


## Interruptores Caja Moldeada AM2



1. Corriente Nominal de 12.5 a 1600 Amperes.
2. Nivel de aislamiento de 750 Vac.
3. Tensión de Operación máxima 690Vac
4. Norma IEC60947-2.
5. Unidades de protección térmico-magnética y electrónica.
6. Unidades de protección 22ME, 53UE a pedido.

CÓDIGO	Corriente Nominal (A)	Unidad de Protección	Capacidad de Ruptura (kA)	Regulación Térmica (A)	Regulación Magnética (A)
AM2-100N-63-TM	63	Térmico-Magnético	25	50,4-63	315-630
AM2-100N-80-TM	80	Térmico-Magnético	25	64-80	400-800
AM2-100N-100-TM	100	Térmico-Magnético	25	80-100	500-1000
AM2-160N-125-TM	125	Térmico-Magnético	36	100-125	625-1250
AM2-160N-160-TM	160	Térmico-Magnético	36	128-160	800-1600
AM2-250N-200-TM	200	Térmico-Magnético	36	160-200	1000-2000
AM2-250N-250-TM	250	Térmico-Magnético	36	200-250	1250-2500
AM2-400N-315-TM	315	Térmico-Magnético	45	252-315	1575-3150
AM2-400N-400-TM	400	Térmico-Magnético	45	320-400	2000-4000
AM2-630N-500-TM	500	Térmico-Magnético	45	400-500	2500-5000
AM2-630N-630-TM	630	Térmico-Magnético	45	504-630	3150-6300
AM2-100N-40-22SE	40	Electrónica 22SE	45	16-40	80-400
AM2-100N-100-22SE	100	Electrónica 22SE	45	40-100	200-1000
AM2-160N-160-22SE	160	Electrónica 22SE	45	64-160	320-1600
AM2-250N-250-22SE	250	Electrónica 22SE	45	100-250	500-2500
AM2-400N-400-23SE	400	Electrónica 23SE	45	160-400	800-4000
AM2-630N-630-23SE	630	Electrónica 23SE	45	252-630	1260-6300
AM2-1250N-800-Mic	800	Micrologic	37.5	320-800	1.5-10Ir
AM2-1250N-1000-Mic	1000	Micrologic	37.5	400-1000	1.5-10Ir
AM2-1250N-1250-Mic	1250	Micrologic	37.5	500-1250	1.5-10Ir
AM2-1600N-1600-Mic	1600	Micrologic	37.5	640-1600	1.5-10Ir

		AM2-100N	AM2-160N	AM2-250N	AM2-400N	AM2-630N
	Bobina de Disparo (220/230Vac)	AM2-100N-BD	AM2-160N-BD	AM2-250N-BD	AM2-400N-BD	AM2-630N-BD
	Bobina de Mínima Tensión (220/230Vac)	AM2-100N-BM	AM2-160N-BM	AM2-250N-BM	AM2-400N-BM	AM2-630N-BM
Contactos Auxiliares Posición		AM2-630N-CA				
Contactos Auxiliares Falla		AM2-630N-CF				

## AM2 Series Moulded Case Circuit Breaker



AM2-100N/3P



AM2-250N/3P



AM2-400N/3P



AM2-630N/3P

### 1. Application

AM2 series moulded case circuit breaker is one of breaker which adopts international advanced design, manufacture technology to develop. The rated insulating voltage is 750V, suitable for AC 50/60Hz, rated working voltage 690V or below, rated working current is 12.5A to 1600A of circuit and used in distributing electric energy, and non-frequent breaking in the normal conditions, protecting the circuit & equipment from overload & under voltage, circuit breaker with rated frame current 400A or below, can be used in mousecage motor's non-frequent start, breaking during working, protecting motor from overload, short circuit & undervoltage, the product conforms to IEC60947-2 standard.

