



### Features small wind turbine (grid connection from power 3 to 20 kW)

Wind turbine manufacturer			ROPATEC
Importatore aerogeneratore (eventuale)			
Wind turbine model			SIMPLY VERTICAL
			1
Number of installed turbines			800 turbine in 34 paesi
Nominal power (kW)			3KW
Velocità vento (m/s)	Cut-in		3-4m/s
	Nominal		14
	Cut-out		18
	Survival class IEC61400		classe 2 (peaks up to 60m/s)
Vertical			Vertical axis
Pale aerogeneratore	Number		3
	Material		iron fiberglass
Diameter rotor D (m)			3,3m
Height rotore h (m), for vertical axis wind turbines			2m
Activation wind generator <sup>b</sup>	Autonomous by the wind		ca. 3m/s
Power control mode (specify)			Power curves integrated into the inverter
Rotation speed (rpm)	Minimum		1
	Nominal		144
	Maximum		216
Multiplier (present / absent)			absent
Type electric generator (specify)			PMG with the rotor on the outside
Noise level	Value (dBA)		ca. 43dB
	Wind speed (m/s)		10m/s
	Distance from the wind generator (m)		20m
Wind turbine support	Height H center from foundation (m)	Minimum	11,74m
		Typical	11,74m
		Maximum	11,74m
	Type <sup>b</sup>	self carrying	self carrying
		lattice mast	on request
Pesi	Complete wind turbine (without support)		620kg
	Support full height typical		755kg/10,9m
	Platform		needed
Where could be the turbine be installed			Urban / Suburban
Lifetime (years)			25 years
Installation manual in			English

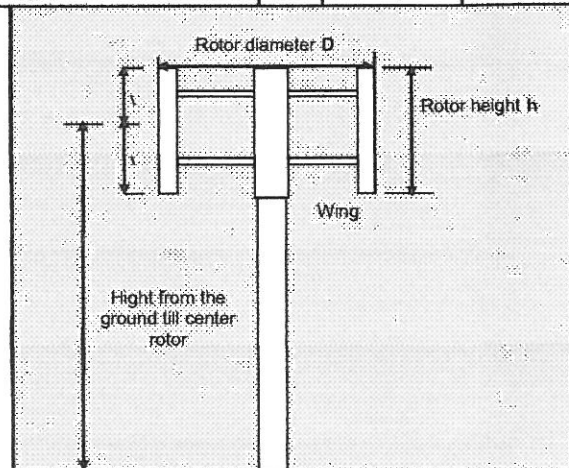
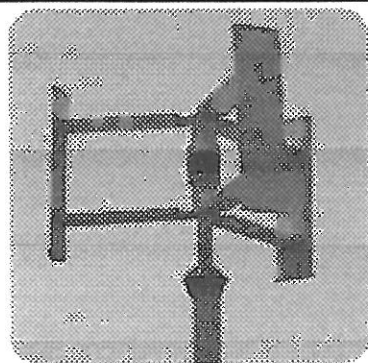
#### AEP data

