

# MXB 180 SA4

Project: \_\_\_\_\_

Reference: \_\_\_\_\_

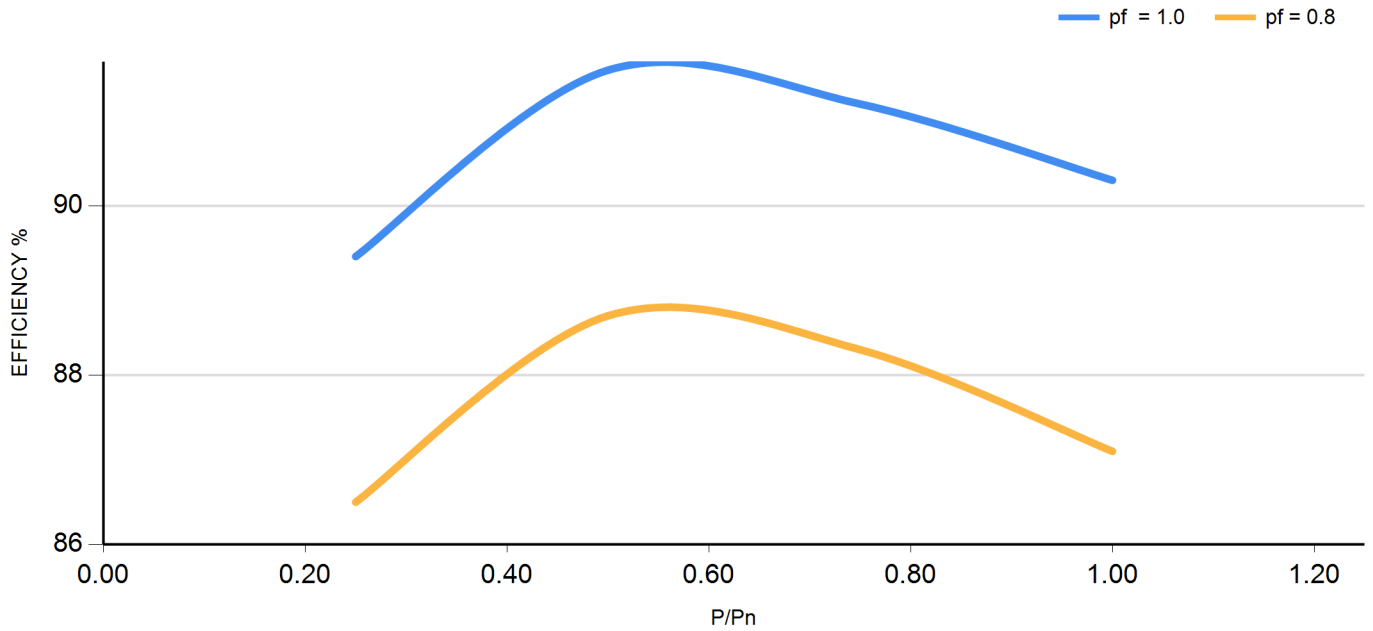
CLASSE DI SOVRATEMPERATURA - TEMPERATURE RISE CLASS	H		
CLASSE DI ISOLAMENTO - INSULATION CLASS	H		
PASSO DI AVVOLGIMENTO - WINDING PITCH	2/3		
FORMA COSTRUTTIVA - MOUNTING	B2		
TEMPERATURA AMBIENTE (°C) - AMBIENT TEMPERATURE (°C)	40		
ALTITUDINE (m s.l.m) - ALTITUDE (m a.s.l.)	1000		
SISTEMA DI RAFFREDDAMENTO - COOLING SYSTEM / PROTEZIONE - PROTECTION DEGREE	IC01 / IP23		
FATTORE DI POTENZA - POWER FACTOR	0.80		
NUMERO DI POLI - NUMBER OF POLES	4		
VELOCITA' NOMINALE (r.p.m.) - RATED SPEED (r.p.m.)	1500		
SOVRAVELOCITA' (r.p.m.) - OVERSPEED (r.p.m.)	2250		
NUMERO DI TERMINALI - NUMBER OF TERMINALS	12		
PESO (kg) - WEIGHT (kg)	Approx. 142		
MOMENTO D'INERZIA (J) (kg*m <sup>2</sup> ) - INERTIA (J) (kg*m <sup>2</sup> )	Approx. 0.251		
TEMPERATURA ACQUA RAFFREDDAMENTO (°C) - COOLING WATER TEMPERATURE (°C)			
PORTATA D'ACQUA (m <sup>3</sup> /h) - WATER FLOW RATE (m <sup>3</sup> /h)			
CADUTA DI PRESSIONE (kPa) - PRESSURE DROP (kPa)			
AUMENTO TEMPERATURA ACQUA (°C) - WATER TEMPERATURE INCREASE (°C)			
TA DI CENTRO STELLA - NEUTRAL POINT CURRENT TRANSFORMER			
CUSCINETTI - BEARINGS			
FREQUENZA - FREQUENCY	Hz	50	
TENSIONE - VOLTAGE	V	400	
CORRENTE NOMINALE - RATED CURRENT	A	36.1	
POTENZA - RATING	kVA	25	
RENDIMENTO - EFFICIENCY - (%)	4/4	90.6	
P.F.= 1.0	3/4	91.5	
	2/4	91.9	
RENDIMENTO - EFFICIENCY - (%)	4/4	87.4	
P.F.= 0.8	3/4	88.6	
	2/4	89.0	
Rapporto di corto circuito - short circuit ratio	SCR	0.44	
reattanza - reactance (%)	sincrona diretta - synchronous direct axis	X <sub>d uns</sub>	268
	sincrona in quadratura - synchr. quadrature axis	X <sub>q uns</sub>	150
	transitoria diretta - transient direct axis	X' <sub>d sat</sub>	26.2
	transitoria in quadratura - transient quadrature axis	X' <sub>q uns</sub>	150
	subtransitoria diretta - subtransient direct axis	X'' <sub>d sat</sub>	12.4
	subtransitoria in quad. - subtransient quadr. axis	X'' <sub>q sat</sub>	14.4
	di sequenza negativa - negative sequence	X <sub>2 sat</sub>	13.4
	di sequenza zero - zero sequence	X <sub>0 sat</sub>	2.5
costanti di tempo - time constants (s)	a vuoto - open circuit	T' <sub>do</sub>	0.480
	transitoria - transient	T' <sub>d</sub>	0.050
	subtransitoria - subtransient	T'' <sub>d</sub>	0.009
	unidirezionale - armature	T <sub>a</sub>	0.008
Coppia di corto circuito bifase - Phase to Phase short circuit torque	kN*m	1.9	
Coppia di corto circuito trifase - Three phase short circuit torque	kN*m	1.3	

