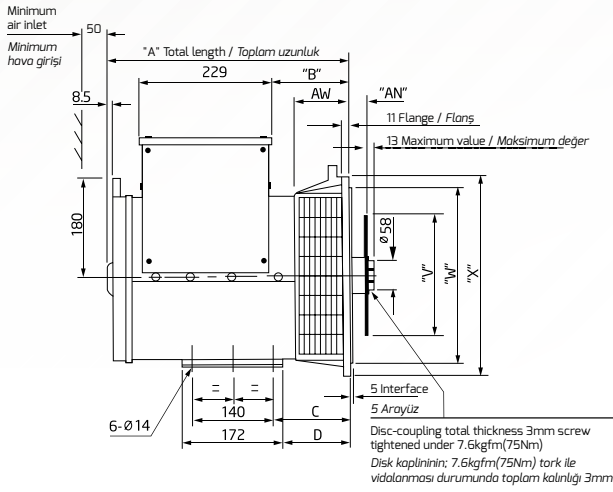
> Enerjide Çözüm Ortağınız

> Your Solution Partner in Energy

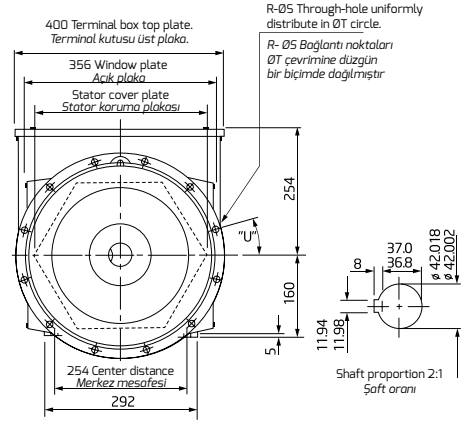
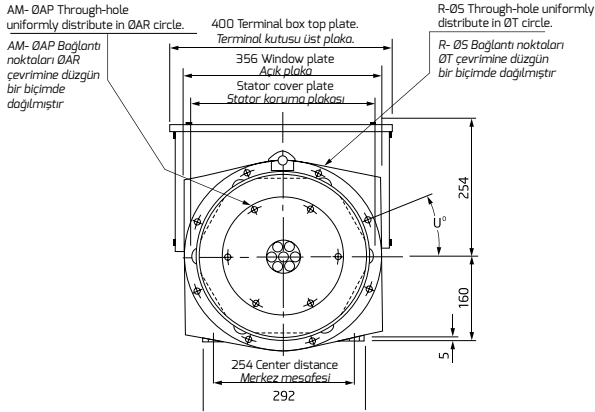
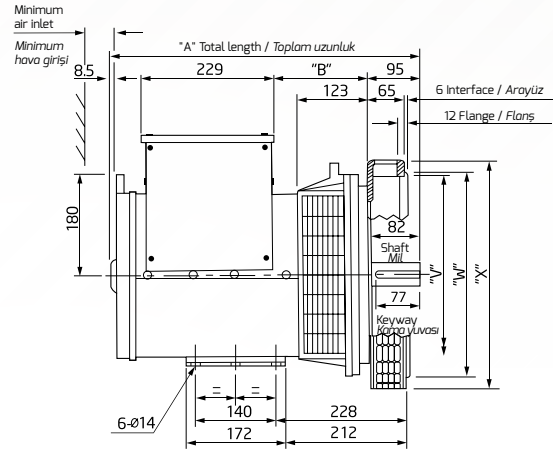
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OVERALL DIMENSIONS / ÖLÇÜLER

SINGLE BEARING / TEK YATAKLI



DOUBLE BEARING / ÇİFT YATAKLI



Model	DIMENSIONS / BOYUTLAR (mm)			SHIPPING DIMENSIONS SEVKİYAT BOYUTLARI			Net Weight / Net Ağırlık (kg)	Gross Weight / Brüt Ağırlık (kg)	LxWxH (mm)
	A	B							
AA164A	403.5	391.5	435.2	119.5	107	151.2	85	95	515x485x620
AA164B	403.5	391.5	435.2	119.5	107	151.2	90	102	515x485x620
AA164C	403.5	391.5	435.2	119.5	107	151.2	96	110	515x485x620
AA164D	403.5	391.5	435.2	119.5	107	151.2	99	116	515x485x620

