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2-4 POLE
BRUSHLESS
LOW-VOLTAGE

AL28 35 VAC 1Ph. CHARACTERISTICS

Tipo type typ	R.P.M.	Voltage (Volt)	Current (Amp.)	Power (kW)	Duty Cycle	P.F.	Efficiency		fattore di utilizzo / Duty cycle	regulation
							3/4	4/4		
AL28 VS/4V35	2500	35	457	16	S1	1	83,6	82,4	S1	Capacitor
AL28 L/4V35	2200	35	685	24	S1	1	83,3	82,1	S1	Capacitor
AL28 S/2V35	2800	35	457	16	S1	1	82,8	81,7	S1	Capacitor
AL28 L/2V35	2800	35	628	22	S1	1	84,2	83,5	S1	Capacitor

AL28-A 28 VDC 3 Ph. CHARACTERISTICS

Tipo Type typ	R.P.M.	Voltage (Volt)	Current (Amp.)	Power (kW)	Duty Cycle	P.F.	Efficiency		fattore di utilizzo / Duty cycle	Ripple* (%)
							3/4	4/4		
AL28-A S/4V28	1500	28	500	12	S1	1	83,6	82,1	S1	<7
AL28-A M/4V28	1800	28	640	18	S1	1	78,8	78,1	S1	<7

AL28-A 48 VDC 3Ph. CHARACTERISTICS

Tipo Type typ	R.P.M.	Voltage (Volt)	Current (Amp.)	Power (kW)	Duty Cycle	P.F.	Efficiency		fattore di utilizzo / Duty cycle	Ripple* (%)
							3/4	4/4		
AL28-A S/4V48	1500	48	250	12	S1	1	83,6	82,1	S1	<7
AL28-A M/4V48	1800	48	416	20	S1	1	83,5	82,7	S1	<7
AL28-A 2L/4V48	1500	48	500	24	S1	1	84,3	83,7	S1	<7

AL28-A 48 VDC 9Ph. CHARACTERISTICS

Tipo Type typ	R.P.M.	Voltage (Volt)	Current (Amp.)	Power (kW)	Duty Cycle	P.F.	Efficiency		fattore di utilizzo / Duty cycle	Ripple* (%)
							3/4	4/4		
AL28-A S/49V48	1500	48	250	12	S1	1	84,5	83,3	S1	<2

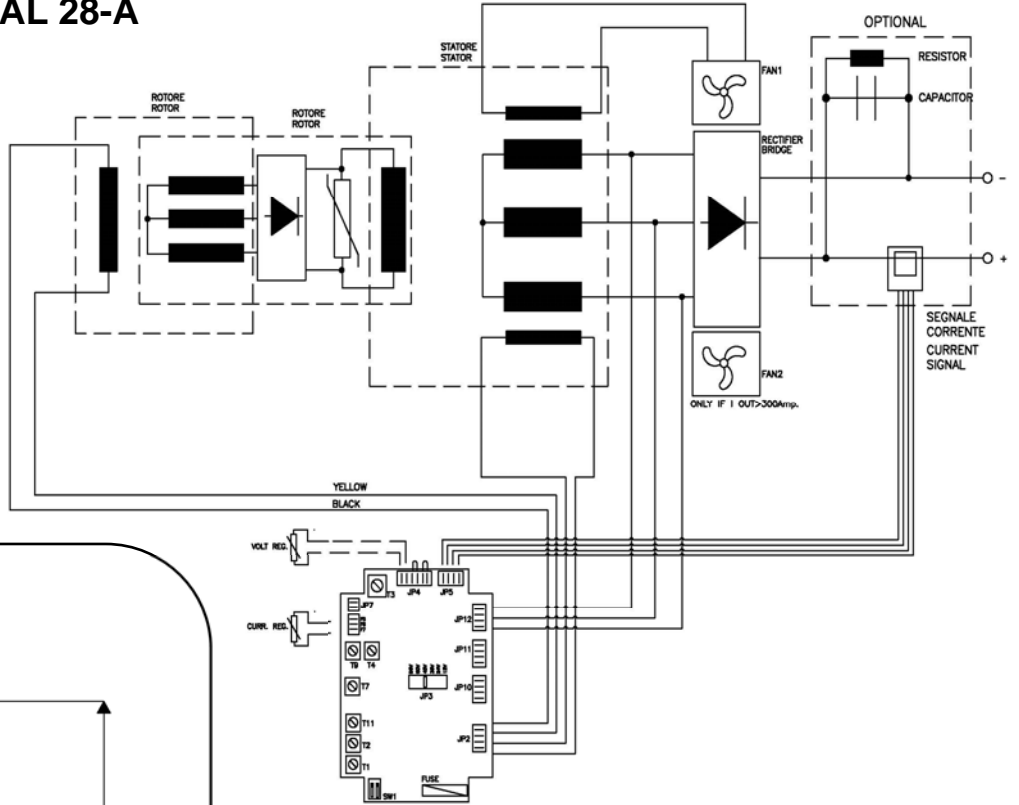
Tipo Type Typ	Weight (Kg)	J (Kgm²)	Air volume (m³/min)		Noise dB (A)			
					50Hz		60Hz	
			50Hz	60Hz	1mt.	7mt.	1mt.	7mt.
AL28 VS/4	106	0,1182	8,7	10,1	72	58	78	60
AL28 L/4	125	0,1183	7,6	9,1				
AL28 S/2	143	0,1203	9	10,7				
AL28 L/2	63	0,0398	9	10,7				
AL28-A S/4	113	0,0459	5,3	5,8	68	57	71	61
AL28-A M/4	132	0,0518						
AL28-A 2L/4	147	0,0577						

