

Certificate of Verification

Certificate: 2394434

Master Contract: 151041

•Project: 2394434

Date Issued: 2011-03-03

Issued to: CANTONI MOTOR S.A.

Ul. M. Grazynskiego 22

43-300 Bielsko Biala

POLAND

Attention: Mr. Andrzej Sala

The Motor listed below are eligible to bear the CSA EEV Mark shown




Issued by: Ioan Goga, Eng.

PRODUCTS

Class 8811-01 - ENERGY EFFICIENCY - MOTORS - Three Phase Induction

Class 8811 81 - ENERGY EFFICIENCY - MOTORS - Three Phase Induction - Evaluated to U.S. Requirements

Energy Efficiency Verification of Three-phase, squirrel-cage, induction motors, Series **SIE**, foot or flange mounted; 2, 4 or 6 poles, 600V ac or less (230/460V, 460V, 575V or 600V), 60 Hz, 1 to 250 hp, TEFC, NEMA frame sizes 143 to 447, Insulation System Class F, with Quoted Efficiency Values at full load as tabulated below:

QUOTED EFFICIENCY VALUE (%)

Power (hp)	2 poles		4 poles		6 poles	
	<u>Minimum</u> <u>Nominal</u> <u>Efficiency</u> <u>(Premium)</u> (%)	<u>Quoted</u> <u>Efficiency</u> <u>(if higher than</u> <u>minimum)</u> (%)	<u>Minimum</u> <u>Nominal</u> <u>Efficiency</u> <u>(Premium)</u> (%)	<u>Quoted</u> <u>Efficiency</u> <u>(if higher than</u> <u>minimum)</u> (%)	<u>Minimum</u> <u>Nominal</u> <u>Efficiency</u> <u>(Premium)</u> (%)	<u>Quoted</u> <u>Efficiency</u> <u>(if higher than</u> <u>minimum)</u> (%)
1	-	-	85.5	-	82.5	-
1.5	84.0	-	86.5	-	87.5	-
2	85.5	-	86.5	-	88.5	-
3	86.5	-	89.5	-	89.5	-
5	88.5	-	89.5	-	89.5	-
7.5	89.5	-	91.7	-	91.0	-

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QUOTED EFFICIENCY VALUE (%) (concluded)

Motor Horsepower	Minimum Nominal Efficiency (Premium) (%)	Quoted Efficiency (if higher than minimum) (%)	Minimum Nominal Efficiency (Premium) (%)	Quoted Efficiency (if higher than minimum) (%)	Minimum Nominal Efficiency (Premium) (%)	Quoted Efficiency (if higher than minimum) (%)
10	90.2	-	91.7	-	91.0	-
15	91.0	91.7	92.4	-	91.7	-
20	91.0	91.7	93.0	-	91.7	-
25	91.7	92.4	93.6	-	93.0	-
30	91.7	-	93.6	-	93.0	-
40	92.4	-	94.1	-	94.1	-
50	93.0	-	94.5	-	94.1	-
60	93.6	-	95.0	-	94.5	-
75	93.6	-	95.4	-	94.5	-
100	94.1	95.4	95.4	-	95.0	-
125	95.0	-	95.4	-	95.0	95.4
150	95.0	-	95.8	-	-	-
200	95.4	-	96.2	96.5	-	-
250	95.8	-	96.2	-	-	-

Notes:

1. The above models have been CSA Certified for safety (in submittor's report 151041 – 2387961). See Certification Record 151041 for listing of CSA safety certified models.
2. Equipment verified by CSA for Energy Performance shall also be subject to the safety requirements for the local inspection authorities having jurisdiction.
3. The energy efficiency levels set out in table 3 of CSA C390-10, tested at 100% of rated full load, applies to motors Series **SIE** described in this report.
4. The following suffixes may be added to the **SIE** Series designation to form the motor type designation, in the following order (e.g.: SIE 447TS2A):
 - a. Frame size (3 digits): 143 to 447;
 - b. Housing and shaft construction (1 to 4 digits): T, TS, TCL, TDL, TSCL or TSDL;
 - c. Number of poles (1 digit): 2, 4 or 6;
 - d. Version (0 to 1 digit): A, B or null.

APPLICABLE REQUIREMENTS

CSA Standard CAN/CSA C390-10 -	Test methods, marking requirements, and energy efficiency levels for three-phase induction motors
CSA Standard CAN/CSA C390-93-	Energy Efficiency Test Methods for Three-Phase Induction Motors

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Supplement to Certificate of Verification

Certificate: 2394434

Master Contract: 151041

*The motors listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
2394434	2011-03-03	Original Energy Efficiency Verification of Three-phase, squirrel-cage, induction motors, Series SIE , foot or flange mounted; 2, 4 or 6 poles, 600V ac or less (230/460V, 460V, 575V or 600V), 60 Hz, 1 to 250 hp, TEFC, NEMA frame sizes 143 to 447, Insulation System Class F.

