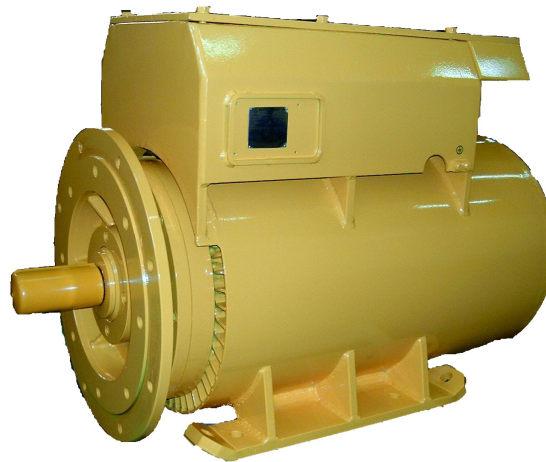


# MINING ELECTRIC MOTORS 3KTCP AND 4KTCP



### Application:

- electric motors type 3KTCP and 4KTCP are suitable for heavy working conditions in coal mines.
- the enclosure of electric motors is designed to be "flameproof" according to EN 50018.
- the terminal boxes are designed to be "increased safety" according to EN 50019
- enclosure (cooling rib, terminal box and cable glands) are protected with steel cuirass, even when the motor is filled up with coal, the motor is cooled enough (the temperature of surface does not exceed 200°C)
- ratio between starting current and nominal current is < 5
- ratio between starting torque and nominal torque is > 2,2
- windings are designed to withstand frequently switch on and off

### Bearings:

- drive end bearing NU3 (DIN 5412), non-drive end 63 (DIN 625)

Explosion protection		
Certificate of Conformity: Frame size 180, 200, 225 Frame size 250 Frame size 280 Frame size 315	BVS 04 ATEX E 260 BVS 04 ATEX E 261 BVS 04 ATEX E 262 BVS 04 ATEX E 263	POCC.SI.ME92.B02699 POCC.SI.ME92.B02699 POCC.SI.ME92.B02699 POCC.SI.ME92.B02699
Explosion protection	I M2 EEx de I I M2 EEx d I	PB Ex d I
Degree of protection	IP 55	
Thermal class	F	

Technical data for 4 pole motors										
Type	Power kW	Speed Min <sup>-1</sup>	In 400 V A	In 500 V A	In 1100 V A	In 1140 V A	Ia/In Starting current	Mm/Mn Starting torque	Efficiency %	Power factor cos φ
3 KTCP 180 L-4	22	1455	44	34,5	15,3	15,3	5,0	2,2	89	0,84
3 KTCP 200 L-4	30	1460	54	45	20,2	19,0	4,7	2,3	90	0,85
3 KTCP 225 M-4	45	1465	81	65	29,2	28,5	4,8	2,5	91	0,86
3 KTCP 225 S-4	37	1470	68	54	24,3	23,7	4,8	2,5	92	0,86
4 KTCP 250 M-4	55	1475	103	82	38,2	36,0	4,8	2,5	92,5	0,86
4 KTCP 280 S-4	75	1475	134	108	48,6	47,0	4,9	2,4	93	0,87
4 KTCP 280 M-4	90	1475	162	129	58,5	56,7	4,8	2,4	92,5	0,88
4 KTCP 315 S-4	110	1485	201	161	72	70,7	5,0	2,4	93	0,88
4 KTCP 315 MA-4	132	1485	240	184	82,8	84,3	5,0	2,4	93	0,88
4 KTCP 315 MB-4	160	1480	280	224	100,8	98,3	5,5	2,4	93,5	0,89
4 KTCP 315 MC-4	200	1485	328	275	126,0	115,0	6,9	2,6	95,8	0,87

