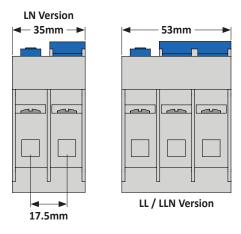
### **lechna** CIRCUIT PROTECTION

## Rtec489 5A - 40A

# 10kA UL489 Listed Branch Circuit Breaker with Equipment Ground Fault Protection (RCBO)







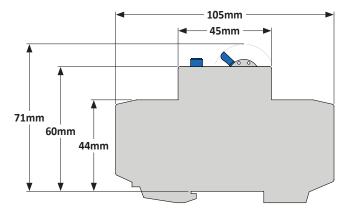
The Rtec489 range is a combined Branch Circuit Breaker and Equipment Ground Fault Protector, featuring dual pole switching (live and neutral disconnect) and designed to provide protection against short circuits, overloads, AC ground faults (residual current faults) as well as pulsating DC ground faults.

#### NOTE:

**LN** = Up to 240V Single Phase System  $\underline{\text{with}}$  neutral connection.

**LL** = 120/240V Split Phase System with no neutral connection.

**LLN** = 120/240V Split Phase System with neutral connection.



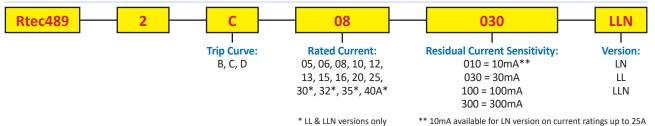
#### **Rtec489 Technical Specification**

Number of Poles	1+N (LN)		2 (LL), 2+N (LLN)
Rated Voltage (U <sub>n</sub> )	120 Vac	240 Vac	120 / 240 Vac
Rated Current	5, 6, 8, 10, 12, 13, 15, 16, 20, 25A		5, 6, 8, 10, 12, 13, 15, 16, 20, 25, 30, 32, 35, 40A
Rated Residual Operating Current (I <sub>n</sub> )	10*, 30, 100, 300mA		
Rated Short Circuit Capacity	10kA		
Rated Frequency	50/60Hz		
Overload Tripping	B, C and D		
Cable Size & Tightening Torque	Stranded wire sized 16 - 3 AWG (1.5mm² - 25mm²) @ 17.5lb-in (2.0Nm)		
	Solid wire sized 16 - 10 AWG (1.5mm² - 5.5mm²) @ 17.5lb-in (2.0Nm)		
	Solid wire sized 18 - 16 AWG (1mm² - 1.5mm²) @ 25lb-in (2.8Nm)		
Electrical Life	6000 Switching Operations		
Mechanical Life	10000 Switching Operations		

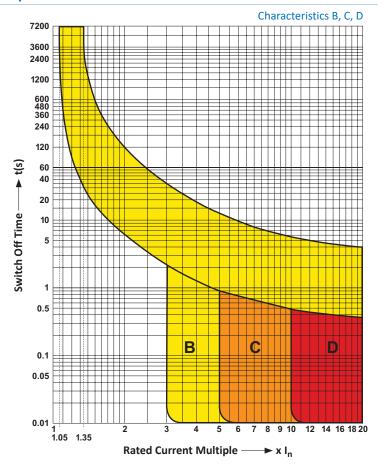
 $<sup>\</sup>ensuremath{^{*}}$  10mA available for LN version on current ratings up to 25A

### **Techna** CIRCUIT PROTECTION

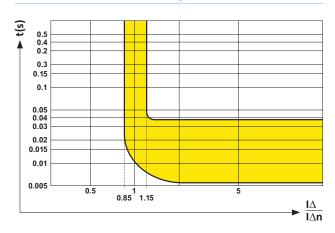
### **Rtec489 Ordering Scheme**



### **Rtec489 Overload Trip Curves**



### **Rtec489 Ground Fault Trip Curve**



### **Rtec489 Impedances and Power Losses**

Current Rating	Impedance (mΩ) / Power Losses (W)		
	10mA	30mA - 500mA	
6A	63mΩ / 2.27W	57mΩ / 2.06W	
10A	28mΩ / 2.84W	26mΩ / 2.57W	
13A	20mΩ / 3.44W	16mΩ / 2.75W	
16A	14mΩ / 3.70W	$12m\Omega$ / $3.01W$	
20A	13mΩ / 5.09W	10mΩ / 4.01W	
25A	12mΩ / 7.42W	9mΩ / 5.73W	
32A	-	6mΩ / 5.86W	
40A	-	6mΩ / 9.13W	