Certificate of Compliance

Certificate: 2387961

Master Contract: 151041

Project: 2387961

Date Issued: February 18, 2011

Issued to: Cantoni Motor S.A.

Ul. M. Grazynskiego 22

Bielsko Biala, 43-300

Poland

Attention: Andrzej SALA

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Ioan Goga

Issued by: Ioan Goga, Eng.

PRODUCTS

CLASS 4211 81 - MOTORS AND GENERATORS - Certified to US Standards

CLASS 4211 01 - MOTORS AND GENERATORS

Three-phase, asynchronous, squirrel-cage, induction motors, Series **SIE**, foot or flange mounted; 2, 4 or 6 poles, 600V ac or less (230/460V, 460V, 575V or 600V), 60 Hz, 1 to 250 hp, Service Factor 1 to 1.4, TEFC, NEMA frame sizes 143 to 447, Insulation System Class F, Types:

a) 2 poles:

- SIE 143T2, 1.5hp, frame size 143,
- SIE 145T2, 2hp, frame size 145,
- SIE 182T2, 3hp, frame size 182,
- SIE 184T2, 5hp, frame size 184,
- SIE 213T2, 7.5hp, frame size 213,
- SIE 215T2, 10hp, frame size 215,
- SIE 254T2, 15hp, frame size 254,
- SIE 256T2, 20hp, frame size 256,



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- SIE 284TS2, 25hp, frame size 284,
- SIE 286TS2, 30hp, frame size 286,
- SIE 324TS2, 40hp, frame size 324,
- SIE 326TS2, 50hp, frame size 326,
- SIE 364TS2, 60hp, frame size 364,
- SIE 365TS2, 75hp, frame size 365,
- SIE 405TS2, 100hp, frame size 405,
- SIE 444TS2, 125hp, frame size 444,
- SIE 445TS2, 150hp, frame size 445,
- SIE 447TS2A, 200hp, frame size 447,
- SIE 447TS2B, 250hp, frame size 447,

b) 4 poles:

- SIE 143T4, 1hp, frame size 143,
- SIE 145T4A, 1.5hp, frame size 145,
- SIE 145T4B, 2hp, frame size 145,
- SIE 182T4, 3hp, frame size 182,
- SIE 184T4, 5hp, frame size 184,
- SIE 213T4, 7.5hp, frame size 213,
- SIE 215T4, 10hp, frame size 215,
- SIE 254T4, 15hp, frame size 254,
- SIE 256T4, 20hp, frame size 256,
- SIE 284T4, 25hp, frame size 284,
- SIE 286T4, 30hp, frame size 286,
- SIE 324T4, 40hp, frame size 324,



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- SIE 326T4, 50hp, frame size 326,
- SIE 364T4, 60hp, frame size 364,
- SIE 365T4, 75hp, frame size 365,
- SIE 405T4, 100hp, frame size 405,
- SIE 444T4, 125hp, frame size 444,
- SIE 445T4, 150hp, frame size 445,
- SIE 447T4A, 200hp, frame size 447,
- SIE 447T4B, 250hp, frame size 447,

c) 6 poles:

- SIE 145T6, 1hp, frame size 145,
- SIE 182T6, 1.5hp, frame size 182,
- SIE 184T6, 2hp, frame size 184,
- SIE 213T6, 3hp, frame size 213,
- SIE 215T6, 5hp, frame size 215,
- SIE 254T6, 7.5hp, frame size 254,
- SIE 256T6, 10hp, frame size 256,
- SIE 284T6, 15hp, frame size 284,
- SIE 286T6, 20hp, frame size 286,
- SIE 324T6, 25hp, frame size 324,
- SIE 326T6, 30hp, frame size 326,
- SIE 364T6, 40hp, frame size 364,
- SIE 365T6, 50hp, frame size 365,
- SIE 404T6, 60hp, frame size 404,
- SIE 405T6, 75hp, frame size 405,



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- SIE 444T6, 100hp, frame size 444,
 - SIE 445T6, 125hp, frame size 445,

Notes:

- Motors may be provided with temperature detectors responsive to motor temperature only, for connection to separate auxiliary circuits, not replacing normal overload protection as required by the Canadian Electrical Code, Part 1.
- The supply connection is subject to further investigation by the local inspection authorities
- Suffixes may be added to the **SIE** Series designation to form the motor type designation, in the following order (e.g.: SIE 447TS2A):
 - Frame size (3 digits): 143 to 447;
 - Housing and shaft construction (1 to 4 digits): T, TS, TCL, TDL, TSCL or TSDL;
 - Number of poles (1 digit): 2, 4 or 6;
 - Version (0 to 1 digit): A, B or null.

APPLICABLE REQUIREMENTS

CSA-C22.2 No. 100-04 - Motors and Generators

UL 1004-1, 1st Ed. - Rotating Electrical Machines – General Requirements