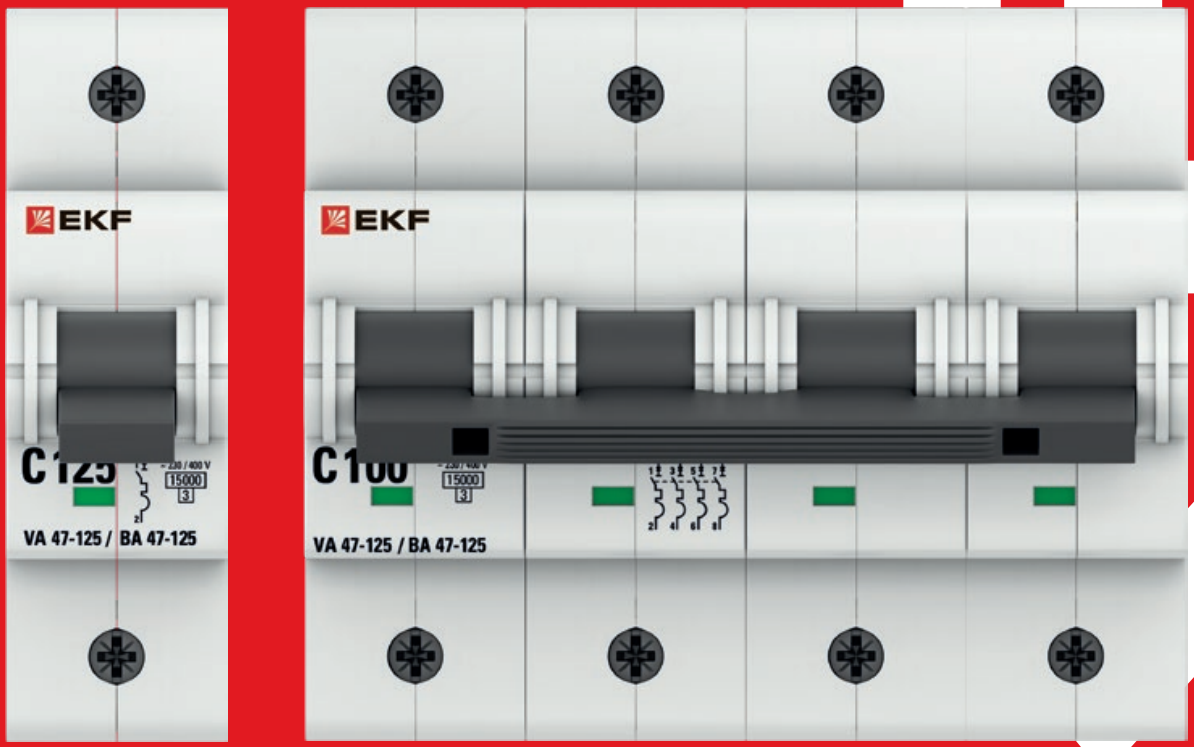


TECHNICAL MANUAL

Miniature circuit breakers

VA 47-125

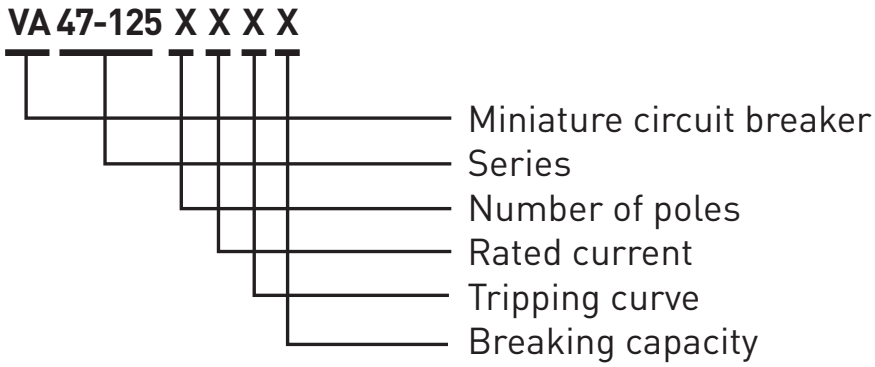
EKF PROXIMA

1 DESCRIPTION

Miniature circuit breakers VA 47-125 EKF PROXIMA are electromechanical switching devices used for close/open operations in AC electrical circuits and for protection against overload and short-circuit currents in residential and commercial buildings. Miniature circuit breakers (MCB) comply with IEC 60898-1.