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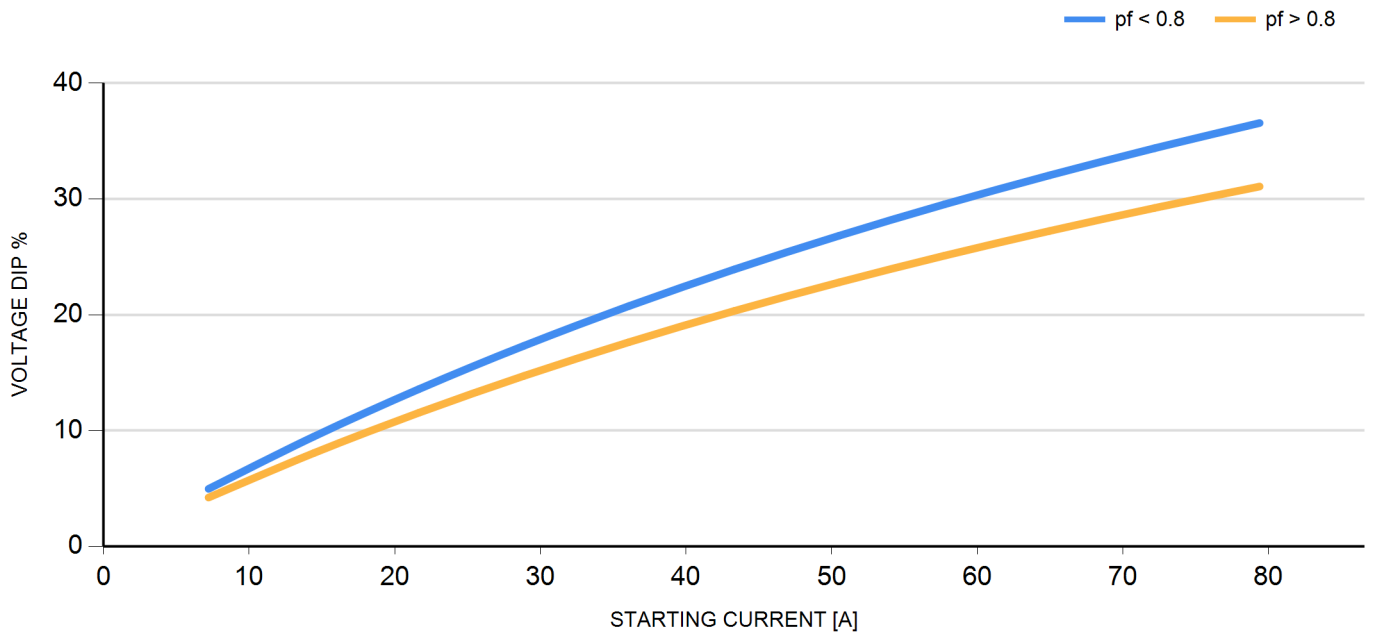
Reference: \_\_\_\_\_

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**CURVA DI RENDIMENTO - EFFICIENCY CURVE**



