

Isolating switches DX³-IS

technical characteristics

DX³-IS remote trip head isolating switches

Electrical characteristics

Thermal rating (Ith)	40 - 63 A 1 module/pole	100 - 125 A 1.5 module/pole
Terminals	Cage	Cage
Connection	flexible	6 to 50 mm ²
	rigid	6 to 70 mm ²
Insulation voltage (Ui)	500 V \sim	500 V \sim
Impulse withstand voltage (Uimp)	6 kV	6 kV
Category of use ⁽¹⁾	AC 22A / AC 23A	100 A = AC 22A / AC 23A 125 A = AC 22A
Short time withstand current (Icw)	1000 A during 1 s 1700 A during 0.5 s	1000 A during 1 s 1500 A during 0.5 s
Short-circuit making capacity (Icm)	3000 A	1500 A
No. of electrical operations	15000	10000
Protection index	IP 2X wired	IP 2X wired

(1) test conditions according to IEC 60947-3
AC 22 A: combined motor/resistor breaking with frequent operations
AC 23 A: inductive motor breaking at In/2 with frequent operations

DX³-IS isolating switches

Electrical characteristics

Thermal rating (Ith)	16 - 40 A 0.5 module/pole	40 - 63 A 1 module/pole	100 - 125 A 1 module/pole
Terminals	Cage	Cage	Cage
Connection	flexible	1.5 to 25 mm ²	4 to 35 mm ²
	rigid	1.5 to 16 mm ²	1.5 to 35 mm ²
Insulation voltage (Ui)	500 V \sim	500 V \sim	500 V \sim
Impulse withstand voltage (Uimp)	6 kV	6 kV	6 kV
Category of use ⁽¹⁾	AC 22 A	AC 22 A	AC 22 A
Short time withstand current (Icw)	750 A	2000 A	2500 A
Short-circuit making capacity (Icm)	1500 A	3000 A	3700 A
No. of electrical operations	30000	20000	5000
Protection index	IP 2X wired	IP 2X wired	IP 2X wired

(1) test conditions according to IEC 60947-3
AC 22 A: combined motor/resistor breaking with frequent operations

RCCBs DX³-ID

technical characteristics

DX³-ID - RCCBs (residual current circuit breakers)

Connection cross-section

RCCBs	Cable (mm ²)	
	Rigid	Flexible
Connection at top and bottom	50	35

AC type - Standard applications

AC type RCCBs detect sinusoidal AC residual currents
In the majority of cases (standard applications), they are used for AC current detection at 50 Hz

A type - Specific applications: dedicated lines

In addition to the characteristics of AC type RCCBs, A type RCCBs also detect pulsating DC residual currents
They are used whenever fault currents are not sinusoidal
They are particularly suitable for the following specific applications :
hobs, washing machines or materials that may produce DC fault currents, speed drives with frequency inverters, etc.

B type - Specific applications: dedicated lines

In addition to the characteristics of A type RCCBs, B type RCCBs also detect smooth DC residual currents
They are used whenever fault currents are not sinusoidal
They are particularly suitable for the following specific applications:
speed drives and inverters for supplying motors for pumps, lifts, textile machines, machine tools, photovoltaic installations, call centres, medical equipment, etc.

F type - Special applications

Type F RCCBs are devices which offer additional immunity to unwanted tripping which significantly exceeds the level required by the standard
They are also able to detect AC and DC residual currents (A type)
Detection of high frequency fault currents
Operation between - 25 °C and + 40 °C
They are used in special applications where:

- Loss of information is potentially damaging, e.g. power supply lines for computer equipment (banks, equipment on military bases, flight reservation centres, etc.)
- Loss of operation is potentially damaging (automated machinery, medical equipment, freezer cable, etc.)

They are also used:

- On sites where there is an increased risk of lightning strikes (see p. 80-83)
- On sites where cables are subject to high levels of interference (use of fluorescents, etc.)
- On sites where very long cables are used