

### ANM9 Series molded case circuit breakers

#### **Application**

ANM9 Intelligent type MCCB is suitable for using in the circuit of AC 50/60Hz, please make remarks when ordering, rated insulating voltage 750V, rated working voltage below 690V, and rated current is 16A to 1250A for distributing electric energy, and infrequently OFF/ ON under normal condition.

The intelligent MCCB, which the rated frame rank current is 800A and below, also can be used for infrequently switching and starting of squirrel cage motor and for protecting motor from over-load, short circuit and under-voltage.

Working conditions:

- Not over altitude 2000m;
- $\bullet$  Ambient temperature is between -25  $^{\circ}\!\!\!\!\!\!C$  and +40  $^{\circ}\!\!\!\!\!\!C$  ;

Working in the medium which not any explosive, not enough dielectric to corrode metal, no gas to damage insulation and electric conduction dust;

- Working in the place would not be invaded by rain and snow;
- Pollution degree3;
- Mounting type.

### The features of the STR







•ANM9 Series molded case circuit breakers of which the main technical performance has reached the level of international equivalent products.ANM9 MCCB has the advantages of compact structure, small volume, high breaking capacity, zero arcing, strong acclimation, installing conveniently and so on.

• ANM9 Series intelligent molded case circuit breakers, adopt microprocessor technology to avoid the short point of traditional ones can be influenced by environment temperature owing to adopting bimetal.

### Classification

- According to using: distribution circuit protection type, motor production type;
- According to connection mode: front panel connection, back panel connection, plug-in connection;
- According to operating way: for direct handle operating, for motor operator operating, for rotary handle operating.
- According to the number of pole: 3,4 pole.
- According to the accessory: with accessory setting, and without accessory setting.

#### The main capability index

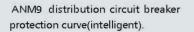
#### Frame grade, rated current

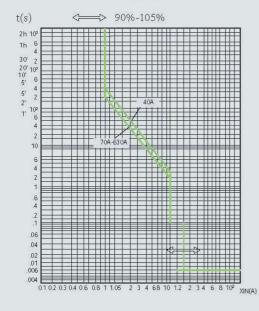
Current grade	100model	160model	250model	400model	630model	1250model
Adjustable rated current range	40A-100A	64-160A	100A-250A	160A-400A	250A-630A	500A-1250A



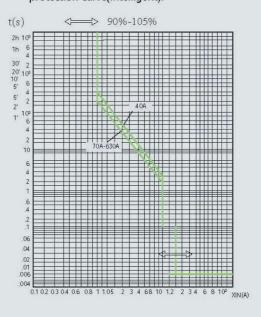
The frame current grad (A)	Rated current	Tims of Short delay(times)	Notice				
100model	40-100	2-10					
160model	64-160	2-10	1:Grades to adjust:2,3,4,5,6,7,8,10				
250model	100-250	2-10	2:Rated current can be adjusted, and has 48 grades.				
400model	160-400	2-10	3:Distribute electric instantaneous multiple up from 11 times				
630model	250-630	2-10	4:Motor instantaneous multiple up from 12 times.				
1250mode	500-1250	2-10					