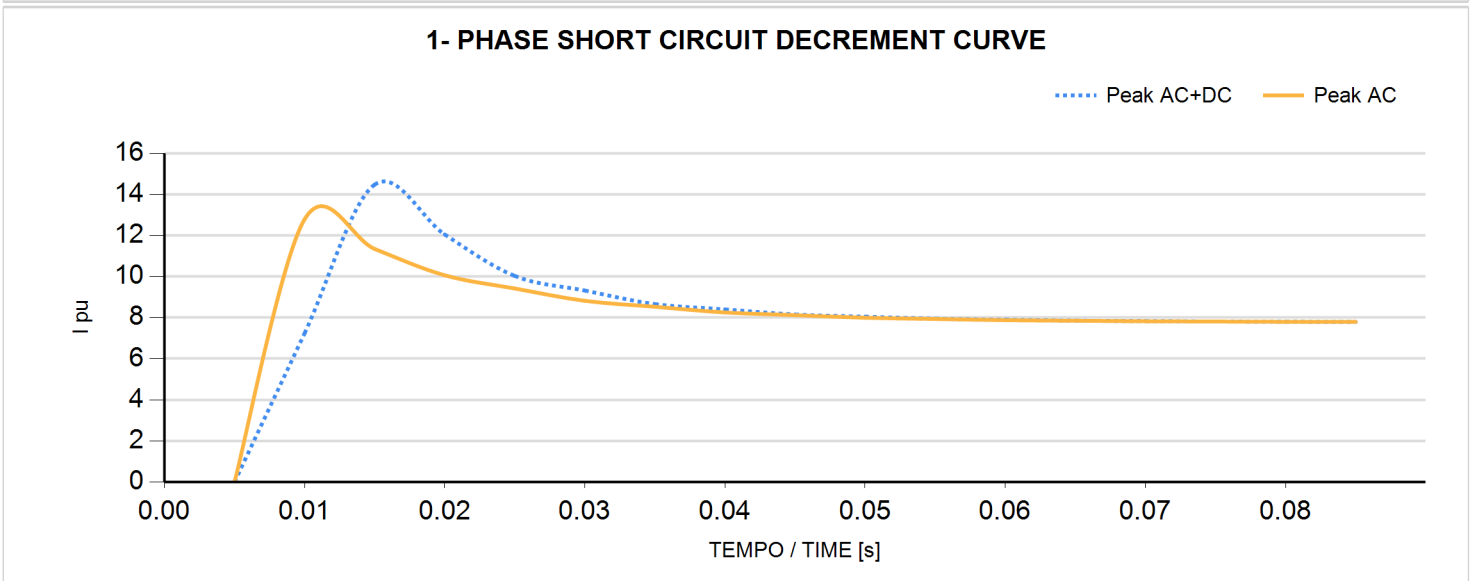
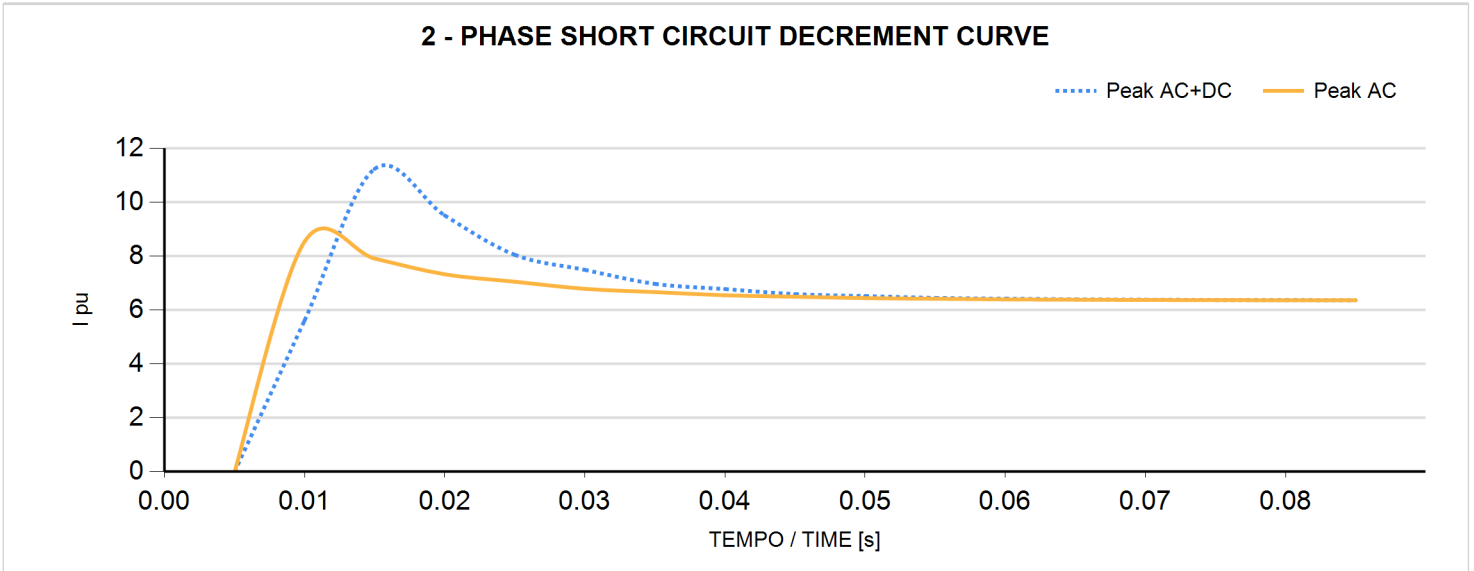
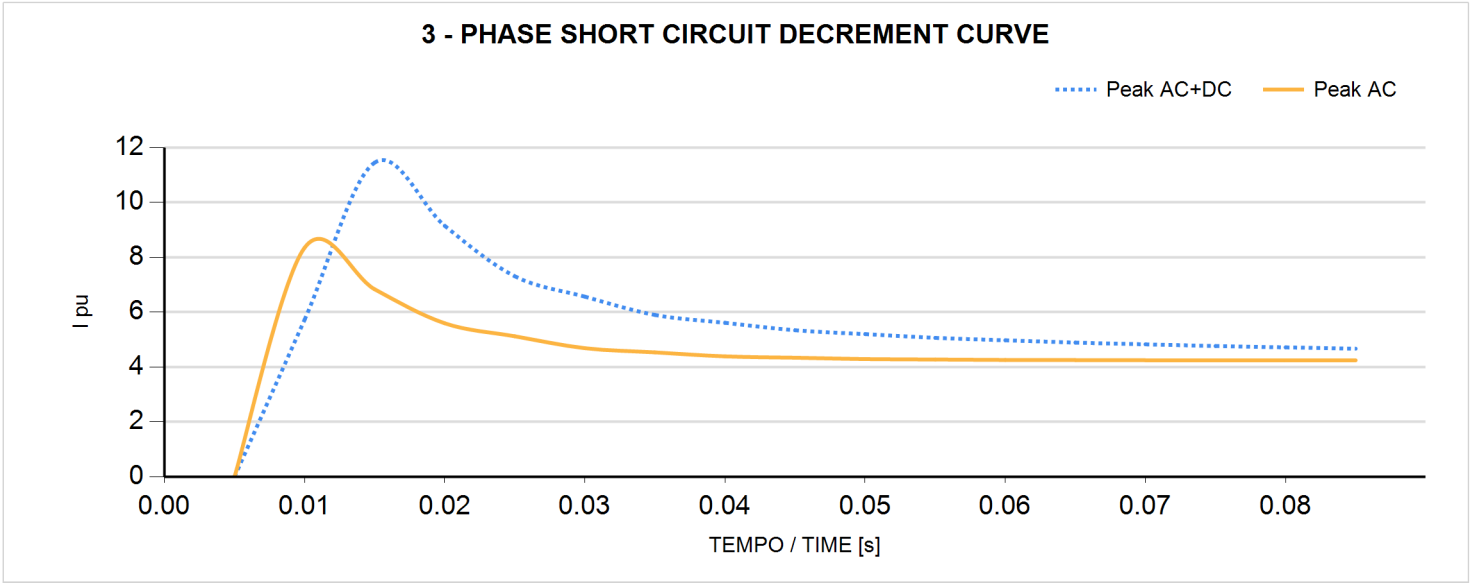
**CADUTA DI TENSIONE - VOLTAGE DIP**



