Usage and its scope of application

RDF16 series powder filled cartridge knife type contact fuse is suitable for the industrial electric distribution device of AC 50Hz, rated voltage up to 500/690V, rated current up to 1250A, as the use of the over-load and short-circuit protection for the circuit.

Confirms to: GB13539.1-2008/IEC60269-1:2006; GB/T13539.2-2008/IEC 60269-2:2006



Model and its implication

RD F 16 - □ / □

- Rated current of fuse link
- Fuse size
- Design serial No.
- Powder filled cartridge fuse (NT fuse system)
- Enterprise code



Normal operating condition and installation condition



3.1 Ambient temperature: -5℃~+40℃, average value within 24h does not exceed +35℃, and the average value within one year should be less than this value.

3.2 Altitude of installation place does not exceed 2000m

3.3 Atmosphere condition

The air is clean, and its relative humidity does not exceed 50% when the ambient temperature is at 40 ℃. It is allowed relatively high humidity at the relatively low temperature, for example, the relative humidity can reach 90% when 20℃, and it should take consideration of the condensation produced on the surface of product that is due to the temperature variation.

3.4 Voltage

When the rated voltage is 500V, the maximum value of system voltage does not exceed 110% of fuse's rated voltage; When the rated voltage is 690V, the maximum value of system does not exceed 105% of fuse's rated voltage.

Note: the fuse link is fusing in a significantly lower than the rated voltage, the fuse indicator or fuse impactor may not act.

3.5 Installation category: III

3.6 Grade of pollution: not less than 3

3.7 Installation position

This series of fuse can be vertically, horizontally or obliquely installed at those operation occasions of without obvious shake, impact vibration.

Note: if the fuse is used in the different from the normal installation specified condition, it should be negotiated with the manufacturer.

Scope of breaking and usage category

Breaking scope of this series fuse link is "g", the usage category is "G", which is the general use full scope of breaking capacity fuse link.

Structure characteristics

This series of fuse is consisted of the fuse link and fuse base, remove the fuse link can choose the fusion loading component/handle.

The fuse link is consisted of fuse tube, melt, filler and indicator. The variable cross-section melt of pure copper belt or wire is sealing into the high strength fuse tube, there filled into the fuse tube with the high purity of quartz sand that is processed by chemical as the arcing medium. Two ends of the melt are spot welded to be firmly electric connected with the end plate (or connecting plate), which forms the knife contact plug-in type structure. The fuse link can be with fusing indicator or impactor, it can display fusing (indicator) or convert to various signals and automatically change-over the circuit (impactor) when the melt is fusing.

The fuse base is combined with flame - retarded DMC plastic baseboard, and the wedged type static contacts, which appears open type structure. The front plate wiring terminal is to be connected with the external wire by the screw. There pre-remains two installation holes. The whole fuse holder has the advantages of good heat dissipation effect, high tensile strength, reliable contacts and convenient operation, etc.

The fusion loading component/handle is formed by the thermosetting plastic film, which is good insulation performance, simple structure and freely operate.

Main technique parameter

Table 1

Size	Rated voltage	Rated breaking capacity	Rated current A		Max. power consumption W
			Fuse	Fuse link	
00	500V / 690V		160	16、20、25、32、40、50、63、80、100、125、160	12
1			250	80、100、125、160、200、250	23
2			400	125、160、200、250、300、315、400	34
3			630	315、400、500、630	48

