



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 00ATEX2090X** Issue: **16**

4 Equipment: **ROUTE MASTER Series 100 Intrinsically Safe Fieldbus System**

5 Applicant: **Moore Industries Incorporated**

6 Address: 16650 Schoenborn Street  
North Hills  
California  
91343-6196  
USA

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

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014:1997 (amendments A1 to A2) EN 50020:1994 EN 50028:1987

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment 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 and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

**Power supply**



II (1) G  
[EEx ia] IIB  
(Ta = -20°C to +60°C)

**RMA100 Device Coupler**



II 1(1)G  
II (1)G  
EEx ia IIB T4  
EEx [ia] IIC  
(Ta = -40°C to +70°C)

**RMA100C Device Coupler**



II 1(1)G  
EEx ia IIB T4  
(Ta = -40°C to +70°C)  
**or**



II 2(1)G  
EEx me [ia ] IIC T4

C Ellaby  
Certification Officer

Project Number 52A20132  
C. Index 16

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**SCHEDULE**

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**Maximum allowable Inductance to Resistance Ratio, Lo/Ro (mH/W)**

Cable A (Group)	Cable B (Group)	Lo/Ro ( $\mu\text{H}/\Omega$ )
IIA & IIB	IIA, IIB & IIC	30
IIA & IIB	IIA & IIB	36
IIA & IIB	IIA	36
IIA	IIA, IIB & IIC	30
IIA	IIA & IIB	72
IIA	IIA	72

The Lo/Ro values are appropriate for Hazardous Location Apparatus with the following permitted values of Li and Ci. The values vary depending upon the group of the hazardous location.

Group IIC      Li = 0, Ci = 2.62 nF  
 Group IIB      Li = 0, Ci = 16 nF  
 Group IIA      Li = 0, Ci = 63.9 nF

**Maximum Allowable Capacitance, Co (mF)**

Group	Capacitance of Cable A, ( $\mu\text{F}$ )	Co ( $\mu\text{F}$ ) (Capacitance of Cable B Plus Ci)
IIC	N/A	262 nF or 0.262 $\mu\text{F}$
IIB	1.6	1.6
IIA	6.39	6.39

**Safety parameters for the RMA100C Device Coupler (Entity)**

Spur Output terminals (Ch1 to 10)
Uo = 17.5 V
Io = 249.9 mA
Po = 1.18 W
Ci = 0
Li = 0

Trunk Output terminals
Ci = 12.2 nF

The safety description of the Trunk Output has been simplified since the supply that is connected to the Trunk Input terminals passes directly to the Trunk Output terminals. However the trunk contains an internal capacitance of 12.2nF.

**Parameters for the cable out of the Trunk Isolator module (type 102B) and into and out of the RMA100C Device Coupler**

The cable from the Trunk Isolator module to the Device Coupler is "Cable A". The cable from the Device Coupler to the downstream field device(s) is "Cable B" – this cable is intrinsically safe. The RMA100C can be mounted in locations with a group IIA or IIB hazard, where cable "A" can be either Ex i or Ex e. The RMA100C can also be mounted in group IIC, in which case "Cable A" is Ex e.

The maximum allowable external capacitance, Co, and either the total maximum allowable external inductance, Lo, or the maximum external inductance to resistance ratio, Lo/Ro, of cables A and B shall not exceed the following values:

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**RMA100C: Total maximum allowable external inductance, Lo (mH)**

Cable A (Group)	Cable B (Group)	Lo (mH) (Inductance of Cables A plus B plus Li)
IIA, IIB or IIC	IIA, IIB or IIC	0.15
IIA, IIB or IIC	IIA or IIB	0.15
IIA, IIB or IIC	IIA	0.15
IIA or IIB	IIA, IIB or IIC	0.15
IIA or IIB	IIA or IIB	0.206
IIA or IIB	IIA	0.206
IIA or IIB	IIA, IIB or IIC	0.15
IIA	IIA or IIB	0.412
IIA	IIA	0.412

