

A L T E R N A T O R S

T Y P E

AAG

AAG compact

AAK

AAK compact

AAN compact

AAT



Iskra

Iskra Avtoelektrika d.d.



MAIN TECHNICAL DATA

Type	AAG Compact	
Nominal voltage	14V	28V
Nominal current	45A - 75A	30A - 35A
Stator diameter	108 mm	
Weight (without pulley)	~3.3 kg	
Max. speed (permanent / short time)	15,000 RPM / 18,000 RPM	
Regulator	Built-in Monofunction or multifunction Microelectronic technology	
Pulleys and drive end brackets	Different types according to customers' requirements.	
Terminals	Screw and/or blade terminal	
Drive end bearings	Type 6303 / 6304E	
Rear end bearing	Type 6003	
Power diodes	Press fit Zener diodes	
Protection of the slip rings and brushes	Protected against ingress of solid foreign matter and water spray (IP 54)	
Ambient temperature	From - 40°C to + 110°C	

APPLICATIONS

- for small tractors
- for small agricultural and construction machinery
- for stationary engines
- for passenger cars

Features

- high specific power and efficiency
- small dimensions
- low weight
- low noise level
- higher protection against accidental contact
- long life operation

DESIGN

The alternator is a three-phase, 12-pole synchronous self-excited generator with two internal fans and built-in regulator and rectifier. The compact construction and carefully selected materials assure improved technical characteristics and long life, service free, operation even under the harshest conditions of high and low temperatures, salt spray, humidity, water, dust, vibrations, aggressive liquids.

Stator

The stator has a three-phase winding on a laminated pack. The selected design and high filling factor of the stator slots provides improved cooling, low noise and high output characteristics.

Cooling

Two internal fans positioned on the claw poles provide more effective cooling with lower noise and higher protection against accidental contacts as well as higher output.

Rotor

The rotor field winding fixed between the claw poles provides excitation of the alternator through slip rings. Smaller slip rings provide higher brush durability, even at high speeds. Encapsulated slip rings offer increased durability of the alternator.

Rectifier

Construction of the rectifier with press fit Zener diodes provides low temperatures of the rectifier diodes, high resistance to vibrations and protections of loads on the vehicle against alternator overvoltages. The installation of the rectifier on the outer side of the rear end bracket ensures flexible arrangement of all types of terminals.

Regulator

The regulator together with the brush holder is assembled on the rear end bracket. Regulators use microelectronic technology and are mono or multifunction. The highest quality of brushes ensures long life of the alternator.

Brackets - Bearings - Pulleys

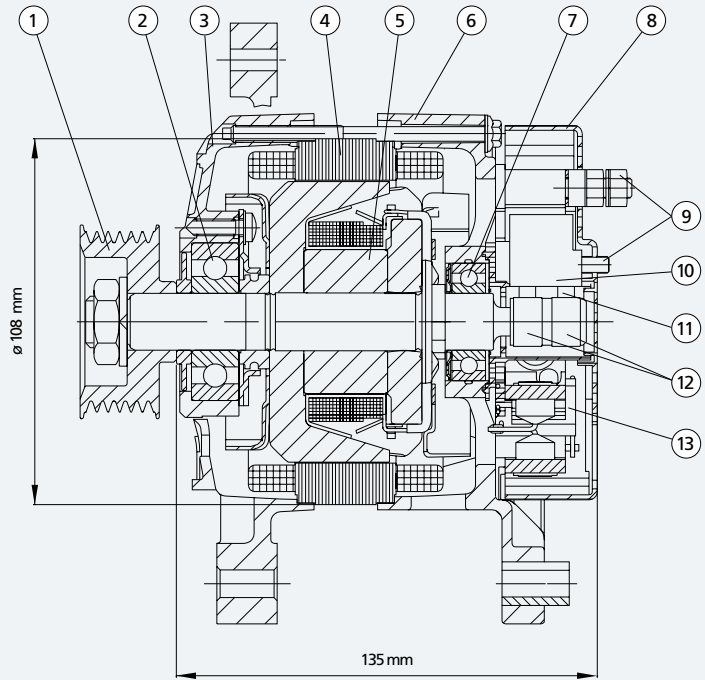
Brackets, bearings and pulleys are made according to the customers' requirements. A range of special sealed bearings makes it possible to design alternators for specific installations, operating in the harshest conditions whilst achieving long, maintenance free life.

