

GETTEC

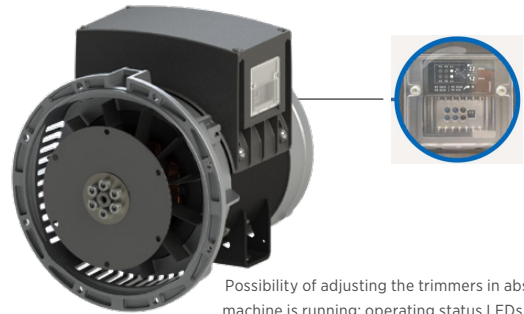
4 Pole - Brushless- AVR-d



37 to 75 kva

ZB180 3ph

- ✓ Innovative design, high-quality features
- ✓ AVR setting trimmer accessible from outside
- ✓ External signaling of statuses/alarms by LEDs
- ✓ Robust design ensuring a long operating life
- ✓ Efficient internal cooling system
- ✓ Outstanding performance



Possibility of adjusting the trimmers in absolute safety when the machine is running; operating status LEDs of the alternator are visible from the outside.

Technical characteristics

Number of poles	4	Protection degree	IP20 (IP23 on request)
Rated power factor	0,8	Rated speed	1500rpm at 50Hz; 1800rpm at 60Hz
Voltage accuracy	±0,5%	Overspeed	2250rpm
T.H.D.	<3% phase to phase	Rotation direction	CW-CCW
Rated temperature	-15°C to +40°C (+60°C with derating)	Air flow requirement	3,5m3/min at 1500rpm; 4,2m3/min at 1800rpm
Excitation system	Self-excitation	NDE bearing type	62082RSC3
Execution	Brushless	Stator windings	Single layer with auxiliary windings
AVR model	AVR 625D- Digital with 3ph sensing	Rotor	With damping cage
	Right side std (left on request)	Number of leads	6 (12 on request)
Overload	110% of rated power for 1 hour in a 6 hour cycle	Standards	IEC 34-1; EN60034-1; EN60034-22; ISO 8528-3
Short circuit current	> 300% In	Electromagnetic compatibility	EN61000-6-2; EN61000-6-4
Insulation class	H	Union Harmonization Legislation	2014/35/EU (low Voltage) : 2014/30/EU (EMC)

Power and efficiency

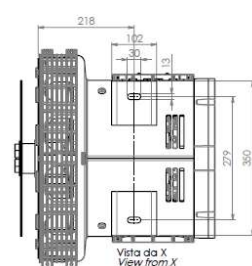
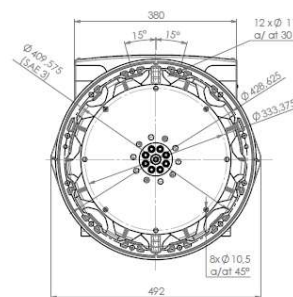
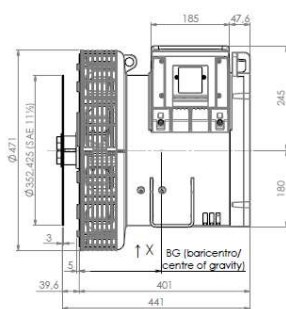
Frequency/Speed Duty	50Hz -1500rpm								60Hz -1800rpm								
	S1 continuous 40/105°C cl. H							Stand-by 27/163°C	S1 continuous 40/105°C cl. H							Stand-by 27/163°C	
	Voltage		3ph, p.f.=0,8				1ph, p.f.=1	3ph, p.f.=0,8	1ph, p.f.=1	3ph, p.f.=0,8				1ph, p.f.=1	3ph p.f.=0,8	1ph p.f.=1	
Connections	Star	Y	380	400	415	440	Eff% 4/4 load 400V	400		380	416	440	460	480	Eff% 4/4 load 480V	480	
	Parallel star	YY (*)	190	200	208	220		200		190	208	220	230	240		240	240
	Delta	D	220	230	240	254		230	230	220	240	254	266	277		277	277
	Parallel delta	DD (*)	110	115	120	127		115	115	110	120	127	133	138		138	138
Model / (kVA)	ZB180 SC		30				85,5		33	32	33,5	35	36	37	86,5	40,7	
	ZB180 MB		40				87	44	43	44,5	46	48	50	88	55		
	(ZB180 MC)		45										55				
	ZB180 MD		50				89	55	55	57	60	62,5	65	90	71,5		
	ZB180 ME		60				89,5	60	64	67	70	72,5	75	90,5	82,5		

