

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				Winding code				80
		Number of leads				Number of leads				6
		Winding pitch				Winding pitch				2/3
FREQUENCY	Hz	50 Hz			60 Hz					
VOLTAGE	Star V	380	400	415	416	440	460	480		
RATING	kVA kW	1300 1040	1300 1040	1300 1040	1450 1160	1520 1216	1560 1248	1625 1300		
EFFICIENCY [%] @ 0,8 p.f.	4/4	95,6	95,8	95,9	95,8	96,0	96,2	96,3		
	3/4	96,0	96,0	96,0	96,1	96,3	96,4	96,5		
	2/4	96,1	96,0	96,0	96,2	96,4	96,5	96,5		
EFFICIENCY [%] @ 1 p.f.	4/4	96,5	96,7	96,8	96,7	96,8	97,0	97,1		
	3/4	96,8	96,8	96,8	96,9	97,1	97,2	97,2		
	2/4	96,9	96,9	96,9	97,0	97,2	97,2	97,2		
SHORT CIRCUIT RATIO	SCR	0,42	0,46	0,50	0,37	0,40	0,42	0,44		
REACTANCES [%]										
Direct axis synchronous	X _d	277	250	232	309	290	272	260		
Quadrature axis synchronous	X _q	154	139	129	172	161	151	145		
Direct axis transient	X' _d	24,9	22,5	20,9	27,8	26,1	24,5	23,4		
Direct axis subtransient	X'' _d	10,4	9,4	8,7	11,6	10,9	10,2	9,8		
Quadrature axis subtransient	X'' _q	10,9	9,8	9,1	12,1	11,4	10,7	10,2		
Negative sequence	X ₂	10,6	9,6	8,9	11,9	11,1	10,5	10,0		
Zero sequence	X ₀	2,3	2,1	2,0	2,6	2,4	2,3	2,2		
TIME CONSTANTS [s]										
Open circuit	T' _{do}					2,49				
Transient	T' _d					0,22				
Subtransient	T'' _d					0,014				
Armature	T _a					0,022				

MECHANICAL CHARACTERISTICS

D-end bearing/Lubrication	6324 C3 / With grease nipple
N-end bearing/Lubrication	6318 Z C3 / Prelubricated
Overspeed [r.p.m.]	2250
Inertia (J) [kgm ²]	Refer to B34 construction 22,5
Weight [kg]	Refer to B34 construction 2800
Method of cooling	IC01
Cooling air required [m ³ /s] @ 50/60 Hz	1,30 / 1,55
Degree of protection	IP23
Types of construction available	B2 (SAE) - IM B34 - IM B20
Direction of rotation (Standard)	CW

OTHER DATA

Phase resistance [Ω] @ 20 °C - Star series	1,4
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

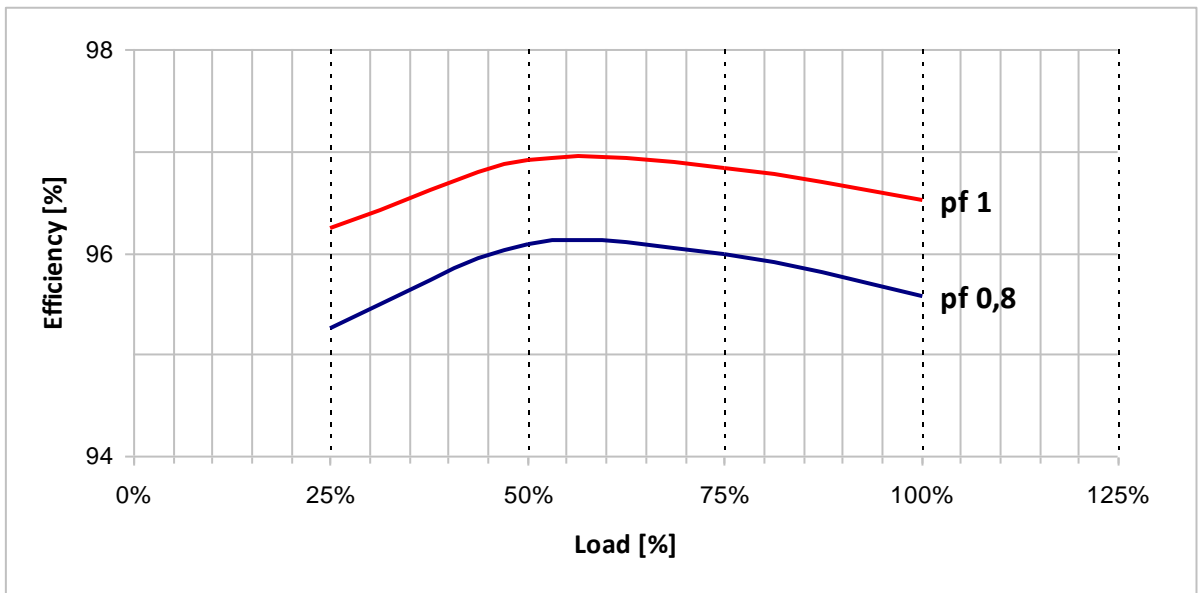
IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

