

12.3 RHMUX Version

12.3.1 RHMUX Configurations

CE Compliance

All models of the Remote Hardened Low Level Analog Input Multiplexer (RHMUX) Field Termination Assembly (FTA), Power Adapters, and IOP can be used in a CE Compliant application. However, they must be used with the model MU-KFTSxx IOP to FTA cable and the IOP must be installed in a CE Compliant card file. A model MU-KLXxxx or MU-KLO305 Power Adapter to FTA four-conductor cable must also be used with a single ferrite shield or six solid ferrite beads, respectively, installed inside the remote enclosure at the FTA end of the cable. Both types of ferrites are included with the Honeywell enclosure.

Table 12-2 lists the FTA, Power Adapter, and IOP model part numbers.

Table 12-2 RHMUX Assemblies

Model Number	Description	Part Number
MC-GRMT01	RHMUX TC FTA with Local CJR Screw Terminals – Conformally Coated	51404106-175
MU-GRPA01	Intrinsically Safe RHMUX Power Adapter	51304724-125
MC-GRPA01	Intrinsically Safe RHMUX Power Adapter Conformally Coated	51304724-175
MU-TRPA01	Non-Incendive RHMUX Power Adapter	51304722-125
MC-TRPA01	Non-Incendive RHMUX Power Adapter Conformally Coated	51304722-175
MU-PRHM01	RHMUX IOP	51404109-125
MC-PRHM01	RHMUX IOP—Conformally Coated	51404109-175
MU-CMSS03	NEMA 4X Stainless Steel Enclosure (35.6 cm wide x 40.7 cm high x 15.2 cm deep)	51309250-100
MU-CMSC03	NEMA 4 Painted Carbon Steel Enclosure (35.6 cm wide x 40.7 cm high x 15.2 cm deep)	51309250-200

Non-CE Compliance

The RHMUX FTA, Power Adapters, and IOP can also be used for non-CE Compliant applications. The model MU-KFTAxx IOP to FTA cable can be substituted for the model MU-KFTSxx cable and a ferrite shield or ferrite beads are not required for the model MU-KLXxxx or MU-KLO305 Power Adapter to FTA cable.

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12.3.1 RHMUX Configurations, Continued

Galvanically Isolated Power Adapters	Both models of the Power Adapter provide Galvanic Isolation between the FTA and the IOP.
Hazardous locations	The RHMUX is designed primarily for Intrinsically Safe applications. However, the RHMUX assemblies can be used in Nonincendive and nonhazardous locations.
Control drawings	The approvals for the RHMUX subsystem are valid only if the appropriate Honeywell control drawing is followed. Drawing 51204105 covers Intrinsically Safe installations and drawing 51204185 covers Nonincendive installations.
Compatibility	The RHMUX assemblies are compatible only with each other. The assemblies are not compatible with the LLMux assemblies that are discussed in subsection 12.2.
Conformal coating	The RHMUX TC FTA is available only with conformal coating. The RHMUX Power Adapter and IOP assemblies are available with or without conformal coating. See Table 12-2.
Description	<p>One or two RHMUX Thermocouple (TC) FTAs can be connected to either an Intrinsically Safe (IS) Power Adapter or a Non-Incendive (NI) Power Adapter. The Power Adapter also connects to a model MU/MC-PRHM01 RHMUX IOP as illustrated in Figures 12-3 and 12-4. Figure 12-3 illustrates a Nonincendive RHMUX application, and Figure 12-4 an Intrinsically Safe RHMUX application.</p> <p>The model MU/MC-GRPA01 Intrinsically Safe RHMUX Power Adapter and the model MU/MC-TRPA01 Non-Incendive Power Adapter are functionally the same.</p> <p>The RHMUX FTA supports 0 to 100-millivolt and thermocouple inputs. RTD inputs are not supported.</p> <p>The model MU/MC-PRHM01 IOP supports 32 inputs from two RHMUX FTAs.</p>

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12.3.1 RHMUX Configurations, Continued

RHMUX FTA mounting	<p>The RHMUX FTA dimensions of approximately 13 inches by 13 inches cannot be accommodated by an FTA Mounting Channel in an HPM cabinet and is not intended to be mounted in an HPM cabinet.</p> <p>The RHMUX agency approvals are valid only when the FTA is mounted in a 35.6 W x 40.7 H x 15.2 D-centimeter (14 W x 16 H x 6 D-inch) model MU-CMSC03 NEMA 4 or model MU-CMSS03 NEMA 4X sealed enclosure that are offered by Honeywell.</p> <p>The model MU-CMSS03 enclosure is Approved for Division 1 and Division 2, Class I, II, and III locations. The model MU-CMSC03 enclosure is Approved for Division 1 and Division 2, Class I locations only.</p>
Model MU/MC-GRPA01 Power Adapter mounting	<p>The model MU/MC-GRPA01 Power Adapter is the same size as an A-size (6-inch) FTA and can be installed on a standard vertical or horizontal FTA Mounting Channel.</p>
Model MU/MC-TRPA01 Power Adapter mounting	<p>The model MU/MC-TRPA01 Power Adapter is the same size as a B-size (12-inch) FTA and can be installed on a standard vertical or horizontal FTA Mounting Channel.</p>

