

Certificate of Compliance

Certificate Number: LR 102355-5

Revision:

Date Issued: August 25, 1997

Issued to:

MP HUSKY CORP.

P.O. Box 16749

Greenville, SC 29606 USA

USA

Attention: Mr. Tony Burns

The products listed below are eligible to bear the CSA Mark

Issued by:

R. Tateishi, P. Eng. Toronto, ON Canada

Signature:

PRODUCTS

CLASS 4681 01 - WIREWAYS AND BUSWAYS - Cabletroughs

Pre-assembled cable busway and associated fittings, "Cabl-Bus" rated 1000 to 4000A, 600V, 5kV and 15kV, 3-phase, 60 Hz.

APPLICABLE STANDARDS

C22.2 No.

27-94

-Busways

C22.2 No.

201-M1984

-Metal-Enclosed High Voltage Busways



Supplement to Certificate of Compliance

Certificate Number: LR 102355-5

Issued to:

MP HUSKY CORP.

P.O. Box 16749

Greenville, SC 29606 USA

USA

Attention: Mr. Tony Burns

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

Issued By:

R. Tateishi, P. Eng.

Toronto, ON Canada

Signature

Product Certification History

Revision	Date	Description
-5	Aug. 25/97	Cabl-Bus System.



Descriptive and Test Report

Montréal

■ Toronto

■ Edmonton

■ Vancouver

■ Tokyo

■ Hong Kong

REPORT NO: LR 102355-5

Edition 1:

August 25, 1997; Application No LR 102355-5 - Etobicoke

Issued by R. Tateishi, P. Eng.

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Note: Installation to be in accordance with Part I of the Canadian Electrical Code.

Telephone: (416) 747-4000 Telefax: (416) 747-4149

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MARKINGS

Submittor's name, type designation, complete electrical ratings and CSA Monogram appear on a stamped metal nameplate or a CSA Accepted adhesive-type nameplate secured to each finished length of cable bus and on each fitting. Max distance between supports is 12 feet.

See III 1 for typical nameplate.

ALTERATIONS

None.

FACTORY TESTS

Each completed length of "Cabl-Bus", including mounted fittings, at the completion of manufacture shall withstand, without breakdown, the dielectric tests based on rated voltage in accordance with CSA Standard 201-M1984, "Metal-Enclosed High Voltage Busways" for bus ducts 751V to 38kV and for bus ducts below 751V, a test value of 24kV dc.

<u>Warning</u>: The factory test(s) specified may present a hazard of injury to personnel and/or property and should only be performed by persons knowledgeable of such hazards and under conditions designed to minimize the possibility of injury.

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DESCRIPTION

General: The Cabl-Bus is an assembly of fully insulated conductors mounted in a ventilated aluminum housing which maintains cable spacing with insulated support blocks secured to the housing at suitable intervals. Each straight length and associated fittings are fully assembled at the factory. The factory assembled parts are connected with each other and bolted together in the field in accordance with instructions provided by the manufacturer, using all necessary materials and hardware provided by the manufacturer.

The housing is made with two solid side members with a factory-installed ventilated bottom section and a removable ventilated top cover. The top cover is held in place with self-tapping screws located at a maximum spacing of 5 feet.

Illustrations are attached as follows:

III No	Description	
2-16	Typical cross sections	
17	Typical enclosure construction	
18	Fitting support locations	
19-21	Environmental seal installation instructions	
22	Fire stop plate details	
23	Fire stop installation instructions	
24	Box Connector	
25	Die selection chart	
26	High voltage termination instructions.	

- 1. Housing: Load carrying members are extruded aluminum alloy 6036-T6. A "U" shaped traverse member is welded to the siderails for mounting the cable support blocks (Item 2). Two angle extensions form the "U". The top and bottom enclosure sections are corrugated and slotted for ventilation. The top cover is fastened to the enclosure with captive fastening devices spaced approximately 6 feet on centres. The bottom section is factory installed by welding. The splice joints between sections of the bus enclosure are of a high pressure splined bolted type design.
- 2. <u>Cable Supports</u>: Made of hardrock maple, treated and coated with a fire retardant coating. The cable supports are designed in segments to maintain a minimum of one conductor diameter in both the horizontal and vertical planes as required for free air conductor rating. Horizontal runs will have supports spaced every 36 in and vertical runs every 18 in.
- Grounding: At busway splices, bonding is made by bolted joints between sections. Bolts are of the high
 pressure splined bolted type. At the busway expansion joints, the joint is jumpered by a bonding cable of
 suitable length with compression connectors on either end, attached to the housings.
- Cables: CSA Certified power cables of size, type and number per phase are shown in the submittor's catalogue pages attached as Ills 2 to 16.

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Cable Joints and Splices: Factory or field joints are made by CSA Certified Accepted seamless, tubular
copper compression splice connectors. Connectors are compressed with the appropriate tooling and
insulated to the equal value of cable insulation for 600V, 5kV, 15kV and greater.

- 6. Environmental Seals and Firestops: Used to provide an environmental seal where the Cabl-Bus makes a transition through a wall, floor or roof. See Ills 19 to 21 for installation instructions. Nelson MCT-type firestops are incorporated into the system when required. See Ill 22 and 23 for fire stop plate details and installation instructions.
- 7. Box Connectors: Box connectors are used at the ends of the bus run to terminate the bus enclosure to the switchgear cubicles, motor control centres, panels, indoor wall of floor penetrations, etc. The box connector grounds the bus run to the equipment enclosure. The box connectors is affixed to the equipment enclosure and the bus enclosure is slid over it and secured to the box connector using the splice bolts and nuts with captive star washers. See III 24.
- 8. <u>Connectors</u>: CSA Certified. Compression type wire connectors. See Ill 25 for die selection chart.
- Cable Termination: Depending on the rated voltage, Raychem Thermofit insulating kits are to be utilized.
 These are heat shrinkable upon the cable termination, as defined in the Raychem literature. The Raychem literature is attached as Ill 26.

No further description considered necessary.

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TESTS

Satisfactory temperature and dielectric strength (29.5 kV, 5 min) tests were conducted on a 4000A "Cabl-Bus" and were witnessed by a CSA representative.

No further tests were considered necessary,