## FI Earth Leakage **Circuit Breakers**

FI compact Earth Leakage Circuit Breakers detect and interrupt earth (ground) faults. They are VDE approved for the European system of protecting people, animals, equipment and property from dangerous line-to-ground and shock hazard currents.

US applications include groundfault protection of equipment (GFPE) using the 10mA and 30mA fault current ratings, especially when high distributed capacitance or other leakages cause excessive nuisance trips at lower fault currents. Applications for the 300mA rating are equipment protection and fire prevention, limiting the energy of a fault to less than the minimum ignition energy for many materials.

## **Type Designation**

		•	
(a)	(b)		(c)

(a) = 2-2 pole; 4-4 pole

**(b)** = 1-16A; 2-25A; 3-40A; 4-63A

(c) = 01 - 10mA

= 03 - 30mA

= 30 - 300 mA

1	-	
ı	PICOS FIPZIOS  BASE SINS  BASE SI	
111		( (
	and a	CE





FI 4a

Maximum Rated Line Current	Fault Trip Current	Туре	Cat. No.		Fault Trip Current	Туре	Cat. No.	
16A	10mA	FI 21.01	15.921	<b>₽</b>				
25A 25A	30mA 300mA	FI 22.03 FI 22.30	15.922 15.924		30mA 300mA	FI 42.03 FI 42.30	15.926 15.929	
40A 40A	30mA 300mA	FI 23.03 FI 23.30	15.923 15.925		30mA 300mA	FI 43.03 FI 43.30	15.927 15.930	
63A 63A					30mA 300mA	FI 44.03 FI 44.30	15.928 15.931	

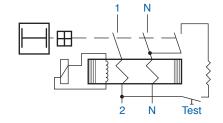
Earth Leakage with Auxiliary		eaker		Earth Leaka with Auxiliary	ge Circuit Br Contacts <sup>b</sup>	eaker	
25A	30mA	FI 22.03Y <b>15.932</b>	Ø¥E	30mA	FI 42.03Y	15.933	<b>₽</b> YE
40A	30mA	FI 23.03Y <b>15.934</b>	Ø <u>®</u>	30mA	FI 43.03Y	15.935	<u>û</u>
63A				30mA	FI 44.03Y	15.936	Ø <b>Ŷ</b> E

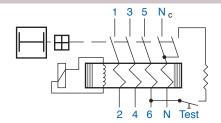
Voltage Rating (maximum)	240VAC, 50/60Hz (VDE: 125/220VAC, 50Hz)	415VAC, 50/60Hz (400Hz available on request) (VDE: 220/380VAC, 50Hz)
Short Circuit Capacity	Up to rated current (RC) 40A = 1.5kA, RC 63A = 2kA. 10I European Operation Class gL/gG: RC 16A = 63A fuse, R	
Fault Trip Current Calibration	FI trips are calibrated at less than fault trip current for ensured safety (Typical trip range between 66.6-83.3% fault trip current, e.g., typical trip at 20-25mA for fault RC of 30mA)	
Typical Life	Fully functional after 4,000 operations to DIN/VDE 0664 (CEE27) and 16000 additional fault current tri	
Standard Pack and Weight	1/290g (0.64 lb.); 1/390g (0.86 lb.) with auxiliary contact	1/450g (1.0 lb.) 1/550g (1.21 lb.) with auxiliary contact
Terminal Size Acceptability	16-6 AWG	14-3 AWG

## **Equivalent Circuit**

- a For 2-Phase applications, terminal 5 and 6 (next to Neutral terminals) must be connected to one phase for the test circuit to be operable.
- b Provided with mounted Auxiliary Switch, one N.O., one N.C. isolated feedthrough contact (Form X double make and Y double break), which adds 9mm (.35 in.) to the width dimension.
- <sup>c</sup> For voltage systems without a neutral conductor. Please use jumper from "1" or "3" to top "N" terminal. This will assure proper functioning of the "test" circuit.

Note: If the power system has a marked conductor, it must connect through the FI and not be grounded at any point downstream.





## **HFI11 - Auxiliary Switch**

Contact Rating	Wire Size	Туре	Cat. No.
6A / 230V AC	4mm <sup>2</sup> (12 AWG)	HFI11	15.991

Unit Weight: 45 grams (0.12 lb.)

Width: 9mm (.354in.)