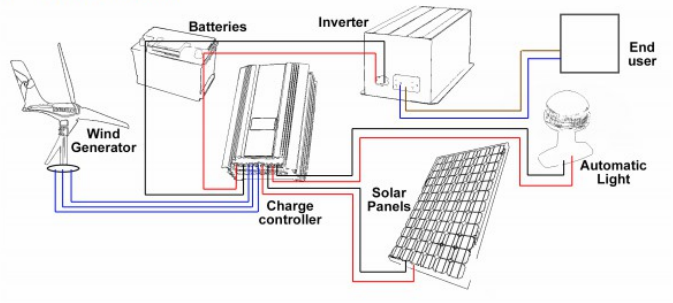
SVB 23093/23094 SILENTWIND 400+ - erforderliche Kabelquerschnitte - required cablecross sections

1. Wiring Diagram



2. Technical data

Hybrid-charge controller type	HYBRID BOOST
Battery system voltage (automatically detected)	12 / 24 / 48 Volt
Maximum power input from the wind generator	600 W
Maximum current input from the wind generator	40A / 30A / 15A
Maximum power input from solar panels	300W
Maximum current input from solar panels	20A / 10A / 5A
Maximum open circuit voltage input of the solar panel	50V DC
Maximum charging current to batteries	60 A
Maximum switch off current at LOAD output (Load)	2 x 10 A
Voltage adjustable for the battery types	flooded, sealed, gel or AGM
Dimensions (L x W x H) in mm	220 x 150 x 82
Weight	2,80 kg
Suitable for	flooded, sealed, gel or AGM
Warranty	24 months
Features	
Cable connection	screw terminals
Integrated electronic brake	charge limitation, storm brake
Integrated manual brake switch	service
LCD of all relevant working data	W, A, V/Ah, kWh, Ah
External stop switch	Plug connector

Der SILENTWIND Generator erzeugt eine 3-Pasen-Wechselspannung.
Daher ist zwischen Generator und Regler eine 3-adrige Verdrahtung erforderlich.

Der Regler wandelt die 3-phasige Eingangswechselspannung in eine geregelte Lade-Gleichspannung.
Die Verdrahtung zwischen Regler und Batterie ist 2-adrig.

Beachten Sie die erforderlichen Leitungsquerschnitte gemäß der nebenstehenden Tabellen.

Berücksichtigen Sie die unterschiedlichen Anforderungen bei 12- oder 24 Volt-Batterien.

Distance from windgenerator to the charge controller in m = Abstand vom Windgenerator zum Laderegler in Meter.

Cable cross Section mm² = Leitungsquerschnitt in mm² AWG = American Wire Gauge, ist im anglo/amerikanischen Raum eine spezielle Angabe der Leitungsdimension.

Distance from the charge contr.to the battery in m = Abstand vom Laderegler zur Batterie in Meter.

Cable cross Section mm² = Leitungsquerschnitt in mm²

As you can see from the wiring diagram in paragraph 1 a 3-pole cable with suitable cross section must be wired from the Silentwind Generator to the charge controller. The charge power gets from the charge controller to the batteries through two wires whereas on the AC input is three wires. Therefore the cross section of the two wires on the DC output should be greater; we recommend a minimum cross section of 10mm^2.

See below table to find the correct cable cross section:

System voltage 12 Volt

Distance from wind generator to the charge controller in m	0 - 9	10 – 19	20 – 29	30 – 44	45 – 69	70 – 110
Cable cross section mm^2	6	10	16	25	35	50
AWG	10	8	6	4	2	1
Distance from the charge contr. to the battery in m	0 - 9	10 – 19	20 – 29	30 – 44	45 – 69	70 – 110
Cable cross section mm^2	16	25	35	---	---	---
AWG	6	4	2	---	---	---

System voltage 24 Volt

Distance from wind generator to the charge controller in m	0 - 9	10 – 19	20 – 29	30 – 44	45 – 69	70 – 110
Cable cross section mm^2	2.5	4	6	10	16	25
AWG	14	12	10	8	6	4
Distance from the charge contr. to the battery in m	0 - 9	10 – 19	20 – 29	30 – 44	45 – 69	70 – 110
Cable cross section mm^2	16	25	35	---	---	---
AWG	6	4	2	---	---	---

Gelsenkirchener Str. 25-27
D - 28199 Bremen

Verkauf: (0421) 57290 - 0
Telefax: (0421) 57290 - 40

e-mail: info@svb.de
Internet: www.svb.de