

# GFR Series - 1 Pole+N, C Trip, 300 mA 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.



### Ordering Information

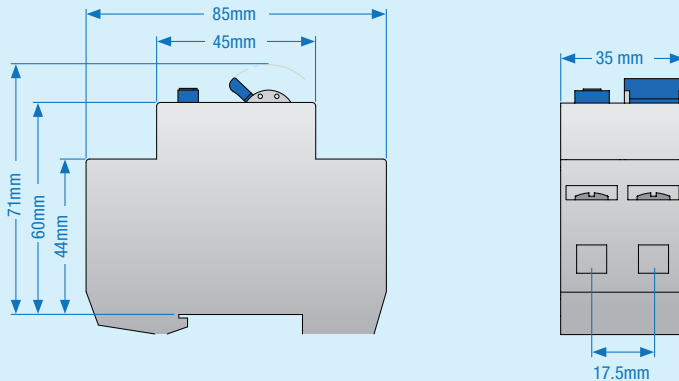
Rated Current	Type/ Cat. No.	Rated Voltage
5.0A	GFR2C05300	277V AC
6.0A	GFR2C06300	277V AC
8.0A	GFR2C08300	277V AC
10A	GFR2C10300	277V AC
12A	GFR2C12300	277V AC
13A	GFR2C13300	277V AC
15A	GFR2C15300	277V AC
16A	GFR2C16300	277V AC
20A	GFR2C20300	277V AC
25A	GFR2C25300	277V AC
30A	GFR2C30300	277V AC
32A	GFR2C32300	277V AC
35A	GFR2C35300	277V AC
40A	GFR2C40300	277V AC

**UL 1077**  
Ground Fault Relay  
with Overload Protection

### Technical Specification

Number of Poles	1+N
Voltage Rating (maximum)	277V AC
Ground Fault Sensitivity Level	300 mA
Short Circuit Withstand Rating	10 kA
Rated Frequency	50/60Hz
Trip Characteristic	C
Cable Size & Tightening Torque	Stranded Wire: 16 - 3 AWG (1.5 mm <sup>2</sup> - 25 mm <sup>2</sup> ) @ 17.5 lb-in (2.0 Nm) Solid Wire: 16 - 10 AWG (1.5 mm <sup>2</sup> - 5.5 mm <sup>2</sup> ) @ 17.5 lb-in (2.0 Nm) 18 - 16 AWG (1 mm <sup>2</sup> - 1.5 mm <sup>2</sup> ) @ 25 lb-in (2.8 Nm)
Electrical Life	6000 Switching Operations
Mechanical Life	10000 Switching Operations

**Dimensions**  
(to convert to inches multiply by 0.03937)

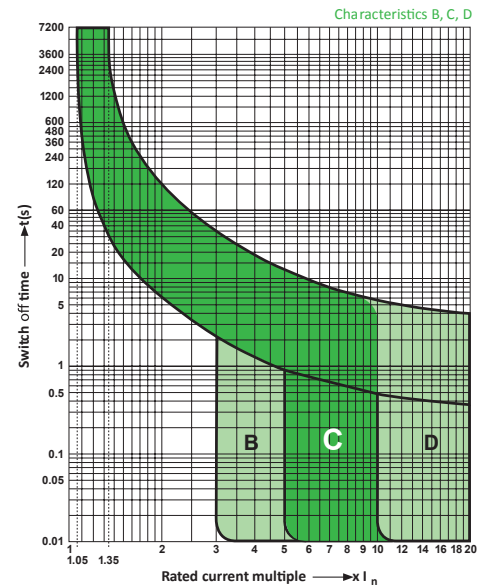


**Weight** 217 g

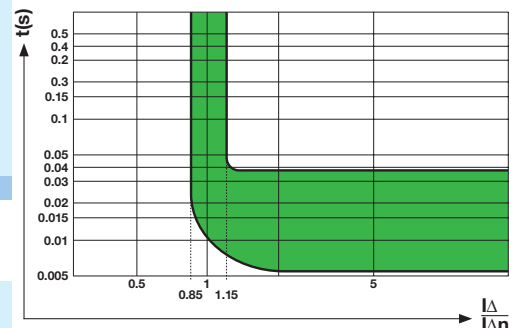
### GFR Series RCBO Short Circuit Withstand Rating

V	I	IR	Backup
1+N Pole	≤20A	10kA	None
277V AC	>20A	10kA	Class J Fuse 250A or lower Altech L Series Branch Circuit Breaker Altech R Series Supplementary Protector

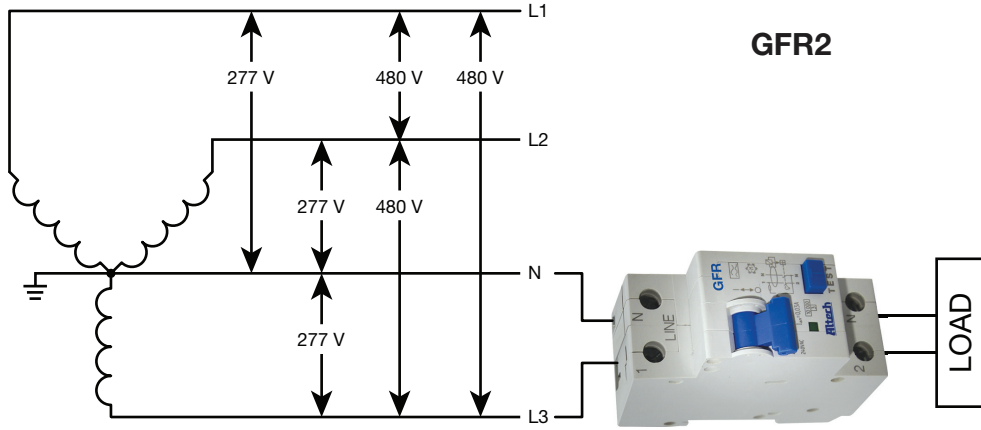
### GFL Series RCBO Overload Trip Curves