Electrical terminals

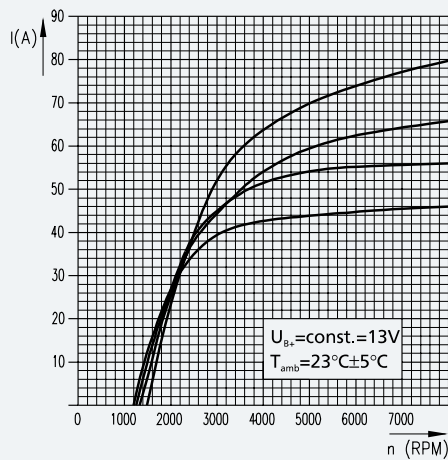
Electrical terminals are according to the requirements of the customers.

CROSS SECTION

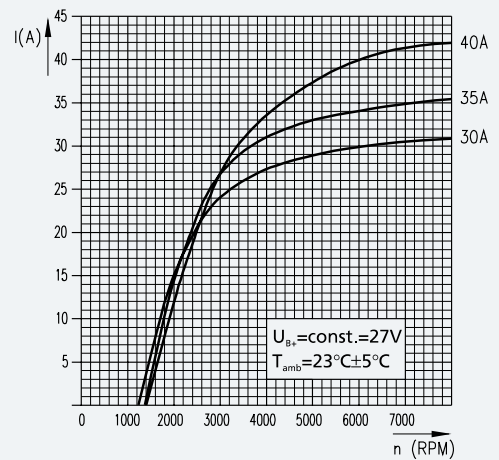
- Pos 1... Pulley
- Pos 2... Drive end bearing
- Pos 3... Drive end bracket
- Pos 4... Stator with winding
- Pos 5... Rotor
- Pos 6... Rear bracket
- Pos 7... Rear bearing
- Pos 8... Protective cover
- Pos 9... Terminals B+, B-, D+, W (monofunction regulator)
B+, L, DFM (multifunction regulator)
- Pos 10... Brush holder with voltage regulator
- Pos 11... Brush
- Pos 12... Slip rings
- Pos 13... Rectifier with diodes



CHARACTERISTICS

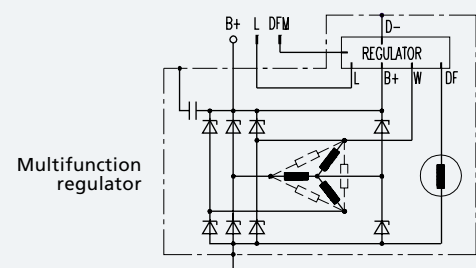
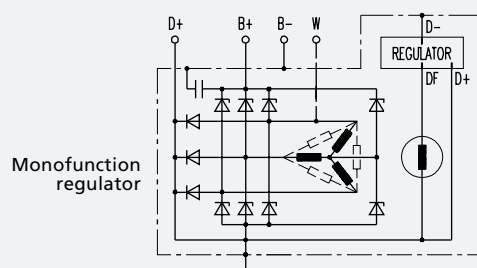


	n_o (RPM)	I (A) at 1800 RPM	I (A) at 6000 RPM
14V 45A	1150	22	45
14V 55A	1250	22	55
14V 65A	1350	20	64
14V 75A	1500	15	74



	n_o (RPM)	I (A) at 1800 RPM	I (A) at 6000 RPM
28V 30A	1250	12	30
28V 35A	1400	10	34
28V 40A	1450	8	40

CONNECTION DIAGRAMS



Iskra Avtoelektrika, d. d.

