Zone 1 Technical Data
2 and 4 pole

Standard Design = ATEX II 2G EEXDe IIC T4

2p=2	3000 min^{-1}			400V/50Hz						440V/60Hz/3600 min^{-1}			
P (kW)	Motor type	n (min^{-1})	η (%)	cos φ	I_n (A)	$\frac{I_k}{I_n}$	$\frac{M_k}{M_n}$	$\frac{M_{max}}{M_n}$	J (kgm^2)	m (kg)	P (kW)	n (min^{-1})	I_n (A)
0.37	5AT 71A-2	2750	70	0.80	0.95	3.8	2.0	2.1	0.000350	10	0.4	3300	0.95
0.55	5AT 71B-2	2760	70	0.82	1.4	4.2	2.2	2.2	0.000530	11.2	0.6	3260	1.4
0.75	5AT 80A-2	2830	73	0.80	1.85	4.5	2.6	2.6	0.000930	14	0.8	3400	1.85
1.1	5AT 80B-2	2830	79	0.83	2.45	4.9	2.6	2.6	0.001100	16.2	1.2	3400	2.45
1.5	5AT 90S-2	2820	78	0.82	3.4	5.3	2.6	2.6	0.001500	18.9	1.7	3385	3.4
2.2	5AT 90L-2	2820	80.5	0.79	5	5.6	2.8	2.9	0.002100	21.8	2.5	3385	5
3	5AT 100L-2	2870	83	0.84	6.2	6.6	3.2	3.4	0.004000	26.7	3.4	3420	6.2
4	5AT 112M-2	2900	85	0.85	8.0	7.0	3.2	3.4	0.006300	37.7	4.5	3480	8
5.5	7AT 132SA-2	2900	85	0.83	11.3	7.0	2.6	3.4	0.014000	78	6.2	3480	11.3
7.5	7AT 132SB-2	2900	87	0.87	14.3	7.0	2.6	3.2	0.015000	92	8.5	3480	14.3
9.5	7AT 132M-2	2920	88	0.87	18	7.5	3.0	3.6	0.020000	89	11	3500	18
11	7AT 160MA-2	2920	89	0.85	21	7.3	3.0	3.3	0.034000	144	12.5	3510	21
15	7AT 160MB-2	2930	90	0.89	27	8.8	3.0	3.8	0.053000	154	17	3520	27
18.5	7AT 160L-2	2940	90	0.90	33	8.8	3.0	3.8	0.063000	168	21	3530	33
22	7AT 180M-2	2940	90	0.85	41.5	7.5	3.0	3.8	0.093000	215	25	3530	41.5
30	7AT 200LA-2	2950	92	0.89	53	7.5	2.2	2.4	0.140000	240	33	3540	52
37	7AT 200LB-2	2955	92.5	0.89	65	7.5	2.3	2.5	0.160000	257	42	3550	65
45	7AT 225M-2	2950	93	0.90	77.5	7.5	2.3	2.5	0.260000	364	50	3540	77.5
55	7AT 250M-2	2960	94	0.88	96	7.3	2.2	2.8	0.340000	416	62	3550	96
75	7AT 280S-2	2970	94	0.89	129.5	7.5	2.2	2.8	0.500000	575	85	3550	130
90	7AT 280M-2	2970	94	0.89	155.5	7.5	2.2	2.8	0.550000	605	105	3550	156
110	7AT 315S-2	2975	94.5	0.90	186	7.0	2.0	2.5	1.120000	840	124	3570	187
132	7AT 315M-2	2980	95	0.90	222	7.7	2.2	2.7	1.280000	885	149	3575	223
160	7AT 315LA-2	2980	95	0.90	268	7.5	2.3	2.5	1.400000	935	180	3575	269