External and installation dimension

7.1 External and installation dimension of fuse link

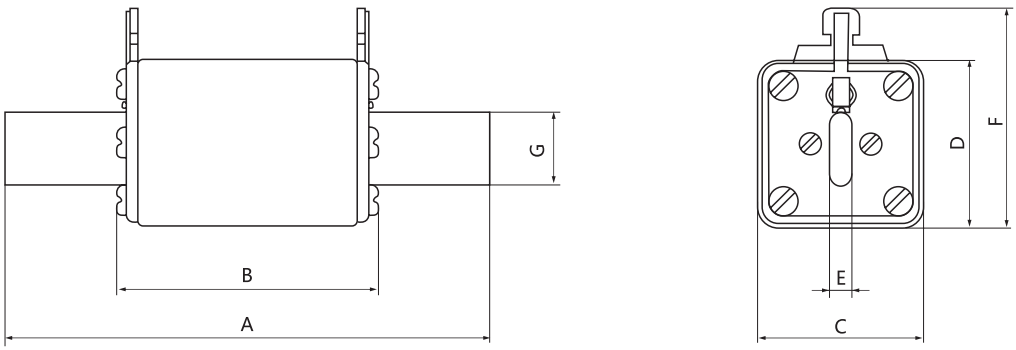


Table 2

Size	Code						
	A	B	C	D	E	F	G
00C	78.5	54	21	40.5	6	42.5	15
00	78.5	54	29	48	6	60	15
1	135	70	48	48	6	62	20
2	150	70	60	60	6	72	25
3	150	70	67	68	6	82	32

7.2 External and installation dimension of fuse base

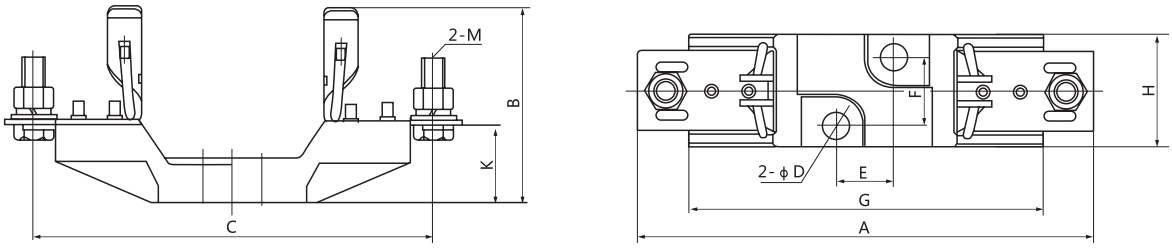
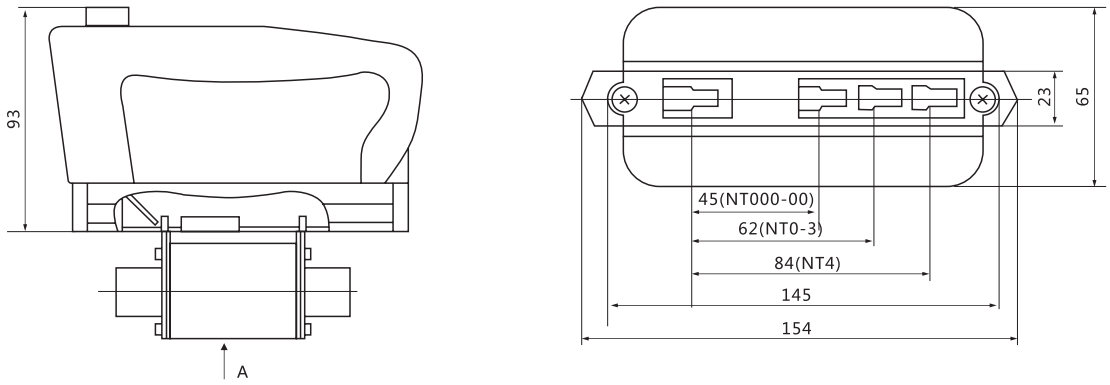