Due to high breaking capacity (15 kA), these MCBs can be used instead of molded case circuit breakers. The MCBs VA 47-125 are available with rated currents up to 125 A in one-, two-, three-, and four-pole versions. Double contact break and two arc chutes ensure reliable arc quenching. The device is equipped with a convenient operating handle to ensure reliable operation. The MCB front panel features an indicator of contact physical position.

Type code



2 TECHNICAL DATA

Table 1

Characteristics	**Value**			
Rated operating voltage Ue, V	230 / 400			
Frequency, Hz	50			
Number of poles	1, 2, 3, 4			
Rated current In, A	80; 100; 125			
Rated impulse withstand voltage Uimp, kV	4			
Tripping curve	C, D (Figure 1)			
Degree of protection	IP20			
Rated short-circuit breaking capacity Icn, A	10 000			
Mechanical endurance, O-C cycles	20 000			
Electrical endurance, O-C cycles	8 000			
Operating temperature, °C	from -25 to +50			
Max. MCB weight, kg (depending on the number of poles)	1	2	3	4
	0,292	0,584	0,876	1,168

Table 1 continued

Characteristics	Value
Minimum cross-section of connected wires, mm^2	1
Maximum cross-section of connected wires, mm^2	50
Tightening torque, N·m	2,5

3 TRIPPING CHARACTERISTICS

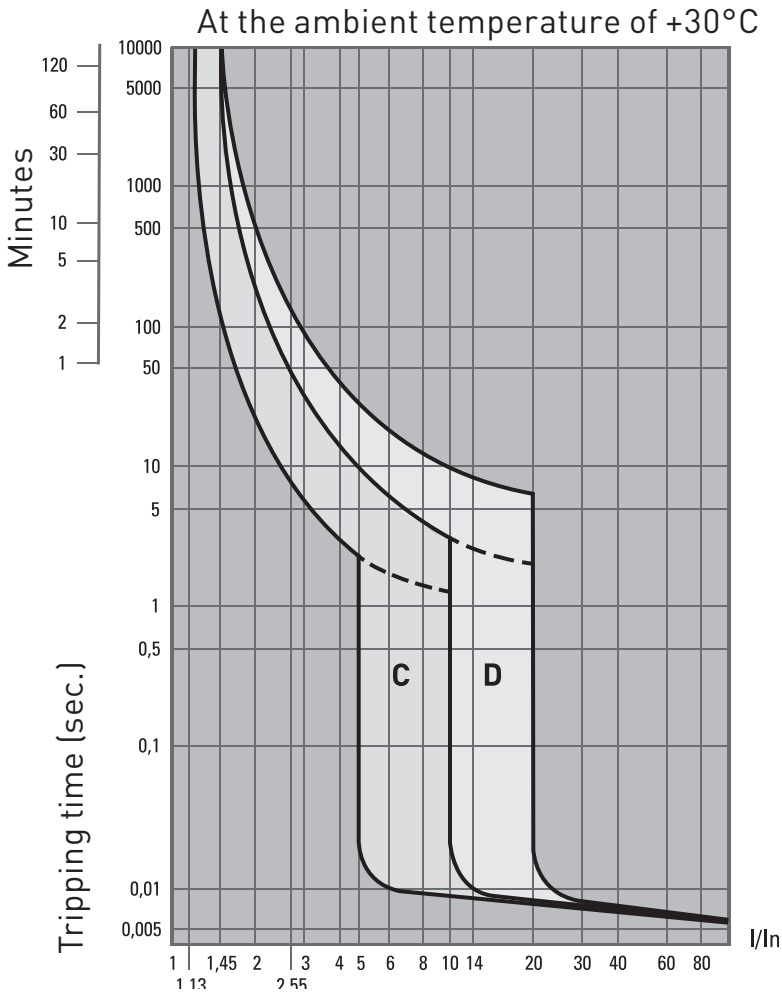


Figure 1. Tripping curves

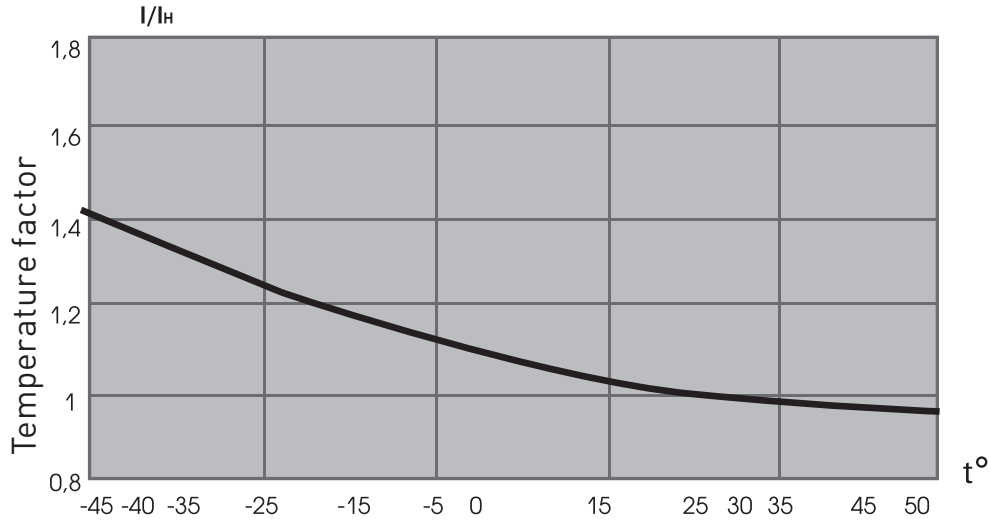


Figure 2. MCB temperature derating chart

4 OVERALL AND INSTALLATION DIMENSIONS

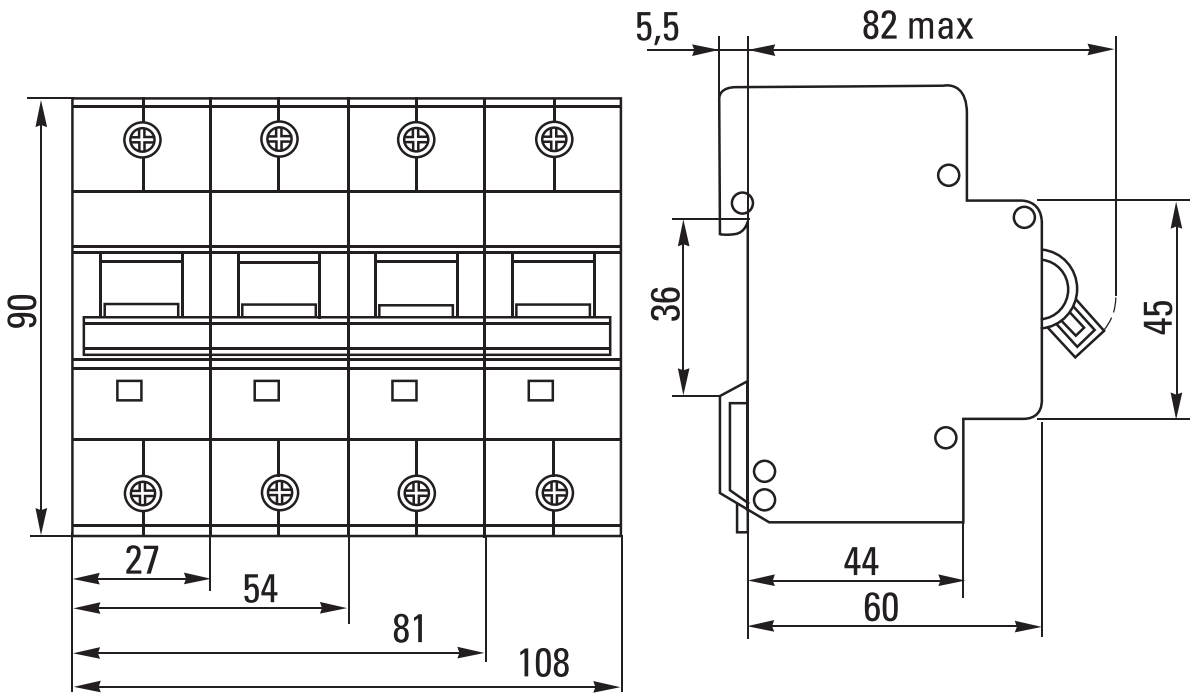


Figure 3

5 INSTALLATION AND CONNECTION

Miniature circuit breakers shall be installed and connected by qualified electrical personnel.

