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<u>Altech Corp.</u>®

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







E483493 GFR 06 030 **Residual Current Sensitivity** No. of Poles Trip Curve Rated Current **GFR Series RCBO** 2,4 B, C, D 5, 6, 8, 10, 12, 13, $010 = 10 \text{mA}^*$ 15. 16. 20. 25. 30. 030 = 30 mA**Overload Trip Curves** 32, 35, 40A 100 = 100 mA300 = 300mA Characteristics B, C, D 500 = 500 mA 7200 * 10mA only available on 3600 **Technical Specification** current ratings up to 25A 1200 Number of Poles 2 4 600 480 Rated Voltage (Un) 277V AC 480Y/277V AC Rated Current 5, 6, 8, 10, 12, 13, 15, 16, 20, 25, 30, 32, 35, 40A 240 Rated Residual Operating Current (In) 10*, 30, 100, 300, 500mA 120 t(s) Rated Frequency 50/60Hz 60 **Overload Tripping** B, C and D Cable Size & Tightening Torque Stranded wire sized 16 - 3 AWG (1.5mm2 - 25mm2) @ 17.5lb-in (2.0Nm) 20 Solid wire sized 16 - 10 AWG (1.5mm2 - 5.5mm2) @ 17.5lb-in (2.0Nm) Switch off time 10 Solid wire sized 18 - 16 AWG (1mm2 - 1.5mm2) @ 25lb-in (2.8Nm) Electrical Life 6000 Switching Operations Mechanical Life 10000 Switching Operations GFR Series RCBO Short Circuit Withstand Rating 0.5 v IR Backup Т 2 Pole ≤20A 10kA None 35 mm R C h 2 Pole Class J Fuse 250A or lower 0.1 277V AC >20A 10kA Altech L Series Branch Circuit Breaker 0.05 Altech R Series Supplementary Protector ≤20A 10kA None 4 Pole Class J Fuse 250A or lower 0.01 480Y/277V AC >20A 10kA Altech L Series Branch Circuit Breaker 1.05 1.35 Altech R Series Supplementary Protector Rated current multiple —→ x I_n **GFR Series RCBO** Ground Fault Trip Curve -17 5mm 85mm t(s) 4 Pole 45mm 0.5 0.4 0.2 70 mm 0.3 0.15 00 0.1 0.05 0.04 0.03 71mm 60mm 0.02 0.015 0.01 0.005 0.5 0.85 1.15 ► <u>I∆</u>

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UL 1077 Ground Fault Rela vith Overload Prote