Service Bulletin

Bulletin No: SB-0035-20-216-SW   Effective Date: 07-03-2020   Type: Installation

Subject: MCE-ARS installation when powered via a FlexSCADA Distribution Board (ACC-Q5-DIST15A or ACC-Q5-DIST15A-D)

Scope
This service bulletin describes configuration change requirements when the Mission Critical Energy Automatic Remote Stop-Switch (MCE-ARS) is powered via a FlexSCADA Distribution Board (ACC-Q5-DIST15A or ACC-Q5-DIST15A-D).

Background information
The MCE-ARS Stop-Switch is designed to operate in conjunction with a FlexSCADA Q5 or Q5Pro. The MCE-ARS remote stop switch is designed to work with both 24VDC and 48VDC systems. System voltage is user selectable via a slide switch located at the bottom of the unit. In a standard configuration, the MCE-ARS is connected to a power source, a wind turbine, a charge controller and a FlexSCADA Q5 or Q5Pro (via a relay channel). In some cases, a configuration change is required when connecting to the FlexSCADA distribution panel (ACC-Q5-DIST15A or ACC-DIST15A-D).

MCE-ARS installation without a distribution panel
Figure 1 shows connection of the MCE-ARS to the FlexSCADA through a relay input via the Dry Contact SW+/- terminals. The MCE-ARS is then connected to a power source (24VDC or 48VDC). When the MCE-ARS is in the "on" position, it will allow the turbine to operate normally. When placed in the "off" position, the turbine will be disconnected from the batteries and the output leads shorted together, placing the turbine in a dynamic brake status mode.

MCE-ARS installation utilizing a distribution panel
When the distribution panel is used in place of the standard relay inputs, a change will be needed for the MCE-ARS to function correctly. When a distribution panel is used, the standard relay becomes a powered relay. Connecting a Dry Contact SW +/- terminal to the relay input in this case would cause the MCE-ARS to be unable to turn "on", thereby keeping the turbine output leads shorted out and the turbine in a dynamic brake status mode. To correct this, the MCE-ARS will need to be connected differently.
The first step is to complete the installation setup procedures as outlined in service bulletin SB-0034-20-167-SW (MCE-ARS Stop Switch). Ensure power is removed prior to completing the following procedure. Connect the MCE-ARS to the Q5 by connecting the DC PWR +/- terminals on the MCE-ARS to the +/- terminals of the selected relay input on the power distribution panel. Next connect the Dry Contact SW +/- terminals to each other (see **figure 2**). The MCE-ARS will now be able to turn on and off as needed through the relay input channel on the FlexSCADA device.
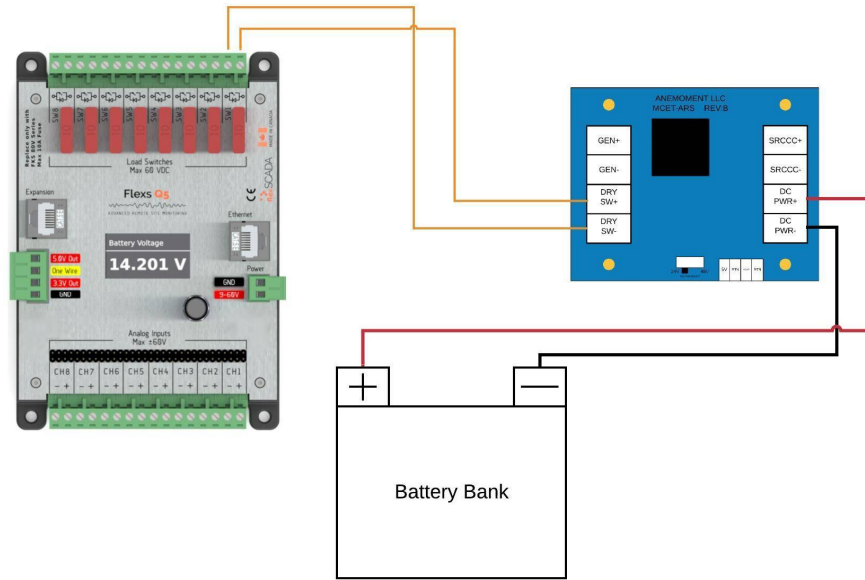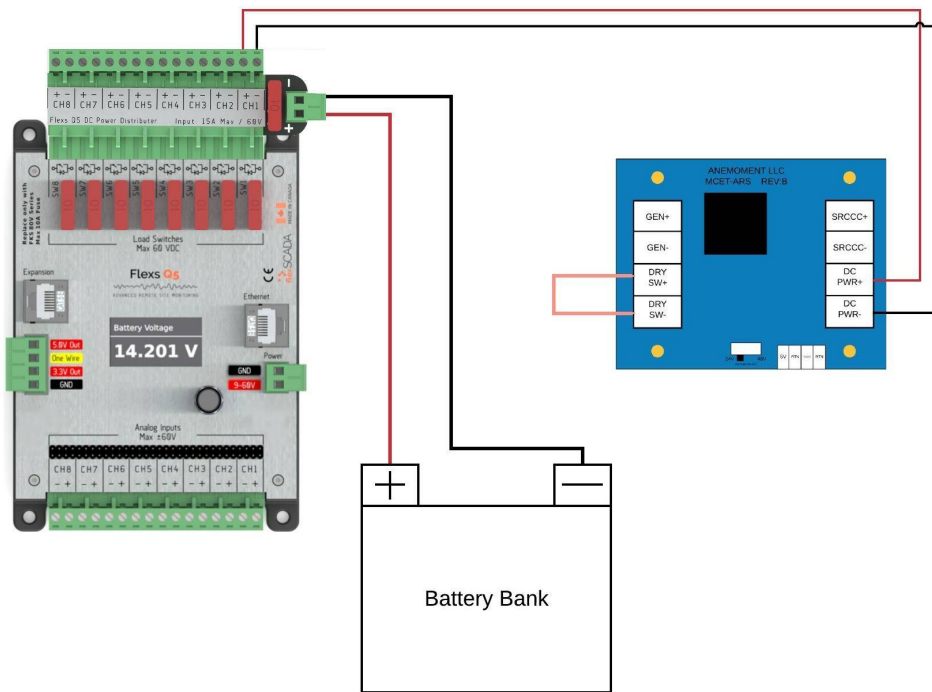
Figure 1

Figure 2

For additional information or assistance, please contact Mission Critical Energy at (716) 276-8465 or visit us at www.missioncriticalenergy.com.