### 2. Main Technical Specifications

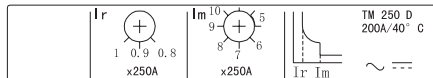
Table 1

Type	Pole	Rated insulating voltage (V)	Rated operating voltage (V)	Rated ultimate short circuit breaking capacity Icu (kA) at 380/415V	Rated service short circuit breaking capacity Ics at 380/415V(kA)	Operation performance		Utilization category			
						ON	OFF				
AM2-100N	3, 4 pole	750	690 or below	25	25	1500	8500	A			
AM2-100H				70	70						
AM2-100L				150	150						
AM2-160N				1000	7000	36	36				
AM2-160H						70	70				
AM2-160L						150	150				
AM2-250N						1000	7000		36	36	
AM2-250H									70	70	
AM2-250L									150	150	
AM2-400N				3 pole	750	690 or below	45		45	1000	4000
AM2-400H							70		70		
AM2-400L							150		150		
AM2-630N	1000	4000	45				45				
AM2-630H			70				70				
AM2-630L			150				150				
AM2-1250N	3 pole	750	690 or below	50	37.5	1000	4000				
AM2-1600N				50	37.5						

Note:1. The N-pole breaker has no protection which closing and opening with the other three poles.  
2. The type of thermal magnetic for AM2-400/630 has no four poles.

### 3 Trip Units Main Technical Parameter

Thermal magnetic release



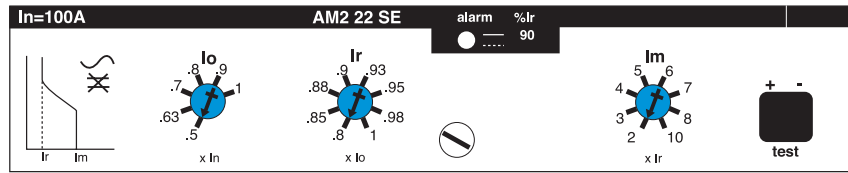
Type	Rated current In(A)	Note
AM2-100	12.5, 16, 20, 25, 32, 40, 50, 63, 80, 100	T adjustable (0.8~1In) M adjustable (5~10In)
AM2-160	16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 160	
AM2-250	160, 180, 200, 225, 250	
AM2-400	315, 350, 400	
AM2-630	400, 500, 630	T adjustable (0.8~1In) M fixed
AM2-1250	800, 1000, 1250	
AM2-1600	1000, 1250, 1600	

● **Electronic release**

**AM2 22SE:** protection of low-voltage distribution networks for AM2-100\160\250



AM2-250N/4P



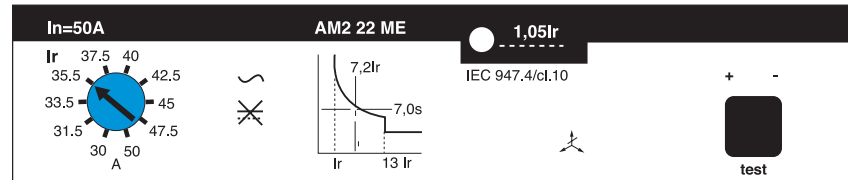
1. Overload protection with adjustable threshold
2. Short-circuit protection with adjustable threshold
3. Load indication : light at 90% of  $I_r$  setting threshold;  
Flashing at 105% or more of  $I_r$  setting threshold

Type	Rated current $I_n$ (A)	Note
AM2-100	40、100	$I_r=0.4\cdots 1 \times I_n$ (adjustable 48 setting) Tripping between $1.05\cdots 1.3 \times I_r$ (IEC60947-2) <b>(Long-time overload protection)</b> $I_m=2-3-4-5-6-7-8-10 \times I_r$ <b>(Short-circuit protection)</b>
AM2-160	40、100、160	
AM2-250	40、100、160、250	