#### The protection of ANM9 serise breakers (intelligent)





## ANM9 power circuit breaker protection curve(intelligent).

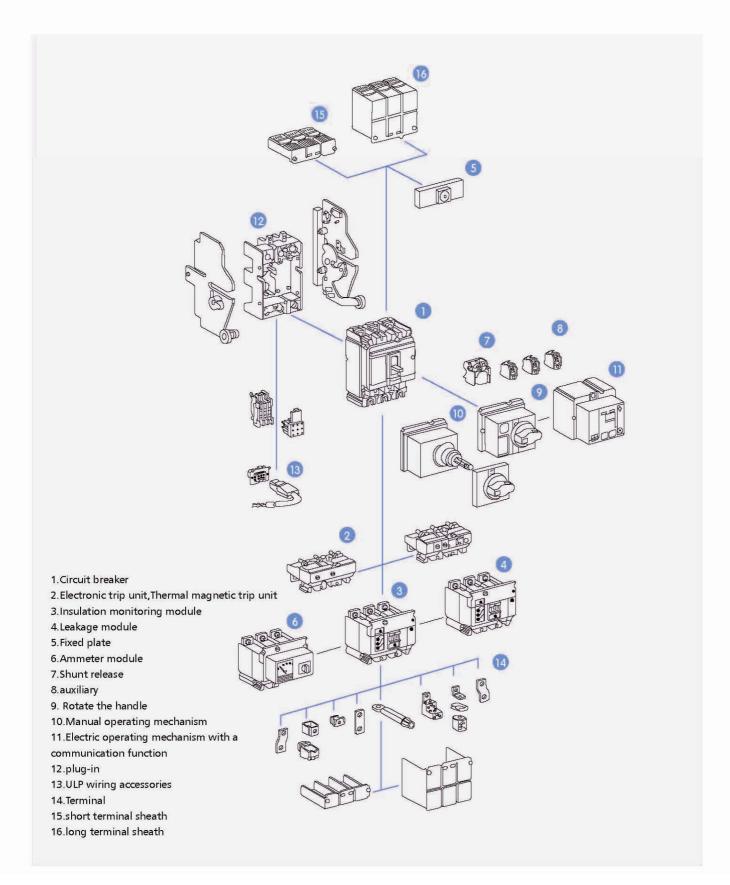


The protection of the thermodynamic distribution circuit breaker  $^{tm}$  (comply with GB14048.2) Ambient temperature + 40  $^{\circ}\mathrm{C}$ 

Action charac-teristic	Ambient temp	Free of the device of the			
Rated current In (A)	1.05In(cold state ) inoperative time(h)	1.30In(heat state ) inoperative time(h)	Error of instantaneous trip		
ln ≤ 63	≥ 1h	<1h	10ln ± 20%		
63 <in 1250<="" td="" ≤=""><td>≥ 2h</td><td>&lt;2h</td><td>10ln ± 20%</td></in>	≥ 2h	<2h	10ln ± 20%		



### Circuit breaker accessories diagram





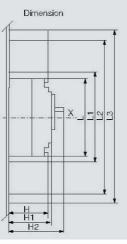
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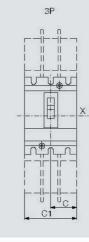
The protection of the thermodynamic distribution circuit breaker<sup>tm</sup> (comply with IEC60947-2) Ambient temperature+40°C

		1.0In(cold state ) 1 inoperative time(h in		1.2In(heat state ) inoperative time(h)		17. ÷		7.2In(cold state ) inoperative time(h		Error of instantaneous trip			
63 <in 250<="" th="" ≤=""><th colspan="2">63<in 250<="" th="" ≤=""><th colspan="2">≥ 2h</th><th colspan="2">&lt;2h</th><th colspan="2">≤ 4min</th><th colspan="2">2s<ln 10<="" th="" ≤=""><th colspan="3">10ln±20%</th></ln></th></in></th></in>	63 <in 250<="" th="" ≤=""><th colspan="2">≥ 2h</th><th colspan="2">&lt;2h</th><th colspan="2">≤ 4min</th><th colspan="2">2s<ln 10<="" th="" ≤=""><th colspan="3">10ln±20%</th></ln></th></in>		≥ 2h		<2h		≤ 4min		2s <ln 10<="" th="" ≤=""><th colspan="3">10ln±20%</th></ln>		10ln±20%		
Туре	ANM9	-100	ANM	9-160	ANM9	-250	ANM9 -400		ANM9 -630		ANM9-1250		
		Main teo	chnical p	oarameter(	comply w	ith GB140	048.2/IEC6	60947-2)					
Rated current(A)	1	00	1	600	2	50	40	00	6.	30	800,1000,125		
Number pole	3	3,4 3,		3,4 3,4		,4	3,4		3,4		3		
Rated insulation voltage (V)	850 85		350	850		850		850		850			
Rated working voltage (V)	6	690 69		590	690		690		690		690		
Test life(no hoad/0.5In load)	8500/1300 700		00/900 7000/900		0/900	4000/800		4000/800		1000/400			
Rated impulse withstand voltage (kV)	7	7.5		7.5 7.5		.5	7.5		7.5		7.5		
Ultimate short circuit break	ing capa	city icu(kA	N)										
220V/230V	75	80	75	80	75	80	80	90	80	90	80	90	
380V/415	25	45	30	45	30	45	42	60	42	60	42	60	
400V	25	40	30	40	30	40	40	55	40	55	40	55	
500V	18	30	25	30	25	30	30	45	30	45	30	45	
600V	7	9	7	9	8	10	10	18	10	18	10	18	
Service short circuit breaking capacity lcs	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Usage sort		Ą		A	А		А		А		А		
Protect Ir form over current	40-	40-100 64		64-160 100		0-250		160-400		250-630		500-1250	
Instantaneous times	2-	2-10		2-10 2-1		10	2-10		2-10		2-10		
Three phase unbalance protection N=In/2,N=In		Aim at the protection of motor and depend on consumer's advises											

# Overall and mounting dimensions Installation abot ANM9-100~630

Туре	H	H1	H2	L	L1	L2	L3	С	C1	C2
ANM9/100/160/250D/N/H/L	81	86	111	160	188	321	357	52.5	105	140
ANM9/400/630D/N/H/L	105	110	168	255	285	480	474	70	140	185





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