MXB 180 SA4

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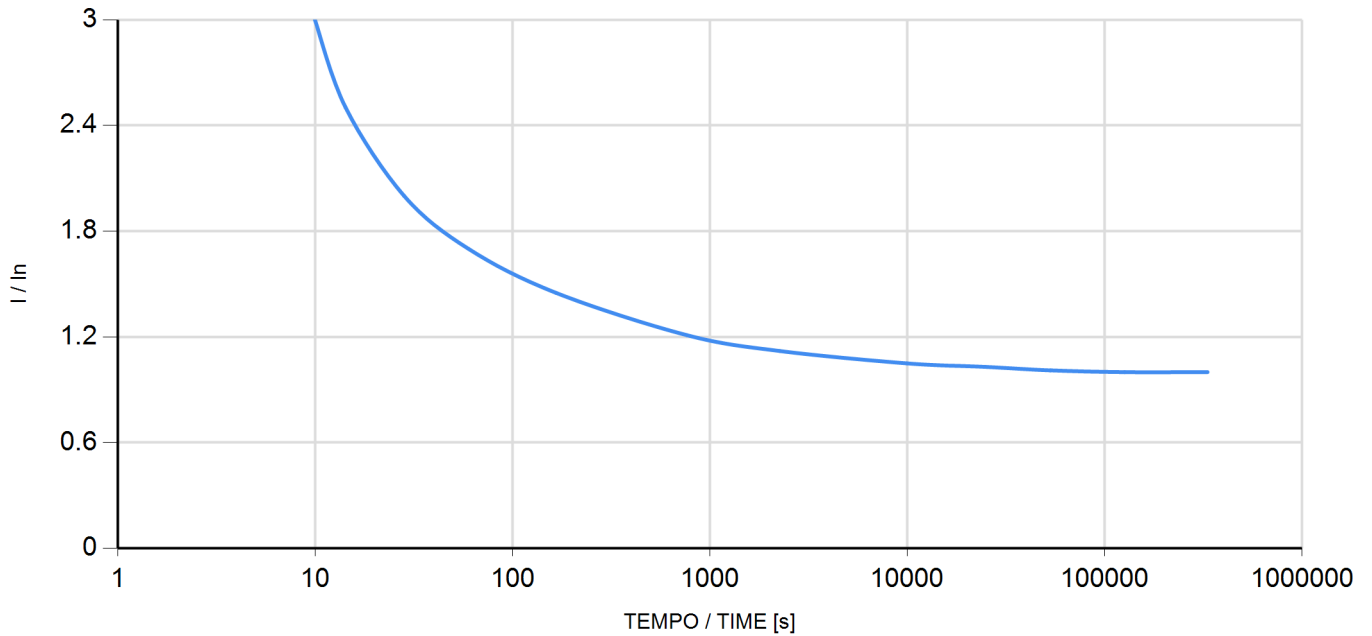


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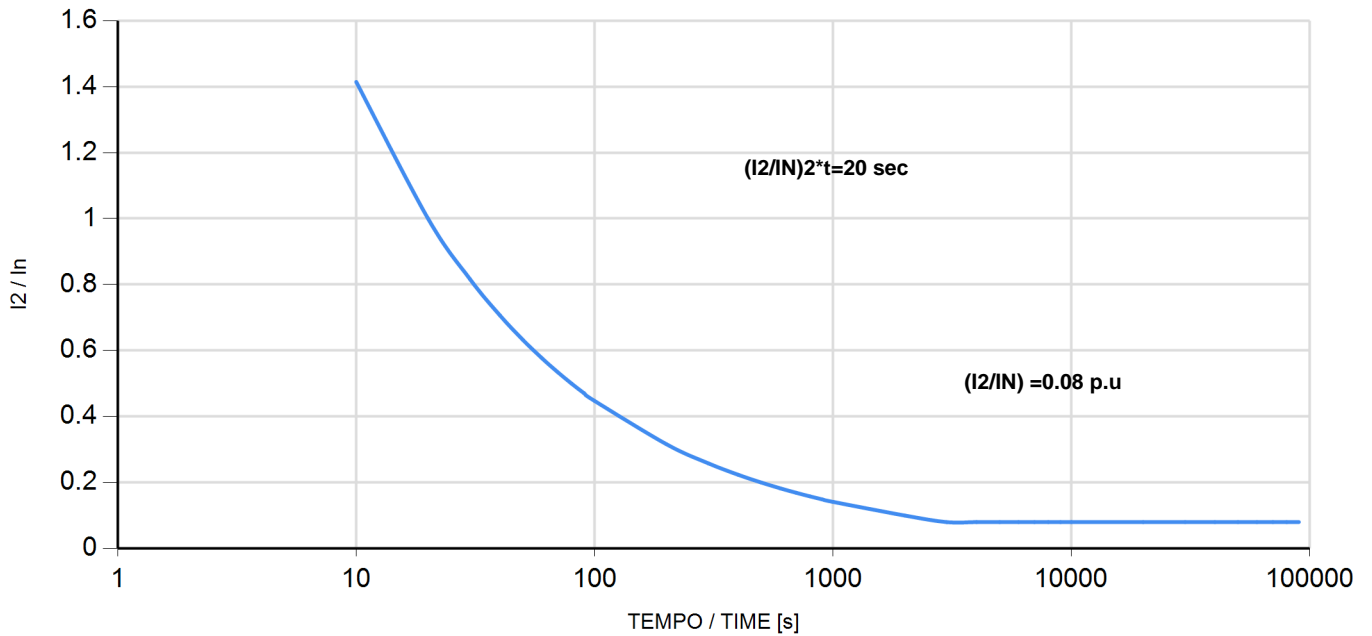
Project: \_\_\_\_\_