**RMA100C: Maximum allowable inductance to resistance ratio, Lo/Ro (mH/W)**

Cable A (Group)	Cable B (Group)	Lo/Ro ( $\mu\text{H}/\Omega$ )
IIA, IIB or IIC	IIA, IIB or IIC	30
IIA, IIB or IIC	IIA or IIB	30
IIA, IIB or IIC	IIA	30
IIA or IIB	IIA, IIB or IIC	30
IIA or IIB	IIA or IIB	36
IIA or IIB	IIA	36
IIA or IIB	IIA, IIB or IIC	30
IIA	IIA or IIB	72
IIA	IIA	72

The Lo/Ro values are appropriate for Hazardous Location Apparatus with the following permitted values of Li and Ci. The values vary depending upon the group of the hazardous location:

Group IIC      Li = 0, Ci = 2.62 nF  
 Group IIB      Li = 0, Ci = 16 nF  
 Group IIA      Li = 0, Ci = 63.9 nF

**RMA100C: Maximum allowable capacitance, Co (mF)**

Group	Capacitance of Cable A, ( $\mu\text{F}$ )	Co ( $\mu\text{F}$ ) (Capacitance of Cable B Plus Ci)
IIC	N/A	0.262
IIB	1.6	1.6
IIA	6.39	6.39

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#### RMA100C: CABLE PARAMETERS (FISCO APPLICATIONS)

The combination of an RM100-series rack (Sira 00ATEX2090X) together with an RMA100C Device Coupler is suitable for use in a FISCO system in accordance with EN 60079-27:2006.

The cable from the Trunk Isolator Module to the Device Coupler is "Cable A". The cable from the RMA100C Device Coupler to the downstream field device(s) is "Cable B".

"Cable B" shall comply with the following parameters:

- i. Loop resistance ( $R_c$ ): 15  $\Omega$ /km to 150  $\Omega$ /km;
- ii. Loop inductance ( $L_c$ ): 0.4 mH/km to 1 mH/km
- iii. Capacitance ( $C_c$ ): 45nF/km to 200 nF/km
- iv. In accordance with IEC 61158-2, for each channel of the RMA100C Device Coupler, the total length of cable between the Device Coupler and the downstream field device is a maximum of 120 m for IIB or IIC. (This is for functional reasons and is within the 1 km for IIC and 5 km for IIB permitted by the FISCO standard EN 60079-27:2006).

#### FISCO safety parameters for the RMA100C spur output

Spur Output terminals (Ch1 to 10)
$U_o = 17.5$ V
$I_o = 249.9$ mA
$P_o = 1.18$ W
$C_i = 0$
$L_i = 0$

**Variation 16** - This variation introduced the following changes:

- i. The RMA100 introduced by variation 15 was re-designed with an additional certification code, EEx me [ia] IIC T4, this version is known as the RMA100C.
- ii. The TG100, introduced by variation 13, to be re-named the RMA100.
- iii. The 3-way connector was modified.
- iv. The value of resistor R6 on schematics 259-430-00, 259-431-00 and 259-436-00 was changed from 10 k $\Omega$  to 200  $\Omega$ .



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#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

Issue	Date	File/Report #	Comment
0	1 Aug 00	R52A6276A	The release of prime certificate.
1	9 Oct 00	R52A7060A	The introduction of Variation 1.
2	12 Jan 01	R52S7543A	The introduction of Variation 2.
3	19 Nov 01	52V8506	The introduction of Variation 3.
4	13 Dec 01	R52A8332A	The introduction of Variation 4.
5	27 Feb 02	51V8421	The introduction of Variation 5.
6	26 Mar 02	52V8541	The introduction of Variation 6.
7	9 Sep 02	R52B9272A	The introduction of Variation 7.
8	12 Nov 02	R52A9608A	The introduction of Variation 8.
9	2 Jun 03	51V10258 52A10395	The introduction of Variation 9 later re-issued 10 June 2004.
10	18 Feb 04	R52A9608A	The introduction of Variation 10.
11	10 May 04	R52A10395A	The introduction of Variation 11.
12	25 Nov 04	R52A12032B	The introduction of Variation 12.
13	19 Jul 05	R52B12961A R52A13841A	The introduction of Variation 13 later re-issued 15 August 2005.
14	20 Feb 08	R52A16872A	The introduction of Variation 14.
15	27 Aug 08	R52A16655A R52A16655B	The introduction of Variation 15 later re-issued 16 April 2009.
16	14 Jul 09	R52A20132A	<p>This Issue covers the following changes:</p> <ul style="list-style-type: none"><li>All previously issued certification was rationalised into a single certificate, Issue 16. Issues 0 to 15 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format. The description, special conditions for safe use and conditions of certification were amended to include the changes in Variations 1 to 15, therefore, to review the previous changes, refer to the original documents; in addition, the modifications introduced by Variation 15 were superseded by those in Variation 16 and are therefore no longer valid.</li><li>The change of the Applicant's name, previously Hawke International, a trading name of Hawke Cable Glands Limited-Fieldbus Division, Oxford Street West, Ashton-Under-Lyne, Lancashire OL7 0NA, UK, was re-confirmed, this was first recognised 15/19 August 2005.</li><li>The introduction of Variation 16.</li></ul>