2p=4	1500 min^{-1}			400V/50Hz						440V/60Hz/1800 min^{-1}			
P (kW)	Motor type	n (min^{-1})	η (%)	cos φ	I_n (A)	$\frac{I_k}{I_n}$	$\frac{M_k}{M_n}$	$\frac{M_{max}}{M_n}$	J (kgm^2)	m (kg)	P (kW)	n (min^{-1})	I_n (A)
0.25	5AT 71A-4	1370	61	0.72	0.85	3.4	2.0	2.1	0.000600	10	0.3	1640	0.85
0.37	5AT 71B-4	1360	66	0.75	1.1	3.4	2.0	2.1	0.000850	10.7	0.4	1630	1.1
0.55	5AT 80A-4	1390	70	0.76	1.6	4.1	2.0	2.1	0.001500	13.8	0.6	1670	1.6
0.75	5AT 80B-4	1390	75	0.76	1.9	4.1	2.2	2.3	0.001600	14.4	0.8	1670	1.9
1.1	5AT 90S-4	1380	75.5	0.78	2.7	4.1	2.2	2.3	0.003300	18.1	1.2	1660	2.7
1.5	5AT 90L-4	1380	78	0.80	3.5	4.4	2.2	2.3	0.004100	21	1.7	1660	3.5
2.2	5AT 100LA-4	1410	81	0.80	4.9	5.0	2.2	2.3	0.006500	26.7	2.5	1690	4.9
3	5AT 100LB-4	1410	82.5	0.81	6.5	5.5	2.5	2.8	0.008750	28.8	3.4	1690	6.5
4	5AT 112M-4	1435	84.5	0.80	8.5	6.5	2.8	3.0	0.001130	39.8	4.5	1720	8.5
5.5	7AT 132S-4	1435	85.5	0.85	11	5.9	2.5	3.0	0.021000	87	6.2	1720	11
7.5	7AT 132M-4	1440	87	0.83	15	6.5	2.7	3.2	0.027000	89	8.5	1730	15
9.5	7AT 132MA-4	1440	88	0.82	19	6.7	2.9	3.3	0.035000	93	11	1730	19
11	7AT 160M-4	1460	88.6	0.82	22	7.3	2.8	3.3	0.067000	154	12.5	1750	22
15	7AT 160L-4	1460	89.7	0.83	29	7.0	2.7	3.1	0.083000	170	17	1750	29
18.5	7AT 180M-4	1460	90.5	0.83	35.5	7.5	2.7	3.1	0.130000	205	21	1750	35.5
22	7AT 180L-4	1460	91	0.84	41.5	7.5	2.8	3.1	0.160000	224	25	1750	41.5
30	7AT 200L-4	1470	93.5	0.85	54.5	7.5	2.4	2.6	0.250000	269	34	1760	55
37	7AT 225S-4	1475	93.5	0.85	67	7.1	2.3	2.6	0.410000	359	42	1780	67
45	7AT 225M-4	1470	94.3	0.85	81	7.2	2.4	2.6	0.480000	391	52	1780	81
55	7AT 250M-4	1480	94.2	0.86	98	7.5	2.4	2.8	0.710000	469	63	1780	98
75	7AT 280S-4	1480	93.5	0.83	140	7.5	2.4	2.8	1.070000	595	85	1780	145
90	7AT 280M-4	1480	94.5	0.83	165	7.5	2.4	2.8	1.290000	655	103	1780	165
110	7AT 315S-4	1485	95	0.88	190	7.4	2.0	2.6	2.120000	920	124	1785	190
132	7AT 315M-4	1485	95	0.88	228	7.5	2.1	2.8	2.460000	985	149	1785	228
160	7AT 315LA-4	1485	95.5	0.88	275	7.5	2.1	2.8	3.090000	1020	180	1785	275

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Zone 1 Technical Data
6 and 8 pole

