MotorSys™ Ethernet By-pass Switch LTM9BPS

The self-healing daisy chain loop

In order to get all the benefits of the Daisy Chain Loop (DCL) with 2 ring switches, the sub-system must be able to "self-heal" after removal of any Functional Unit (FU).

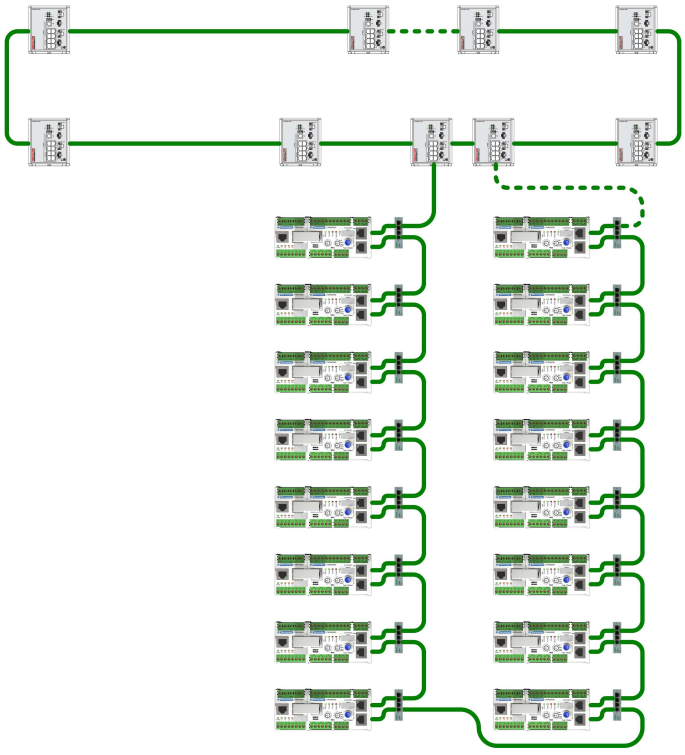
This can be achieved by installing, outside the drawer, a device that will close the loop shortly after removal of a drawer. We call this device a "By-pass switch".

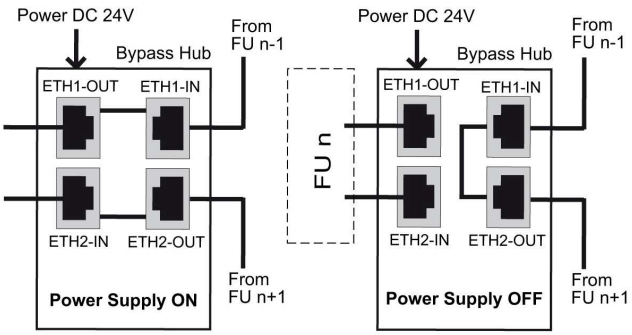
When the drawer is in its place and connected, the by-pass switch is "open", letting communications unchanged.

When the drawer is withdrawn, the by-pass switch is "closed", allowing communications to by-pass the removed FU.

The opening and the closing of the by-pass switch is automatically executed when the position of the FU changes.

Topology

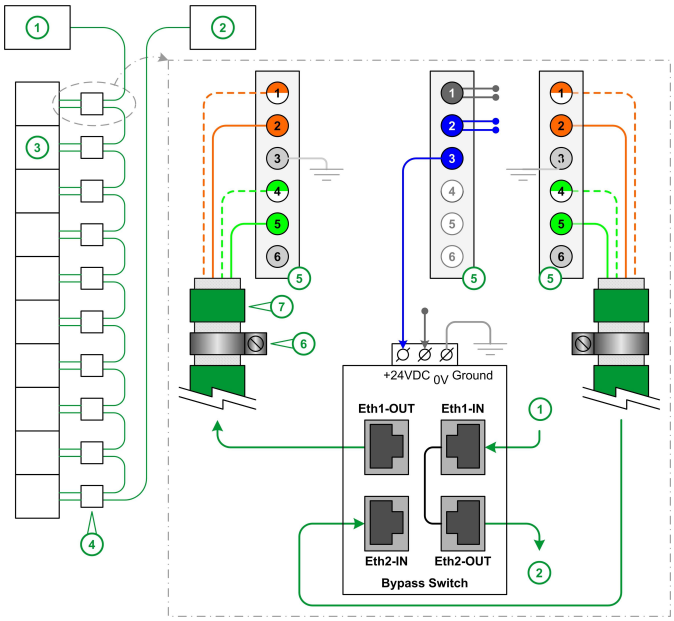




Wiring solutions

Recommended solution:

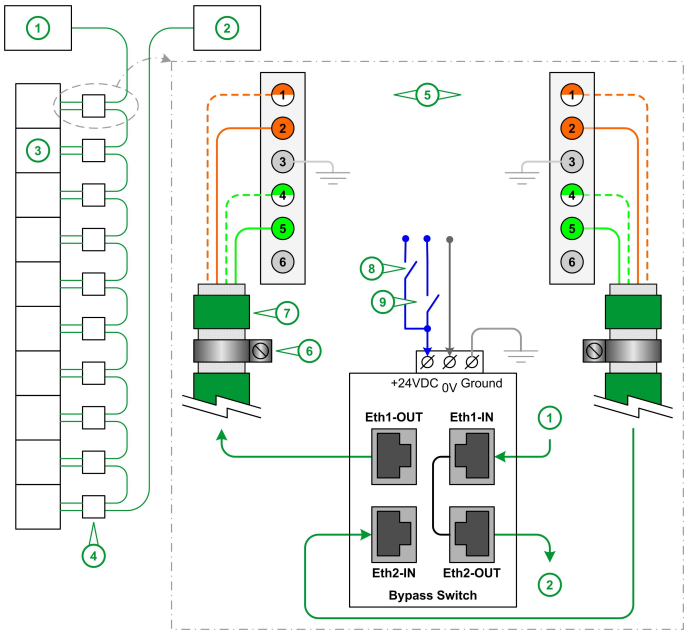
The By-pass Switch is powered through the sliding auxiliary contacts block



1. Previous column
2. Next column
3. Functional unit
4. By-pass switch
5. Auxiliary connector
6. The collar to ground
7. Ethernet cable Cat 5e SFTP or Cat 6 SFTP (no UTP and FTP)
8. Micro-switch test
9. Micro-switch Plug-IN

Alternative solution:

The By-pass Switch is powered by the drawer's position micro-switches



1. Aux. Voltage (- ou ~)
2. Aux. Voltage (+ ou ~)
3. Shield
4. Reception Data +
5. Reception Data -
2. Transmission Data -
1. Transmission Data +

Main features

Power Supply: 24VDC

Protection against polarity reversal

10/100BASE-TX Ethernet

2-pair UTP RJ45 connector

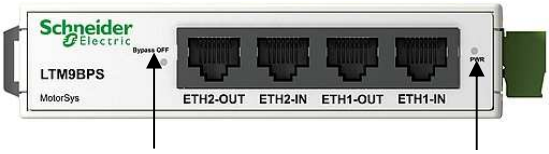
Maximum Transmission Length: 100m

Operational temperature: -10℃ to 60℃

Storage and transport temperature: -25℃ to 70℃

Dimensions: 26mm (W) x 70mm (D) x 110mm (H)

Weight: 0,2kg



LED Bypass OFF
ON: Bypass ON
OFF: Bypass OFF

LED PWR
ON: Power ON
OFF: Power OFF

Schneider Electric