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- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)
- 15.1 Only one "termination network" shall be connected in any one intrinsically safe circuit (i.e. trunk).
- 15.2 The selected cable entry seals shall be rated to at least 80°C.
- 15.3 The RMA100 and RMA100C shall only be used within the RM100 Intrinsically-Safe system.
- 15.4 Spur short-circuit protection fuses must be in position for all active and inactive spurs.
- 15.5 The type RMA100 and RMA100C Device Couplers shall be installed:
- either in an enclosure that provides a degree of ingress protection that is appropriate to the location.
  - or in a controlled environment such as a control panel.
- 15.6 A maximum number of four type RMA100 or RMA100C Device Couplers may be connected together in any one intrinsically safe circuit and any other Device Couplers in the same circuit shall be installed without a "termination network".
- 15.7 Parts of the enclosure of the type RMA100 and RMA100C Device Couplers are non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- 15.8 The concept of protection used for the cable between the power supply and the RMA100C depends on whether the RMA100C is located in a IIA, IIB or IIC area:
- RMA100C in a IIA or IIB area: the cable between the power supply and the RMA100C ("Cable A") may be regarded as intrinsically safe or covered under the increased safety (Ex e) concept.
  - RMA100C in a IIC area: the cable between the power supply and the RMA100C ("Cable A") is not intrinsically safe for IIC but is covered under the increased safety (Ex e) concept.

The installer shall ensure that it is clear (by means of cable colour, tagging, or other suitable method) whether the cable is intrinsically safe or not.

In all cases, the output from the RMA100C ("Cable B") is intrinsically safe for IIC gases and vapours.

- 15.9 The RMA100 may only be located in a IIA or IIB area and the concept of protection is intrinsic safety only.

### 16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

### 17 **CONDITIONS OF MANUFACTURE**

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the Special Conditions for Safe Use.

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- 17.4 All infallible transformers that are used in production of the ROUTE MASTER Series 100 Intrinsically Safe Fieldbus System, i.e. the TX2 and TX3 in the power supply module and the T2 in the isolator module, shall be subjected to and pass the routine tests in accordance with clause 11.2 of EN 50020:1994.
- 17.5 If the equipment is made in accordance with variation 7, then it is not necessary to measure the resistance of the fuses as a routine test.
- 17.6 Only the type VMQ seal, (silicone solid foam with round cross section) with a temperature range of -60°C to +100°C is permitted.
- 17.7 The products covered by this certificate incorporate previously certified devices. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.
- 17.8 The following routine tests are to be performed on each product manufactured under the Ex m method of protection:
- v. The encapsulated parts of the apparatus shall be subjected to a visual inspection. No visible damage of the compound shall be evident, such as cracks, exposure of the encapsulated parts, flaking, impermissible shrinkage, discolouration, swelling decomposition or softening, as required by EN 50028:1987 clause 7.1.
  - vi. An electric strength test of  $2U + 1000$  V (where U is the supply voltage) with a minimum of 1500 V ac, shall be applied between circuit and the casing covered in metal foil for at least 1 minute as required by EN 50028:1987 clause 7.2. No breakdown shall occur.
  - vii. The electrical data shall be checked by measurement of voltage, current and active power as required by clause 7.3 of EN 50028:1987
- 17.9 The RMA100 or RMA100C PCB assembly may be fitted to any suitably certified enclosure. If the enclosure is manufactured from a plastic material the warning: 'Clean only with a damp cloth' shall be included in the marking details.
- 17.10 The permitted manufacturers of the type BZY91C20R zener diodes Z1, Z2, Z3 and Z4 are either DSI, (Discrete Semiconductor Industries) or Philips or NJS (New Jersey Semi-Conductor). 100% of the zener diodes used in production shall be tested for the maximum zener voltage, this shall not exceed 18.90 V at the test current specified on drawing number ZEN-00001 revision D.
- 17.11 The certificate has been re-issued to rationalise the construction. Only two versions of the device coupler are permitted, namely:
- RMA100C (FISCO or entity), with Ex e terminals for connection to the power supply;
  - RMA100 (entity only)
- The manufacturer shall only place on the market versions of the RMA100 manufactured against variation 16, in accordance with the drawings listed in the annex to this certificate.