Polje 15, Slovenia,
5290 Šempeter pri Gorici
Tel.: +386 5 33 93 000,
Fax: +386 5 33 93 801
E-mail: info@iskra-ae.com
www.iskra-ae.com

BELARUS

Iskra o. o. o.
Ul. Dombrovskogo 69
230002 Grodno
Tel.: +375 152 487 484
Tel/Fax: +375 152 487 485
E-mail: iskra@mail.grodno.by

BOSNIA AND HERZEGOVINA

Iskra AE Komponente, d. o. o.
Nemanjina 35
78250 Laktaši
Tel.: +387 51 53 07 85
Fax: +387 51 53 53 15
E-mail: iskra-ae@inecco.net

BRAZIL

Iskra do Brasil Ltda.
Rua Testa n. 81 -
Jardim Sao Sebastiao
Jaguariuna - (SP)
CEP 13820-000
Tel.: +55 19 3837 2363
Fax: +55 19 3837 3185
E-mail: uros.kravos@iskra-ae.com
www.iskra-ae.com.br

CHINA

Iskra Suzhou Autoelectric Co., Ltd.
Wenzhou Industrial Zone Shuangfeng
Taicang, Jiangsu Province
Tel: +86 512 8160 6888
Fax: +86 512 8160 7799
E-mail: iskrasuzhou@iskra-ae.com
www.iskra-ae.com.cn

Changchun Fawer
Iskra Automotive Electrical Co., Ltd.
No. 2258 Pudong Road
Changchun Economic
Technology Development Zone
Changchun, Jilin Province
Tel.: +86 431 461 5016
Fax: +86 431 461 5017
E-mail: zhj_fa@faw.com.cn

FRANCE

Iskra Autoelectrique S.A.S.
ZA du Chapeau Rouge
56000 Vannes
Tel.: +33 2 97 45 59 90
Fax: +33 2 97 45 59 99
E-mail: iskra@iskra-sa.fr
www.iskra-ae.fr

GERMANY

Iskra Deutschland GmbH
Danziger Strasse 1
71691 Freiberg am Neckar
Tel.: +49 7141 702 69 0
Fax: +49 7141 702 69 33
E-mail: info@iskra-ae.de
www.iskra-ae.de

GREAT BRITAIN

Iskra UK Ltd.
Redlands
Ullswater Crescent, Coulsdon
Surrey CR5 2HT
Tel.: +44 208 668 7141
Fax: +44 208 668 3108
E-mail: sales@iskra-agency.co.uk
www.iskra-ae.co.uk

IRAN

Iskra Autoelectric Iran JVC
No.28, East Mirdamad Avenue
Tehran 15469-34311
Tel.: +98 21 2 226 237 1 - 4
Fax: +98 21 2 226 237 6
E-mail: info@iskra-iran.com

ITALY

Iskra Autel S. r. l.
Via G. Cantore, 2
34170 Gorizia
Tel.: +39 0481 536 800
Fax: +39 0481 536 810
E-mail: info@iskra-autel.it
www.iskra-autel.it

RUSSIA

Iskra Avtoelektrika
Representative Office
Storozhevaya str., 4,
building 1 office 123
111020 Moscow
Tel.: +7 095 726 93 94
Fax: +7 095 225 84 06
E-mail: info@iskra-ae.ru
www.iskra-ae.ru

Pramo Iskra o.o.o.
Zubcovskoe shosse 21
172387 Rzhev, Tverskaya obl.
Representative office in Moscow
Elektrozavodskaya str. 21
107023 Moscow
Tel. / Fax: +7 495 995 2512
E-mail: iskra@pramo.ru

SPAIN

Iskra Autoelectrique Spain S.A.
Calle Llobatona No. 6-D
08840 Viladecans
Tel.: +34 93 647 40 83
Fax: +34 93 647 40 84
E-mail: iskra@iskra-ae.es
www.iskra-ae.fr/esp/

USA

Iskra AE Inc.
4814 American Road
Rockford, IL 61109
Tel.: +1 800 474 1996
Tel.: +1 815 874 4022
Fax.: +1 815 874 4024
E-mail: iskra@iskraae.com
www.iskraae.com