Standard Design = ATEX II 2G EEXDe IIC T4

2p=6		1000 min^{-1}			400V/50Hz						440V/60Hz/1200 min^{-1}		
P (kW)	Motor type	n (min^{-1})	η (%)	cos φ	I_n (A)	$\frac{I_k}{I_n}$	$\frac{M_k}{M_n}$	$\frac{M_{max}}{M_n}$	J (kgm^2)	m (kg)	P (kW)	n (min^{-1})	In (A)
0.18	5AT 71A-6	870	51	0.67	0.9	2.2	1.6	1.8	0.000600	9.9	0.2	1040	0.9
0.25	5AT 71B-6	880	53	0.65	1.1	2.5	1.7	1.8	0.000850	10.6	0.3	1060	1.1
0.37	5AT 80A-6	900	65	0.75	1.2	3.5	1.7	2.0	0.001400	13.5	0.4	1080	1.2
0.55	5AT 80B-6	900	67	0.77	1.7	3.4	2.1	2.2	0.002000	14.1	0.6	1080	1.7
0.75	5AT 90S-6	900	70	0.65	2.4	3.2	2.2	2.3	0.003300	17.6	0.8	1080	2.4
1.1	5AT 90L-6	900	73	0.68	3.2	3.2	2.0	2.1	0.004300	20.6	1.2	1080	3.2
1.5	5AT 100L-6	910	76	0.80	3.6	4.0	1.9	2.1	0.007000	26.7	1.7	1090	3.6
2.2	5AT 112M-6	930	78	0.72	5.7	5.3	2.7	3.1	0.013000	36.7	2.5	1110	5.7
3	7AT 132S-6	940	81.5	0.72	7.4	4.6	2.1	2.5	0.030000	87	3.4	1130	7.4
4	7AT 132MA-6	950	83.1	0.70	9.7	5.5	2.7	3.0	0.037000	87	4.5	1140	9.7
5.5	7AT 132MB-6	950	84	0.74	12.8	5.8	2.8	3.0	0.045000	89	6.2	1140	12.8
7.5	7AT 160M-6	965	86.5	0.81	15.5	7.0	2.8	3.2	0.095000	151	8.2	1160	15.5
11	7AT 160L-6	965	88	0.82	22	7.0	2.8	3.2	0.120000	173	12.5	1160	22
15	7AT 180L-6	970	90.5	0.84	28.5	7.8	2.7	3.6	0.200000	195	17	1160	28.5
18.5	7AT 200LA-6	970	90	0.80	37	6.5	2.2	2.5	0.310000	252	21	1170	37
22	7AT 200LB-6	975	91	0.82	42.5	6.1	2.2	2.8	0.310000	281	25	1170	42.5
30	7AT 225M-6	975	92.5	0.83	56.5	7.3	3.0	3.0	0.520000	392	34	1170	56.8
37	7AT 250M-6	985	93	0.75	78.5	7.8	2.8	3.0	0.780000	426	42	1180	78.5
45	7AT 280S-6	985	93	0.77	90	7.8	2.5	3.0	1.140000	555	50	1180	90
55	7AT 280M-6	985	93.5	0.77	110	7.8	2.5	3.0	1.360000	595	60	1180	110
75	7AT 315S-6	990	94.5	0.80	143	7.3	2.0	2.6	2.290000	840	84	1185	143
90	7AT 315M-6	990	94.5	0.80	172	7.5	2.1	2.7	2.740000	905	101	1185	172
110	7AT 315LA-6	990	95	0.80	208	7.6	2.1	2.7	3.300000	1000	124	1185	208