Model	DIMENSIONS / BOYUTLAR (mm)			SHIPPING DIMENSIONS SEVKİYAT BOYUTLARI			Net Weight / Net Ağırlık (kg)	Gross Weight / Brüt Ağırlık (kg)	LxWxH (mm)
	A	B							
AA164A	511.5	137		91	101		565x485x620		
AA164B	511.5	137		98	108		565x485x620		
AA164C	511.5	137		106	116		565x485x620		
AA164D	511.5	137		112	122		565x485x620		

S.A.E.NO.	FLANGE / FLANŞ (mm)								
	AW	R	S	T	U*	W	X	C	D
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	105	8	11	333.3	22.5	314.3	356	145	129
6*	136.7	8	11	285.8	22.5	266.7	308	176.7	160.7

S.A.E.NO.	FLANGE / FLANŞ (mm)						
	R	S	T	U*	V	W	X
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

S.A.E.NO.	DISC COUPLING / DİSK KAPLIN (mm)				
	AN	AM	AP	AR	V
6.5	30.16	6	8.7		200.0
7.5	30.16	8	8.7		222.2
8**	61.9	6	11		244.5
10	53.98	8	11		295.3

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

(*) "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 distribute the circle spaced as 12.

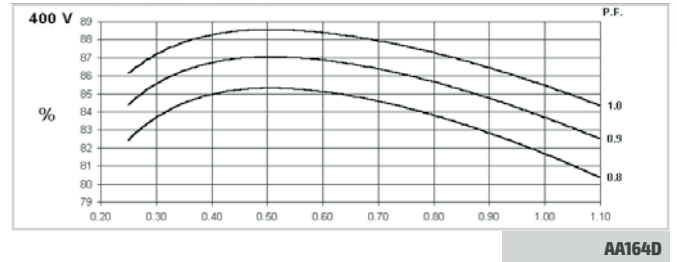
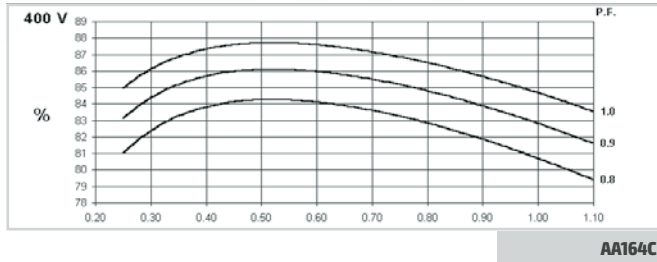
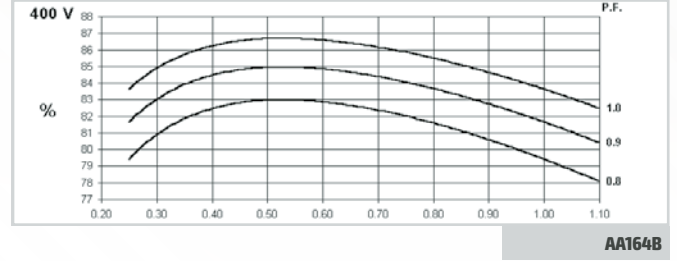
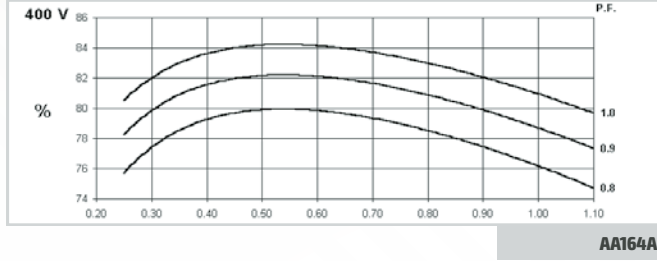
SAE 3 disk kaplin modelinde, 12 bağlantı noktası yerine 8 adet bağlantı noktası eşit dağılmıştır.

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EFFICIENCY CURVES / VERİM GRAFİKLERİ



