

ELECTRIC MOTORS





Explosion protection

Marking	I M2 Ex de I Mb, I M2 Ex dbe I Mb
	I M2 Ex d I Mb, I M2 Ex db I Mb
	PB Ex d I Mb

Technical data

Frame sizes	180-200-225-250-280-315-355
Power	22 kW to 400 kW
Voltage	380 V to 1140 V
Operating duty	S1 to S10, ready for operating with frequency inverters
Frequency	50 Hz and 60 Hz
Single speed	2, 4, 6, 8 pole
Pole changing	4/2, 8/4, 6/4, 8/6, other versions on request
Insulation class	F and H

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Protection class	IP 55, possible up to IP 65
Ambient temperature	-20 °C to +40 °C
Thermal protection in winding	3 x PTC, possible also PTO or Pt100
Thermal protection in bearings	PTC, PTO or Pt100
Anticondensation protection	Heaters in winding AC 220 V
Additional regreasing	grease nipples
Cooling	air, TEFC
Material of enclosure	welded steel plates
Cable glands	1 x for power supply, 1 x for protection, Ex e or Ex d

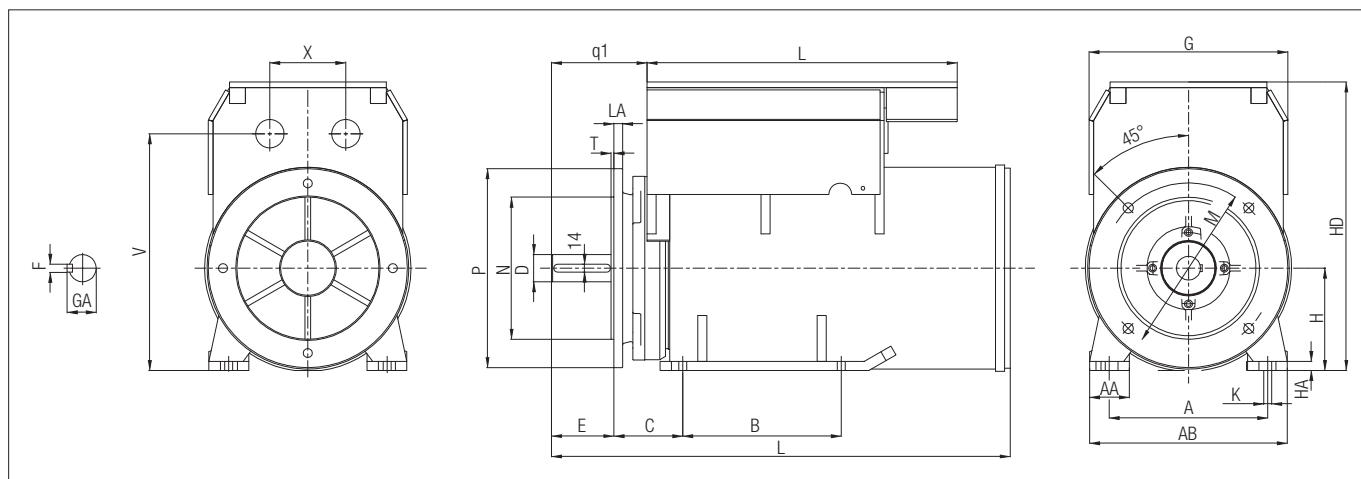
Certifications

Type	ATEX		IECEX		CU TR certificate Russia, Belarussia, Kazakhstan RU-C-SI-ГБ08.B.00309
	BVS 15 ATEX E 075 X	FTZU 13 ATEX 0111X	IECEX BVS 15.0066X	IECEX FTZU 14.0006X	
3KTCR 180	●		●		●
3KTCR 200	●		●		●
3KTCR 225	●		●		●
4KTCR 250	●		●		●
4KTCR 280	●		●		●
4KTCR 315	●		●		●
5KTCR 355		●		●	●

Technical data for 4 pole motors

Type	Power kW	Speed Min ⁻¹	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
4 KTCP 315 MD-4	250	1487	433	347	158	152	7.2	3.0	95.2	0.88
5 KTCP 355 SA-4	200	1485	353	282.4	128.4	123.9	7.3	2.3	95.2	0.86
5 KTCP 355 SB-4	250	1490	459	367.2	166.7	161.1	7.2	2.4	94.6	0.83
5 KTCP 355 S(L)-4	315	1490	555	444	202	195	7.2	2.4	94.6	0.87
5 KTCP 355 M-4	400	1490	660	528	240	232	7.5	2.5	95.8	0.91

Data for 2, 6 and 8 pole motors on request



Dimensions (mm)

Frame size	A	AA	AB	B	C	2 pole				4, 6, 8 pole				H	HA
						D	E	F	GA	DA	E	F	GA		
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
4KTCP 315 MD	508	120	628	457	216	65	140	18	69.2	80	170	22	85.5	315	25
5KTCP 355 S	on request														
5KTCP 355 M															
5KTCP 355 L															



Dimensions (mm)

Frame size	HD	K	L	q	L	q	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
4KTCP 315 MD	857	24	1600	261	1600	291	22	600	550	660	24	6	532	855	760	170
5KTCP 355 S	on request															
5KTCP 355 M																
5KTCP 355 L																

Note: All datas and dimensions in this catalogue are informative and will be specified during quotation.

Frame size	71	80	90	100	112	132	160	180	200	225	250	280	315	355
Special voltage up to 1140 V	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special frequency	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Frequency inverter drive	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special power	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Special shaft end	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Free shaft end on NDS-end of motor	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special flange	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Flange made in R acc. to DIN 42955	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Additional greasing								●	●	●	●	●	●	●
Fixed bearing on AS								●	●	●	●	●	●	●
2RS bearings	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Labyrinth seal								●	●	●	●	●	●	●
Oil seal								●	●	●	●	●	●	●
Protection IP 56	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Protection IP 65	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Protection IP 66	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Protection cover	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Vibrations within R or S limits	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SPM placing							op	op	op	op	op	op	op	op
Special data plate	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Terminal box with Ex d cable glands	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Terminal box with socket	op	op	op	op	op	op	op	op	op	op	op	op	op	op
Thermal protection of winding	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heating of winding against condensation	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heating of winding at temp. lower -20 °C	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Insulation class H	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special colour	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● = on request
op = option

Ordering data

- rating in kW
- voltage and frequency
- r.p.m.
- type of motor arrangement (form IM ..)
- mechanical requirements
- special requirements (i.e. H-class thermal insulation, two-shaft, radial bearing seals...).

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