

Technical Data

Rated power	550 kVA
Operating mode	grid controlled
DC – connection (DC/DC)	
Voltage, min/max	200 - 1000 V DC
maximum discharge current	1300 A
maximum charging current	1300 A
maximum discharging power	567 kW
maximum charging power	534 kW
Recommended pre fuse	2xgL/gG 1400 A
Switchgear	Contactar
Disconnecter	for service
Recommended cable cross-section, Applies to installati-on type B1 as per DIN VDE 0298-4 without bundling	2 x 4 x 240 mm²
Connection for cable lug	M12
AC – connection	
Voltage	3/N/PE AC 620/358 V
Voltage tolerance	+ 10 % / - 10 %
THDi	< 4 %
Network system	IT
Frequency	50 Hz ± 5 %
Nominal current	512 A
Apparent power	550 kVA
Power factor (adjustment range)	0,8 lead up to 0,8 lag variable selectable
Recommended per fuse	4xgL/gG 630 A
Mains disconnection	Circuit breaker with Rectifier-R-charging device
Recommended cable cross-section, Applies to installati-on type B1 as per DIN VDE 0298-4 without bundling	2 x 3 x 185 mm²
Connection for cable lug	M12
External mean voltage transformer	Dyn5, 3x620 Vac, 6% uk, ≥ 600 kVA
Complete device	
Protection class	1 according EN 60950-1
Earth conductor current	< 5 % Inom.
Protection type EN 60529	IP20
Permissible environmental conditions: Storage as per EN 60721-3-1 (long term) Transport as per EN 60721-3-2 (short term) Operation as per EN 60721-3-3 (ambient air)	1K2/1M3 0 to +40 °C 2K2/2M2 -25 to +60 °C 3K3/3M2 0 to +40 °C - 85 % rel. humidity, without condensation - With cabinet heating up to 95 % rel. humidity without condensation - Degree of pollution: 1
Permissible installation height	1000 m above sea level min. air pressure 870 hPa Operating area with restricted access
Installation site	Installation on concrete or other non-flammable surface
Design, Safety, Operation	
Design	metal
Cable entry	from below
Dimension (B x T x H)	1830 x 600 x 2200 mm
Total weight	1600 kg
Cooling:	- Powerparts, chockes - Cabinet - liquid cooling: 4,7 m³/h, 5 K via ambient air temperature, pressure loss ca. 0,5 bar - „AF“ forced air cooling (3x door fan), controlled
Noise level according to EN 62040-3	approx. 70 dB(A)
Instrumentation/Operation	LED, pushbutton
Efficiency at nominal capacity (typ.)	> 96 %
Reaction time	< 10 s
OFF > nominal capacity	< 5 s
SILENT-MODE > nominal capacity	
Interface	ProfiNet IO
Test voltage powerpart - frame	3,11 kVDC
further applied standard and norms	
Degree of protection by enclosures	EN 60529
Classification of environmental conditions	EN 60721
Institutions of information technology: Safety	EN 60950-1
Unit certificate	High voltage (AR-N-4120)

Subject to change without notice (tech)



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Active Infeed Converter

TYPE AIC-3890



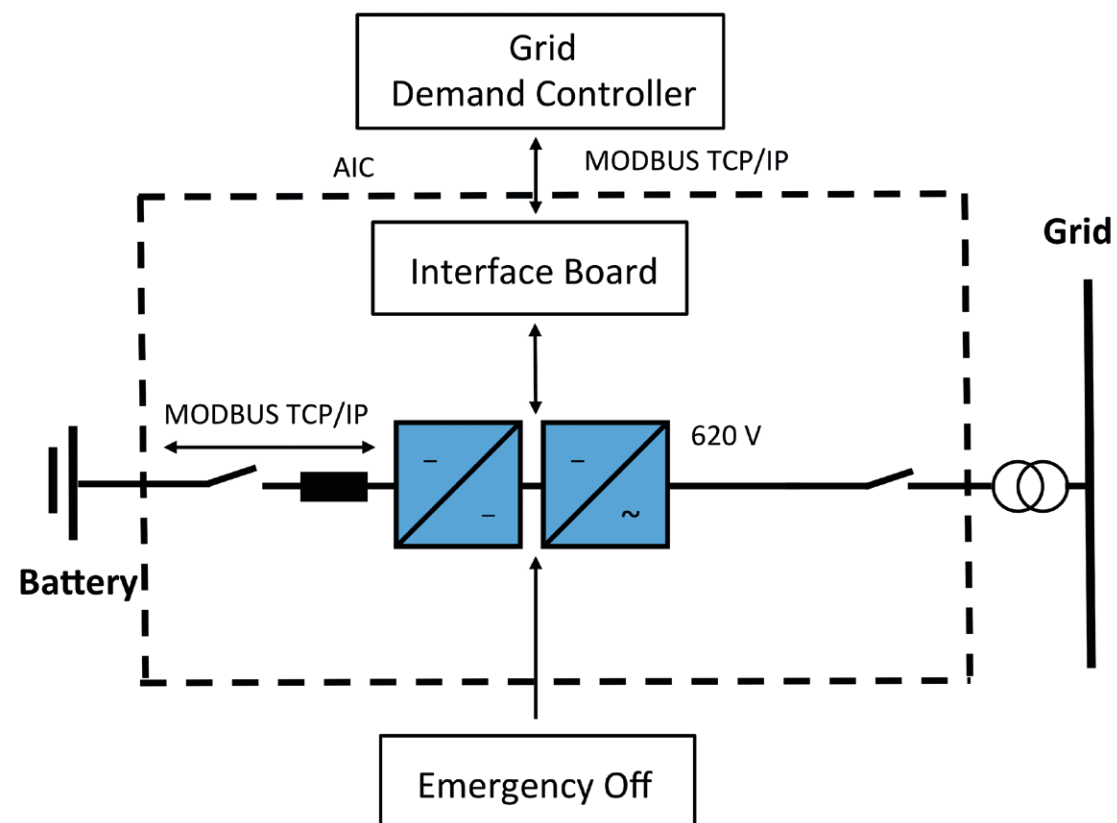
AC/DC Converter for large scale Energy Storage