AM2-630N/4P

**AM2 22ME:** protection of motor for AM2-100\160\250



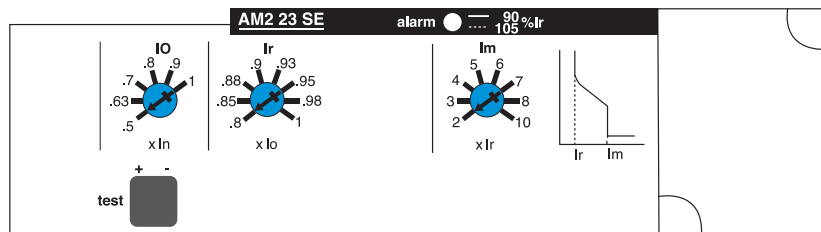
1. Overload protection with adjustable threshold, as defined by IEC60947-4 (2) tripping class 10
2. Short-circuit protection with fixed threshold ( $13\times I_r$ )
3. phase failure protection (tripping time delay between 3.5s-6s)
4. Load indication : dark less than 105% of  $I_r$  setting threshold;  
Flashing at 105% or more of  $I_r$  setting threshold

Type	Rated current $I_n$ (A)	Note
AM2-100	40、50、80、100	$I_r=0.6-0.63-0.67-0.71-0.75-0.80-0.85-0.90-0.95-1 \times I_n$
AM2-160	40、50、80、100、150	
AM2-250	40、50、80、100、150、220	

**AM2 23SE:** protection of low-voltage distribution networks for AM2-400\630



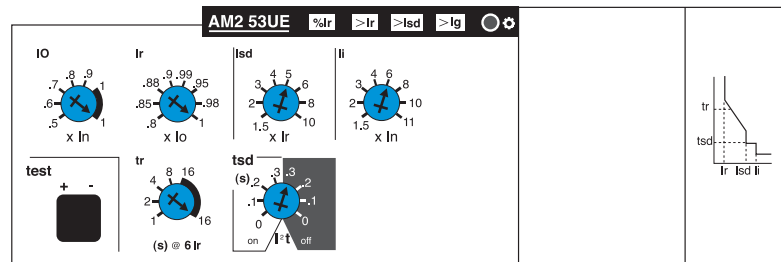
AM2-1600N



1. Overload protection with adjustable threshold
2. Short-circuit protection with adjustable threshold
3. Load indication : light at 90% of  $I_r$  setting threshold;  
Flashing at 105% or more of  $I_r$  setting threshold

Type	Rated current In(A)	Note
AM2-400	400	$I_r = 0.4 \dots 1 \times I_n$ (adjustable 48 setting) Tripping between $1.05 \dots 1.3 \times I_r$ (IEC60947-2) <b>(Long-time overload protection)</b> $I_m = 2-3-4-5-6-7-8-10 \times I_r$ <b>(Short-circuit protection)</b>
AM2-630	630	

**AM2 53UE:** protection of low-voltage distribution networks for AM2-400\630



1. Overload protection with adjustable threshold, as defined by IEC60947-2
2. Short-circuit protection with adjustable threshold
3. Instantaneous short-circuit protection
4. Earth fault protection with adjustable threshold
5. Load indication : light at 90% of Ir setting threshold;  
Flashing more than Ir setting threshold
6. Fault indication

LEDs indicates the type of fault that caused tripping

Overload (**LT** protection) or abnormal component temperature (**>Ir**);

Short-circuit (**ST** or instantaneous protection)( **>Im**);

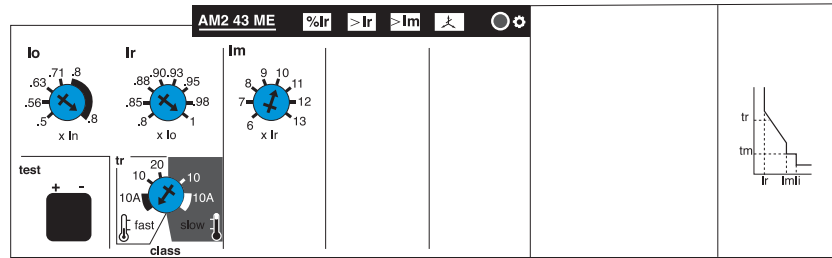
Earth fault (if earth fault protection option is present)(**Ig**);