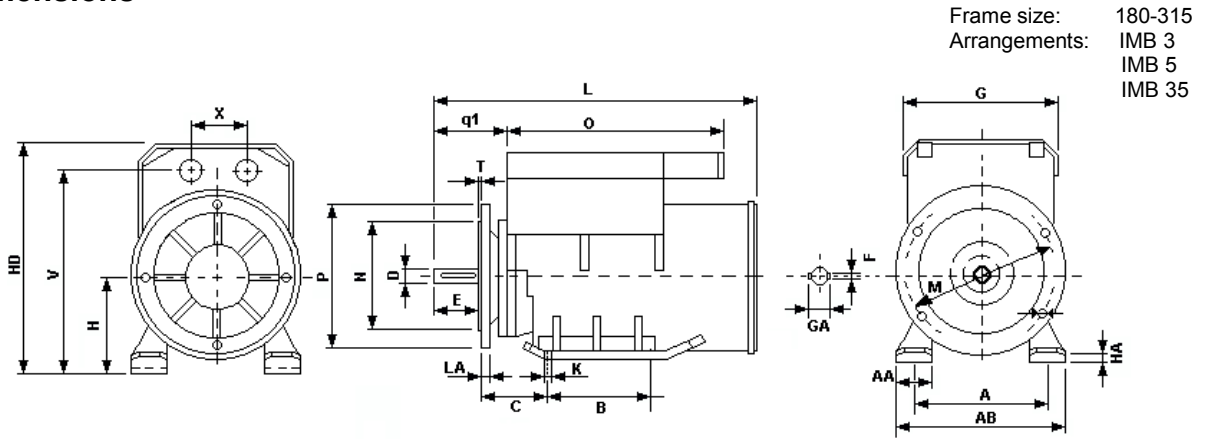
- data for 2, 6 and 8 pole motors on request



**Materials:**

Frame size	Stator			Shield	Auxiliary parts	Fan's shield	Fan	Noise level (dB)			
	Stator frame	Feet	Outside surface	Material	Material	Material	Material	3000 Min <sup>-1</sup>	1500 Min <sup>-1</sup>	1000 Min <sup>-1</sup>	750 Min <sup>-1</sup>
180	Steel sheet-welded	Welded	Cooling rib protected with Steel cuirass	Cast iron	Cast iron	Steel sheet-welded	Steel sheet-welded	73	65	60	56
200								75	64	60	58
225								76	65	62	58
250				76				66	64	60	
280				78				69	66	62	
315				80				70	69	64	

**Dimensions**



Type	A	AA	AB	B	C	D	E	F	GA	D	E	F	GA	H	HA
					2 pole						4, 6, 8 pole				
3KTCP 180 M	279	70	348	241	121	48	110	14	51,5	48	110	14	51,5	180	16
3KTCP 180 L	279	70	348	279	121	48	110	14	51,5	48	110	14	51,5	180	16
3KTCP 200 L	318	80	398	305	133	55	110	16	58,8	55	110	16	58,8	200	16
3KTCP 225 S	356	80	436	285	149	60	140	18	64,2	60	140	18	64,2	225	16
3KTCP 225 S	356	80	436	311	149	55	110	16	58,8	60	140	18	64,2	225	16
4KTCP 250 M	406	100	506	349	168	60	140	18	64,2	65	140	18	64,2	250	20
4KTCP 280 S	457	110	568	368	190	65	140	18	69,2	75	140	20	79,6	280	20
4KTCP 280 M	457	110	568	419	190	65	140	18	69,2	75	140	20	79,6	280	20
4KTCP 315 S	508	120	628	406	216	65	140	18	69,2	80	170	22	85,5	315	25
4KTCP 315 M	508	120	628	457	216	65	140	18	69,2	80	170	22	85,5	315	25
4KTCP 315 MC	508	120	628	457	216	65	140	18	69,2	80	170	22	85,5	315	25

Type	HD	K	L	q1	L	q1	LA	M	N	P	S	T	G	O	V	X
			2 pole		4, 6, 8 pole											
3KTCP 180 M	510	14	740	168	740	168	15	300	250	350	18	5	350	494	422	82
3KTCP 180 L	510	14	780	168	780	168	15	30	250	350	18	5	350	534	422	82
3KTCP 200 L	563	18	840	177	840	177	18	350	300	400	18	5	385	585	473	98
3KTCP 225 S	613	18	842	208	842	208	18	350	300	400	18	5	386	556	523	98
3KTCP 225 S	613	18	872	178	902	208	18	350	450	400	18	5	386	616	523	98
4KTCP 250 M	701	24	987	219	987	219	18	500	450	550	19	5	446	660	589	144
4KTCP 280 S	770	24	1012	223	1012	223	18	500	450	550	19	5	456	690	655	144
4KTCP 280 M	770	24	1072	223	1072	223	18	500	450	550	19	5	456	750	659	144
4KTCP 315 S	857	24	1051	261	1081	291	22	600	550	660	24	6	532	795	760	170
4KTCP 315 M	857	24	1176	261	1206	291	22	600	550	660	24	6	532	855	760	170
4KTCP 315 MC	857	24	1390	261	1390	291	22	600	550	660	24	6	532	855	760	170

- all datas and dimensions are informative and will be specified during quotation.