

Altech Corp.®

GFR Series (5A - 40A) 480Y/277V AC Ground Fault Relay with Overload Protection (RCBO)

The GFR Series is a combined Equipment Ground Fault Relay and Supplementary Protector (RCBO), featuring dual pole switching (live and neutral) and designed to provide protection against overloads and AC ground faults (residual current faults) as well as pulsating DC ground faults. Short Circuit Withstand rating is 10kA.



GFR Series RCBO Ordering Scheme

GFR	2	B	06	030
	No. of Poles 2, 4	Trip Curve B, C, D	Rated Current 5, 6, 8, 10, 12, 13, 15, 16, 20, 25, 30, 32, 35, 40A	Residual Current Sensitivity 010 = 10mA* 030 = 30mA 100 = 100mA 300 = 300mA 500 = 500mA

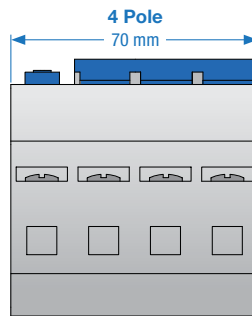
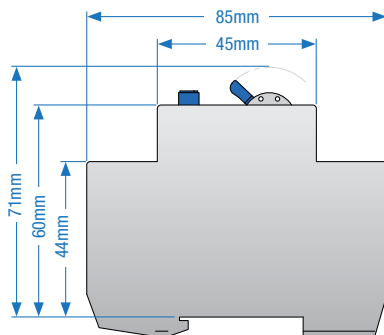
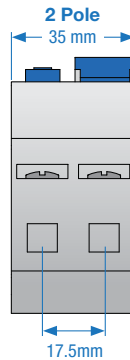
* 10mA only available on current ratings up to 25A

Technical Specification

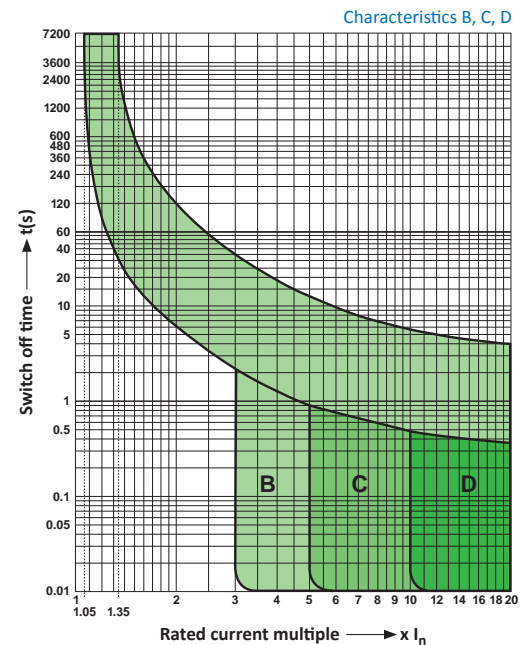
Number of Poles	2	4
Rated Voltage (U _n)	277V AC	480Y/277V AC
Rated Current	5, 6, 8, 10, 12, 13, 15, 16, 20, 25, 30, 32, 35, 40A	
Rated Residual Operating Current (I _n)	10*, 30, 100, 300, 500mA	
Rated Frequency	50/60Hz	
Overload Tripping	B, C and D	
Cable Size & Tightening Torque	Stranded wire sized 16 - 3 AWG (1.5mm ² - 25mm ²) @ 17.5lb-in (2.0Nm) Solid wire sized 16 - 10 AWG (1.5mm ² - 5.5mm ²) @ 17.5lb-in (2.0Nm) Solid wire sized 18 - 16 AWG (1mm ² - 1.5mm ²) @ 25lb-in (2.8Nm)	
Electrical Life	6000 Switching Operations	
Mechanical Life	10000 Switching Operations	

GFR Series RCBO Short Circuit Withstand Rating

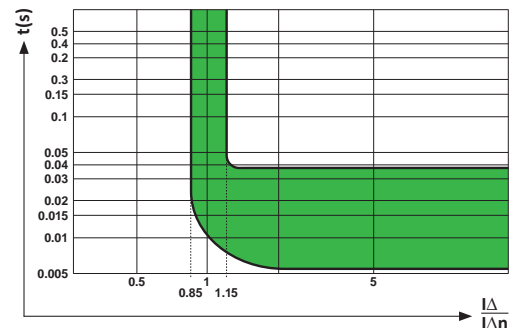
V	I	IR	Backup
2 Pole 277V AC	≤20A	10kA	None
	>20A	10kA	Class J Fuse 250A or lower Altech L Series Branch Circuit Breaker Altech R Series Supplementary Protector
4 Pole 480Y/277V AC	≤20A	10kA	None
	>20A	10kA	Class J Fuse 250A or lower Altech L Series Branch Circuit Breaker Altech R Series Supplementary Protector



GFR Series RCBO Overload Trip Curves



GFR Series RCBO Ground Fault Trip Curve



UL 1077
Ground Fault Relay
with Overload Protection