



M-7679 R-PAC QUICK REFERENCE GUIDE

PROTECTION, AUTOMATION AND CONTROL SYSTEM FOR RECLOSER, SWITCH, SECTIONALIZER AND ADVANCED DISTRIBUTION AUTOMATION APPLICATIONS.

GROUND Cut/Out & SGF Cut/Out Buttons



Effective release:
• Firmware 03.29.06
and newer.

Required Tools:

- PC running Windows 7® or higher
- S-7600 IPScom Communications Software

Latest version of IPScom software can be downloaded from:

<https://beckwithelectric.com/products/s-7600/>

Required Documentation:

- M-7679 Instruction Book
- M-7679 Application Guide
- Communications and Cybersecurity A.G.

Latest version of M-7679 Instruction Book can be downloaded from:

<https://beckwithelectric.com/products/m-7679/>

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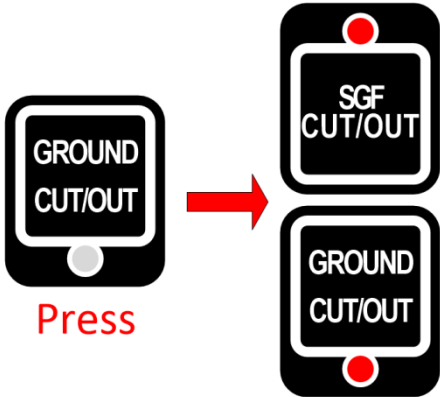
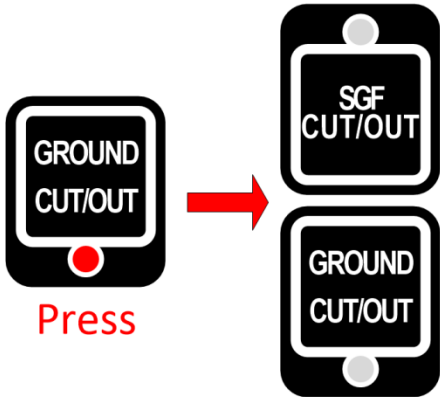
GROUND Cut/Out & SGF Cut/Out Buttons

Definition of Cut/In and Cut/Out: When a protection function is in Cut/Out state, in the case of an overcurrent event, the function will be allowed to Pickup but will never time out. This means that, if the function has a trip output assigned and is in Cut/Out state, the Recloser/Breaker will never perform the trip operation. If the user sends the Cut/In command, the function will go back to Cut/In state. This means that, in the case of an overcurrent event, the function will Pickup and Timeout. In this last case, if the function has a trip output assigned the Recloser/Braker will perform the trip operation normally.

This Quick Reference Guide explains the behavior of the GROUND Cut/Out and SGF Cut/Out Front Panel buttons in the M-7679 R-PAC. **This feature is available in Firmware version 03.29.06 and Newer.**

1	The GROUND Cut/Out button toggles all the Ground Overcurrent protection functions between Cut/In and Cut/Out states. Ground Overcurrent functions are 50N, 51N and 67N.	RED LED ON = Cut/Out   RED LED OFF = Cut/In
2	The SGF Cut/Out button toggles all the Sensitive Ground Overcurrent functions between Cut/In and Cut/Out states. Sensitive Ground Overcurrent functions are 50G/GS, 51G/GS and 67G/GS.	RED LED ON = Cut/Out   RED LED OFF = Cut/In
End of Procedure.		

Case #1: GROUND &SGF both start in Cut/In state

1	GROUND & SGF are both in Cut/In state	
2	If GROUND Cut/Out button is pressed GROUND & SGF both go into Cut/Out state.	
3	If GROUND Cut/Out button is pressed again GROUND & SGF both return to their original state (Cut/In).	
End of Procedure.		

Case #2: GROUND starts in Cut/In and SGF starts in Cut/Out state

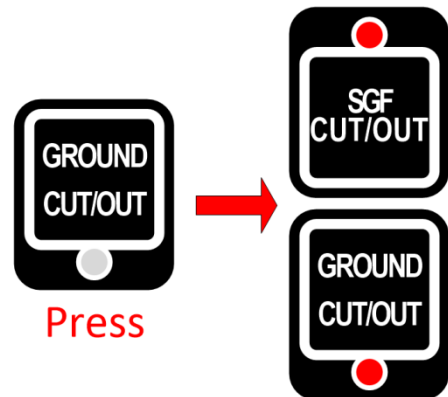
1

GROUND is in Cut/In state & SGF is in Cut/Out state



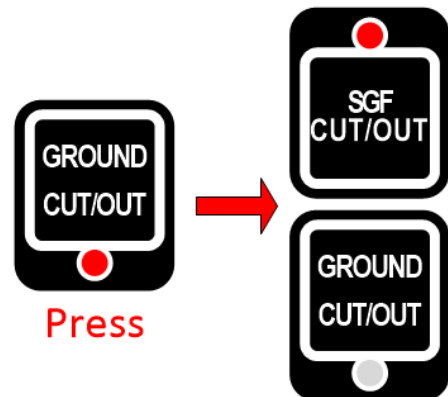
2

If GROUND Cut/Out button is pressed GROUND & SGF both go into Cut/Out state.