Copper and aluminum wire connection options are supported. Do not connect copper and aluminum wires to one terminal concurrently.

MCB power supply can be connected both from terminals 1, 3, 5, 7 and from terminals 2, 4, 6, 8 (Figure 4).

MCB shall be mounted onto 35 mm DIN rail. Tightening torque: max. 2,5 N·m for copper wires; max. 2,2 N·m for aluminum alloy series 8000 wires.

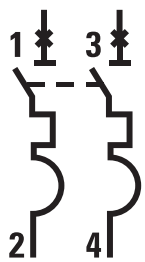
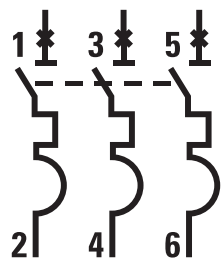
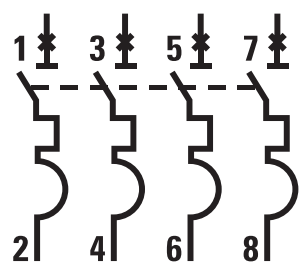
Number of poles			
1P	2P	3P	4P
			

Figure 4. Wiring diagrams

6 OPERATION CONDITIONS

Operating temperature: from -25 to +50°C.

Max. altitude above sea level: 2000m.

Position in space: vertical or horizontal on a vertical plane. If vertically installed, the upper position of the operating handle shall correspond to the MCB ON status, while the handle lower position shall correspond to the MCB OFF status in compliance with IEC 60447. If horizontally installed, the handle right position shall correspond to the MCB ON status, while the handle left position shall correspond to the MCB OFF status.

7 DELIVERY SCOPE

Miniature circuit breakers VA-125 are supplied in a group package. For all available documentation, scan the QR-code on the insert or on the inside of the package.

8 SAFETY REQUIREMENTS

Do not operate MCBs with visual mechanical damage.

MCBs conform to IEC 61140 Class 0 for protection against electrical shock and shall be installed in distribution enclosures with Class 1 protection or higher.

9 MAINTENANCE

For MCB maintenance, follow national safety rules for operation of electrical Installations.

Under normal operating conditions, visually inspect MCBs, check «ON/OFF» operations, and tighten screw terminals every 6 months.

Do not operate miniature circuit breakers with visibly damaged housing.

10 STORAGE AND TRANSPORTATION

Miniature circuit breakers can be transported by any means of enclosed transport that ensures protection of packed products from mechanical impacts and weather exposure.

The expansion modules shall be stored in the original package indoors at the ambient temperature from –40° C to + 55°C and relative humidity of max. 80% at +25°C.

11 DISPOSAL

Life-expired and failed miniature circuit breakers shall be disposed of in compliance with the national and local laws and regulations in force.

To dispose of the product, send it to an authorized company for recycling in compliance with the national and local laws and regulations in force.

12 MANUFACTURER'S WARRANTY

The manufacturer guarantees the products comply with the declared characteristics, provided that consumers follow the operation, transportation and storage conditions.

Warranty period: 7 years from the date of sale specified in the sales receipt.

Shelf life: 7 years from the date of manufacture specified on the product package or housing.

Service life: 20 years.

Manufacturer: for information, refer to the product package.

Importer and EKF trademark service representative: EKF ELECTRICAL SOLUTION – FZCO, Dubai Silicon Oasis, DDP, Building A2, Dubai, United Arab Emirates.

Importer and EKF trademark service representative on the territory of the Russian Federation: ООО «Electroresheniya», Otradnaya st.,2b bld. 9, 5th floor, 127273, Moscow, Russia.Tel.: +7 (495) 788-88-15.

Importer and EKF trademark service representative on the territory of the Republic of Kazakhstan: ТОО «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

11 CERTIFICATE OF ACCEPTANCE

The miniature circuit breakers VA 47-125 EKF PROXIMA have been approved for operation.

Date of manufacture:
for information, refer to the product package.

Quality control stamp

ekfgroup.com

v3