(*) = on request

ZB180 S.. in SAE3

tipo/ type	kVA	B/G mm	peso/ weight Kg
S	50 Kz (400V) 60 Hz		
	30	(1)	199

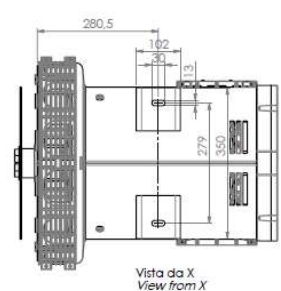
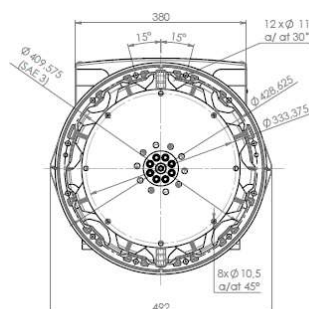
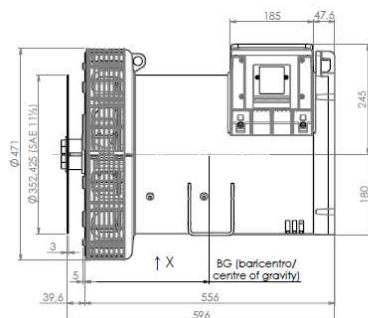
1) vedi scheda tecnica/ see data sheet



ZB180 M.. in SAE3

tipo/ type	kVA	B/G mm	peso/ weight Kg
M	50 Kz (400V) 60 Hz		
	40	(1)	
	50	(1)	
	60	(1)	

1) vedi scheda tecnica/ see data sheet



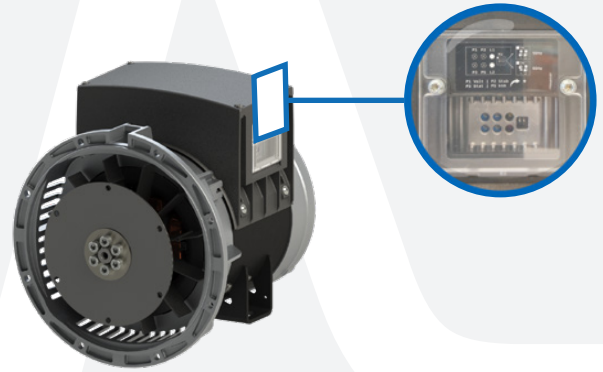
GETEC

BRUSHLESS ALTERNATORS WITH AVR-d 4 Poles



COMPACT ZBC132

Patent Pending
Digital with 3 phase sensing



- Innovative design, high-quality features
- AVR setting trimmer accessible from outside
- External signaling of statuses/alarms by LEDs
- Robust design ensuring a long operating life
- Efficient internal cooling system

10 to 25 kva

Possibility of adjusting the trimmers in absolute safety when the machine is running; operating status LEDs of the alternator are visible from the outside.

Technical characteristics

	ZBC132	ZBC132-1
	Three-phase	Single-phase
Number of poles	4	
Rated power factor	0,8	1
Voltage accuracy	± 0,5%	
T.H.D.	< 4% phase to phase	< 5%
Rated temperature	-15°C ÷ 40°C	
Excitation system	Self-excited	
Execution	Brushless	
AVR model	AVR 625D - Digital with 3 phase sensing Right side (coupling side view) as standard - 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	

	ZBC132	ZBC132-1
	Three-phase	Single-phase
Protection degree	IP20 (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	6207 2RSC3	
Stator windings	Single layer with auxiliary windings	
Rotor	With damping cage	
Number of leads	6 (12 on request)	4
Standards	IEC 34-1; EN60034-1; EN6034-22; ISO 8528-3	
Electromagnetic compatibility	EN61000-6-2; EN61000-6-4	
Union Harmonization Legislation	2014/35/EU (Low Voltage); 2014/30/EU (EMC)	

3ph

	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 p.f.=0,8			3ph p.f.=0,8			3ph p.f.=0,8			3ph p.f.=0,8			
Voltage	Star Y	380	400	415	Eff. 4/4 load 400V	400	380	416	440	460	480	Eff. 4/4 load 400V	480
	Parallel star YY (*)	190	200	208		200	190	208	220	230	240		240
	Delta Δ	220	230	240		230	220	240	254	265	277		277
	Parallel delta ΔΔ (*)	110	115	120		115	110	120	127	133	138		138
Power	Model	[kVA]		η %	[kVA]	[kVA]				η %	[kVA]		
	ZBC132 XSA	8		80	8,8	8,5	9	9,5	9,5	10	80,5	11	
	ZBC132 XSB	10		81	11	11	12	12,5	13	13,5	81,5	14,9	
	ZBC132 SA	12		83	13,2	13	13,5	14	14,5	15	83,5	16,5	
	ZBC132 SB	14,5	15		85	16,5	15,5	16,5	17,5	18	19	85,5	20,9
	ZBC132 MA	18		86,5	19,8	20	21	22	22,5	23,5	87	25,9	