Ambient 40°C

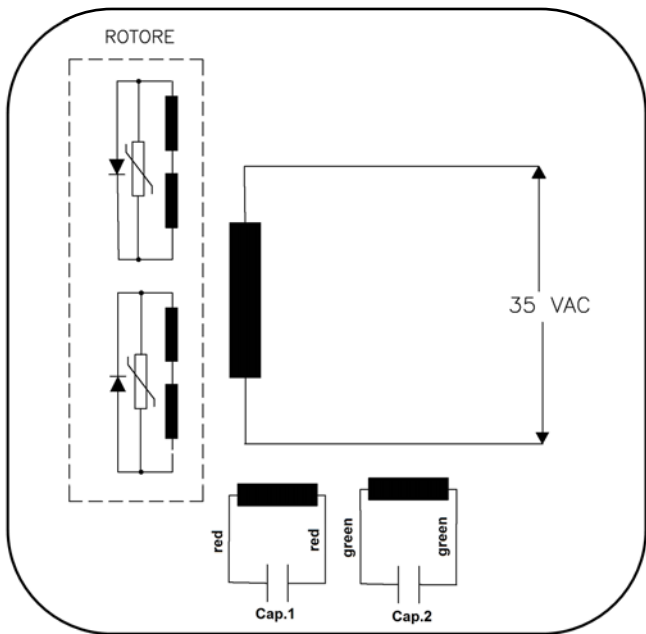


ELECTRIC DIAGRAM

AL 28-A



AL 28



TYPICAL ELECTRICAL DATA

AL 28 1PH. WINDING

ELECTRICAL DATA

- Type: brushless
- Regulation: capacitor
- Excitation: diodes in rotor
- Cooling: by fan
- Insulation class: H
- Voltage accuracy: +/- 8%

AL 28-A 3PH. WINDING

*= value with three phase winding and capacitor filter. (resistive load)

ELECTRICAL DATA

- Type: brushless
- Regulation: electronic RT-DC regulator
- Voltage accuracy: +/- 2% (depend model alternator)
- Cooling: by fan / rectifier: electric fan
- Thermal Protection: protection in winding and rectifier
- Under speed protection
- Exciter current limit protection
- Adjustable: from 20 to 32 vdc (24 vdc version); from 45 to 58 vdc (48 vdc version)
- Insulation class: H