Reference: \_\_\_\_\_

**CURVA DI LIMITE TERMICO - THERMAL DAMAGE CURVE**

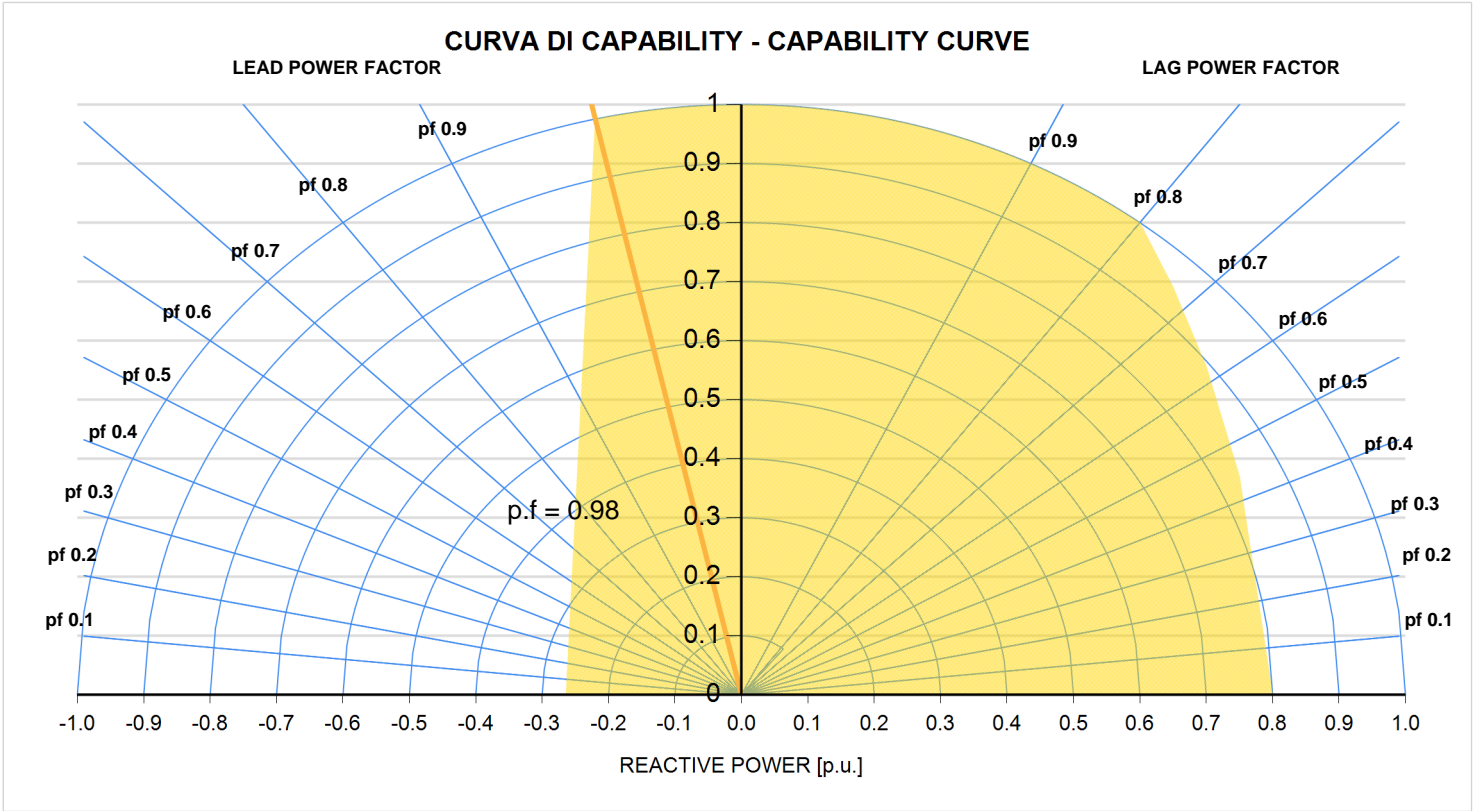


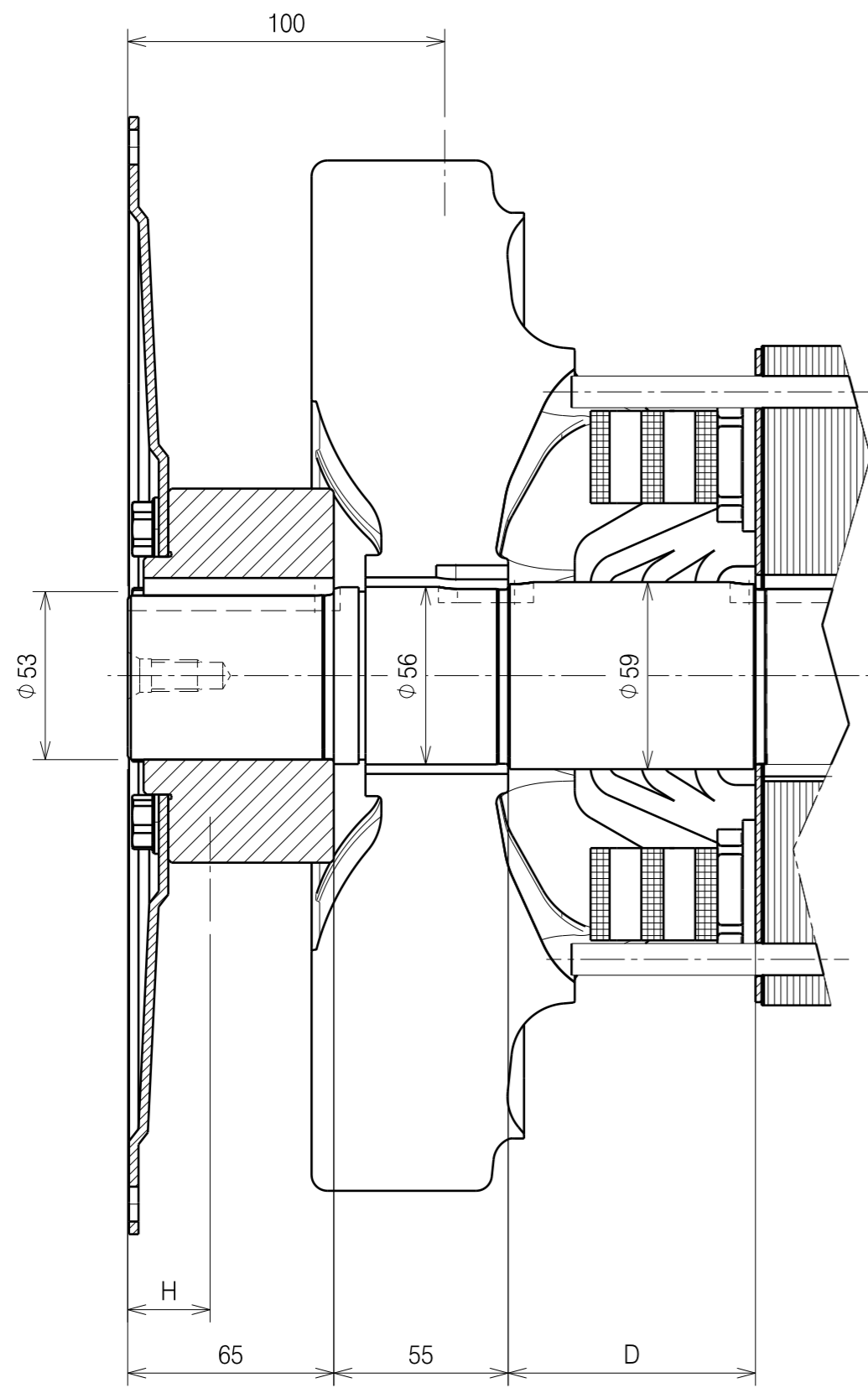
**CORRENTE SEQUENZA INVERSA - NEGATIVE SEQUENCE CURRENT**