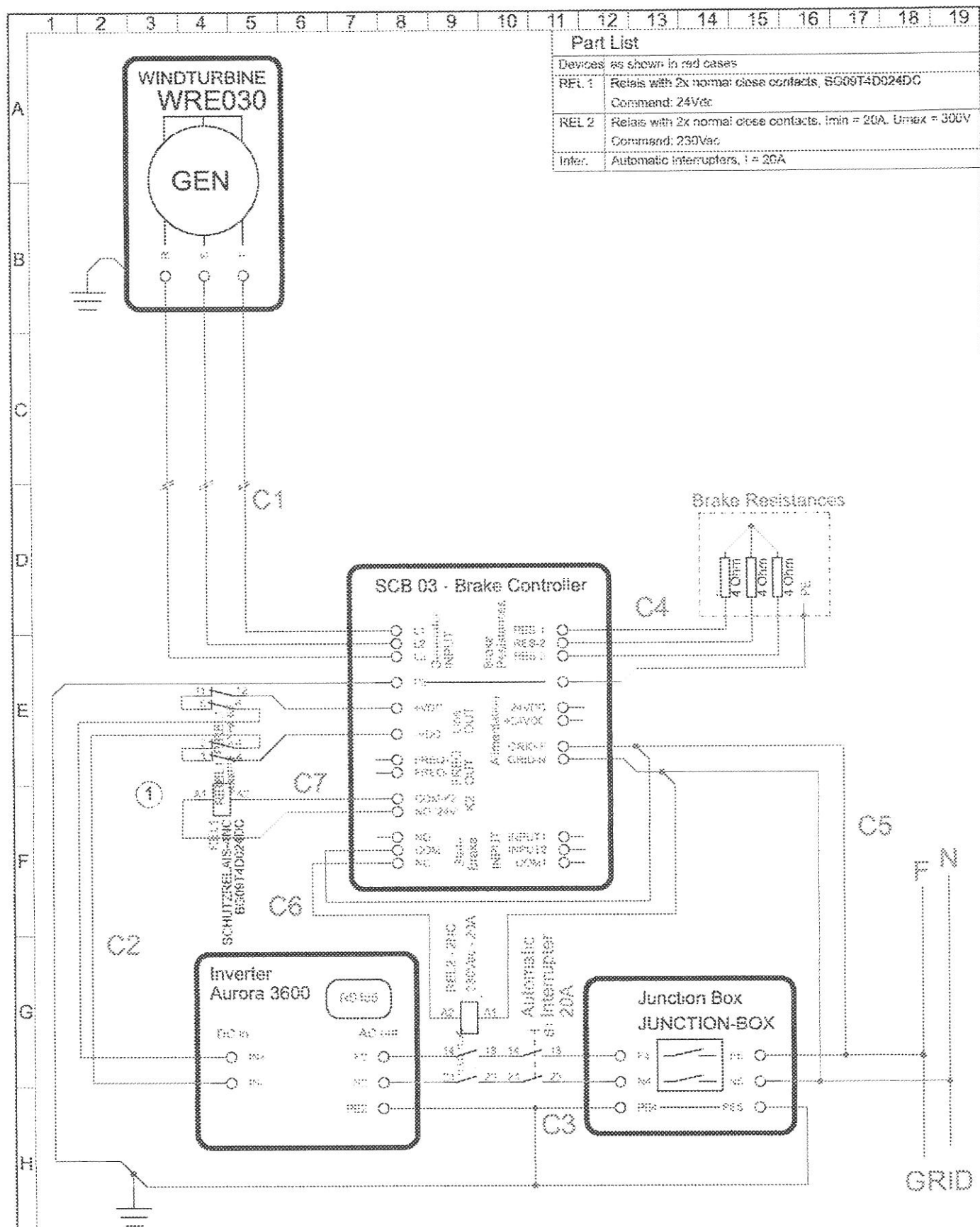
#### Power Curve<sup>a</sup>

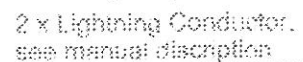
Wind speed (m/s)	Power (kW)
1	
2	
3	22
4	64
5	127
6	224
7	362
8	551
9	799
10	1117
11	1497
12	1957
13	2506
14	3152
15	3600
16	3600
17	3600
18	3600
19	
20	
21	

#### Possible AEP

W. speed (m/s)	5,5
K factor	2
kWh/year	3300
W. speed (m/s)	6
K factor	2
kWh/year	4200
W. speed (m/s)	7
K factor	2
kWh/year	6200







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Cable		<10m	<50m	<100m	<150m	>150m	relative drawing
C1	Conn. generator - SCB		3x10	3x16	3x25	3x35	ES.WRE030.SCB03GA230
C2	Conn. SCB - Inverter	3G4					
C3	Conn. Inverter - seperating grid device	3G6	3G10	3G16	3G25	3G35	
C4	Conn. SCB - Resistance	4G6					
C5	Alimentation SCB	3G0.75					
C6	Command line to interupter relay REL2	2x0.75					
C7	Command line to protection relay REL1	2x0.75					
C9	Alimentation and command line to sensor SETAC	(special cable, sent with the optional sensor SETAC)					ES.WRE030.OPT.SETAC
C10	Alimentation installation kit for SETAC	3x0.75	3x0.75	3x0.75	3x1.5	3x1.5	
C12	separate ground line in parrallel with cable C1	(i.e. steel cable, minimum cross section 50mm <sup>2</sup> )					ES.WRE030.OPT.LPS