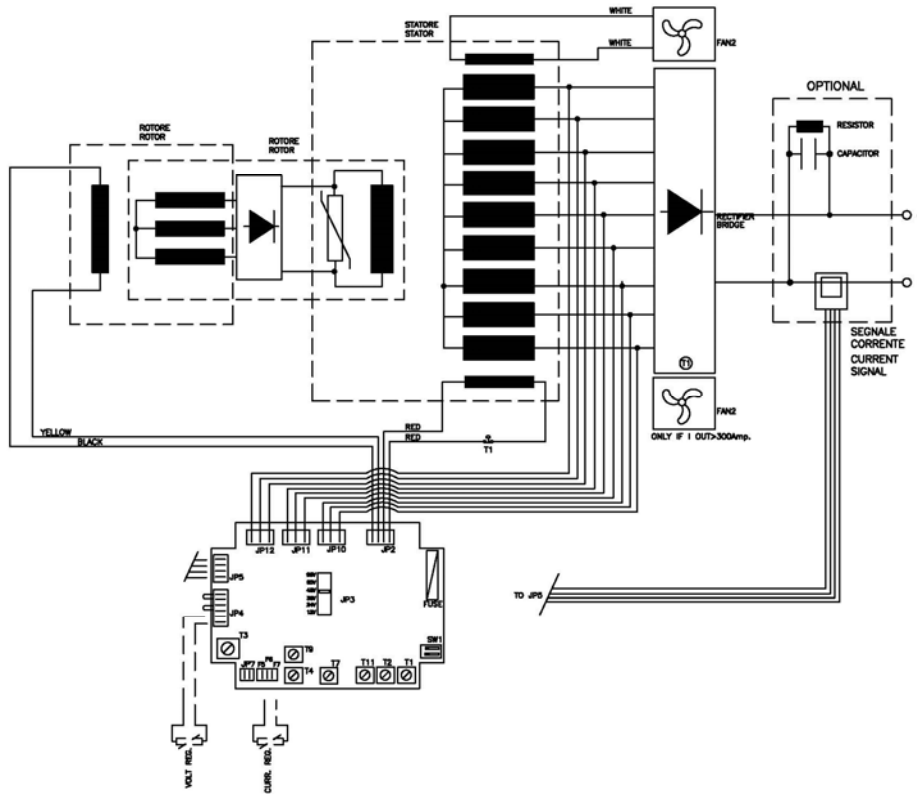
IMPREGNATION		HEATERS	THERMAL PROTECTION			MECHANICAL PROTECTION	
POLYESTER RESIN	EG 43 RESIN		PTC	BIMET. DEVICE	PT100	IP 23	IP 45
●	□	□	□	□	□	●	□

IMPREGNATION		HEATERS	THERMAL PROTECTION			FILTER	CURR. SENSOR	MECHANICAL PROTECTION
POLYESTER RESIN	EG 43 RESIN		PTC	BIMET. DEVICE	PT100			IP 21
●	□	□	□	●	□	□	□	●

● = STANDARD
□ = OPTIONAL

ELECTRIC DIAGRAM

AL28-A 9 Phase



TYPICAL ELECTRICAL DATA

AL 28-A 9PH. WINDING

*= value with three phase winding and capacitor filter. (resistive load)

ELECTRICAL DATA

Type: brushless

Regulation: electronic RT-DC regulator

Voltage accuracy: +/- 2% (depend model alternator)

Cooling: by fan / rectifier: electric fan

Thermal Protection: protection in winding and rectifier

Under speed protection

Exciter current limit protection

Adjustable: from 20 to 32 vdc (24 vdc version); from 45 to 58 vdc (48 vdc version)

Insulation class: H

IMPREGNATION		HEATERS	THERMAL PROTECTION			FILTER	CURR. SENSOR	MECHANICAL PROTECTION
POLYESTER RESIN	EG 43 RESIN		PTC	BIMET. DEVICE	PT100			
●	□	□	□	●	□	□	□	●

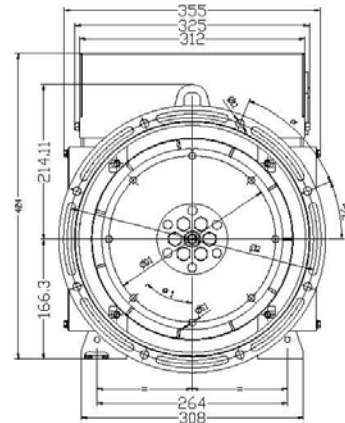
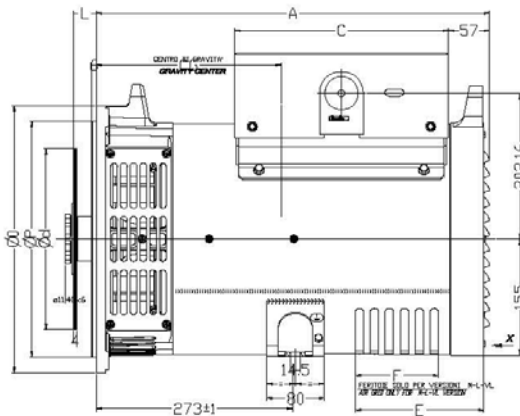
● = STANDARD

