Power-heat cogeneration

- *Maximum efficiency factors of the alternators*
- *Highest energy output*
- *Best manufacture and quality*
- *Customer specific adaptions possible*
- *Lowest working costs*
- *Surpassing long durability*
- *Low maintenance and reparation effort*

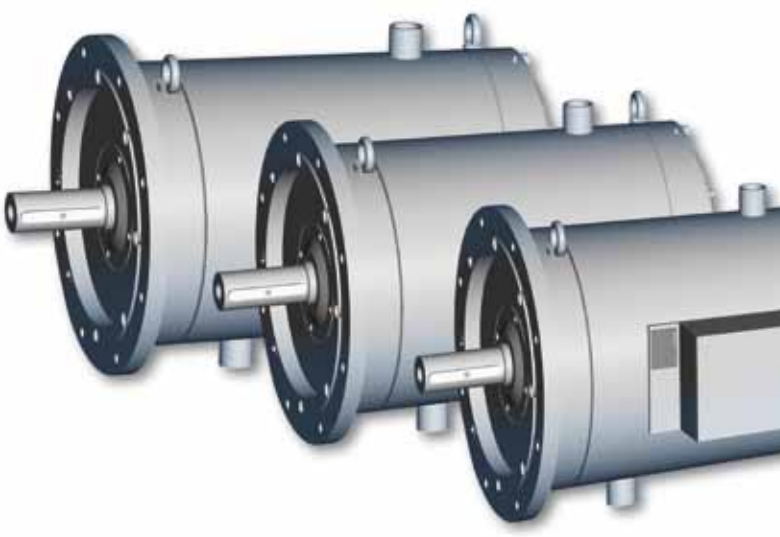
Compact power for maximum efficiency

Alternators from Weier

energy by weier

www.weier-energie.de

More efficiency with guarantee:
Alternators for block heat and power plants



With traditional power generation more than 50% of the primary energy is dispensed unused as waste heat into the environment. Power-heat cogeneration at block heat and power plants uses this waste heat to provide more efficiently additional energy as needed. Due to the possibilty to place these installations decentralized, electricity networks will be discharged. The application of renewable energies will be advanced by this technique.

Due to the application of very efficient and highly developed alternators from Weier in block heat and power plants a highest possible energy output is guaranteed. The advantages of these alternators consist in very high electrical and thermic degrees of efficiency. An effective water jacket cooling of the alternators makes the heat usable – other ventilation plants of the block heat and power plants can be reduced or even be dispensed. The alternators fulfil all requirements regarding high environment or cooling agent temperatures, constant load operation, high efficiency degrees and the application to different power frequencies.

Technical advantages at a glance

- Compact construction
- Simple assembling and installation
- Connection to all current combustion engines possible
- Alternators water jacket cooled
- Synchronous and asynchronous technique
- Output: asynchronous from 1 to 250 kW (water jacket or air cooled)
  synchronous from 20 to 400 kW (water jacket or air cooled)
  permanent magnet from 0,5 to 12 kW
- Individual types possible

Our offer for you

With our block heat and power plant service we offer the customer the complete package around the alternator:

- Minimized warehousing at the customer through adapted delivery lots and dates
- Customer specific adaptions possible through own construction department
- Best quality through application of premium materials and construction components
- Continuous extension of the product range

Extract of our product range: Rotary current – asynchronous alternators and synchronous alternators for block heat and power plants, water jacket cooled

Term	Rotary current – asynchronous alternator									Rotary current – synchronous alternator	
Motor type/assembly group	DASGM112 / 4L	DASGM132 / 4M	DASGM132 / 4L	DASGM160 / 4S	DASGM160 / 4M	DASGM160 / 4L	DASGM200 / 4L	DASGM250 / 4L	DASGM280 / 4L	DVGIM250 / 4L	DVGIM250 / 4L
Number of poles	4	4	4	4	4	4	4	4	4	4	4
Power rating (kW)	4,5	6	8	10	15	20	30	56	117	50 kVA	62,5 kVA
Rated voltage (v)*	3x400V**	3x400V**	3x400V**	3x400V**	3x400V**	3x400V**	3x440V**	3x400V**	3x400V**	3x400V**	3x400V**
Rated current (A)	7,6	10,3	14	19	28	37,5	51	94	196	72	90
Operation mode	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Cycling rating factor cos phi	0,85	0,83	0,82	0,78	0,78	0,78	0,85	0,86	0,84	1	1
Efficiency degree	90,6	91	90	92,1	91,4	92	94	94,7	95	95	94
Rated frequency (Hz)***	50	50	50	50	50	50	50	50	50	50	50
Nominal rotation speed (rpm)	1550	1538	1545	1527	1530	1535	1523	1514	1511	1500	1500
Safety class (IP)****	54	54	54	54	54	54	54	54	54	54	54
Cooling	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7	IC8A1W7
Max. water entry temp. (°C)	70	70	70	70	70	70	70	70	70	70	60
Max. environment temp. (°C)	60	60	60	60	60	60	60	60	60	60	60

* deviating frequency on demand ** Rotary current *** 60 Hz available as well **** other safety classes on demand

energy by weier

You find more information on www.weier-energie.de

Weier Antriebe und Energietechnik GmbH · Otto-Hahn-Str. 7 · 23701 D-Eutin · Tel.: +49-4521-804 0 · Fax: +49-4521-804 44 · Mail: info@weier-energie.de