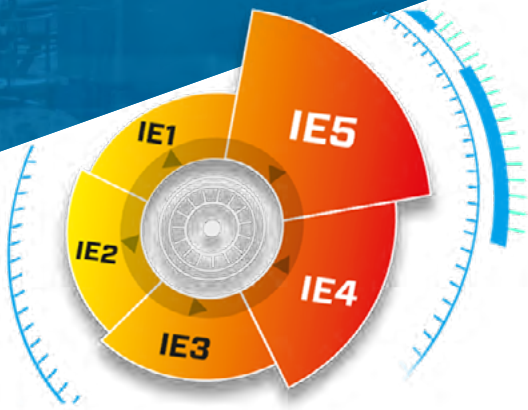


KONČAR-MES IN STEP WITH LEADING MANUFACTURERS OFFERS IE4 AND IE5 MOTORS IN EXPLOSION PROTECTION

SERIES 7KSRT (**SYNCHRONOUS RELUCTANCE**
MOTOR IEC FRAME SIZE 80-160)



PERFECT MATCH with reduction of energy losses compared to conventional solutions with return of investment in less than two years

Končar-MES was among the first and alongside leading manufacturers to certify high-efficiency motors in flameproof protection

Ex protection marking and usage:

- ✓ II 2G Ex db IIC T3, T4, T5, T6 Gb
- ✓ II 2G Ex db eb IIC T3, T4, T5, T6 Gb
- ✓ II 2D Ex tb IIIC, T160°C, T130°C, T100°C Db
- ✓ High efficiency IE4 and IE5
- ✓ Reduces energy losses by up to 40% compared to conventional solutions
- ✓ Return on investment - less than two years
- ✓ Guaranteed total system efficiency and optimized process control
- ✓ Fully interchangeable due to IEC/Cenelec compliance
- ✓ Lower bearing and winding temperatures (longer bearing lifetime)
- ✓ Reduce CO₂ emission





STANDARD DESIGN

- * Cast iron design
- * Ex protection: II 2G Ex db eb IIC T4 Gb
- * Frequency inverter input voltage: 3x400V / 50Hz
- * Rated power: up to 18,5 kW
- * Duty type: S1
- * Frequency range: 5-133Hz; up to 4000 rpm
- * Efficiency class: IE4 and IE5 acc. to EN 60034-30-2
- * Ambient temperature: -20°C/+40°C
- * Insulation class: F (with temperature rise in B class)
- * Mechanical protection: IP55
- * Cooling type: IC411
- * Mounting arrangement: IMB3
- * Colour tone RAL 7031 C4

MOUNTING POSSIBILITIES

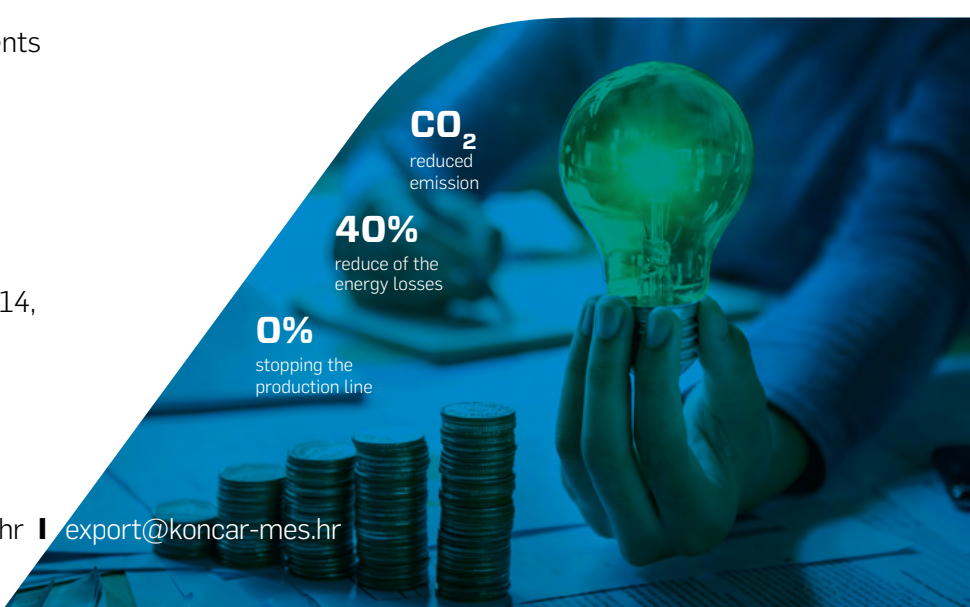
- * With ATEX Ex db protected brake
- * With ATEX Ex db protected forced ventilation (IC416)
- * With ATEX Ex db encoder

MAIN APPLICATIONS

- * Pumps, fans and compressors
- * Hoist application
- * Conveyor and transport application
- * Other work machine application where regulation of speed is needed

