

# DATA SHEET

# residual current operated circuit-breakers with integral overcurrent protection

FIC 32/0,30/3+N-A

sensitive to pulsating and alternating currents Type A, characteristic C
Article number 09955137



symbolic image



#### **Function**

RCCB/MCB combinations (RCBO) are residual current operated circuit-breakers with integral overcurrent protection for protecting systems in the event of a short-circuit and overload as per the requirements of VDE 0100 Part 430, and for protecting persons, farm animals and material items in the event of earth leakage currents as per VDE 0100 Part 410. Overload tripping occurs at currents in the overload range through a short-time delayed, heat-sensitive bimetal trip and at short-circuit currents through an electromagnetic instantaneous trip. FIB/FIC of this series have a rated switching capacity of 6 kA. They provide a labelling area in addition to the tripping indicator. Type A residual current circuit-breakers are sensitive to pulsating and alternating currents. This function is independent of the mains voltage. RCBOs with tripping characteristic C are primarily suitable for power circuits with high switch-on or peak currents, as their short-circuit trip value is five to ten times the rated current. Devices in standard design are intended for monitoring circuits with a rated voltage of 230 V or 400 V and a rated frequency of 50 Hz.

#### **Features**

mains-voltage-independent tripping, compact design for all rated currents, high short-circuit resistance, switch position indicator, separate indication of fault cause, strain-relief clamps with a wide terminal cross-section range on both connection sides, Neutral conductor right, high electromagnetic compatibility (immunity to interference for industrial applications)

#### Mounting

quick fastening to mounting rail, any installation position, supply as desired

### **Applications**

Protection of circuits in residential and purpose-built buildings as well as industrial facilities with TN-S, TT and TN-C-S networks. In IT networks, the RCCB/MCBs can be set to switch off in the event of a second earth fault, Not permitted for use in systems with TN-C networks; not permitted for protecting circuits in which the power electronics equipment may cause smooth DC residual currents or residual currents with frequencies not equal to 50/60 Hz.

#### **Accessories**

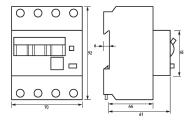
auxiliary switches DRCBO 4 Hi 1

## Technical Data

Technical Data	FIC 32/0,30/3+N-A
Series	FIC
Number of poles	3+N
Residual current type	A
Rated current (AC)	32 A
Rated residual current I∆n	o.3 A
Short-time delayed	false
Selective	false
min. Operating voltage range of test circuit	100 V
max. Operating voltage range of test circuit	254 V
Tripping characteristic	С
Operating voltage (AC)	max. 440 V

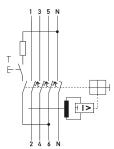
	ad circuit
Specification load disc	
	connect contact
Rated voltage (AC)	o V, 400 V
Rated current (AC)	32 A
Rated short-circuit current	6 kA
Surge current strength	o.25 kA
max. Total rated switching	6 kA
capacity	
Rated insulation voltage	440 V
Rated impulse withstand voltage	4 kV
Rated frequency 50	Hz, 60 Hz
Current heat loss per current path	5.1 W
Short-circuit backup-fuse SCPD	100 A
Back-up fuse type	gG
Overvoltage class	III
screw-type terminal	top, bottom (load circuit)
Neutral conductor position	right
Connection C1 Maximum 2 (conductors of sar number of conductors per terminal	me type and cross-section)
Cross section solid 1-wire: 1	mm <sup>2</sup> 35 mm <sup>2</sup>
Connecting capacity flexible 1-wire: 1	mm² 25 mm²
Cross section stranded 1-wire: 1 mm <sup>2</sup> 25 m	m²; 2-wire: 1 mm² 10 mm²
Ger	neral data
Operating position	pptional
Electrical endurance min. 2000	switching cycles
Ambient temperature -25	°C 40 °C
Housing type distribution	on board housing
Installation type Mounting	ng rail (35 mm)
Housing material the	rmoplastic
Protection class IP20 (in	nstalled: IP40)
Width	70 mm
Height	92 mm
Depth	74 mm
Installation depth	68 mm
Module widths	4
Weight	o.519 kg
Design requirements/Standards EN 61009-1, EN 6	51009-2-1, VDE 0664-20
Power limitation category	3
	2

## **Dimensions**



Dimensional drawing Group view

# Wiring example



Wiring diagram