Microprocessor malfunction (both (**>Ir**) and (**>Im**) LEDs go on ,plus the (**Ig**) LEDs if earth fault protection option is present )

Battery powered. Spare battery are supplied in an adapter box. When a fault occurs , the LED indicating the type of fault ,lights for about 10 minutes . The information is however stored in memory . The LED can be illuminated by pressing the test pushbutton. The LED automatically goes off and the memory is cleared when the circuit breaker is reset .

Type	Rated current In(A)	Note
AM2-400	400	$I_r = 0.4 \dots 1 \times I_n$ (adjustable 48 setting) Tripping between $1.05 \dots 1.3 \times I_r$ (IEC60947-2) at $6 \times I_r$ Trip time: 1s, 2s, 4s, 8s, 16s(adjustable) <b>(Long-time overload protection)</b> $I_{sd} = 1.5-2-3-4-5-6-7-8-10 \times I_r$ Trip time: 0s, 0.1s, 0.2s, 0.3s adjustable+I <sup>2</sup> t <b>(Short-circuit short time delay protection)</b> $I_i = 1.5-2-3-4-6-7-8-10-11 \times I_r$ <b>(Instantaneous short-circuit protection)</b> $I_g = 0.1-0.2-0.3-0.4-0.5-0.6-0.7-0.8-1 \times I_r$ Trip time: 0.1s, 0.2s, 0.3s, 0.4s adjustable+I <sup>2</sup> t <b>(Earth fault protection) (If option is present)</b>
AM2-630	630	

### AM2 43ME: protection of motor for AM2-400\630



1. Overload protection with adjustable threshold, as defined by IEC60947-4 (2) tripping class 10A,10 and 20
2. Short-circuit protection with adjustable threshold (6...13xIr)
3. Phase failure protection (built-in electronic release: operates unbalanced single-phase current at 40% and more than ) (tripping time delay  $4s \pm 10\%$ ), as defined by IEC60947-4.1
4. Load indication : Flashing more than Ir setting threshold
5. Fault indication

LEDs indicates the type of fault that caused tripping

Overload (**LT** protection) or abnormal component temperature (**>Ir**);

Short-circuit (**ST** or instantaneous protection) (**>Im**);

Phase failure (**right LED**);

Microprocessor malfunction ( **>Ir** ) ( **>Im** ) and phase failure LEDs all go on )

Battery powered. Spare battery are supplied in an adapter box. When a fault occurs ,the LED indicating the type of fault ,lights for about 10 minutes . The information is however stored in memory . The LED can be illuminated by pressing the test pushbutton. The LED automatically goes off and the memory is cleared when the circuit breaker is reset .

Type	Rated current In(A)	Note
AM2-400	400	$I_r = 0.4 \dots 1 \times I_n$ (adjustable 48 setting) Trip degree: class 10A, 10,20(IEC60947-4) <b>(Long-time overload protection)</b> $I_m = 6-7-8-9-10-11-12-13 \times I_r$ <b>(Short-circuit protection)</b>
AM2-630	630	



Under-voltage release  
Shunt release



Auxiliary contact  
Alarm contact

### 4. Accessories

Accessories	Rated operating voltage	Consumption		For type
		Pick-up	Seal-in	
Shunt release (MX)	24V	<10VA	<5VA	AM2-100~630
	100V			
Under-voltage release(UN)	220/230V	<10VA	<5VA	
	380/400V			
Accessories	Rated operating voltage	Rated operating current		For type
		AC12	AC15	
Auxiliary contact (OF)	380/400V	6	3	AM2-100~630
Alarm contact(AL)	380/400V	6	3	