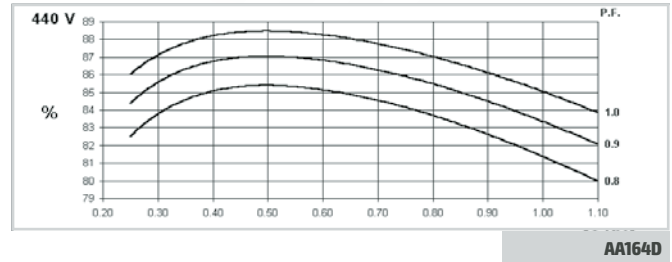
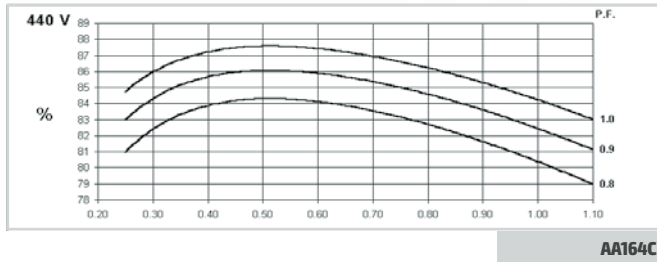
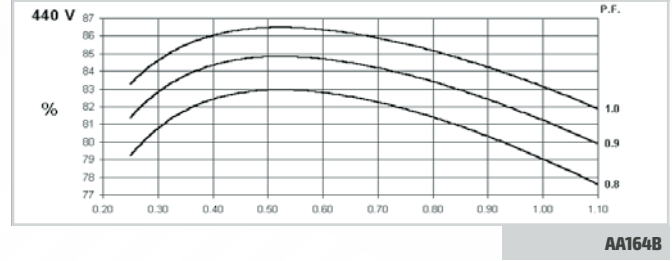
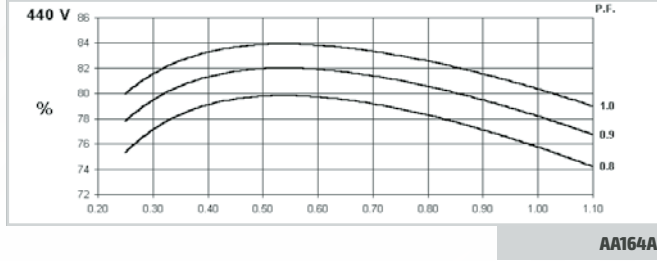
50 Hz



VOLTAGE SERIES STAR 400/230 50Hz

MODEL	AA164A	AA164B	AA164C	AA164D
Xd DIR. AXIS SYNCHRONOUS	1.800	1.777	1.754	1.734
X'd DIR. AXIS TRANSIENT	0.184	0.181	0.179	0.177
X''d DIR. AXIS SUBTRANSIENT	0.115	0.113	0.112	0.111
Xq QUAD. AXIS REACTANCE	0.895	0.883	0.872	0.861
X'q QUAD. AXIS SUBTRANSIENT	0.207	0.203	0.201	0.199
XL LEAKAGE REACTANCE	0.072	0.071	0.070	0.070
X2 NEGATIVE SEQUENCE	0.172	0.170	0.168	0.166
X0 ZERO SEQUENCE	0.078	0.077	0.76	0.075
T'd TRANSIENT TIME CONST. (s)	0.012 s	0.014 s	0.016 s	0.018 s
T''d SUB-TRANSTIME CONST. (s)	0.003 s	0.0035 s	0.004 s	0.0045 s
T''do O.C. FIELD TIME CONST. (s)	0.2 s	0.25 s	0.3 s	0.35 s
Ta ARMATURE TIME CONST. (s)	0.004 s	0.0045 s	0.005 s	0.0055 s
SHORT CIRCUIT RATIO	1/Xd	1/Xd	1/Xd	1/Xd

60 Hz



VOLTAGE SERIES STAR 440/254 60Hz

MODEL	AA164A	AA164B	AA164C	AA164D
Xd DIR. AXIS SYNCHRONOUS	2.248	2.211	2.174	2.149
X'd DIR. AXIS TRANSIENT	0.230	0.225	0.223	0.219
X''d DIR. AXIS SUBTRANSIENT	0.144	0.140	0.139	0.138
Xq QUAD. AXIS REACTANCE	0.117	1.098	1.081	1.068
X'q QUAD. AXIS SUBTRANSIENT	0.258	0.252	0.249	0.246
XL LEAKAGE REACTANCE	0.090	0.088	0.087	0.087
X2 NEGATIVE SEQUENCE	0.215	0.212	0.208	0.206
X0 ZERO SEQUENCE	0.098	0.096	0.094	0.093
T'd TRANSIENT TIME CONST. (s)	0.012 s	0.014 s	0.016 s	0.018 s
T''d SUB-TRANSTIME CONST. (s)	0.003 s	0.0035 s	0.004 s	0.0045 s
T''do O.C. FIELD TIME CONST. (s)	0.2 s	0.25 s	0.3 s	0.35 s
Ta ARMATURE TIME CONST. (s)	0.004 s	0.0045 s	0.005 s	0.0055 s
SHORT CIRCUIT RATIO	1/Xd	1/Xd	1/Xd	1/Xd