□ = OPTIONAL

OVERALL DIMENSIONS

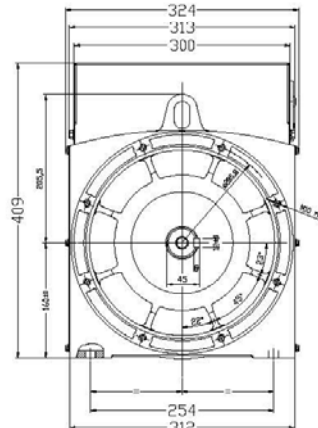
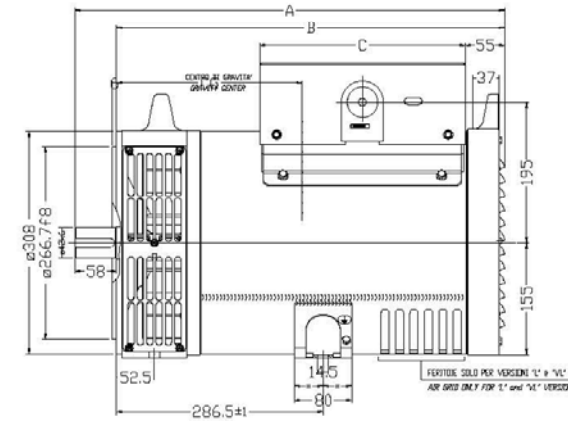
SAE N.	FLANGIA / FLANGE BRODE / FLANSCH			
	Ø	P	Q	α
5	356	314,3	333,4	45°
4	403	362	381	30°
3	451	409,6	428,6	30°
2	490	447,7	466,7	30°

SAE N.	GIUNTI A DISCHI / DISC COUPLING DISQUE DE MONOPALIER / SCHEIBENKUPPLUNG				
	d	L	Q1	S1	α1
6 1/2	215,9	30,2	200	9	60°
7 1/2	241,3	30,2	222,25	9	45°
8	263,52	62	244,47	11	60°
10	314,32	53,8	295,27	11	45°
11 1/2	352,42	39,6	333,37	11	45°



AL28 MD35

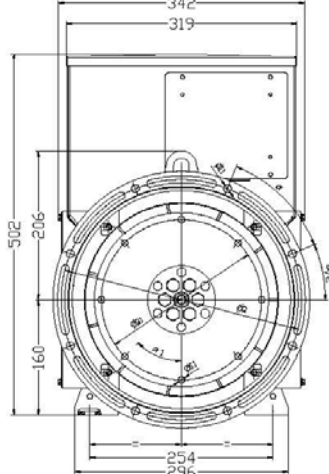
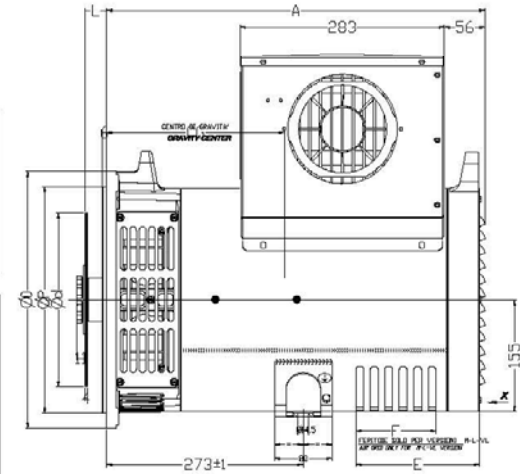
TIPO / TYPE / TYP	A	B	C
AL28 1VS/4	476	418	225
AL28 2VS/4	476	418	225
AL28 0S/4	516	458	285
AL28 S/4	516	458	285
AL28 1L/2	596	538	285
AL28 1L/4	596	538	285
AL28 2L/2	596	538	285
AL28 2L/4	596	538	285
AL28 3L/2	596	538	285
AL28 VL/2	626	568	285
AL28 VL/4	626	568	285