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# Certificate Annexe

**Certificate Number:** Sira 00ATEX2090X  
**Equipment:** ROUTE MASTER Series 100  
**Intrinsically Safe Fieldbus System**  
**Applicant:** Moore Industries Incorporated



**Issues 0 to 15** (The drawings listed with these Issues were rationalised and have been superseded by those detailed in Issue 16.)

## Issue 16

RM100 PSU				
Drawing	Sheet	Rev.	Date (Sira stamp)	Description
HCGFB-390-01	1 to 2	A	16 Nov 09	PCB Fab, RM103B
HCGFB-390-02	1 to 4	A	16 Nov 09	PCB Artwork, RM103B
HCGFB-390	1 of 1	A	16 Nov 09	Schematic, RM103B Power Supply
HCGFB-391	1 to 4	C1	16 Nov 09	Assy, RM103B
HCGFB-392	1 of 1	B	16 Nov 09	Heat Sink, Power Supply
HCGFB-395D-FM1	1 of 1	B	16 Nov 09	Cover Plate, PSU Mains, 115VAC
HCGFB-395D-FM2	1 of 1	B	16 Nov 09	Cover Plate, PSU Mains, 230VAC
HCGFB-395E	1 to 2	A	16 Nov 09	PCB Fab, RM100 Mains Panel
HCGFB-395FM	1 of 1	B	16 Nov 09	Front Panel, RM103B PSU
HCGFB-396-01	1 of 1	A	16 Nov 09	Primary Cladding, Bottom
HCGFB-396-02	1 of 1	A	16 Nov 09	Primary Cladding, Top
HCGFB-396B	1 of 1	B	16 Nov 09	Transformer, 230V, RM100
HCGFB-397A	1 of 1	B	16 Nov 09	Transformer, 115V, RM100
HCGFB-398	1 of 1	A	16 Nov 09	Schematic, RM100 System
HCGFB-400-115	1 of 1	A	16 Nov 09	List of Materials, Mains Panel, 115VAC
HCGFB-400-230	1 of 1	A	16 Nov 09	List of Materials, Mains Panel, 230VAC
HCGFB-401-SSP1	1 of 1	B	16 Nov 09	Front Panel, Mains Connector, 115VAC
HCGFB-401-SSP2	1 of 1	B	16 Nov 09	Front Panel, Mains Connector, 230VAC
HCGFB-402	1 of 1	A	16 Nov 09	PCB Artwork, RM100 Mains Panel
HCGFB-MAIN	1 of 1	A	16 Nov 09	Assy, RM100 Mains Panel
RM103B	1 to 6	C1	16 Nov 09	List of Materials, RM103B

HCGFB-390B, HCGFB-395BART, HCGFB-395C, HCGFB-395E, and HCGFB-396GA related to a 4 fuse model that is obsolete and never manufactured by Moore Industries.