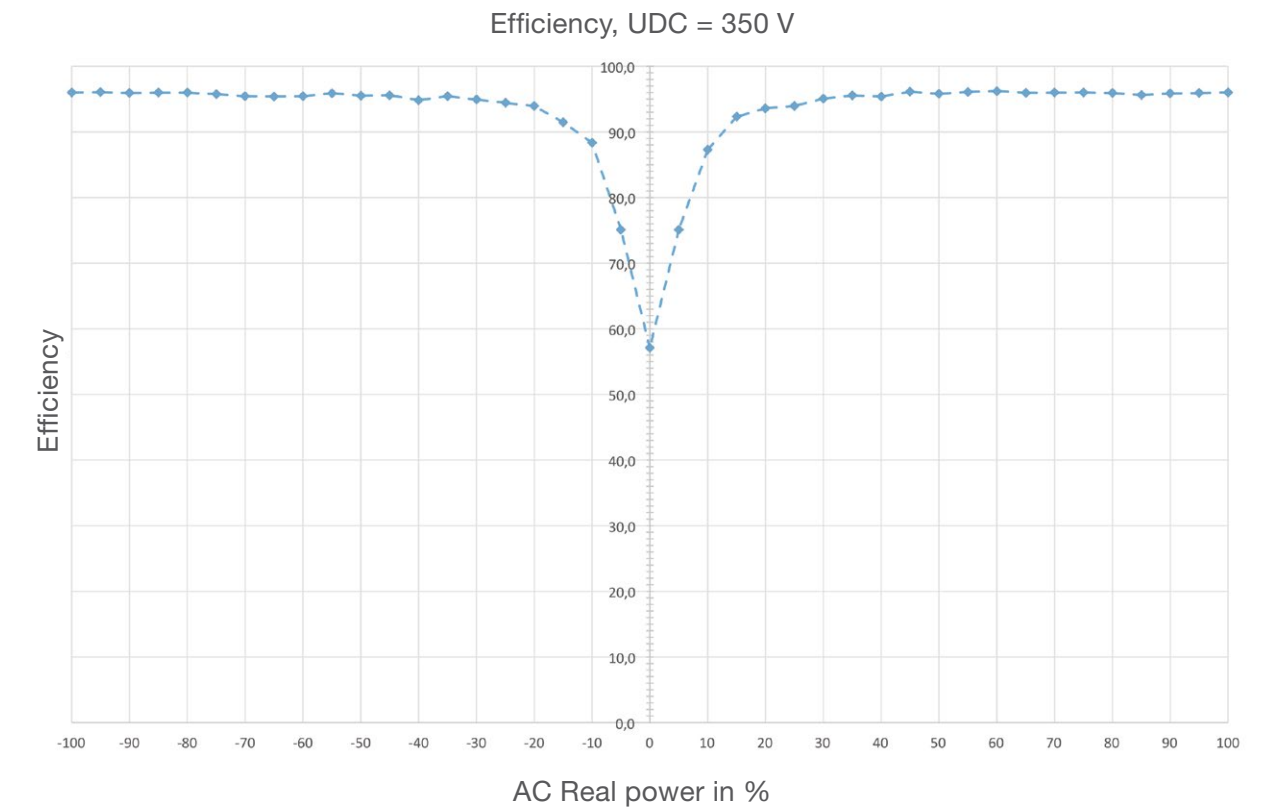
Design

- Emergency-Stop external via terminals
- ProfiNet IO – Interface to central control system
- Signaling list for ProfiNet
- Temperature monitored cooling circuit
- Switching counter for contactor and circuit breaker
- DC-current limiting
- Permanent configurable fault memory
- Maintenance and measurement by front access

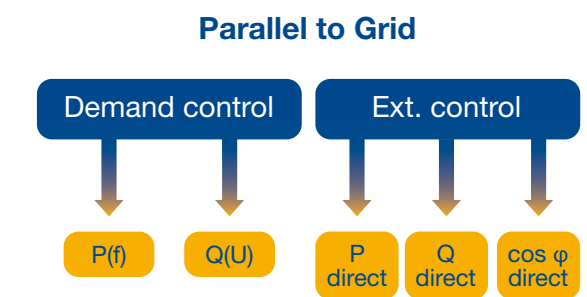
Bloc Diagramm



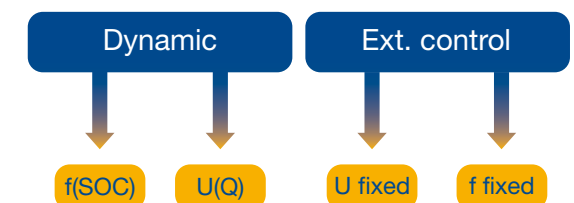
Efficiency characteristic



Control and Applications



Without Grid connection (Island-grid)



Black start via voltage and frequency control, as well as successive addition of load.