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

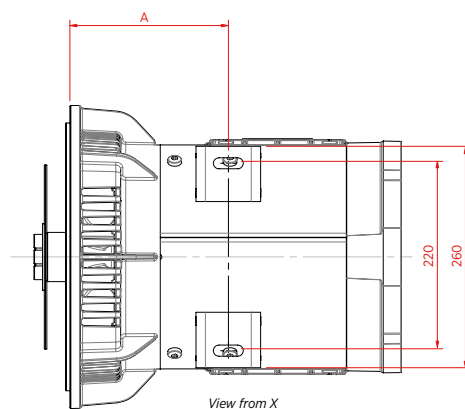
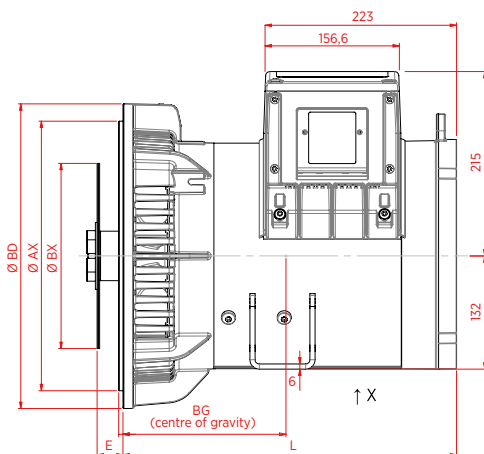
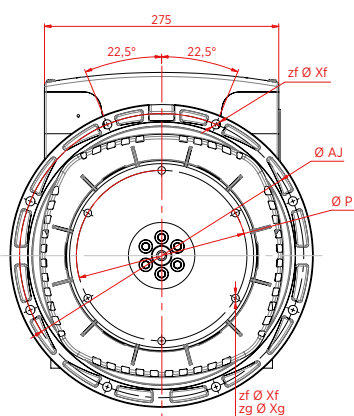
1ph

	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			
	p.f.=1			p.f.=0,8			p.f.=1			p.f.=0,8			
Voltage	Series	220-230-240		Eff. 4/4 load 230V	220-230-240	220-230-240	220	230	240	Eff. 4/4 load 240V	240	240	
	Parallel	110-115-120			110-115-120	110-115-120	110	115	120		120	120	
Power	Model	[kVA]		η %	[kVA]		[kVA]		η %	[kVA]	[kVA]	[kVA]	
	ZBC132 XSA-1	5	79	4	5,5	4,4	5,3	5,5	5,7	79,5	4,6	6,3	5
	ZBC132 XSB-1	7	80,5	5,6	7,7	6,2	7,3	7,6	8	81	6,4	8,8	7
	ZBC132 SA-1	9	82	7,2	9,9	8	9,5	10	10,5	82,5	8,4	11,6	9,2
	ZBC132 SB-1	10,5	83,5	8,4	11,6	9,2	11	11,5	12	84	9,6	13,2	10,6
	ZBC132 MA-1	13	85,0	10,4	14,3	11,4	13,5	14	14,5	85,5	11,6	16	12,8

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

Overall Dimensions

SAE 5 - SAE 4



	A	L	Weight	
			SAE 5	SAE 4
	[mm]	[mm]	[kg]	

ZBC132 XSA	186	339	55	56
ZBC132 XSB	186	339	61	62
ZBC132 SA	186	389	72	73
ZBC132 SB	186	389	79	80
ZBC132 MA	215	449	96	97

	A	L	Weight	
			SAE 5	SAE 4
	[mm]	[mm]	[kg]	

ZBC132 XSA-1	186	339	54	55
ZBC132 XSB-1	186	339	60	61
ZBC132 SA-1	186	389	71	72
ZBC132 SB-1	186	389	77	78
ZBC132 MA-1	215	449	97	98

BG	
SAE 5-6,5	SAE 4-7,5
[mm]	

ZBC132 XSA	164	162
ZBC132 XSB	166	164
ZBC132 SA	185	183
ZBC132 SB	190	188
ZBC132 MA	217	215

SAE	Flange				
	AX	BD	AJ	Xf	zf
5	314,325	355	333,37	11	8
4	361,95	404	381	11	12

SAE	Joint				
	E	BX	P	Xg	zg
6,5	30,2	215,9	200,02	9	6
7,5	30,2	241,3	222,25	9	8