

CONTINUOUS DUTY

4 poles
50 Hz - 1500 rpm / 60 Hz - 1800 rpm

AMBIENT TEMPERATURE TEMPERATURE RISE INSULATION CLASS POWER FACTOR		40°C H H 0,8	WINDING DATA										
			50 Hz					60 Hz					Winding code Number of leads Winding pitch
FREQUENCY		Hz	50 Hz					60 Hz					
VOLTAGE	Connections	Star series	V	380	400	415	440	380	416	440	460	480	
		Star parallel		190	200	208	220	190	208	220	230	240	
RATING POWER		kVA	127	132	132	132	137	148	153	158	158		
		kW	102	106	106	106	110	118	122	126	126		
EFFICIENCY [%] @ 0,8 p.f.		4/4	91,9	92,2	91,8	91,7	91,7	92,1	92,5	92,7	93,0		
		3/4	92,5	92,6	92,4	92,3	92,7	93,0	93,1	93,3	93,3		
		2/4	92,7	92,7	92,6	92,5	93,0	93,2	93,3	93,4	93,3		
EFFICIENCY [%] @ 1 p.f.		4/4	93,5	93,8	93,4	93,4	93,4	93,8	94,0	94,2	94,4		
		3/4	94,0	94,1	94,0	93,9	94,2	94,4	94,5	94,6	94,7		
		2/4	94,2	94,2	94,1	94,0	94,4	94,6	94,7	94,8	94,7		
SHORT CIRCUIT RATIO		SCR	0,39	0,42	0,45	0,51	0,30	0,34	0,37	0,39	0,42		
REACTANCES [%]													
Direct axis synchronous		X _d	283	265	246	219	264	330	305	288	264		
Quadrature axis synchronous		X _q	155	145	135	120	200	180	167	157	145		
Direct axis transient		X' _d	20,6	19,3	17,9	16,0	26,6	24,0	22,2	21,0	19,3		
Direct axis subtransient		X'' _d	10,1	9,5	8,8	7,9	13,1	11,8	10,9	10,3	9,5		
Quadrature axis subtransient		X'' _q	11,3	10,6	9,8	8,8	14,6	13,2	12,2	11,5	10,6		
Negative sequence		X ₂	10,8	10,1	9,4	8,3	13,9	12,6	11,6	11,0	10,1		
Zero sequence		X ₀	2,3	2,2	2,0	1,8	3,0	2,7	2,5	2,4	2,2		
TIME CONSTANTS [s]													
Open circuit		T' _{do}					1,08						
Transient		T' _d					0,087						
Subtransient		T'' _d					0,006						
Armature		T _a					0,007						

MECHANICAL CHARACTERISTICS

D-end bearing/Lubrication	6215 2RS C3 / Prelubricated
N-end bearing/Lubrication	6311 2RS C3 / Prelubricated
Overspeed [r.p.m.]	2250
Inertia (J) [kgm ²]	Refer to B34 construction 0,924
Weight [kg]	Refer to B34 construction 420
Method of cooling	IC01
Cooling air required [m ³ /s] @ 50/60 Hz	0,31 / 0,39
Degree of protection	IP23
Types of construction available	B2 (SAE) - IM B34
Direction of rotation (Standard)	CW

