

VB12L-40 RCBO (Magnetic type)



VeKON

General introduction

Function

VB12L-40 series RCBO mainly applies to the circuit of AC 50Hz, rated voltage 240V, rated current up to 40A. When electric shock occurs to human, leakage current or voltage in grid exceeds stipulated values, RCBO cuts off the fault power in a very short time to protect the safety of human and electrical equipments, it also owns the functions of overload and short circuit protection. In addition, it can switch on and off non frequently the electrical facilities and lighting circuit while the circuit works well.

Application

Lighting and distribution system for industry and commerce system.

Conforms to

IEC/EN61009-1 & 61009-2-1

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Main parameters

Form 1

Types	Values
Rated voltage(Un)	240V AC
Rated current(In)	6A,10A,16A,20A,25A,32A,40A
Rated residual operated current(I Δ n)	0.03A,0.1A,0.3A
Rated residual non tripping current(I Δ no)	0.5I Δ n
DC component	AC type, A type
Poles	1P+N
Instant tripping type	B type, C type
Rated short circuit breaking capacity(Icn)	6000A
Rated residual making and breaking capacity(I Δ m)	500A
Breaking time of residual operated current	See Form 2 and 3
Overcurrent protection properties	See Form 4, Diagram 1 and 2
Mechanical and electrical life	See Form 5
Connection wire	See Form 6
Tightening torque	1.5N.m
Nominal temperature $^{\circ}$ C	30
Operated ambient temperature $^{\circ}$ C	-25~+40
Stored ambient temperature $^{\circ}$ C	-25~+70
Pollution level	2
Protection level	IP20
Mounting type	II

Breaking time of AC type

Form 2

Type	In(A)	I Δ n(A)	Breaking time(s) when I Δ equals to the below values			
			I Δ n	2I Δ n	5I Δ n	0.25A,5A~200A,500A
AC	6~40	0.03,0.1,0.3	0.3	0.15	0.04	0.04

Breaking time of A type

Form 3

Type	In(A)	I Δ n(A)	Breaking time(s) when I Δ equals to the below values				
			1.4I Δ n	2.8I Δ n	7I Δ n	0.35A	350A
A	6~40	0.03	0.3	0.15		0.04	0.04
		0.1,0.3	0.3	0.15	0.04		0.04

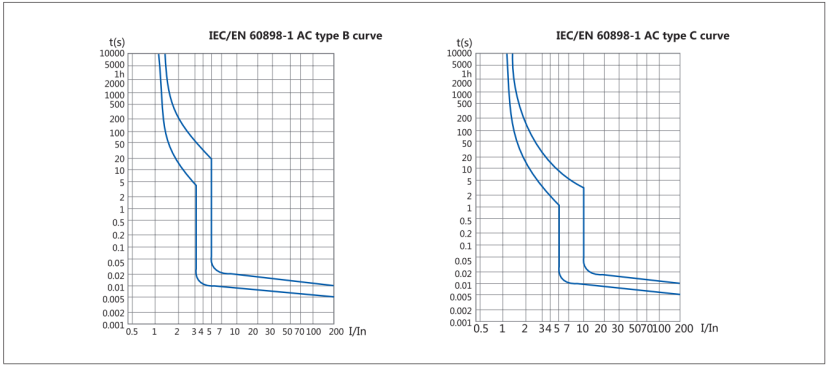
Overcurrent protection properties(nominal temperature 30 $^{\circ}$ C)

Form 4

Item	Type	Test curren	Initial status	Tripping or non tripping time limit	Expected resul	Remarks
a	B,C	1.13In	Cold	$t \leq 1h$	Non tripping	
b		1.45In	Test following the previous procedure; Process after test	$t < 1h$	Trip	Current increases to stipulated value within 5s
c		2.55In	Cold	$1s < t < 60s$ (对 Ins32A) $1s < t < 120s$ (对 In > 32A)	Trip	
d	B C	3In 5In	Cold	$t \leq 0.1s$	Non tripping	Connection of current by opening auxiliary switch
e	B C	5In 10In	Cold	$t \leq 0.1s$	Trip	Connection of current by opening auxiliary switch

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Diagram 1 and 2



Mechanical and electrical life

Form 5

Category	Time	Operation Time(time/hour)
Mechanical life	10000	240
Electrical life	2000	120

Connection wire

Form 6

Rated current In(A)	Section area of copper wire S(mm²)
6	1.0
10	1.5
16,20	2.5
25	4
32	6
40	10

Overall and mounting sizes(mm)