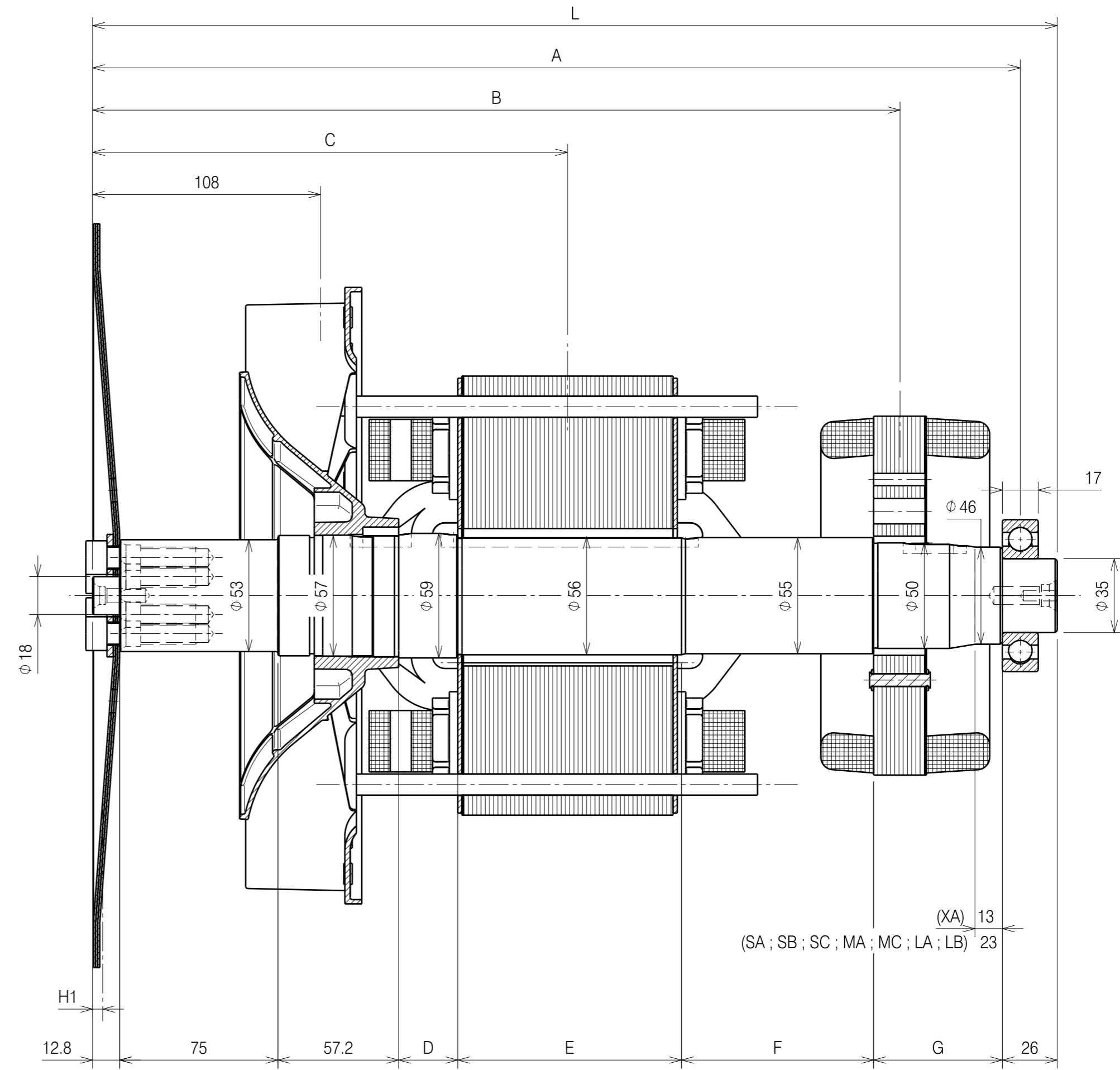
# MXB 180 SA4

Project: \_\_\_\_\_  
Reference: \_\_\_\_\_





REFERENCE FOR SIZES: MA - MC - LA - LB



REFERENCE FOR SIZES: XA - SA - SB - SC

SIZE	DIMENSIONS mm								FAN		SHAFT		MAIN CORE		EXCITER CORE		TOTAL	
	A	B	C	D	E	F	G	L	m [kg]	J [kgm <sup>2</sup> ]	m [kg]	J [kgm <sup>2</sup> ]	m [kg]	J [kgm <sup>2</sup> ]	m [kg]	J [kgm <sup>2</sup> ]	m [kg]	J [kgm <sup>2</sup> ]
XA	439.5	382.5	225	28	106	91	61	457	0.5	0.009	7.67	0.003	28.5	0.161	7.72	0.038	44.4	0.211
SA	509.5	447.5	237.5		176	81	71	527			8.73		34.6	0.195	9.24	0.044	53.1	0.251
SB			247.5								39		0.22	57.5			0.276	
SC			260								44.5		0.251	64.2			0.308	
MA	559.5	492.5	270	53	216	81	577	10.6	0.004	48.7	0.275	10.8	0.05	71.8	0.346			
MC			280							53.8	0.303			76.9	0.374			
