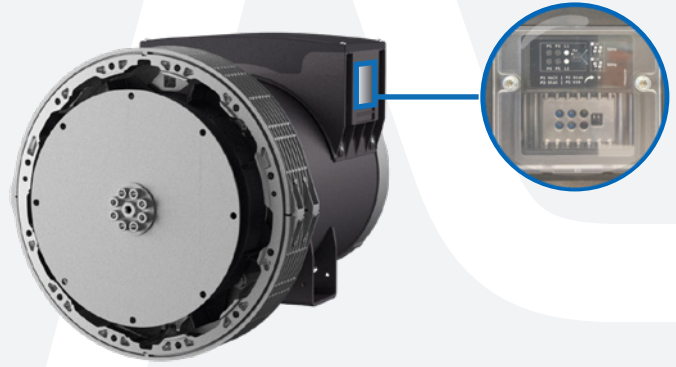


BRUSHLESS ALTERNATORS WITH AVR-d 4 Poles

ZB180



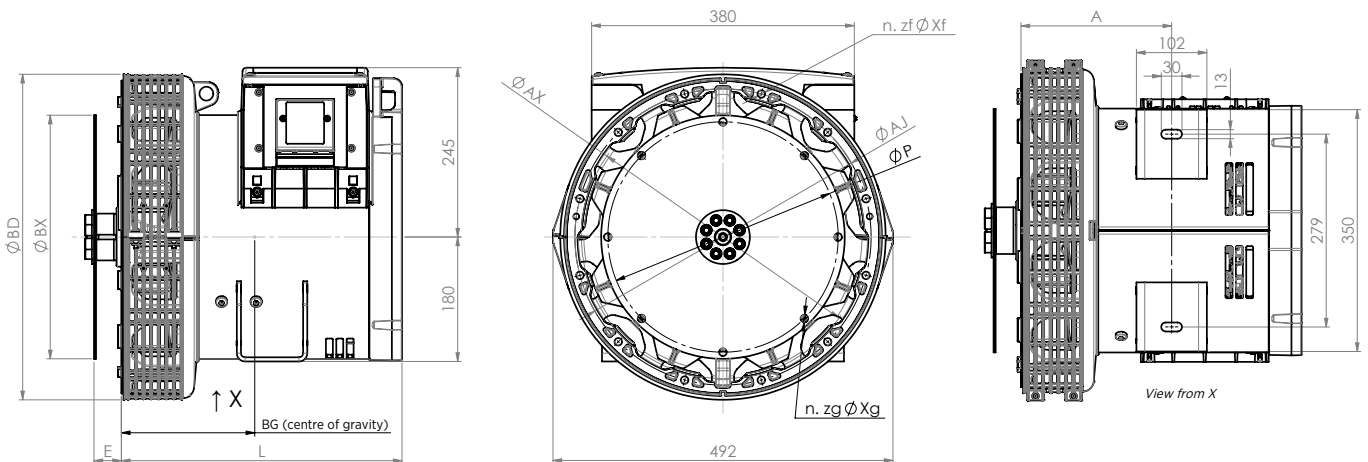
Patent Pending
Digital with 3 phase sensing



Technical characteristics	
Number of poles	4
Rated power factor	0,8
Voltage accuracy	± 0,5%
T.H.D.	<3% phase to phase
Rated temperature	-15°C to +40°C (+60°C with derating)
Excitation system	Self-excitation
Execution	Brushless
AVR model	AVR 625D- Digital with 3ph sensing Right side std (left on request)
Overload	110% of rated power for 1 hour in a 6 hour cycle
Short circuit current	> 300% I _n
Insulation class	H
Protection degree	IP21 (IP23 on request)
Rated speed	1500 rpm at 50Hz - 1800 rpm at 60Hz
Overspeed	2250 rpm
Rotation direction	CW - CCW
Air flow requirement	3,5 m ³ /min at 1500rpm; 4,2 m ³ /min at 1800rpm
NDE bearing type	6208 2RSC3
Stator windings	Double layer (2/3 pitch) with auxiliary windings
Rotor	With damping cage
Number of leads	12 leads
Standards	IEC 34-1; EN60034-1; EN60034-22; ISO 8528-3
Electromagnetic compatibility	EN61000-6-2; EN61000-6-4
Union Harmonization Legislation	2014/35/EU (low Voltage) ; 2014/30/EU (EMC)

		50Hz -1500rpm						60Hz -1800rpm									
		S1 continuous 40/125°C cl. H			Stand-by 27/163°C			S1 continuous 40/125°C cl. H			Stand-by 27/163°C						
		3ph - 0,8 p.f.		1ph - 1 p.f.	3ph - 0,8 p.f.		1ph - 1 p.f.	3ph - 0,8 p.f.		1ph - 1 p.f.	3ph - 0,8 p.f.		1ph - 1 p.f.				
Voltage (V)	Series-Star Y	380	400	415	Eff. 4/4 load 400V 25°C	400		380	416	440	480	Eff. 4/4 load 400V 25°C	480		240	240	240
	Parallel Star YY	190	200	208		200		190	208	220	240		277	277	277	277	
	Series-Delta Δ	220	230	240		230	230	230	220	240	254		277	277	277	277	
	Double Delta ΔΔ	110	115	120		230 - 115	115	230 - 115	110	120	127		138	277 - 138	138	277 - 138	
Model		kVA		%	kVA	kVA	kVA	kVA		%	kVA	kVA	kVA				
Power	ZB180 SC	30	30	30	86,2	18	33	20	35	38	39	41	86,7	24,6	45	27	
	ZB180 MA	35	35	35	86,5	21	38,5	23	40	43	44	45	87,1	27	50	30	
	ZB180 MB	40	40	40	87,4	24	44	26,5	45	48	50	52	88	31	57	34	
	ZB180 MC	45	45	45	88,6	27	49,5	30	50	54	57	60	89,1	36	66	40	
	ZB180 LA	50	50	50	89,1	30	55	33	57	62	64	67	89,5	40	74	44	
	ZB180 LC	60	60	60	90,5	36	66	39,5	70	74	76	80	91,4	48	88	53	

Power S1 cl.H (ΔT=125°C) - below 1000m AMSL - A.T. < 40°C



Type	A	L
ZB180 SC	218	406
ZB180 MA	248	469
ZB180 MB	248	469
ZB180 MC	248	469
ZB180 LA	280,5	556
ZB180 LC	280,5	556

Flange					
SAE	AX	BD	AJ	Xf	zf
3	409,575	471	428,625	11	12
Coupling					
SAE	E	BX	P	Xg	zg
11,5	39,6	352,425	333,375	11	8