OTHER DATA

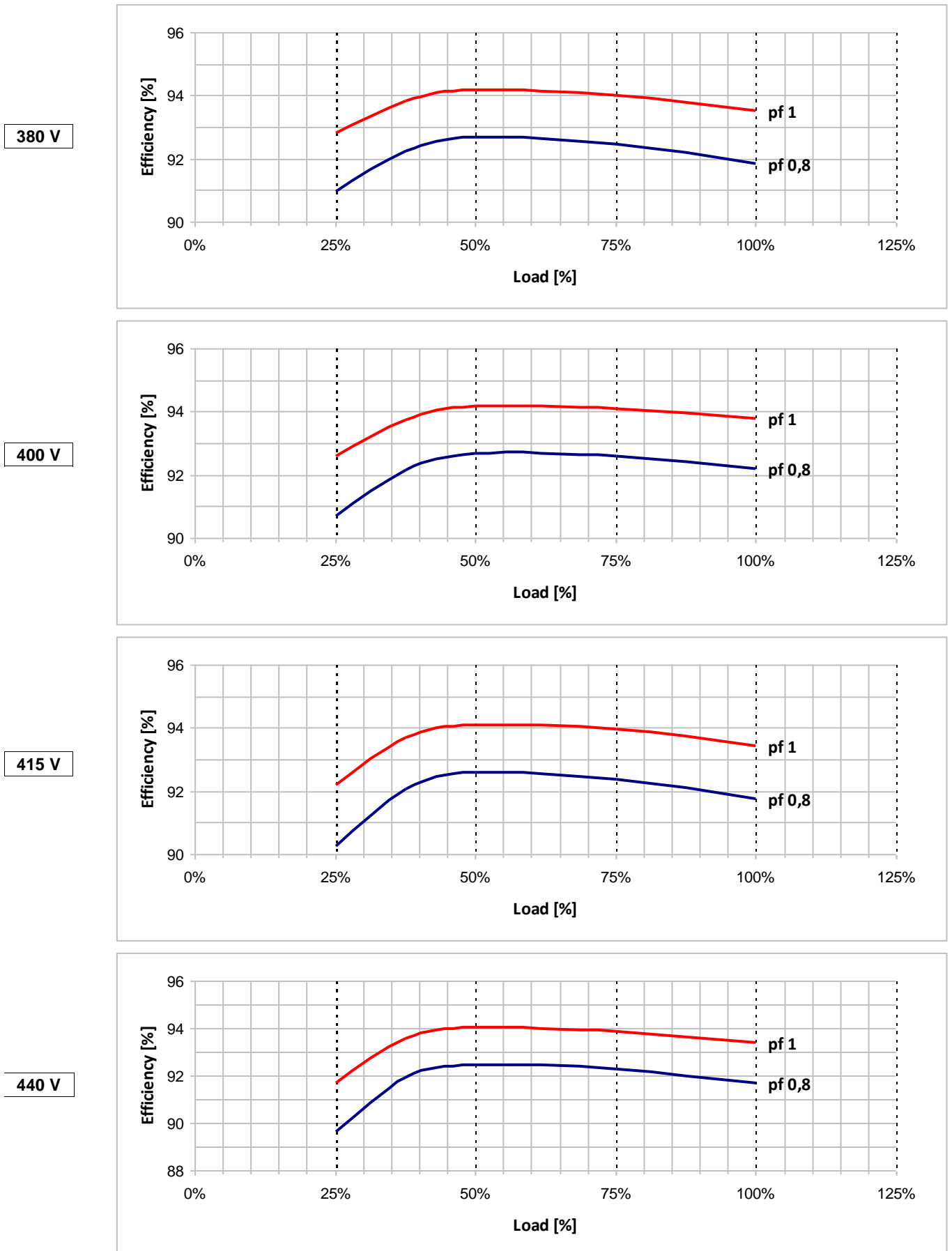
Phase resistance [Ω] @ 20 °C - Star series	0,045
Overloads	10% for 1 hour every 12 hours
3-phase short circuit sustained current	≥ 300 % (3 I _n) with auxiliary winding
Voltage regulation accuracy	± 0,5 % I _n steady state condition
Radio interference	EN 55011 - Class B Group 1
Wave form THF	< 2%
Total harmonic content	< 2% - At no load

