

Customer	Supplier	Certificate number
Senvion GmbH Überseering 10 22297 Hamburg	Ria Blades,SA Parque Empresarial de Soza Rua da Barreira, nº25 Salgueiro 3840-346 Soza Portugal	IC nº 013_2019
Article	Colour Code	Documents for construction Blade set
Rotor Blade: RE 68.5 MK1	RAL 7035	We confirm that the delivered blade are in accordance with Senvion Specifications and all other documents referred on Doc list 52953
Order nb: 4500457104		
SET NB: 013		

Blade Number	Static Moment referring to the blade flange	Deviation from the average static moment of rotor blade [%]	Balancing masses						
			Total Weigth (Kg)	Center of gravity COG Z[m]	Balancing Chamber Nº1 (Kg)	Balancing Chamber Nº2 (Kg)	Balancing Chamber Nº3 (Kg)	Balancing Chamber Nº4 (Kg)	Extra weight (kg)
RB 038	343332	0,09	17990	19,08	0	0	5	31	0
RB 039	342758	0,08	17924	19,12	0	0	14	31	0
RB 040	343007	0,01	17901	19,16	0	17	25	31	0
Average static moment of the rotor blade set [kgm]			343032						

Lightning protection results	Blade Number	RB 038	RB 039	RB 040
	Receptor 1 --> SS Z= 63,15m (Min:22mΩ - Max:41mΩ)	37	28	25
	Receptor 2 --> SS Z=66,20m (Min:23mΩ - Max:43mΩ)	40	29	26
	Receptor 3 --> SS Z=67,24m (Min:24mΩ - Max:44mΩ)	41	30	27
	Receptor 4 --> PS Z=63,15m (Min:22mΩ - Max:41mΩ)	31	28	25
	Receptor 5 -->PS= Z66,20m (Min23mΩ - Max:43mΩ)	33	30	26
	Receptor 6--> PS Z= 67,24m (Min:24mΩ - Max:44mΩ)	38	29	27
	Tip Z68,5 (Min:24mΩ - Max:44mΩ)	40	30	27

Blade Numbers	Root Inserts Batch number	Root Inserts Supplier	M30 bolts Batch number	M30 bolts Supplier	Jig control
RB 038	BUS BUR	Kleinsorge Verbindungstechnik	BVF	Kleinsorge Verbindungstechnik	OK
RB 039	BUR	Kleinsorge Verbindungstechnik	BVF BWM	Kleinsorge Verbindungstechnik	OK
RB 040	BUR	Kleinsorge Verbindungstechnik	BWM	Kleinsorge Verbindungstechnik	OK

Date:	01-02-2019
Authorized signature: <i>Quality Assurance</i>	Guilherme Teixeira
Stamp:	  <small>Guilherme Teixeira Quality Engineering Coordinator</small>