Typical efficiency curves
50 Hz - 1500 rpm

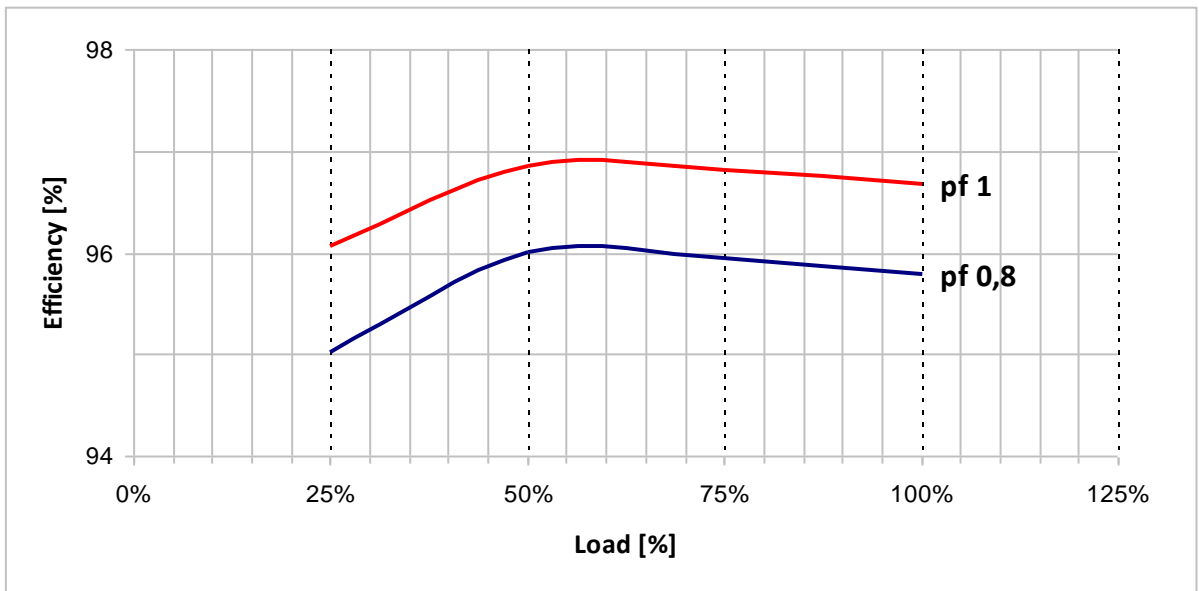
Typical efficiency curves