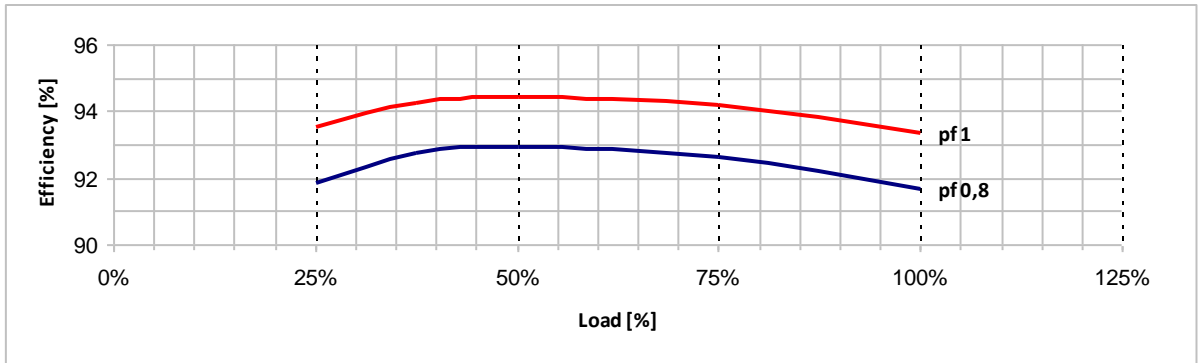
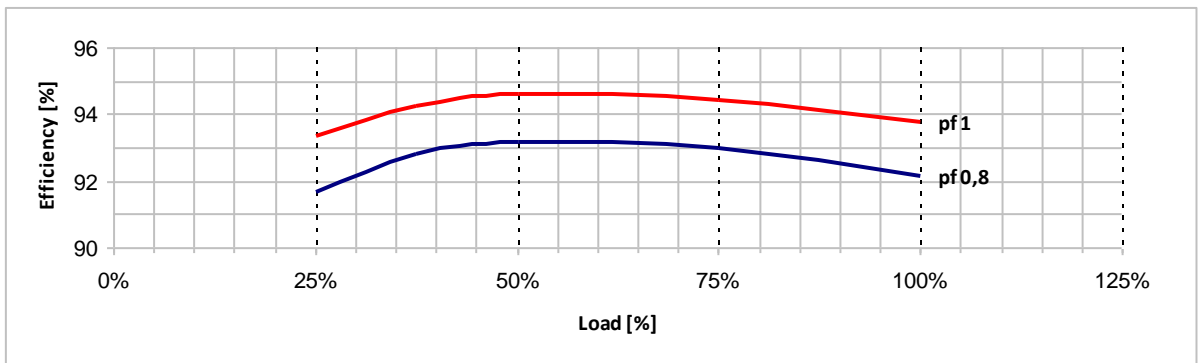
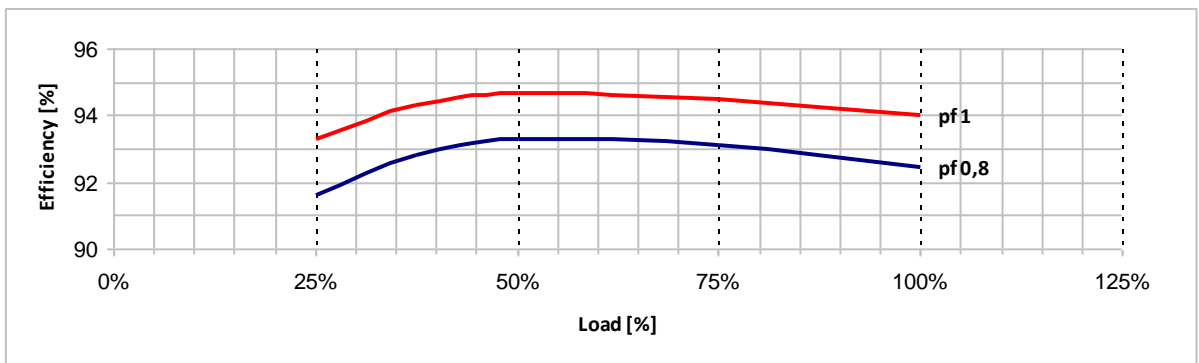
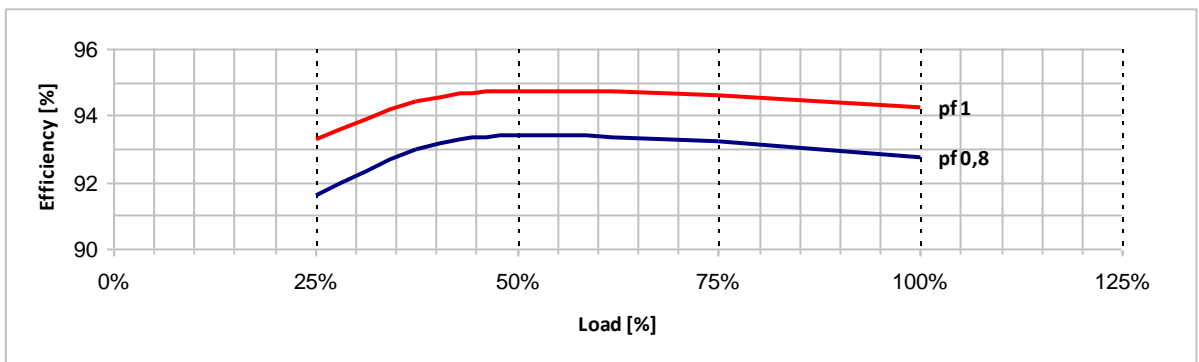
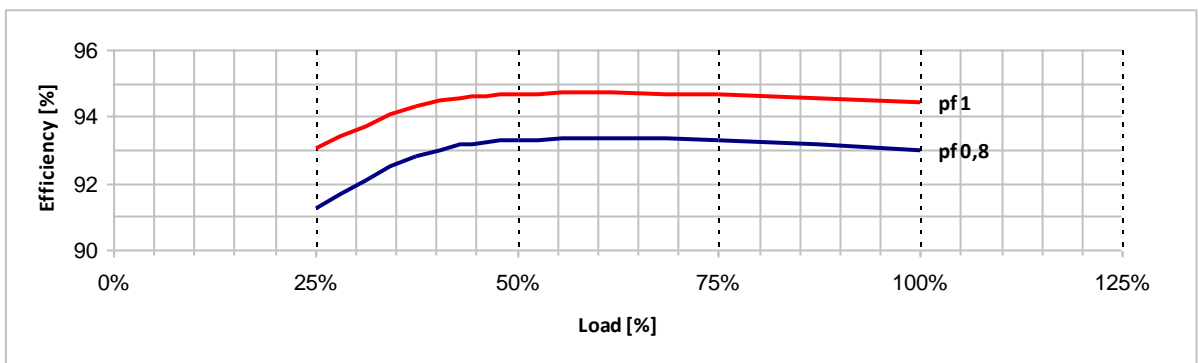
STANDARDS

IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

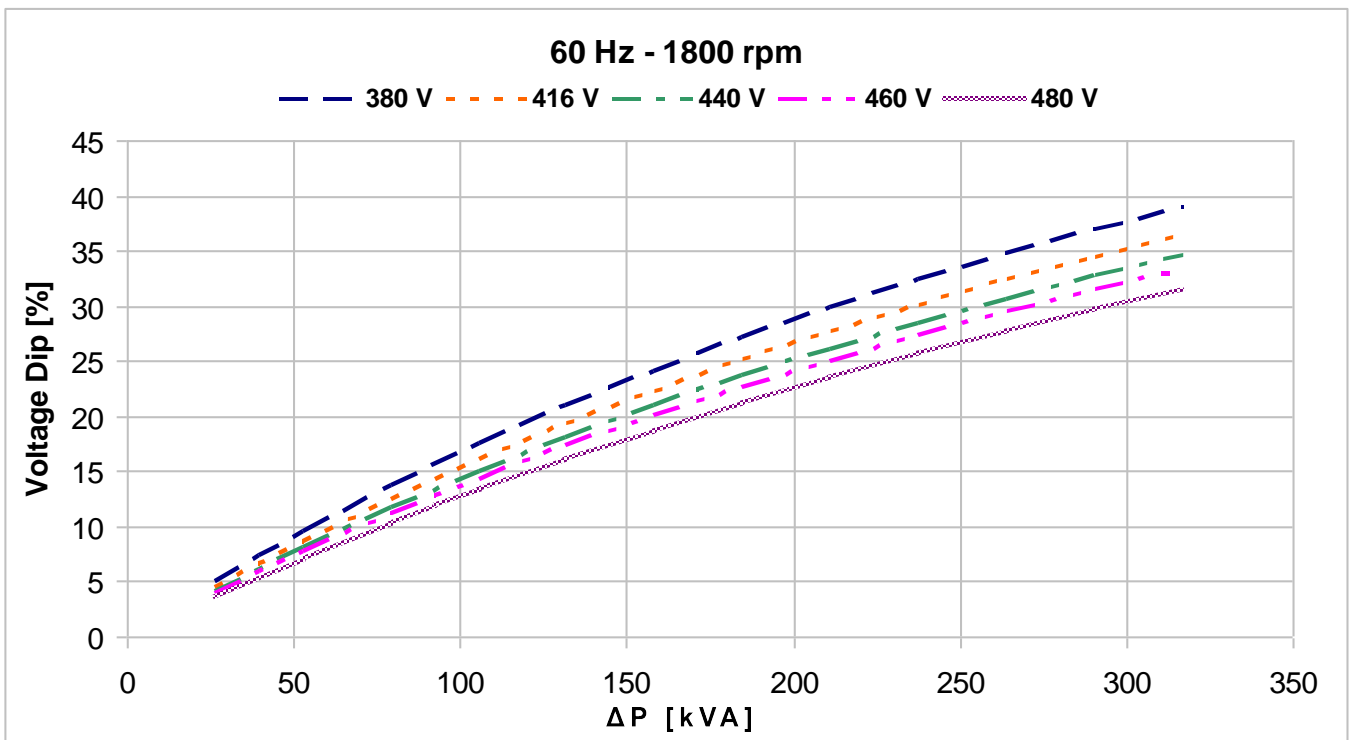
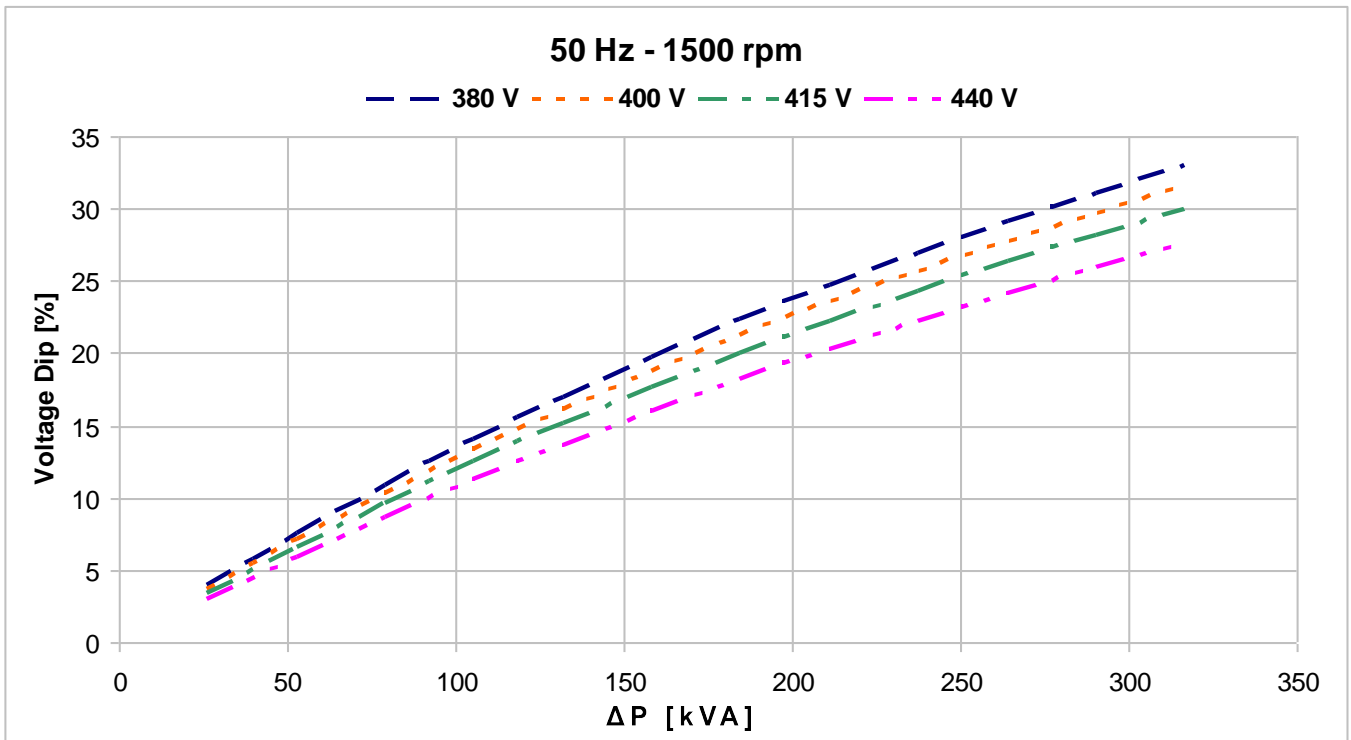
Typical efficiency curves

50 Hz - 1500 rpm



Typical efficiency curves
60 Hz - 1800 rpm
380 V

416 V

440 V

460 V

480 V


Locked rotor motor starting curves (*)



$$\Delta P = P_n \times \frac{I_s / I_n}{\cos \varphi_n \times \eta_n}$$

(*): A coefficient of 0,85 must be applied to the voltage dip if the load has a power factor equal or greater than 0,8.