



M-7679 R-PAC QUICK REFERENCE GUIDE

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

Enable Enhanced Security (Role Based Passwords) via Modbus



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/>

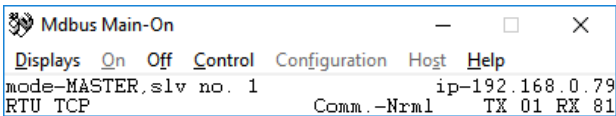
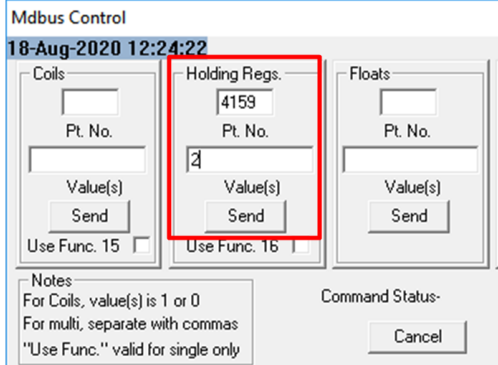


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Enable Enhanced Security via Modbus

WARNING:

When modifying settings directly through MODBUS be careful to enter appropriate values into the corresponding registers. If incorrect values are written to non-corresponding registers, IED could exhibit unexplained behavior and may be needed to be returned to the factory for repair/reset.

1	The M-7679 supports Modbus communication via USB, serial or Ethernet (TCP) ports. Connect the appropriate cable between PC and M-7679.	 										
2	Establish communication with the M-7679 using a third party Modbus communication tool.											
3	Read Modbus register 4159. The reported value by default should be 0 (zero). This indicates that the Access Password Type is set to None , and no Access Passwords are enabled.	<table><tr><td>04157</td><td>0</td></tr><tr><td>04158</td><td>0</td></tr><tr><td>04159</td><td>0</td></tr><tr><td>04160</td><td>0</td></tr><tr><td>04161</td><td>0</td></tr></table>	04157	0	04158	0	04159	0	04160	0	04161	0
04157	0											
04158	0											
04159	0											
04160	0											
04161	0											
4	The supported Access Password Type options are: • None (0): Cyber Security is not enabled. The user will not be prompted to enter a User Name and Password and will have access to ALL features and functions. • Open Password (1): The password is not encrypted. This option should be chosen when IPSCOM is not the sole method of communication to the unit. • Encrypted Password (2): The password is encrypted and is authenticated by the unit to allow the user to log on to the unit. This selection only controls password encryption for a user login, setpoints files and passwords contained in Account Permissions files are always encrypted.											
5	Based on Access Password Options listed in step 4, write a (1) or (2) to Modbus Register 4159.  WARNING: Once a (1) or (2) has been written to register 4159 the M-7679 will immediately disconnect and enable password protection. The M-7679 is now password protected requiring the user to provide proper security credentials for all access through any communication port or front panel HMI.											

6 The default Administrator credentials are listed below and will be required each time access is required through either front panel HMI or any communication port:

- USER: admin1
- PASSWORD: admin1@M76XX

For details or instructions on creating roles, individual user accounts or passwords please refer to the M-7679 Communications Application Guide:

(<https://beckwithelectric.com/wp-content/uploads/docs/app-guide/M-7679-M-7651A-COMS-AG.pdf>)

NOTE:

- M-7679 units with Firmware Version 03.29.03 or higher: users including the administrator will be forced to change their passwords the first time they connect to the unit.
- M-7679 units with Firmware Version 03.28.07 or lower: the unit will NOT force the administrator or users to change their passwords.

The M-7679 is supplied with embedded advanced security features. Once enabled, these advanced security features allow role based access to individual users based on permissions as assigned by the administrator.

Permission Categories (Access Permitted)	Default Permissions (X = Permission Category Included in Default Permission Set)										
	View Data	View Setpoints	Change Setpoints	Read Files	View Config	Change Config	Firmware Update	Manage Users	View Audit Log	Remote Control	Change Date/Time
Monitor Data	X										
View setpoints		X									
Change setpoints		X	X								
View configuration					X						
Change configuration					X	X					
Datalog setup					X	X					
Datalog download				X							
SOE setup					X	X					
SOE download				X							
OSC setup					X	X					
OSC download				X							
Security events log									X		
Manage users*								X			
Firmware update							X				
Remote control										X	
Change Date/Time											X
Get LED file				X							
Write LED file											
Get Button file				X							
Write Button file											
Write Wakeup Screens											

*User can change own password without manage users permissions set

Table 2 Permissions Implemented for IEEE 1686 Standard

End of Procedure.



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