50 Hz - 1500 rpm

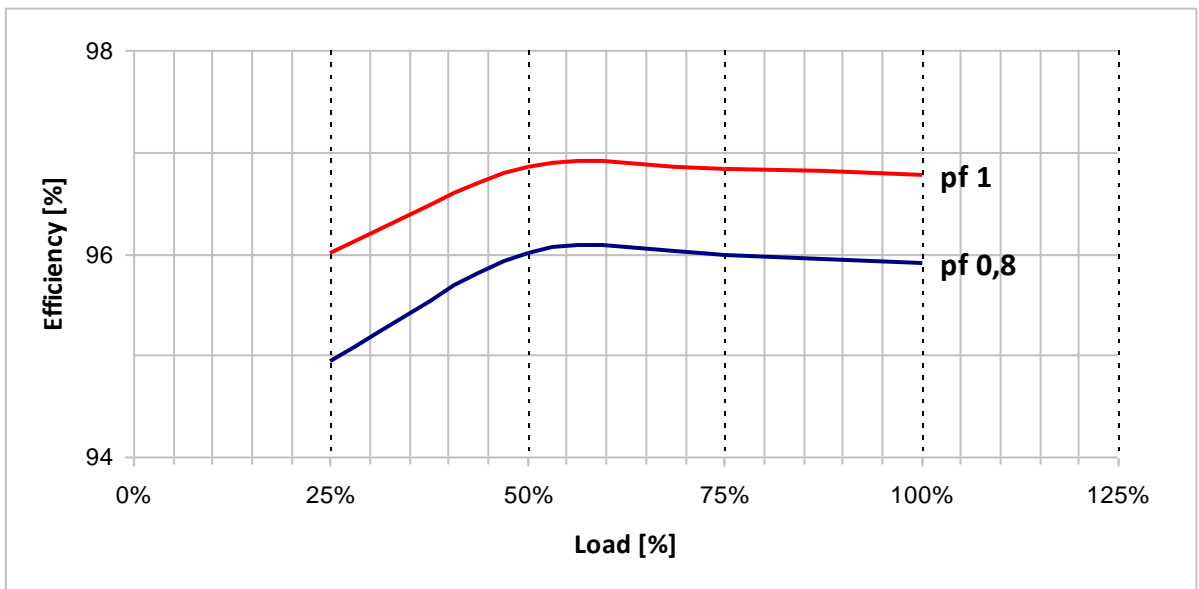
380 V

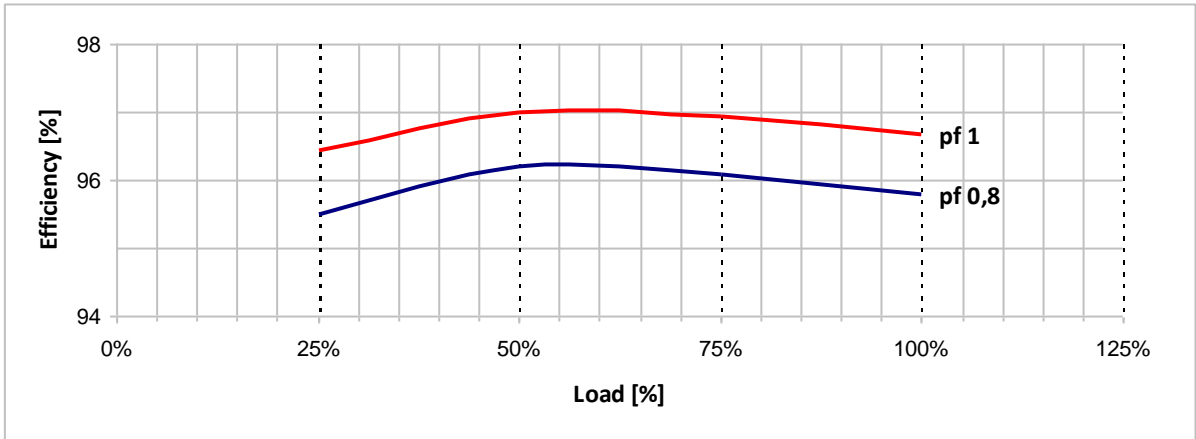
