

This document is intended to provide the menu structure of the CMD420 / CMD421 current relays, along with a checklist of entered settings for the device. For instructions on installation and use of the CMD420 / CMD421, refer to the user manual and installation bulletin. This document is intended as a supplement and not a replacement to the complete user manual.

Only qualified maintenance personnel shall operate or service this equipment. These instructions should not be viewed as sufficient for those who are not otherwise qualified to operate or service this equipment. This document is intended to provide accurate information only. No responsibility is assumed by BENDER for any consequences arising from use of this document.



		Description	Range	Factory Default	Your Settings / Notes	
AL	> I 2	Current trip level / window high trip level	0.1 - 1 A (CMD420) 0.5 - 5 A (CMD421)	0.3 A (CMD420) 1.5 A (CMD421)	<input type="text"/>	
	> I 1	Prewarning / window low trip level	50 - 100% (based on main alarm, amp value must be calculated when using window function)	50%	<input type="text"/>	
	Hys	Hysteresis	1 - 40%	15%	<input type="text"/>	
OUT	M	Latching behavior (Fault memory)	ON (latching) / OFF (non-latching) / CON (remains latched on power restore)	ON (latching)	<input type="text"/>	
	K1 OP	Relay K1 operation (failsafe / non-failsafe)	N/O (normally de-energized) / N/C (normally energized)	N/C (normally energized)	<input type="text"/>	
	K2 OP	Relay K2 operation (failsafe / non-failsafe)	N/O (normally de-energized) / N/C (normally energized)	N/C (normally energized)	<input type="text"/>	
	RL	Reload Cycles	0 - 100	0	<input type="text"/>	
	R1	ERR	Relay K1 trips on device error	ON / OFF	ON	<input type="text"/>
		> I 2	Relay K1 trips on main alarm / window high	ON / OFF	ON	<input type="text"/>
		> I 1	Relay K1 trips on prealarm / window low	ON / OFF	OFF	<input type="text"/>
		Tes	Relay K1 trips on device self-test	ON / OFF	ON	<input type="text"/>
	R2	ERR	Relay K2 trips on device error	ON / OFF	ON	<input type="text"/>
		> I 2	Relay K2 trips on main alarm / window high	ON / OFF	OFF	<input type="text"/>
> I 1		Relay K2 trips on prealarm / window low	ON / OFF	ON	<input type="text"/>	
Tes		Relay K2 trips on device self-test	ON / OFF	ON	<input type="text"/>	
t	ton1	Response delay for prealarm	0 - 10 s	1 s	<input type="text"/>	
	ton2	Response delay main alarm	0 - 10 s	0 s	<input type="text"/>	
	t	Startup delay (applies only on device startup)	0 - 10 s	0.5 s	<input type="text"/>	
	toff	Delay on release (to return to normal state)	0 - 99 s	1 s	<input type="text"/>	
SET	HI I 1/2	Change between overcurrent / undercurrent / window	Hi (overcurrent) / Lo (undercurrent) / In (window)	Hi	<input type="text"/>	
	n	Enter external CT ratio (enter as 1 A secondary regardless of CMD420 or 421)	1 - 2000	1	<input type="text"/>	
ESC						

ex. CMD420 50:1 ratio, enter 50
ex. CMD421 50:5 ratio, enter 10

NOTE: Enter the current transformer ratio first before entering alarm values. Refer to installation bulletin for more information.