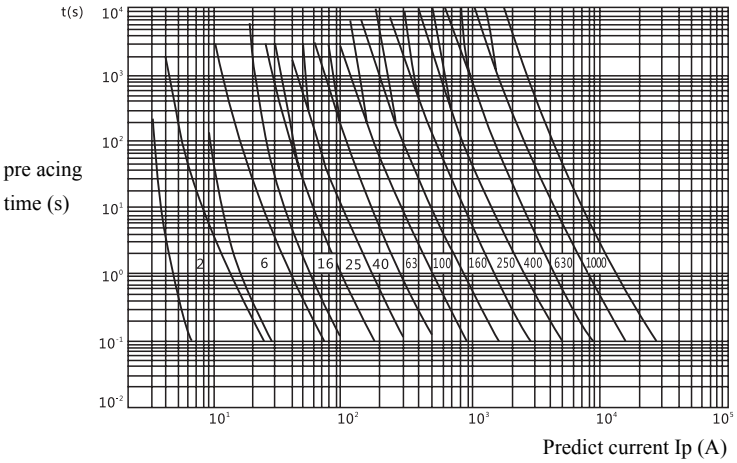
Table 3

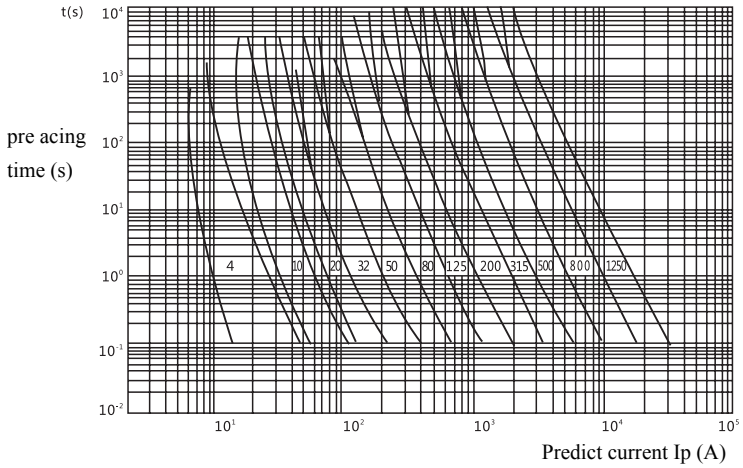
Size	Code									
	A	B	C	D	E	F	G	H	K	M
00	120	58	100	7.5	25	-	95	34	23	8
1	200	90	175	10.5	25	30	160	48	38	10
2	220	90	200	10.5	25	30	160	48	38	10
3	240	95	210	10.5	25	30	160	48	38	12

7.3 External and installation dimension of fusion loading component

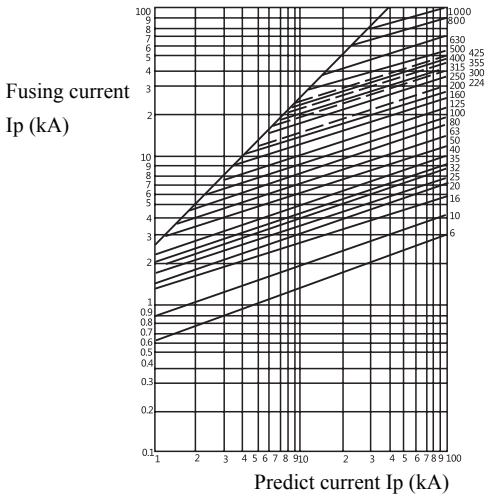


Fuse link time-current characteristics curve





Fuse cross section current characteristics curve



Rated power consumption of fuse link

Table 4

Size	Rated current A	Max. rated power consumption Pn W			
		IEC 60269	EN 60269	VDE 063	PEOPLE
00	16	12	12	7.5	2.1
	25	12	12	7.5	2.5
	32	12	12	7.5	3.5
	40	12	12	7.5	4.5
	50	12	12	7.5	4.7
	63	12	12	7.5	5.5
	80	12	12	7.5	5.7
	100	12	12	7.5	8.1
	125	12	12	7.5	9.9
	160	12	12	-	11.5
1	80	23	23	23	7.5
	100	23	23	23	9.3
	125	23	23	23	10.2
	160	23	23	23	13.9
	200	23	23	23	17.7
	250	23	23	23	23.5
2	160	34	34	34	12.9
	200	34	34	34	17.9
	250	34	34	34	22.4
	315	34	34	34	25.7
	400	34	34	34	30.6
3	315	48	48	48	25.4
	400	48	48	48	32.8
	500	48	48	48	35.7
	630	48	48	48	41.5

▸ Ordering Notice

It required to be noted when ordering: product name and model No., voltage of fuse link, current of fuse link, and quantity, the fuse base or fuse link can also be ordered separately.

For example, 1. Fuse link RDF16-00 500V/160A, 1000 pcs, fuse base RDF16-00 1000 pcs, it can be also written as fuse RDF16-00 500V/160A 1000 sets;

2. Fuse link RDF16-1 690V/200A 8000 pcs, fuse base RDF16-1 600 pcs