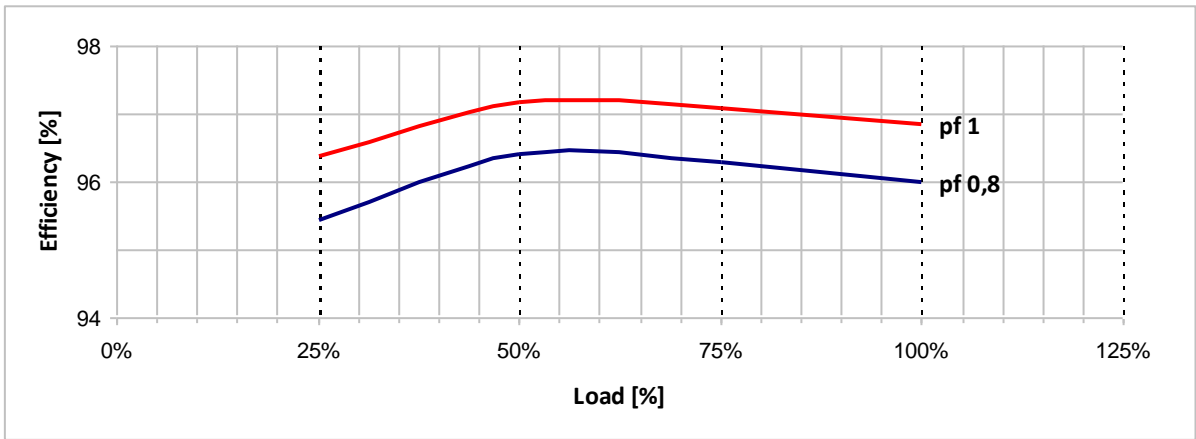
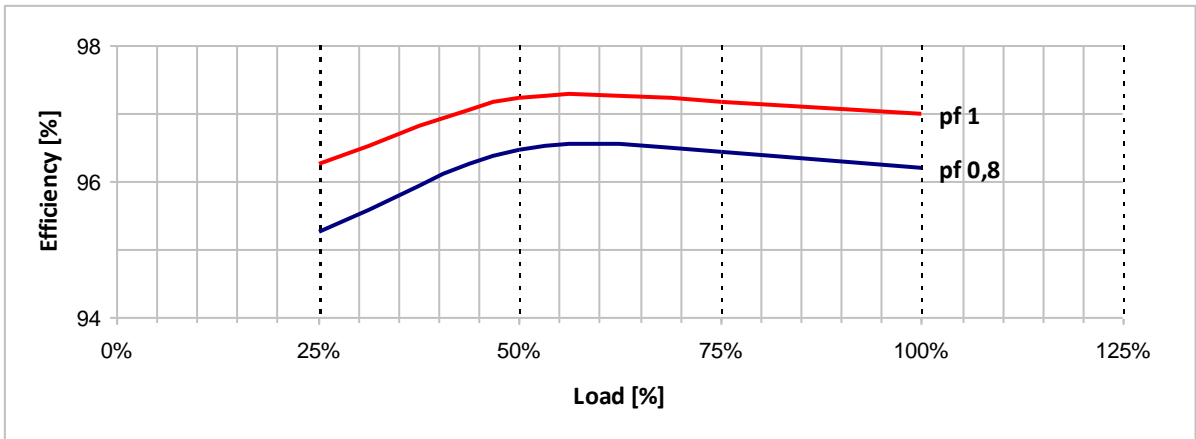
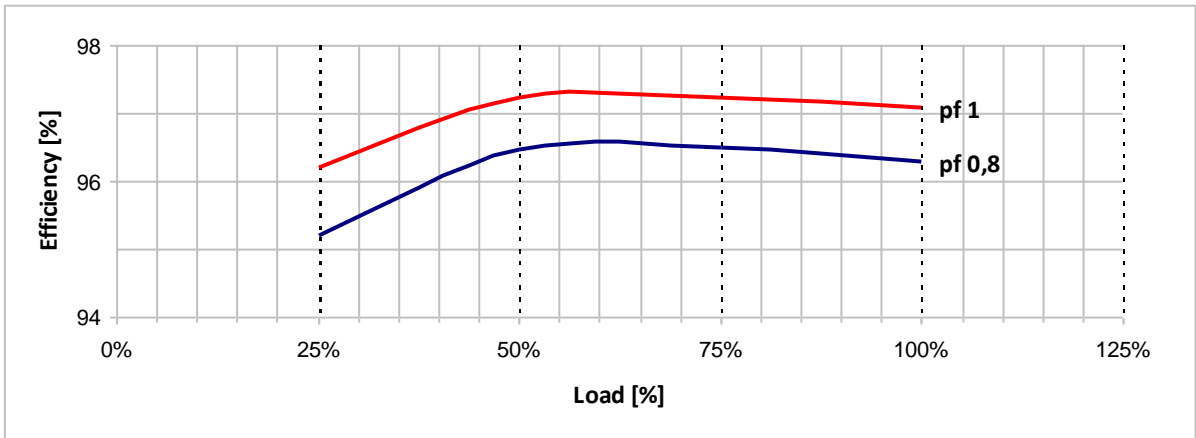