## Rotary handle

### ● Direct rotary handle

Degree of protection:IP40

Function: 1) suitability for isolation

2) indication of three positions 0(off) I(on) and tripped

3) press “push to trip” button, can trip-free

4) visibility of and access to trip unit settings

5) the circuit breaker can be locked in the off position by one to three padlocks , diameter 5 to 8mm(not supplied)



Rotary handle

### ● Extended rotary handle

Degree of protection:IP55

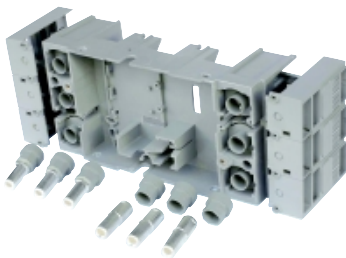
Function: 1) Suitability for isolation

2) Indication of three positions 0(off) I(on) and tripped

3) Visibility of and access to trip unit settings when the door is open

4) Door opening prevented when circuit breaker is on

5) The circuit breaker can be locked in the off position by one to three padlocks , diameter 5 to 8mm(not supplied).Locking prevents opening of the switchboard door



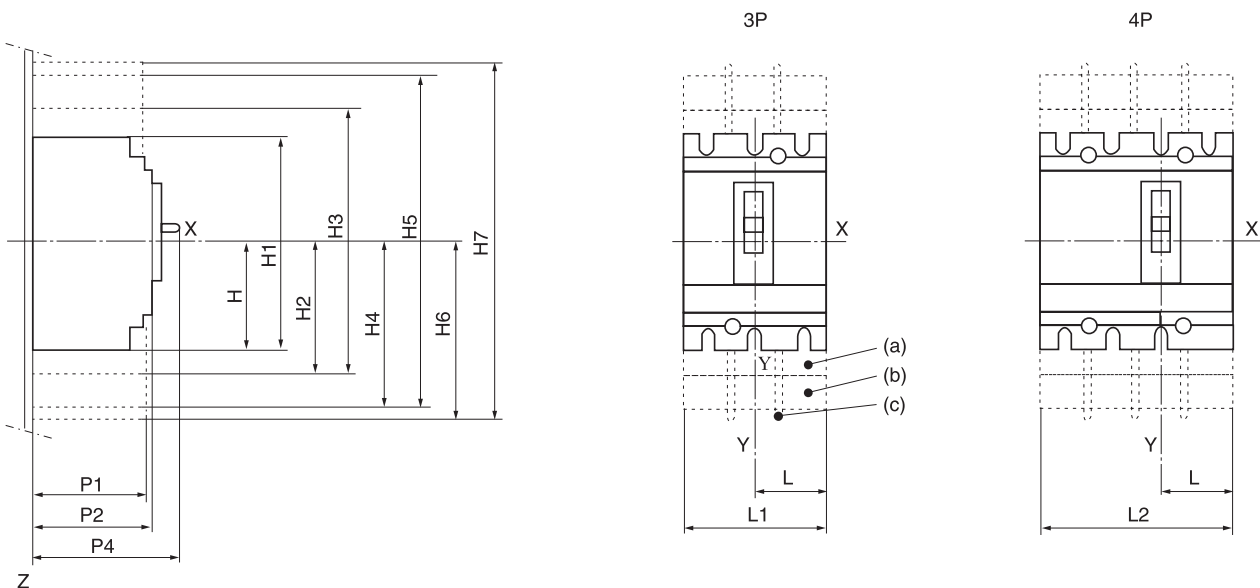
Plug-in base

**5. Installation:** Circuit breaker may be mounted vertically, horizontally or flat on their back without any derating of characteristics.

