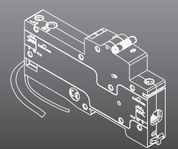
DANSON

Directions for use
Residual Current Circuit Breakers with Overcurrent Protection
RCBO



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A. Mounting

1.The correct function of the RCBO should be regularly checked by operating the test button. It is therefore recommended that the device is mounted in an accessible position.

2.The RCBO can be mounted on 35mm symmetrical din rail(EN 60715), see figures 1 and 2 .

Figure 1

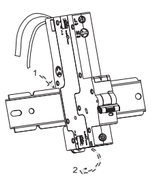
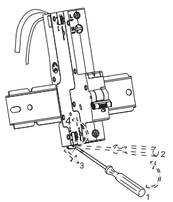


Figure 2



3.RCBO's complying with BSEN 61009-1 are designed for use in clean and dry environments. Should the device be installed in an atmosphere which is subject to high or excessive pollution. Please seek advice.

B.Connection

1.The incoming supply cables can be connected to the terminal as required. It is possible to release the wiring with connection busbars on the terminal , see figures 3 and 4.

2.To ensure the correct operation of the RCBO all the live and neutral conductors feeding the installation must be connected to the device.

3.All electrical equipment protected by the RCBO must be effectively earthed and the measured value of the earth

Figure 3

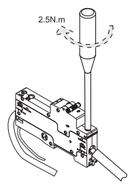
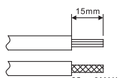


Figure 4



loop impedance in ohms must be such that the value of this product , and the operating current does not exceed 50A.

C.Test

1.After installation of the RCBO, it is recommended that the insulation resistance of all the protected live and neutral conductors is measured with respect to earth. This can be carried out by using a 500V insulation tester connected between the main earthing terminal and each of the RCBO outgoing terminals in turn with the device in the “OFF” position. The insulation resistance measured shall not be less that 1 megaohm.

2.Remember to press the “T” test button each month. The RCBO should trip, see figures 5 and 6. If this does not

happen, an authorised electrician should be alerted immediately because the system safety has been reduced.

Figure 5

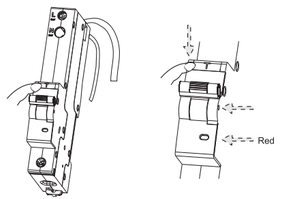
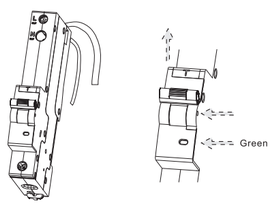


Figure 6



D.Overcurrent protection features

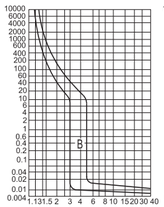
1.Residual current circuit breaker under ambient air temperature 30~35℃,

overcurrent action feature values without temperature compension are shown in table;

			Starting state	Tripping time	Expeacted result	Note
a	B、C	1.13In		t≥1h	Trip	
b	B、C	1.45In		t < 1h	Trip	Current steadily rising to a specified value within 5s
c	B、C	2.55In	Cold state	1s<t<60s (In≤32A) 1s<t<120s (In>32A)	Trip	
d	B	3In	Cold state	t≥0.1s	Trip	Current is switched on through the closed auxiliary switch
	C	5In				
e	B	5In	Cold state	t < 0.1s	Trip	Current is switched on through the closed auxiliary switch
	C	10In				

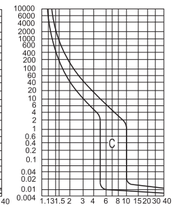
2.Tripping curves
Tripping curves are shown in figure 7 and figure 8

Figure 7 : BType



Multiple of rated current

Figure 8 : CType



Multiple of rated current

E. Technical data

See equipment plate data and refer below:

Rated current	A	6,10,16,20,25,32,40,50
Rated residual operating current	A	0.03
Number of poles	P	1P+N
Rated voltage	Va.c.	230
Trip type		AC,A
Rated conditional short-circuit current	A	10000
IP number		20
Mechanical life	times	10000

F. Danger

Hazard of electric shock, explosion or arc flash, then isolate and lock off, then label the power sources, repeat during installation or maintenance.
Failure to follow these instructions could result in death or serious injury.

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