LA	664.5	597.5	310	78	276	101	682	12	0.005	56	0.315	66.8	0.376	80.5	0.386			
LB			335							12.1	66.8			0.376	91.4	0.448		

COUPLING	H	H1	m [kg]	J [kgm <sup>2</sup> ]
SAE 6 1/2	TBD	-	-	-
SAE 7 1/2	TBD	-	-	-
SAE 8	TBD	-	-	-
SAE 10	TBD	-	-	-
SAE 11 1/2	26	-	6	0.043
SAE 11 1/2	-	4.8	2.3	0.035

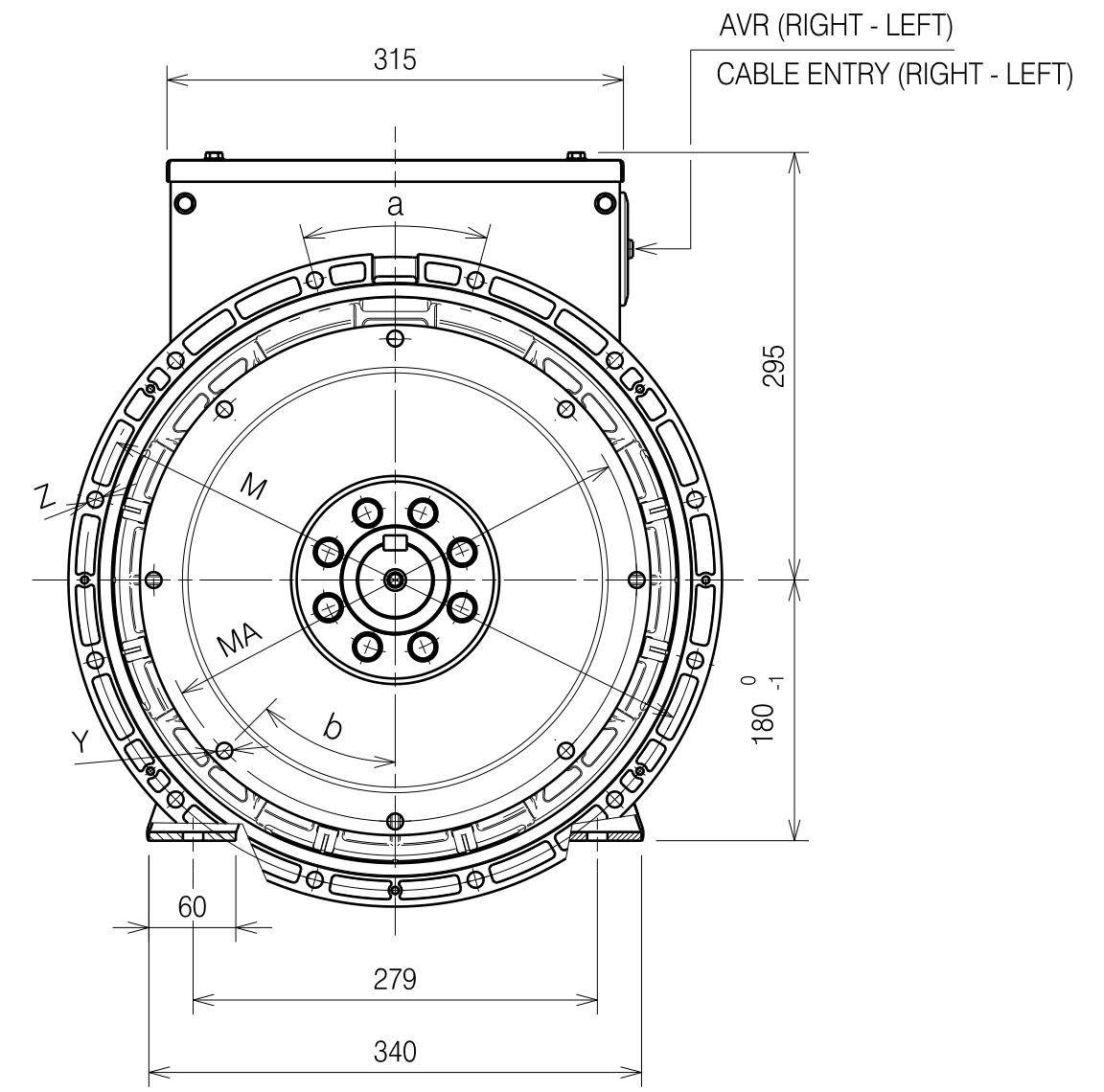
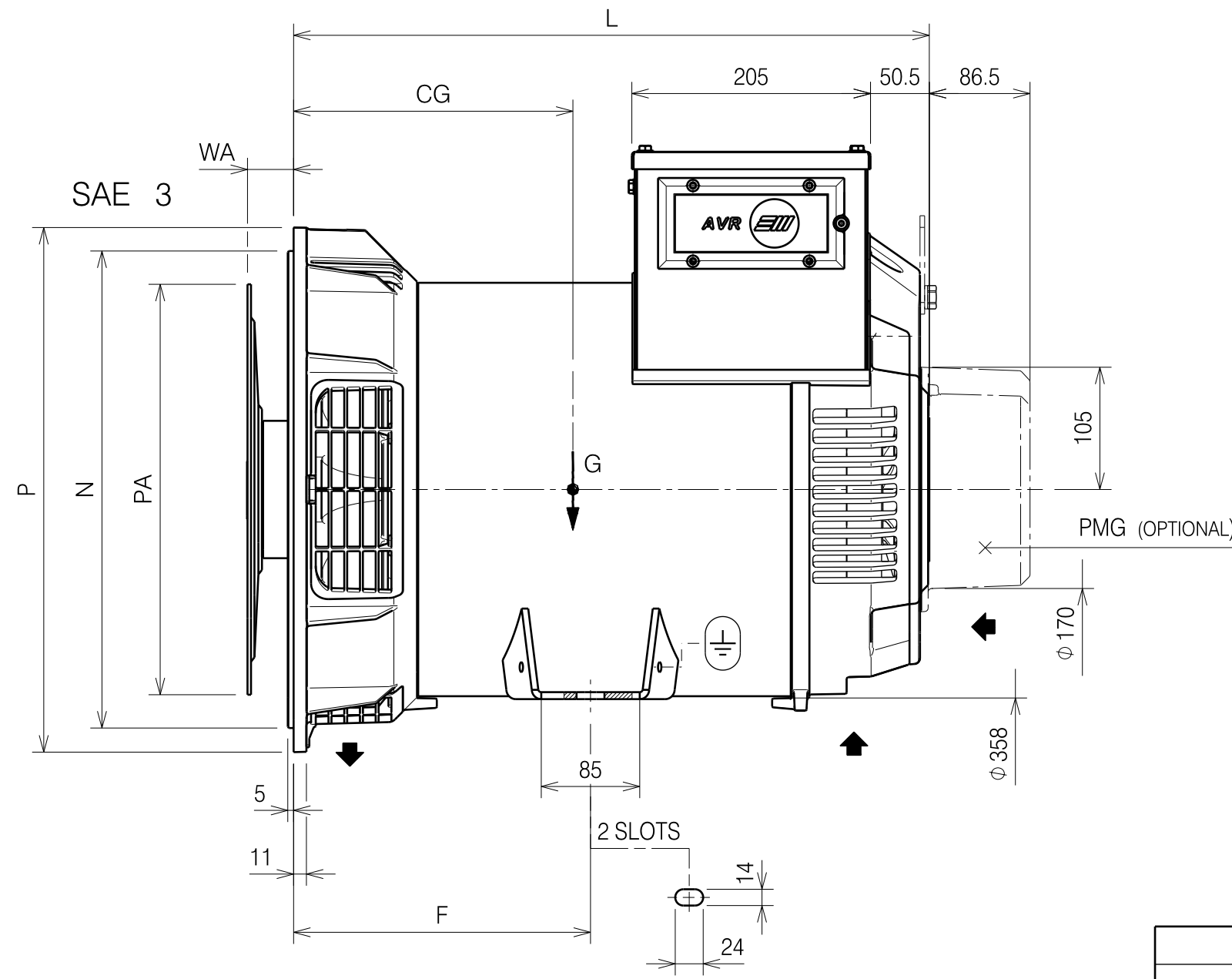
B	MODIFIED SIZE (MB)	15/10/2015	G.Stefani
A	MODIFIED VALUES IN TABLE	14/10/2015	G.Stefani
=	PRIMA EMISSIONE	08/10/2015	D.Pegoraro
REV	DESCRIZIONE	DATA	FIRMA
	SOSTITUISCE IL COD.		
	CAD	SCALE A2	DISEGNATORE 08/10/2015 D.Pegoraro
			CONTR./C.UFF. 15/10/2015 D.Pegoraro
			CONTR. ATEX
TORSIONAL ANALYSIS DATA MXB 180		M18AV001C	
SYNCHRONOUS GENERATORS		B	
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DIMENSIONS IN mm