400 V

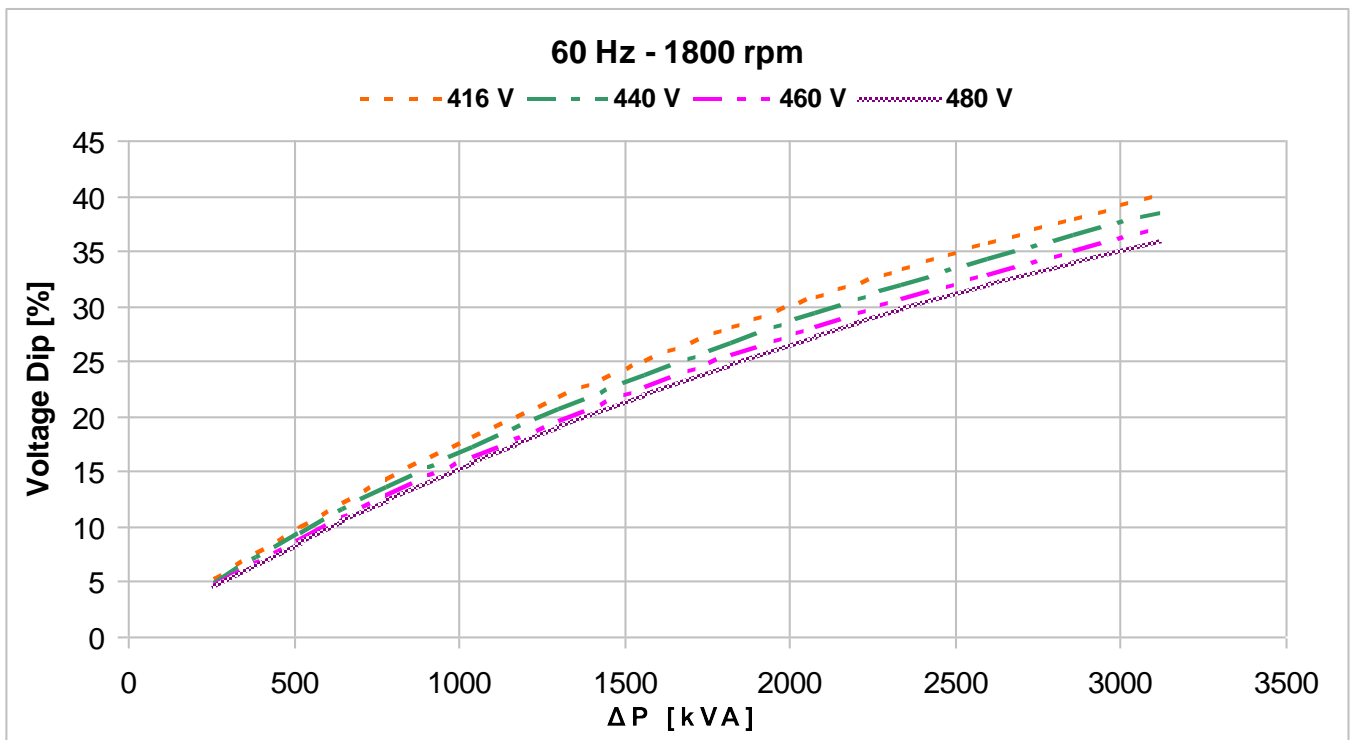
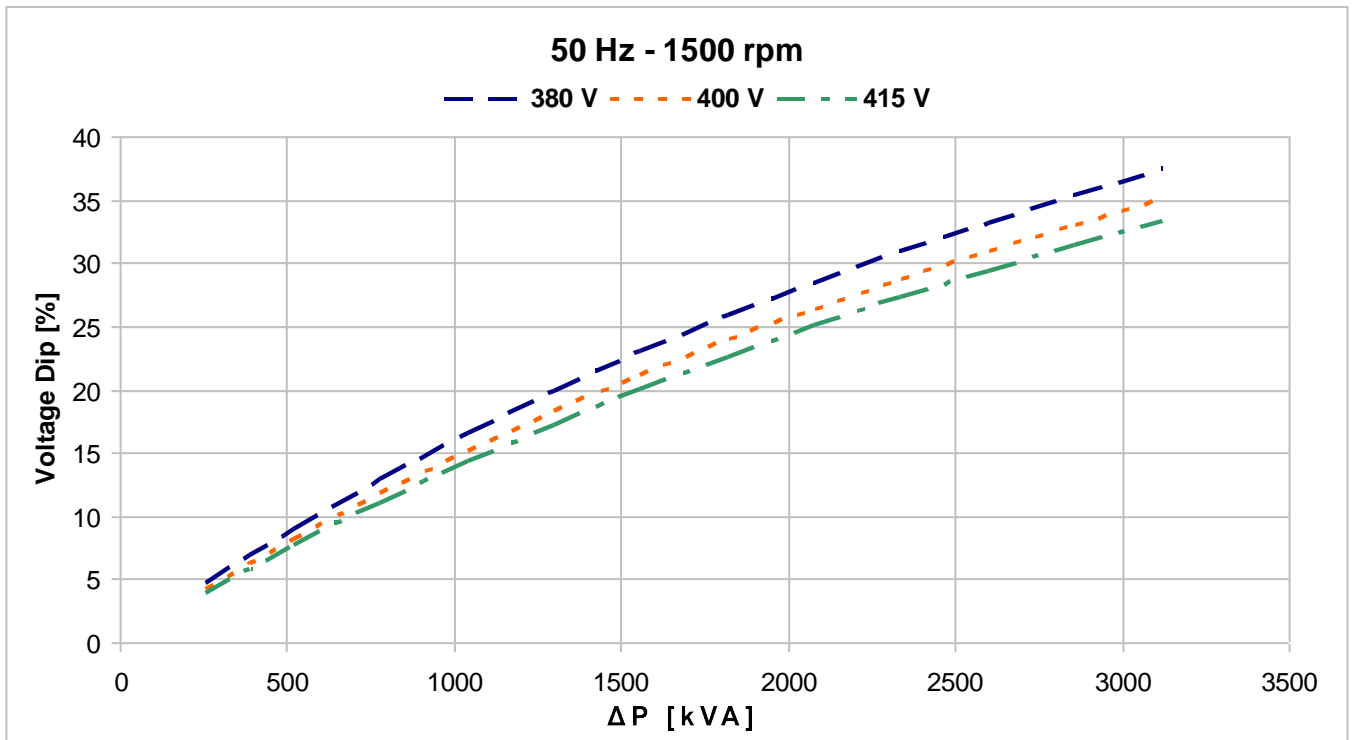


415 V



Typical efficiency curves
60 Hz - 1800 rpm
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.