AL28 B14

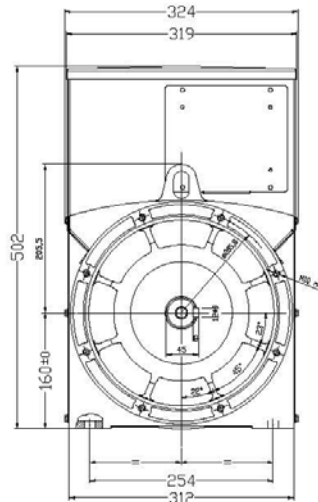
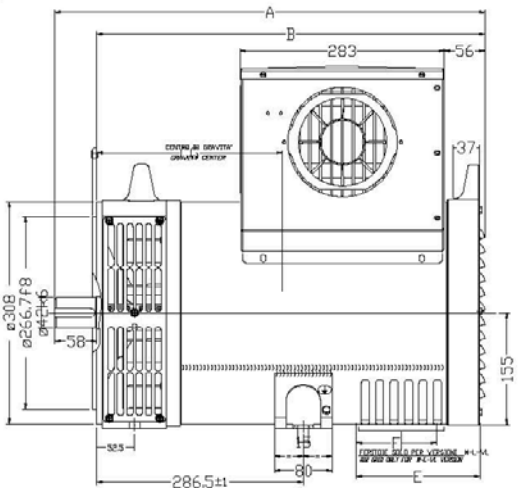
SAE N.	FLANGIA / FLANGE BRODE / FLANSCH			
	Ø	P	Q	α
5	356	314,3	333,4	45°
4	403	362	381	30°
3	451	409,6	428,6	30°
2	490	447,7	466,7	30°

SAE N.	GIUNTI A DISCHI / DISC COUPLING DISQUE DE MONOPALIER / SCHEIBENKUPPLUNG				
	d	L	Q1	S1	α1
6 1/2	215,9	30,2	200	9	60°
7 1/2	241,3	30,2	222,25	9	45°
8	263,52	62	244,47	11	60°
10	314,32	53,8	295,27	11	45°
11 1/2	352,42	39,6	333,37	11	45°



AL28A MD35

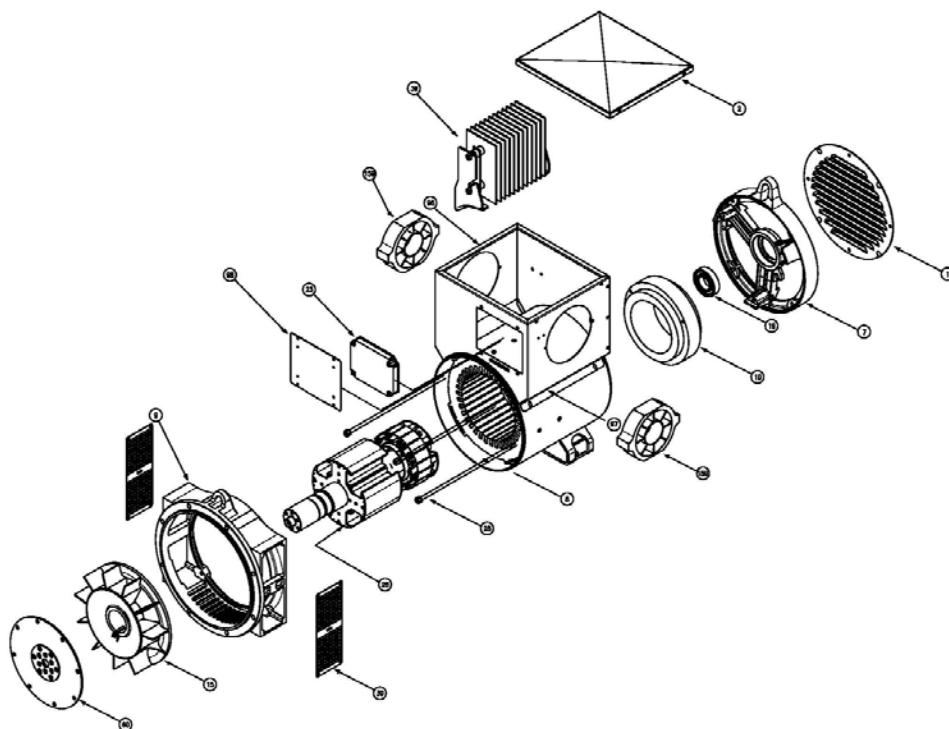
TIPO / TYPE / TYP	A	E	F	C.G.
AL28 A S/4	445	/	/	217
AL28 A M/2	480	131,5	71	233
AL28 A M/4	480	131,5	71	238
AL28 A 2L/2	525	171,5	111	248
AL28 A 2L/4	525	171,5	111	254
AL28 A 3L/2	525	171,5	111	254
AL28 A VL/2	555	171,5	111	273
AL28 A VL/4	555	171,5	111	274



