

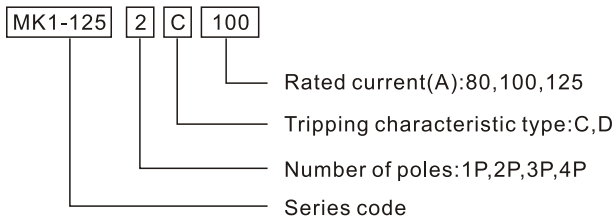


MK1-125 Miniature Circuit Breaker

Functions

- ◆ Overload protection
- ◆ Short circuit protection
- ◆ Isolation
- ◆ Controlling
- ◆ Used in residential building, non-residential building, energy, industry and infrastructure.

Instruction of type code



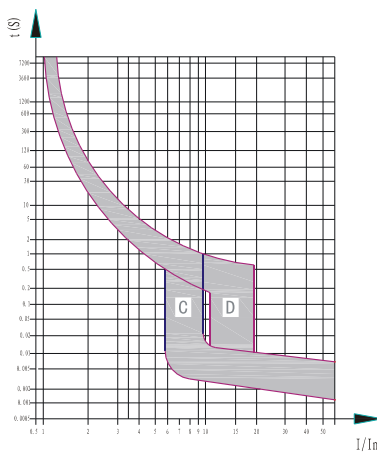
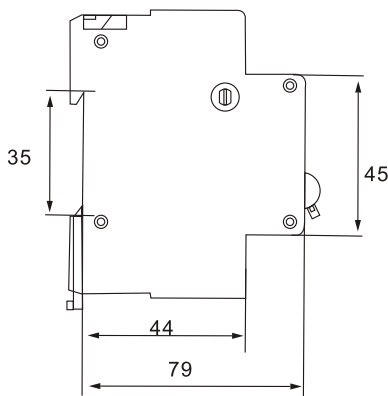
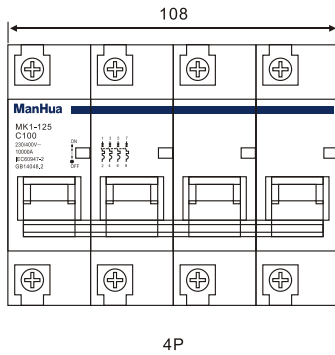
Technical specifications

- ◆ Standard:IEC60947-2
- ◆ Rated current I_n (A):80, 100, 125
- ◆ Rated voltage U_e (AC):230/400V
- ◆ Operational voltage (AC): Min.24 Max. 250/440V
- ◆ Number of poles:1P,2P,3P,4P
- ◆ Tripping Characteristics:C,D
- Characteristic curve B(I_n): $4 \pm 20\%$
- Characteristic curve C(I_n): $8 \pm 20\%$
- Characteristic curve D(I_n): $12 \pm 20\%$
- ◆ Thermal operating limit(I_n):1.05-1.3
- ◆ Degree of protection:IP40(top),IP20(terminal),with connected conductors
- ◆ Electrical life(times):4,000
- ◆ Mechanical life(times):10,000
- ◆ Breaking Capacity:

Model	Rated voltage(V)	I_{cu} (KA)	I_{cs} (kA)	Standards
MK1-125	1P:230	10	7.5	IEC60947-2
	2-4P:400	10	7.5	IEC60947-2

- ◆ Fire resistance according to UL 94 : V₀
- ◆ Mounting position:Any
- ◆ Conductor cross-sections
- ◆ Terminal can connect stranded conductor within 50mm²
- ◆ Terminal tightening torque(N.m):2.5-4
- ◆ The relative humidity is max95% when ambient temperature(°C): 55
- ◆ Storage temperature(°C): -40~+75
- ◆ Altitude Max.(meters):2000

Outline and installation dimensions



Magnetic release

- ◆ An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- ◆ The standard leaves the calibration of magnetic release to manufacturers decision.
- ◆ Manhua MCB series MK1-125 offers instantaneous tripping ranges
 - release C: 5~10In
 - release D: 10~20In

Thermal release

- ◆ The release is initiated by a bimetal strip in case of overload
- ◆ The standard defines the range of release for specific overload values
- ◆ Reference ambient temperature is 40°C

Test Current	Tripping Time	
1.05In	$t \geq 2h$ (In 63A)	Non-Tripping
1.30In	$t < 2h$ (In 63A)	Tripping

Tripping characteristic curves

C curves

Features

- ◆ Rated current up to 125A
- ◆ The handle being sealable or equipped with padlock bracket avoids dangerous operation changes(ON/OFF)
- ◆ The handle provides a clear indication of the contact position
- ◆ Adequate printing of all data on the front provides long-term identification
- ◆ Energy limiting class : 3
- ◆ The emission of ionized gases is limited to the severest restrictions : 45 mm grid distance
- ◆ This MCB for industry in accordance with IEC 60947-2 instantaneous tripping characteristic with release C : $8In \pm 20\%$, release D : $12In \pm 20\%$
- ◆ This MCB may be extended with:
 - ◆ A wide range of RCDs and RCBO
 - ◆ Full sets of additional components
 - ◆ Full sets of accessories