2p=8		750 min^{-1}			400V/50Hz						440V/60Hz/900 min^{-1}		
P (kW)	Motor type	n (min^{-1})	η (%)	cos φ	I_n (A)	$\frac{I_k}{I_n}$	$\frac{M_k}{M_n}$	$\frac{M_{max}}{M_n}$	J (kgm^2)	m (kg)	P (kW)	n (min^{-1})	In (A)
0.09	5AT 71A-8	660	43	0.53	0.60	2.0	1.8	1.9	0.000600	9.9	0.09	790	0.60
0.12	5AT 71B-8	660	43	0.54	0.75	2.0	2.0	2.2	0.000850	10.6	0.12	790	0.75
0.18	5AT 80A-8	700	60	0.58	0.75	3.0	2.3	2.6	0.001400	13.4	0.2	840	0.75
0.25	5AT 80B-8	680	60	0.61	1.05	2.6	1.7	2.0	0.001400	14	0.3	820	1.05
0.37	5AT 90S-8	690	58	0.57	1.7	2.5	1.7	2.0	0.002800	17.6	0.4	830	1.7
0.55	5AT 90L-8	670	60	0.58	2.2	2.8	2.0	2.1	0.003500	20.6	0.6	810	2.2
0.75	5AT 100LA-8	700	65	0.60	2.8	3.1	1.8	2.2	0.007000	26.4	0.8	840	2.8
1.1	5AT 100LB-8	700	73	0.62	3.5	3.7	2.1	2.4	0.011000	29.8	1.2	840	3.5
1.5	5AT 112M-8	680	72	0.70	4.3	3.8	1.9	2.3	0.013000	38	1.7	820	4.3
2.2	7AT 132S-8	690	78	0.78	5.2	4.2	2.0	2.1	0.030000	83	2.5	830	5.2
3	7AT 132M-8	690	78	0.76	7.4	4.2	2.1	2.4	0.040000	82	3.4	830	7.4
4	7AT 160MA-8	710	85	0.73	9.7	4.8	2.0	2.7	0.060000	134	4.5	850	9.7
5.5	7AT 160MB-8	710	85	0.75	13	5.1	2.0	2.7	0.095000	154	6.2	850	13
7.5	7AT 160L-8	720	86	0.78	16.5	5.5	2.2	2.6	0.140000	169	8.5	860	16.5
11	7AT 180L-8	720	88	0.80	24	5.6	2.3	2.8	0.022000	225	12.5	860	24
15	7AT 200L-8	730	90	0.78	31	5.8	1.9	2.4	0.320000	255	17	880	31
18.5	7AT 225S-8	735	91	0.78	38	5.9	2.0	2.6	0.460000	327	21	880	38
22	7AT 225M-8	735	91	0.78	45	5.9	2.0	2.5	0.530000	349	25	880	45
30	7AT 250M-8	735	92	0.78	60	5.6	1.9	2.4	0.860000	421	34	880	60
37	7AT 280S-8	735	92	0.79	75	5.6	1.9	2.4	1.200000	560	40	880	75
45	7AT 280M-8	735	92.5	0.79	90	5.6	1.9	2.4	1.400000	595	50	880	90
55	7AT 315S-8	740	93.5	0.81	105	5.5	1.9	2.4	2.120000	805	62	890	105
75	7AT 315M-8	740	94.0	0.82	141	5.5	1.9	2.4	2.750000	895	85	890	141
90	7AT 315LA-8	740	94.3	0.82	168	5.3	1.8	2.3	3.320000	980	102	890	168

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5 AT Series Certificate

Standard Design = ATEX II 2G EEXDe IIC T4

CESI

CERTIFICATE

CESI
Centro Elettrotecnico
Sperimentale Italiano
Giacinto Motta SpA

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Telefono +39 022125.1
Fax +39 0221255440
www.cesi.it

Capitale sociale 8 550 000 €
interamente versato
Codice fiscale e numero
iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

CESI

Schema di certificazione

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998, D.M. 27/9/2000 e D.M. 02/02/2006

[1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 05 ATEX 110X

[4] Equipment: Three-phase asynchronous motors series 5A 71- 80-90-100-112

[5] Manufacturer: **KONCAR – MALI ELEKTRICNI STROJEVI d.d.**

[6] Address: Falerovo setaliste 22, HR – 10002 Zagreb, CROATIA

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report n. EX- A5060401

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + A1..A2 EN 50018: 2000 + A1 EN 50019: 2000
EN 50281-1-1: 1998

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

II 2G EEx d IIC T4, T3 *oppure* **EEx de IIC T4, T3**

II 2GD EEx d T4 IP66 T135°C *oppure* **EEx de T4 IP66 T135°C**

II 2D IP66 T135°C

Date 29/12/2005 - Translation issued the 29/12/2005

Prepared	Verified	Approved
Sergio Mezzetti	Mirko Balaz	Ulisse Colombo

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione
Il Responsabile

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7 AT Series Certificate

Standard Design = ATEX II 2G EEXDe IIC T4

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Codice fiscale e numero
iscrizione CCIAA 00793580150

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Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

CERTIFICATE

EC-TYPE EXAMINATION CERTIFICATE

[1]

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 03 ATEX 280X

[4] Equipment: Three-phase asynchronous motors series 7 A 132-160-180-200-225-250

[5] Manufacturer: **KONCAR – Mali Elektricni Strojevi d.d.**

[6] Address: Falerovo setaliste 22, HR – 10002 Zagreb, Croatia

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-A3/033419.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + A1..A2 EN 50018: 2000 + A1 EN 50019: 2000

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

I M2 EEx d I *or* **EEx de I**

II 2 G EEx d IIC T4, T3 *or* **EEx de IIC T4, T3**

Date 02 October 2003 - Translation issued the 02 October 2003

Prepared	Verified	Approved
Mezzetti Sergio	Mirko Balaz	Ulisse Colombo

CESI
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