RM102B isolator				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
CON-00001	1 of 1	A	16 Nov 09	Phoenix connector specification, RM102B
HCGFB-001	1 of 1	A	16 Nov 09	Schematic, RM102B
HCGFB-004	1 to 2*	A	16 Nov 09	PCB Fabrication, RM102B
HCGFB-004-02	1 to 2*	A	16 Nov 09	PCB Artwork, RM102B
HCGFB-005-01	1 of 1	A	16 Nov 09	Zener block assembly, RM102B
HCGFB-005	1 of 1	A	16 Nov 09	List of Materials, Zener Diode, RM102B
HCGFB-007-1	1 of 1	B	16 Nov 09	Mech Fab, Zener Block, RM102B
HCGFB-008FM	1 to 2	A	16 Nov 09	Front PCB fabrication, RM102B
HCGFB-009	1 to 2	B	16 Nov 09	Mechanical assembly, RM102B
HCGFB-010AD	1 of 1	B	16 Nov 09	Marking, front panel, RM102B
HCGFB-011	1 of 1	A	16 Nov 09	Stiffener, RM102B
HCGFB-011-02	1 of 1	A	16 Nov 09	PCB Artwork, Stiffener, RM102B
HCGFB-020-01	1 of 1	C	16 Nov 09	Front panel assembly, RM102B
HCGFB-020	1 of 1	B	16 Nov 09	List of Materials, Front Panel, RM102B
HCGFB-030-01	1 of 1	A	16 Nov 09	PCB assembly, isolator
HCGFB-030	1 of 1	A	16 Nov 09	List of materials, isolator
HCGFB-PULL	1 of 1	A	16 Nov 09	Puller, RM102B

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**Certificate Number:** Sira 00ATEX2090X  
**Equipment:** ROUTE MASTER Series 100  
 Intrinsically Safe Fieldbus System  
**Applicant:** Moore Industries Incorporated

RM102B isolator				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
RM102B	1 of 1	A	16 Nov 09	List of materials, RM102B
TRX-00002	1 of 1	B	16 Nov 09	Signal Coupling Transformer T2
ZEN-00001	1 of 1	D	16 Nov 09	Zener Diode, RM102B

\* Amended by Sira to add sheet numbering

RM100 Rack/Backplane				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
HCGFB-100SCFM	1 of 1	A	16 Nov 09	Side panel cheek transformer mounting
HCGFB-102LIN	1 of 1	A1	16 Nov 09	PCB Fab, RM100 backplane
HCGFB-104LIN	1 of 1	A	16 Nov 09	Label, Approved Logos, RM100 backplane
HCGFB-107LIN	1 to 2*	A	16 Nov 09	PCB Artwork, RM100 Backplane
HCGFB-108LIN	1 of 1	B	16 Nov 09	BoM, RM100 Backplane
HCGFB-110LIN-B	1 of 1	B	16 Nov 09	BoM, RM100 115VAC Transformer
HCGFB-111-A	1 of 1	B	16 Nov 09	BoM, RM100 230VAC Transformer
HCGFB-BACK	1 of 1	B	16 Nov 09	PCB assembly, RM100 Backplane
HCGFB-RACK	1 of 1	A	16 Nov 09	Rack assembly, RM100 backplane
HCGFB-SUB	1 to 4	A	16 Nov 09	Sub-rack assembly, RM100 backplane
HCGFB-XFMR	1 to 2	A	16 Nov 09	Transformer assembly, 115/230, RM100 backplane

HCGFB-110LIN-B is withdrawn: it described a 4-fuse model that is obsolete and never manufactured by Moore Industries.

Hook-up				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
RMA100-001	1 of 1	B	16 Nov 09	RM100 and RMA100/RMA100C Series Intrinsically Safe Fieldbus System (SIRA)
RMA100-TRK-TERM	1 of 1	C1	16 Nov 09	Trunk Terminator – RMA100C - Fisco
TRK-TERM	1 of 1	B	16 Nov 09	Trunk Terminator