DESIGN OPTIONS

- * Ex protection:
 - II 2G Ex db eb IIC T3...T6 Gb
 - II 2G Ex db IIC T3...T6 Gb
 - II 2D Ex tb IIIC T100...T160°C Db IP6x
- * Other ambient temperatures (up to -20/+60°C for IIC and -20/+80° for IIB T3)
- * Marine use design for tropical environments
- * Standstill winding heaters
- * Other degrees of mechanical protection: IP56, IP65, IP66 or IP67
- * Other cooling types: IC410, IC416, IC418
- * Other duty types: S2-S10
- * Other mounting arrangement: IMB5, IMB14, IMB35 etc.
- * Special flanges, bearings and shaft ends

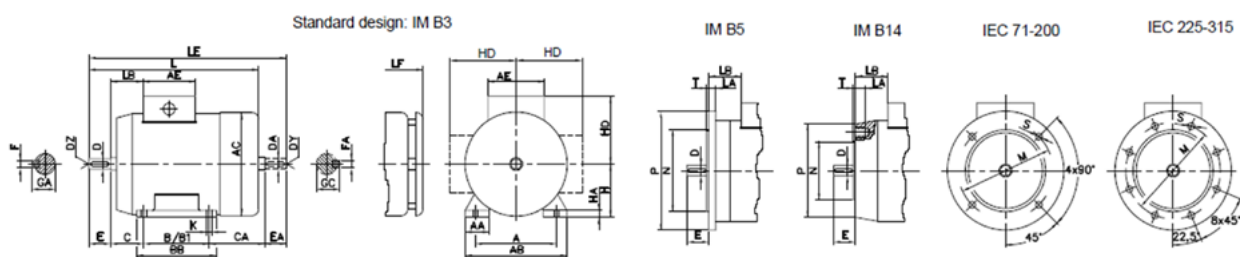


CO₂
reduced
emission

40%
reduce of the
energy losses

0%
stopping the
production line

Dimensional drawing 7KSRT 80-160



IM B3, IM B5, IM B14

Motor type	AC	D	DZ	E	F	GA	L	Terminal box			Terminal box			LE	LF	LG
		/	/	/	/	/		design "e"			design "d"					
		DA	DY	EA	FA	GC		HD	LB	AE	HD	LB	AE			
7KSRT 80	156	19j6	M6	40	6	21,5	316	177	15	146	193	21	132	352	333	276
7KSRT 90S & L	176	24j6	M8	50	8	27	329	184	22	146	200	29	132	385	362	286
7KSRT 90LX	176	24j6	M8	50	8	27	366	184	22	146	200	29	132	421	386	322
7KSRT 100	194	28j6	M10	60	8	31	439	194	33	146	210	30	132	504	459	389
7KSRT 112	218	28j6	M10	60	8	31	446	204	21	146	220	28	132	511	465	389
7KSRT 132S & M	257	38k6	M12	80	10	41	512	246	39	170	256	41	165	600	536	434
7KSRT 132MX	257	38k6	M12	80	10	41	562	246	39	170	256	41	165	650	586	484
7KSRT 160M & L	308	42k6	M16	110	12	45	662	299	48	208	303	52	200	775	689	580

Motor type	IM B3										IM B5					
	A	AA	AB	B	B1	BB	C	H	HA	K	LA	M	N	P	S	T
7KSRT 80	125	29	150	100	-	128	50	80	10	10x16	10	165	130j6	200	11	3,5
7KSRT 90S & L	140	35	170	100	125	155	56	90	12	10x14	10	165	130j6	200	11	3,5
7KSRT 90LX	140	35	180	125	-	155	56	90	12	10x14	10	165	130j6	200	11	3,5
7KSRT 100	160	44	202	140	-	175	63	100	13	12x15	15	215	180j6	250	15	4
7KSRT 112	190	44	218	140	-	175	70	112	15	12x15	15	215	180j6	250	15	4
7KSRT 132S & M	216	50	260	140	178	218	89	132	18	13	18	265	230j6	300	14	4
7KSRT 132MX	216	50	260	140	178	218	89	132	18	13	18	265	230j6	300	14	4
7KSRT 160M & L	254	62	320	210	254	304	108	160	25	15	20	300	250j6	350	18	5

Motor type	IM B14 – small						IM B14 – large					
	LA	M	N	P	S	T	LA	M	N	P	S	T
7KSRT 80	13	100	80j6	120	M6	3	13	130	110j6	160	M8	3,5
7KSRT 90S & L	13	115	95j6	140	M8	3,5	13	130	110j6	160	M8	3,5
7KSRT 90LX	13	115	95j6	140	M8	3,5	13	130	110j6	160	M8	3,5
7KSRT 100	15	130	110j6	160	M8	3,5	15	165	130j6	200	M10	3,5
7KSRT 112	15	130	110j6	160	M8	3,5	15	165	130j6	200	M10	3,5
7KSRT 132S & M	16	215	180j6	250	M12	4						
7KSRT 132MX	16	215	180j6	250	M12	4						
7KSRT 160M & L												

