Description
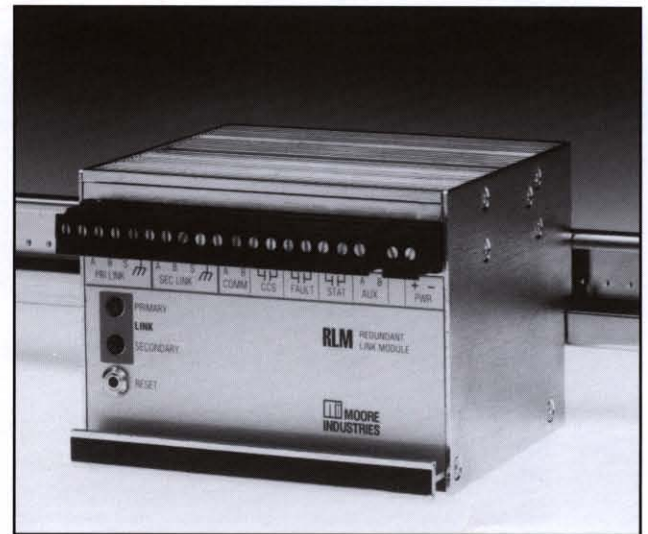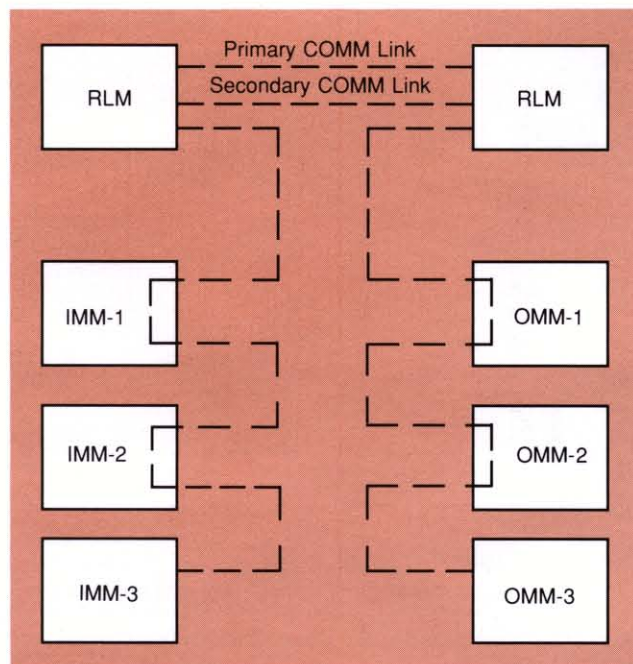
The RLM Redundant Link Module automatically switches the signals being transmitted by Moore Industries' CCS® Cable Concentrator System® to a secondary communication link should the primary link be severed or otherwise interrupted.

Only two RLMs are required per CCS Cable Concentrator System, which may include up to eight separate pairs of Input (IMM) and Output (OMM) Modules. Installed at each end of the CCS's communication link, the RLM senses a signal transmission interruption via the IMM's and OMM's fault relays. When an IMM or OMM fault relay is tripped by a communication link break, the RLM instantly switches transmission from the primary link to the secondary link, restoring system communication. Transmission will continue on the secondary link until a reset button located on the RLM's front panel is pressed. LEDs, also located on the unit's front panel, provide visual indication of which link is currently being used by the CCS for transmission.

The RLM's compact DIN-style housing is designed to mount alongside the CCS Cable Concentrator System on a standard DIN rail. Moore Industries' DPS DIN-style power supplies are ideal for installing on the same rail and powering both the RLM and CCS.

Figure 1. *RLMs Connect on Each End of the CCS's Communication Link*

The RLM provides system security by automatically routing the CCS's signals to a back-up communication link if the primary link is interrupted.

Features

- **Continuous sensing and automatic switching.** The RLM continually monitors the CCS's fault contact relays and switches transmission to the secondary link if the primary link fails. This provides system security and prevents costly process downtime caused by signal loss.

- **LEDs indicate link in use.** Front panel LED's indicate which communication link is currently being used for signal transmission.

- **Automatic re-startup.** An automatic timing circuit allows primary link startup after a power loss without energizing the switching circuit. This eliminates the need to manually reset the unit after power failure.