RMA10x device coupler				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
RMA10X-001	1 to 2	D	16 Nov 09	PCB Fab, RMA10X
RMA10X-004	1 to 2	F	16 Nov 09	PCB Assy, RMA10X
RMA10X-005	1 to 8	F	16 Nov 09	List of Materials, RMA10X
RMA10X-009	1 to 2	F	16 Nov 09	Schematic, RMA10X
RMA10X-010	1 to 2	D	16 Nov 09	PCB Artwork, RMA10X
RMA10X-DIN	1 of 1	B1	16 Nov 09	List of Materials, RMA10X-DIN
RMA100-002	1 of 1	B	16 Nov 09	RMA100 enclosure serial/cert label, Sira
RMA100-004	1 of 1	A	16 Nov 09	RMA100 serial/cert label, Sira
RMA100-DIN1	1 of 1	A	16 Nov 09	Mech Assy, RMA100 Series
RMA104-001	1 to 2	D	16 Nov 09	PCB Fab, RMA104
RMA104-004	1 of 1	E	16 Nov 09	PCB Assy, RMA104
RMA104-005	1 to 4	E	16 Nov 09	List of Materials, RMA104
RMA104-009	1 of 1	F	16 Nov 09	Schematic, RMA104
RMA104-010	1 to 2	D	16 Nov 09	PCB Artwork, RMA104
RMA104-DIN	1 of 1	B1	16 Nov 09	List of Materials, RMA104-DIN
RMA108-001	1 to 2	D	16 Nov 09	PCB Fab, RMA108
RMA108-004	1 to 2	E	16 Nov 09	PCB Assy, RMA108

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RMA10x device coupler				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
RMA108-005	1 to 6	E	16 Nov 09	List of Materials, RMA108
RMA108-009	1 to 2	F	16 Nov 09	Schematic, RMA108
RMA108-010	1 to 2	D	16 Nov 09	PCB Artwork, RMA108
RMA108-DIN	1 of 1	B1	16 Nov 09	List of Materials, RMA108-DIN

The above drawings replace the HCGFB-2xx drawings, which are obsolete and were never used for manufacturing by Moore Industries.

RMA10xC (FISCO device coupler)				
Drawing	Sheet	Rev	Date (Sira stamp)	Description
200-251-2317	1 of 1	B	16 Nov 09	RMA100C enclosure serial/cert label, Sira
200-251-2360	1 of 1	A	16 Nov 09	RMA100C serial/cert label, Sira
208-285-00	1 of 1	A	16 Nov 09	Mech Assy, RMA100C Series
259-430-00	1 of 2	D	16 Nov 09	Schematic, RMA104 Fisco Version
259-431-00	1 of 3	D	16 Nov 09	Schematic, RMA108 Fisco Version
259-436-00	1 of 3	D	16 Nov 09	Schematic, RMA10X Fisco Version
259-530-00	1 of 1	B	16 Nov 09	PCB Assy, RMA104 Fisco Version
259-531-00	1 of 2	B	16 Nov 09	PCB Assy, RMA108 Fisco Version
259-536-00	1 of 2	B	16 Nov 09	PCB Assy, RMA108 Fisco Version
259-830-00	1 of 5	B	16 Nov 09	List of Materials, RMA104 Fisco Version
259-831-00	1 of 9	B	16 Nov 09	List of Materials, RMA108 Fisco Version
259-836-00	1 of 10	B	16 Nov 09	List of Materials, RMA10X Fisco Version
509-575-01	1 of 2	C	16 Nov 09	PCB Fab, RMA104 Fisco Version
509-575-02	1 of 3	C	16 Nov 09	PCB Artwork, RMA104 Fisco Version
509-584-01	1 of 2	C	16 Nov 09	PCB Fab, RMA108 Fisco Version
509-584-02	1 of 3	C	16 Nov 09	PCB Artwork, RMA108 Fisco Version
509-585-01	1 of 2	C	16 Nov 09	PCB Fab, RMA10X Fisco Version
509-585-02	1 of 3	C	16 Nov 09	PCB Artwork, RMA10X Fisco Version
RMA10XC-DIN	1 of 1	B	16 Nov 09	List of Materials, RMA10XC-DIN
RMA104C-DIN	1 of 1	B	16 Nov 09	List of Materials, RMA104C-DIN
RMA108C-DIN	1 of 1	B	16 Nov 09	List of Materials, RMA108C-DIN

\* Amended by Sira to add sheet numbering

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