**6. Fix:** Mounting on backplate , mounting on rails

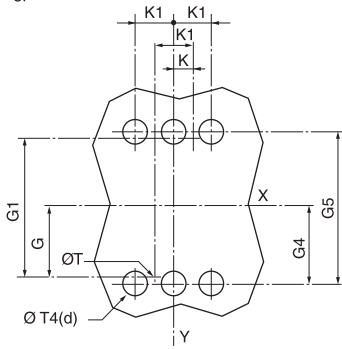
**7. Connection:** Front panel connection , back panel connection , plug-in connection

## 8. Outline and Installation Dimension

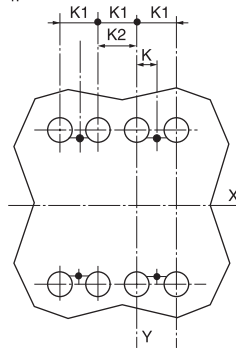


### Mounting on backplate

3P

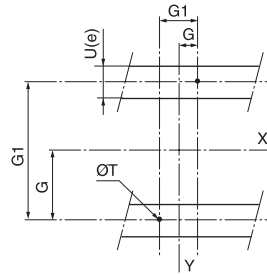


4P

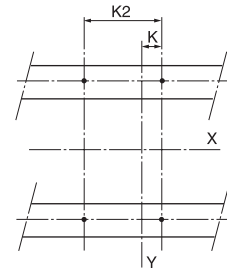


### Mounting on rails

3P

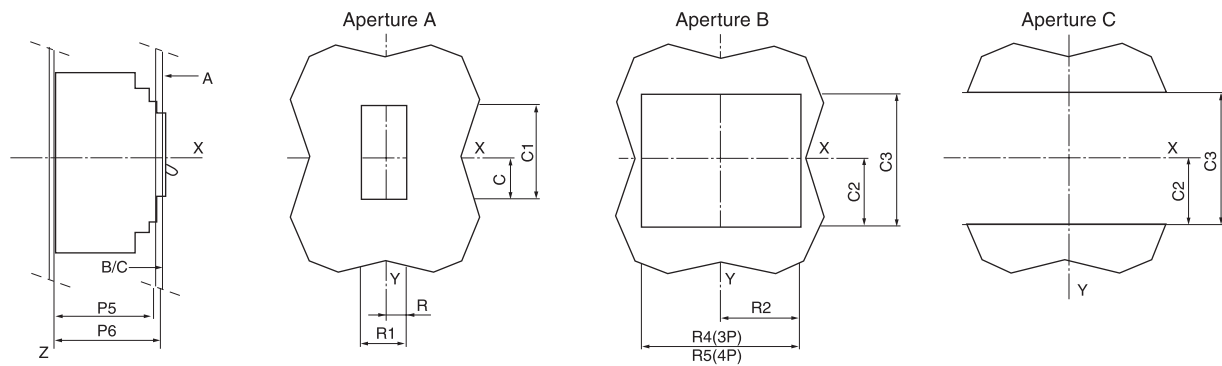


4P



### Aperture on a front panel

Fitting to fixed and plug-in circuit breaker



### AM2-100~630

mm	C	C1	C2	C3	G	G1	G4	G5	H	H1	H2
AM2 100/160/250N/H/L	29	76	54	108	62.5	125	70	140	80.5	161	94
AM2 400/630N/H/L	41.5	116	92.5	184	100	200	113.5	227	127.5	255	142.5
AM2 1250/1600N									100	255	

mm	H3	H4	H5	H6	H7	K	K1	K2	L	L1	L2	P1	P2	P4	P5
AM2 100/160/250N/H/L	188	160.5	321	178.5	357	17.5	35	70	52.5	105	140	81	86	111*	83
AM2 400/630N/H/L	285	240	480	237	474	22.5	45	90	70	140	185	95.5	110	168	107
AM2 1250/1600N						99.5	199	209	99.5	199	269	107.5		205	

mm	P6	R	R1	R2	R4	R5	ØT	ØT4	(Ue)
AM2 100/160/250N/H/L	88	14.5	29	54	108	143	6	22	≤ 32
AM2 400/630N/H/L	112	31.5	63	71.5	143	188	6	32	≤ 32
AM2 1250/1600N							6.5		

\* P4=126 is suitable for AM2 250N/H/L