Note: Consult the factory if the RLM will be used with other CCS peripheral equipment such as modems, LCM's and LFM's

Specifications

Characteristics

Front Panel Switches	Reset button: Switches communication from secondary communication link back to primary communication link
Front Panel Indicators	LEDs labeled "PRIMARY" and "SECONDARY" indicate communication link currently in use
Ambient Temperature Range	**Operating:** 0°C to 70°C (+32°F to +158°F)

Contact Ratings	**Cable:** 250mA, 24Vdc maximum (resistive) **Fault Output:** 0.5A, 115Vac or 1A, 24Vdc (resistive).
Weight	652 grams, (1 lb. 7 oz.)

Ordering Specifications

Unit	**RLM** Redundant Link Module
Input	**RS485**

Output	**2X RS485** RS-485 for both primary and secondary communication links
Power*	**24V** 18 to 30Vdc or 24Vac +10%, -20%, 50-60Hz (3.5 watts typical)
Housing	**DIN** Aluminum DIN-style rail-mount housing snaps onto a standard G-type DIN rail

*Recommended power supply: DPS/24V/240mA/117AC/-FA [DIN]

NOTE: Using the same DPS1200 to power a pair of CCS modules plus an RLM may overload the power supply.

When ordering specify: Unit / Input / Output / Power [Housing]
Model number example: RLM / RS485 / 2X RS485 / 24V [DIN]

Ordering Information

To order a specific unit, use the appropriate bold face data from the Specification table. For assistance during this procedure, refer to the model number example at the bottom of the table.

Installation

The RLM is housed in a rugged aluminum DIN-style rail-mount housing that snaps on a G-type rail alongside the CCS® Cable Concentrator System®. Housing dimensions and terminal designations are indicated below.
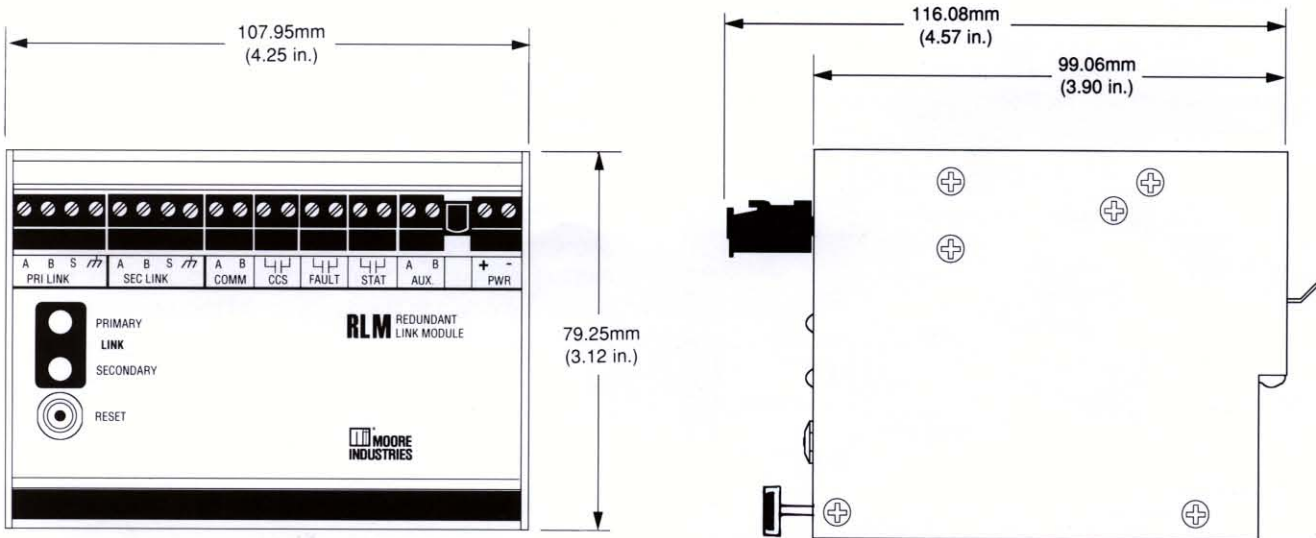

Figure 2. *Outline and Installation Dimensions*