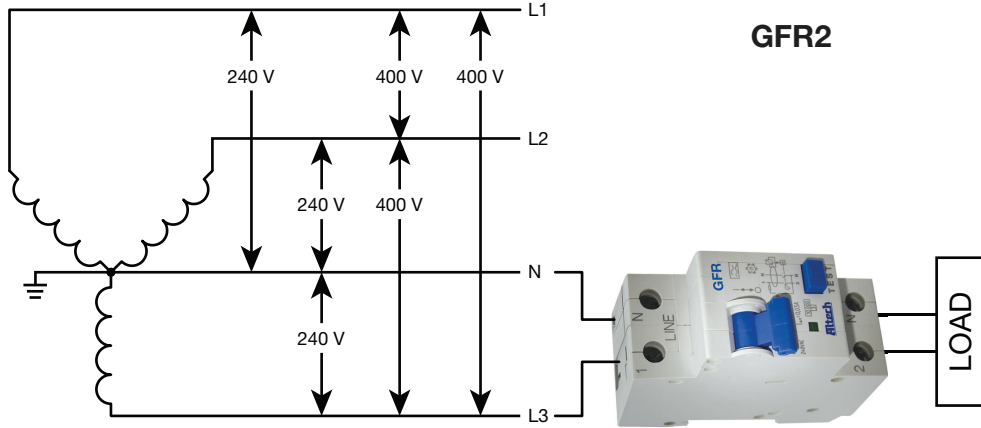
### GFR Series RCBO Ground Fault Trip Curve



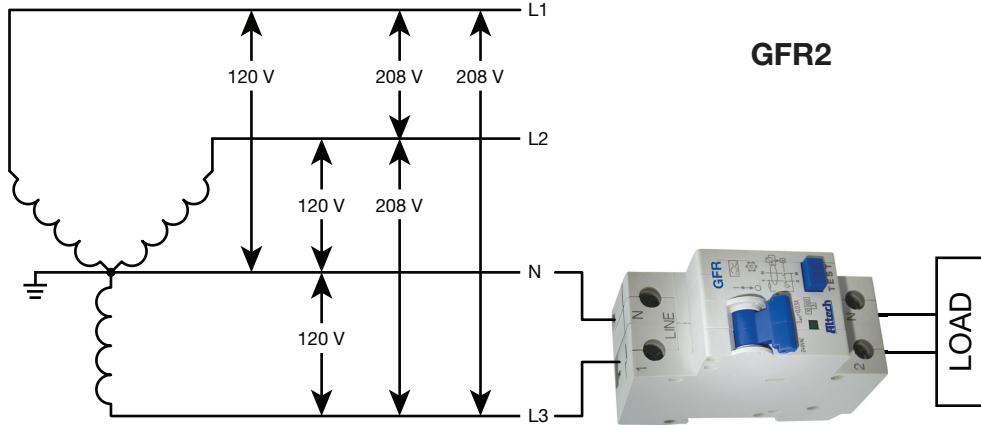
**GFR Series - 1 Pole+N, C Trip, 300 mA**  
 Applicable voltage systems and wiring examples.



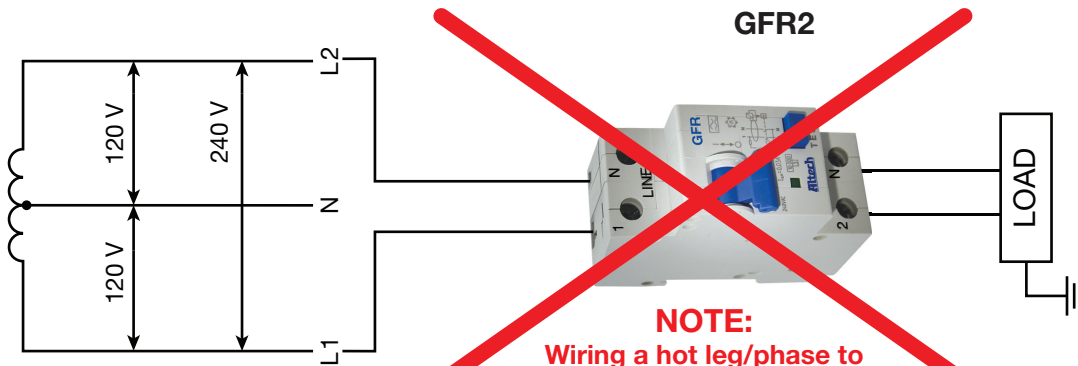
**GFR2**



**GFR2**



**GFR2**



**GFR2**

**NOTE:**  
 Wiring a hot leg/phase to  
 N terminal is not permitted.

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