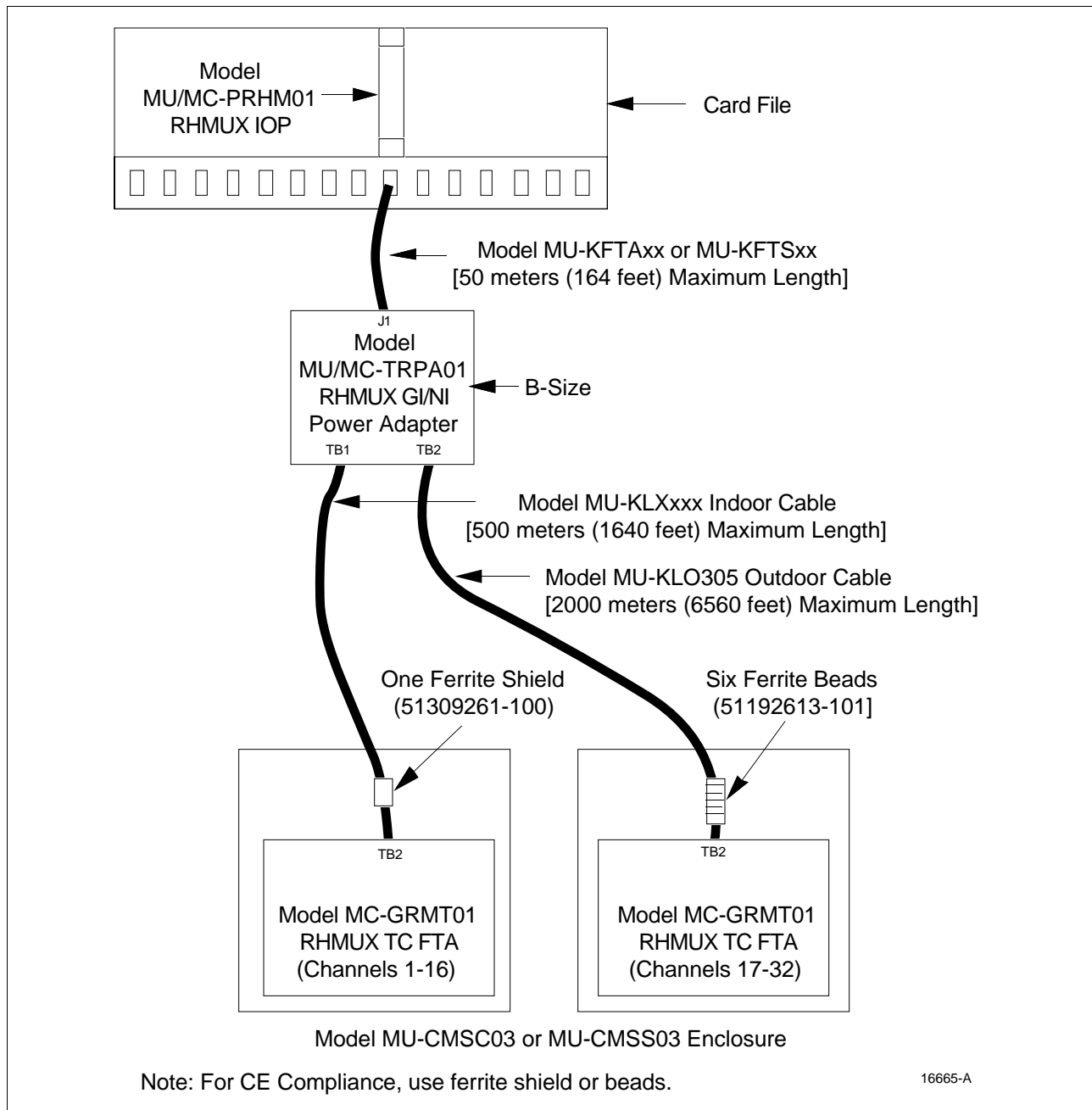
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12.3.1 RHMUX Configurations, Continued

Nonincendive RHMUX application

Figure 12-3 illustrates a Nonincendive application of the RHMUX assemblies. For valid agency approvals, the installation must comply with Honeywell control drawing 51204185.

Figure 12-3 Nonincendive RHMUX Configuration Interconnections



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