Technical data for standard motors efficiency class

IE4 acc. to IEC/EN60034-30-2



Motor type		P (kW)	Un (V)	f (Hz)	n (rpm)	In (A)	cos Φ	Tn (Nm)	Tmax / Tn	Efficiency			m (kg)
										100%	75%	50%	
w	80A-2	0,75	398	100	3000	2,0	0,65	2,4	1,5	83,5	80,87	76,38	18,6
P7KSRT	80B-2	1,1	394	100	3000	2,9	0,65	3,5	1,5	85,2	83,58	79,99	19,8
P7KSRT	90S-2	1,5	400	100	3000	3,7	0,69	4,8	1,5	86,5	82,32	77,1	26,5
P7KSRT	90LX-2	2,2	393	100	3000	5,3	0,69	7,0	1,5	88	86,49	82,42	30
P7KSRT	100L-2	3	400	100	3000	7,0	0,70	9,6	1,5	89,1	85,33	80,53	41
P7KSRT	112M-2	4	387	100	3000	9,7	0,68	12,7	1,5	90	88,49	84,53	55
P7KSRT	132SA-2	5,5	400	100	3000	12,9	0,69	17,5	1,5	90,9	89,5	85,8	79
P7KSRT	132SB-2	7,5	400	100	3000	16,0	0,74	23,9	1,5	91,7	89,48	85,76	87
P7KSRT	160MA-2	11	400	100	3000	23,0	0,74	35,0	1,5	92,6	91,81	88,82	148
P7KSRT	160MB-2	15	395	100	3000	32,0	0,73	47,8	1,5	93,3	92	91,5	149
P7KSRT	160L-2	18,5	400	100	3000	37,5	0,75	58,9	1,5	93,7	92,5	91,3	168
P7KSRT	80A-4	0,55	395	50	1500	1,4	0,67	3,5	1,5	83,9	82,4	81,8	18,6
P7KSRT	80B-4	0,75	395	50	1500	1,9	0,67	4,8	1,5	85,7	84,4	83,91	20,9
P7KSRT	90S-4	1,1	397	50	1500	2,7	0,70	7,0	1,5	87,2	83,97	81,21	26,5
P7KSRT	90LX-4	1,5	399	50	1500	3,6	0,70	9,6	1,5	88,2	86,54	84,39	30
P7KSRT	100LA-4	2,2	397	50	1500	5,3	0,69	14,0	1,5	89,5	87,02	84,62	41
P7KSRT	100LB-4	3	400	50	1500	7,1	0,68	19,1	1,5	90,4	88,19	85,95	47
P7KSRT	112M-4	4	389	50	1500	9,8	0,67	25,5	1,5	91,1	89,28	87,39	55
P7KSRT	132S-4	5,5	396	50	1500	12,5	0,70	35,0	1,5	91,9	89,91	87,61	87
P7KSRT	132MX-4	7,5	400	50	1500	15,5	0,76	47,8	1,5	92,6	91	90,6	109
P7KSRT	160M-4	11	391	50	1500	24,0	0,73	70,0	1,5	93,3	92,03	90,22	148
P7KSRT	160L-4	15	400	50	1500	31,9	0,72	95,5	1,5	93,9	93,03	91,31	168
P7KSRT	90LXR-6	0,75	399	33	1000	1,8	0,72	7,2	1,5	82,7	84,38	82,16	30
P7KSRT	90LX-6	1,1	400	33	1000	2,6	0,71	3,2	1,5	84,5	84,72	83,06	32
P7KSRT	100L-6	1,5	396	33	1000	3,7	0,70	14,3	1,5	85,9	83,31	80,81	41
P7KSRT	112M-6	2,2	393	33	1000	5,4	0,69	21,0	1,5	87,4	85,58	82,91	55
P7KSRT	132S-6	3	400	33	1000	7,2	0,69	28,7	1,5	88,6	86,02	83,82	79
P7KSRT	132MA-6	4	395	33	1000	9,7	0,68	38,2	1,5	89,5	87,79	85,75	87
P7KSRT	132MXB-6	5,5	400	33	1000	12,9	0,68	52,5	1,5	90,5	89,25	87,33	109
P7KSRT	160M-6	7,5	400	33	1000	16,0	0,74	71,6	1,5	91,3	90,58	88,85	148
P7KSRT	160L-6	11	400	33	1000	23,7	0,73	105,1	1,5	92,3	91,78	90,23	168