AL28A B14

TIPO / TYPE / TYP	A	B	C.G.
AL28 A S/4	516	458	237
AL28 A M/4	552	491	250
AL28 A 1L/2	596	538	267
AL28 A 1L/4	596	538	268
AL28 A 2L/2	596	538	271
AL28 A 2L/4	596	538	275
AL28 A 3L/2	596	538	275
AL28 A VL/2	626	568	291
AL28 A VL/4	626	568	286

SPARE PARTS LIST



N°	DENOMINAZIONE	NAME	DESIGNATIONS	NAMEN	DENOMINACION	CODE
1	Chiusura posteriore	Rear seal	Toile de fermeture	Deckel	Cierre posterior	9LMCFASPATN28
2	Cuffia	Casing	Couvercle	Klemmenkastendeckel	Tapa	-
7	Coperchio posteriore	Rear cover	Flasque arriere	Hinteres Gehäuse	Tapa posterior	8ALCAPSATN-28
8	Carcassa con statore	Frame with stator	Carcasse avec stator	Gehäuse mit stator	Carcaza con estator	ON DEMAND
9	Coperchio anteriore B3-B14	B3-B14 drive end bracket	Flasque avant B3-B14	Vorderes Gehäuse B3-B14	Tapa anterior B3-B14	8ALFLANE28B14
	Coperchio anteriore B9	B9 drive end bracket	Flasque avant B9	Vorderes Gehäuse B9	Tapa anterior B9	8ALFLANE28B9*
	Coperchio anteriore J609b	J609 bdrive end bracket	Flasque avant J609 b	Vorderes Gehäuse J609b	Tapa anterior J609b	8ALFLANE28CBS
	Coperchio anteriore MD35	MD35 drive end bracket	Flasque avant MD35	Vorderes Gehäuse MD35	Tapa anterior MD 35	ON DEMAND
10	Statore eccitatrice	Exciter stator	Stator excitatrice	Erregerstator	Estator excitatriz	8STECCECN28*
14	Induttore rotante	Rotor	Roue polaire	Rotor	Inducido rotante	ON DEMAND
15	Ventola	B9	Ventilateur	Lüferrad	Ventilador	9ALVNTATN28**
17	Cuscinetto ant.	Front bearing	Roulment avant	Vorderes lager	Cojinete anterior	9MNCS013092RS
19	Cuscinetto post.	Rear bearing	Roulment arriere	Hinteres lager	Cojinete posterior	9MNCS01207***
23	Regolatore elettronico	Electronic regulator	Règulateur électronique	Elektronischer regler	Regulador electrónico	8ELRGAVR1217A
28	Tirante coperchi	Cover stay bolt	Tige de flasque	Stehbolzen	Tirante de la tapa	ON DEMAND
39	Retina di protezione B9	B9 Protection screen	Grille de protection B9	Abluftgitter B9	Rejilla protección B9	9LMGRECO28B14
	Retina di protezione MD 35	MD 35 Protection screen	Grille de protection MD 35	Abluftgitter MD35	Rejilla protección MD35	9LMGRECO28MD3
60	Dischi	Disc plates	Disques	Kupplungsscheiben	Discos	ON DEMAND
96	Pannello ant.	Front panel	Panneau avant	Vorderes blech	Panel anterior	-
97	Pannello post.	Rear panel	Panneau arriere	Hinteres blech	Panel posterior	-
98	Pannello porta regolatore	Regulator carrying panel	Panneau support regulateur	Regler blech	Panel portaregulator	-
159	Eletto-ventola	Electric-fan	Electric-ventilateur	Elektro-lüferrad	Electro-ventilador	9ELVN17215038

Nella richiesta di parti di ricambio specificare il tipo e il codice dell'alternatore / When requesting spare parts always indicate the alternator's type and code / Pour toute demande de pieces detachées, prière de mentionner le type et le code de l'alternateur / Beiersatzteilbestellung bitte immer die teibenennung den typ und den code des wechselstromgenerators angeben / En cada pedido de pizas de recambio especificar siempre el tipo y el codigo del alternador.