

# Certificate of Compliance

Certificate: 1236155 Master Contract: 212423

**Project:** 80039247 **Date Issued:** 2020-07-07

Issued To: Elektromotorenwerk Brienz AG

Mattenweg 1 Brienz, Bern, 3855

Switze rland

**Attention: Markus Thoeni** 

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.

Issued by: Majid Ali

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### **PRODUCTS**

CLASS - C421101 - MOTORS AND GENERATORS

CLASS - C421181 - MOTORS AND GENERATORS Certified to US Standards

## Part A

<u>Squirrel-Cage Induction Motors</u>, Types R, F, AF, BF, RF, RAF, RBF, horizontal and vertical, foot and flange mounting, Sizes 56, 63, 71, 80, 90, 100, 112, 132, 160, 180, 200, 225, 250 and 280 Class F or H, max 600 V, max 152 A, TEFC, 2, 4, 6, 8, 10or 12 pole, 3 ph, 50/60 Hz, max output 105 kW.

#### Part B

<u>Squirrel-Cage Induction Motors</u>, Type AK, horizontal and vertical, foot and flange mounting. Housing is octagonal shaped and provided with water cooling., Sizes 71, 80, 90, 100, 112, 132, 160, 180, 200, 225, Class F or H, max 600 V, 3 ph, 50/60 Hz, max output 80 kW.



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#### Part C

<u>Squirrel-Cage Induction Motors</u>, Type G, horizontal and vertical, foot and flange mounting. Housing round shaped and provided with water cooling., Sizes 80, 90, 100, 112, 132, 160, 180, 200, 225, 250, Class F or H, max 600 V, 3 ph, 50/60 Hz, max output 80 kW.

Note: Intended for use as a component part in other equipment where the acceptability is determined by the CSA Group.

<u>Note:</u> Motors may be provided with inherent thermistors or thermal protectors to be connected to an external control circuit. These devices do not replace the motor overload protection

<u>Note:</u> Motors may be delivered without terminal block and/or without terminal box and/or with supply entry openings other than NPT conduit openings and are then Certified as component parts of other equipment where the acceptability of the final assembly is to be determined by CSA Group.

# **APPLICABLE REQUIREMENTS**

CSA C22.2 No. 100 - 14 - Motors and Generators

UL1004-1 2<sup>nd</sup> Edition - Rotating Electrical Machines – General Requirements

# **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following information appears on a CSA Accepted metal nameplate:

- Submittor's name or CSA Master Contract Number 212423 (near the CSA or CSA c/us Monogram)
- Type designation
- Production date or date code traceable to the month and year of manufacture
- Electrical ratings in volts and amperes
- Speed in rpm
- Isolation Class F or H
- Voltage and torque of the brake
- The marking TEFC
- CSA or CSA c/us Monogram



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- Max. water pressure 2,5 bar only on types AK and G.
- Water flow in 1/min as mentioned at table below.
- Motors equipped with heater shall be marked with the rated heater voltage, number of phase and rated power in watts

Type	Flow 1/min	Type	Flow 1/min	Type	Flow 1/min
G 71	1,6	G 112	4,5	G 200	15
G 80	2,1	G 132	6,6	G 225	19
G 90	2,7	G 160	9,6	G 250	23
G 100	3,5	G 180	12		

Type	Flow I/min	Type	Flow 1/min	Type	Flow 1/min	Type	Flow 1/min
AK 71	2,1	AK 100	4,5	AK 160	12	AK 225	23
AK 80	2,7	AK 112	6,6	AK 180	15		
AK 90	3,5	AK 132	9,6	AK 200	19		

For an example of the marking plate see Ill. No. 1 or photo 34 for new design.

The complete Type Designation for Part A consists of the following information:

Mounting method: R, F, AF, BF, RF, RAF, RBF, AK or G followed by

- Motor size in mm, followed by
- Motor length indication: S, M or L, followed by
- Number of poles: 2, 4, 6, 8, 10, 12, 4/2, 6/4 or 8/4 followed by
- Any code for internal use.

The grounding terminal is marked with the proper symbol.

Each motor or motor batch is provided with information for proper connection, installation, maintenance etc.