Technical data for standard motors efficiency class

IE5 acc. to IEC/EN60034-30-2



Motor type		P (kW)	Un (V)	f (Hz)	n (rpm)	In (A)	cos Φ	Tn (Nm)	Tmax / Tn	Efficiency			m (kg)
										100%	75%	50%	
UP7KSRT	80A-2	0,75	398	100	3000	2,0	0,64	2,4	2	86,3	83,6	79,0	19,8
UP7KSRT	80B-2	1,1	394	100	3000	2,9	0,64	3,5	2	87,8	86,1	82,4	21,3
UP7KSRT	90LXR-2	1,5	400	100	3000	3,6	0,67	4,8	2	88,9	84,6	79,2	30
UP7KSRT	90LX-2	2,2	393	100	3000	5,3	0,67	7,0	2	90,2	88,6	84,4	32
UP7KSRT	100L-2	3	400	100	3000	6,9	0,69	9,6	2	91,1	87,2	82,3	47
UP7KSRT	112M-2	4	387	100	3000	9,8	0,67	12,7	2	91,8	90,3	86,3	61
UP7KSRT	132SA-2	5,5	400	100	3000	12,8	0,67	17,5	2	92,6	91,2	87,4	87
UP7KSRT	132SB-2	7,5	400	100	3000	16,0	0,73	23,9	2	93,2	91,0	87,2	96
UP7KSRT	160MA-2	11	400	100	3000	23,3	0,72	35,0	2	94,0	93,2	90,2	168
UP7KSRT	160MB-2	15	395	100	3000	32,5	0,71	47,8	2	94,6	93,2	92,7	169
UP7KSRT	160L-2	18,5	400	100	3000	38,0	0,74	58,9	2	94,9	93,7	92,5	179
UP7KSRT	80A-4	0,55	395	50	1500	1,4	0,66	3,5	2	86,7	85,1	84,5	19,8
UP7KSRT	80B-4	0,75	395	50	1500	1,9	0,65	4,8	2	88,2	86,9	86,4	21,3
UP7KSRT	90LXR-4	1,1	397	50	1500	2,6	0,69	7,0	2	89,5	86,2	83,3	30
UP7KSRT	90LX-4	1,5	399	50	1500	3,5	0,68	9,6	2	90,3	88,6	86,4	32
UP7KSRT	100LA-4	2,2	397	50	1500	5,2	0,67	14,0	2	91,4	88,9	86,4	47
UP7KSRT	100LB-4	3	400	50	1500	7,0	0,67	19,1	2	92,2	89,9	87,6	48
UP7KSRT	112M-4	4	389	50	1500	9,7	0,66	25,5	2	92,8	90,9	89,0	61
UP7KSRT	132S-4	5,5	396	50	1500	12,4	0,69	35,0	2	93,4	91,4	89,1	96
UP7KSRT	132MX-4	7,5	400	50	1500	15,5	0,74	47,8	2	94,0	92,4	92,0	115
UP7KSRT	160M-4	11	391	50	1500	24,1	0,71	70,0	2	94,6	93,3	91,4	168
UP7KSRT	160L-4	15	400	50	1500	32,2	0,71	95,5	2	95,1	94,2	92,4	179
UP7KSRT	90LXR-6	0,75	399	33	1000	1,8	0,71	7,2	2	85,7	87,4	85,1	32
UP7KSRT	90LX-6	1,1	400	33	1000	2,6	0,70	3,2	2	87,2	87,4	85,7	33
UP7KSRT	100L-6	1,5	396	33	1000	3,6	0,69	14,3	2	88,4	85,7	83,2	47
UP7KSRT	112M-6	2,2	393	33	1000	5,3	0,68	21,0	2	89,7	87,8	85,1	61
UP7KSRT	132S-6	3	400	33	1000	7,1	0,68	28,7	2	90,7	88,0	85,8	87
UP7KSRT	132MA-6	4	395	33	1000	9,6	0,67	38,2	2	91,4	89,7	87,6	96
UP7KSRT	132MXB-6	5,5	400	33	1000	12,9	0,67	52,5	2	92,3	91,0	89,0	115
UP7KSRT	160M-6	7,5	400	33	1000	16,1	0,72	71,6	2	92,9	92,2	90,4	168
UP7KSRT	160L-6	11	400	33	1000	23,8	0,71	105,1	2	93,7	93,2	91,6	179



EXPERIENCE

The number of references and projects worldwide that are successfully delivered by KONČAR-MES has equipped us with the expertise to fulfill the most demanding specifications in the industry.

PASSION FOR TECHNOLOGY

With a passion for technology and commitment to our customers, KONČAR-MES delivers high-quality fans that meet our customers' needs and requirements.

TOWARD ENERGY EFFICIENCY

Companies that rely on proven KONČAR-MES technology are taking one more step in the direction of energy efficiency.

**TAKE
ADVANTAGE**
of the efficiency of KONČAR-MES
motors to improve your company's
performance