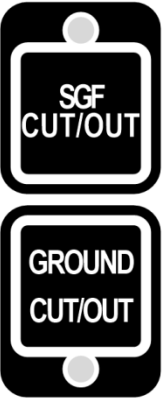
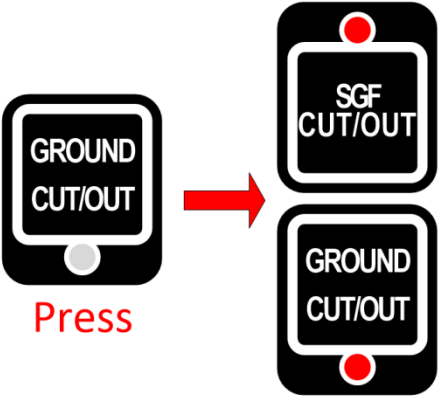
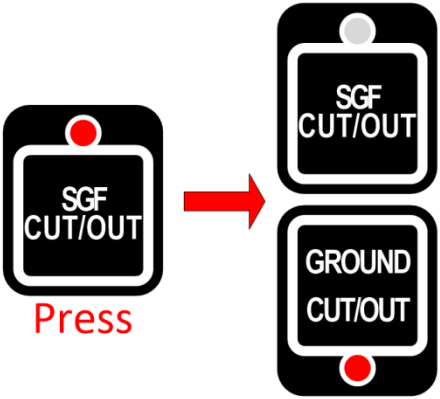
3

If GROUND Cut/Out button is pressed again GROUND & SGF both return to their original state with GROUND in Cut/In and SGF in Cut/Out states.



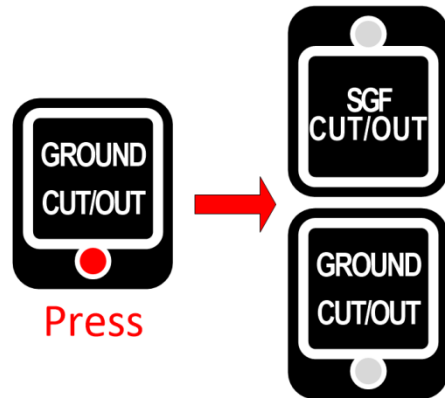
End of Procedure.

Case #3: GROUND & SGF both start in Cut/In state

1	GROUND & SGF are both in Cut/In state	
2	If GROUND Cut/Out button is pressed GROUND & SGF both go into Cut/Out state.	 Press
3	If SGF Cut/Out button is pressed, SGF toggles to Cut/In and that becomes the new state for SGF.	 Press

4

If GROUND Cut/Out button is pressed, then GROUND toggles to Cut/In and SGF remains in its Cut/In state.



End of Procedure.

Case #4: GROUND starts in Cut/In state & SGF starts in Cut/Out state

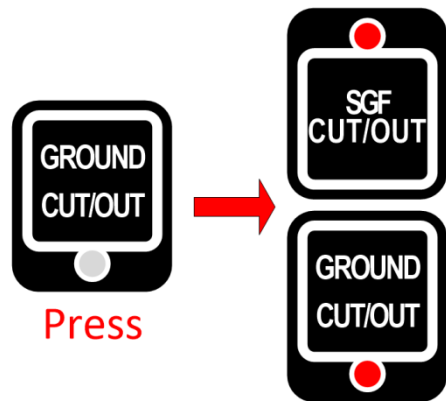
1

GROUND is in Cut/In state & SGF is in Cut/Out state



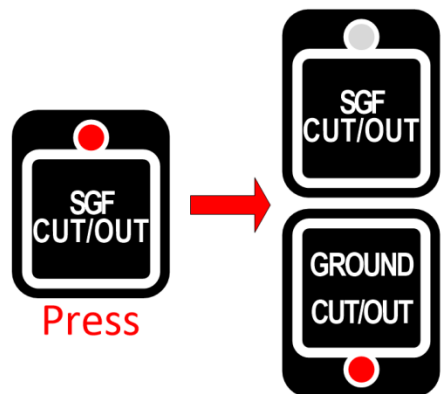
2

If GROUND Cut/Out button is pressed, GROUND and SGF both go into Cut/Out state.



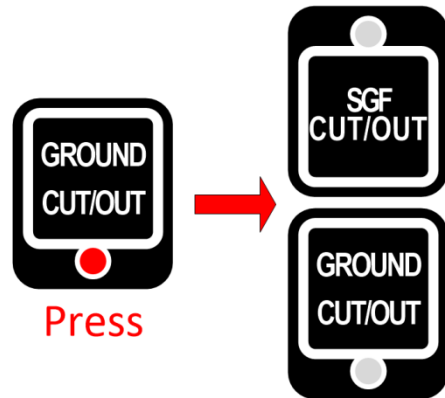
3

If SGF Cut/Out button is pressed, SGF toggles to Cut/In and that becomes the new state for SGF.



4

If GROUND Cut/Out button is pressed, then GROUND toggles to Cut/In and SGF remains in its Cut/In state.



End of Procedure.



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