G= CENTER OF GRAVITY

PROTECTION DEGREE = IP23

CHANGES RESERVED



TYPE	DIMENSIONS			
	L	F	CG SAE 5-4	CG SAE 3
MXB 180 XA 4	426	205		206
MXB 180 SA 4				228
MXB 180 SB 4	496			238
MXB 180 SC 4				250
MXB 180 MA 4	546	255		254
MXB 180 MC 4				264
MXB 180 LA 4			294	
MXB 180 LB 4	651		319	

CONNECTINGS				
COUPLING	FLANGE			
	SAE J617			
SAE J620	5	4	3	2
6 1/2				
7 1/2				
8				
10				
11 1/2			●	

DIMENSIONS																
FLANGE							COUPLING									
SAE J617	N <sup>0</sup> <sub>-0.13</sub>	P	M	Z	NR	Φ	a	SAE J620	PA	MA	NR	Y	Φ	b	WA	WB
5								6 1/2								
4								7 1/2								
3	409.58	451	428.62	12	11	30°	8									
2							10									
							11 1/2	352.42	333.38	8	11	45°	39.6	-		

B	ADDED DIMENSIONS WITH REFERENCE F	16/10/2015	D.Pegoraro
A	MODIFIED SIZE (MB)	15/10/2015	G.Stefani
=	PRIMA EMISSIONE	09/10/2015	G.Stefani
REV	DESCRIZIONE	DATA	FIRMA
	SOSTITUISCE IL COD.	SCALA	DISEGNATORE
		--	09/10/2015
		A3	CONTR./C.UFF.
			16/10/2015
			CONTR. ATEX

**SYNCHRONOUS GENERATOR - MXB 180**  
 SINGLE BEARING CONSTRUCTION - B2 SAE  
**M18AD003B**  
**B**  
 REV

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