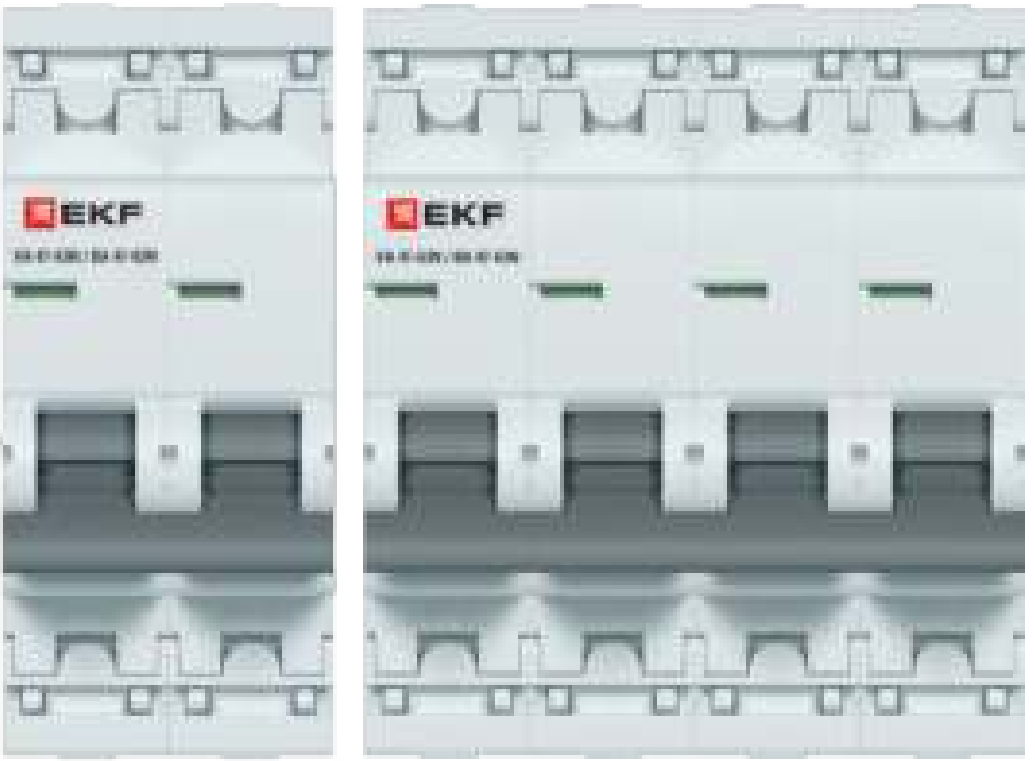


TECHNICAL MANUAL

Miniature circuit breakers
VA 47-63N EKF PROXIMA

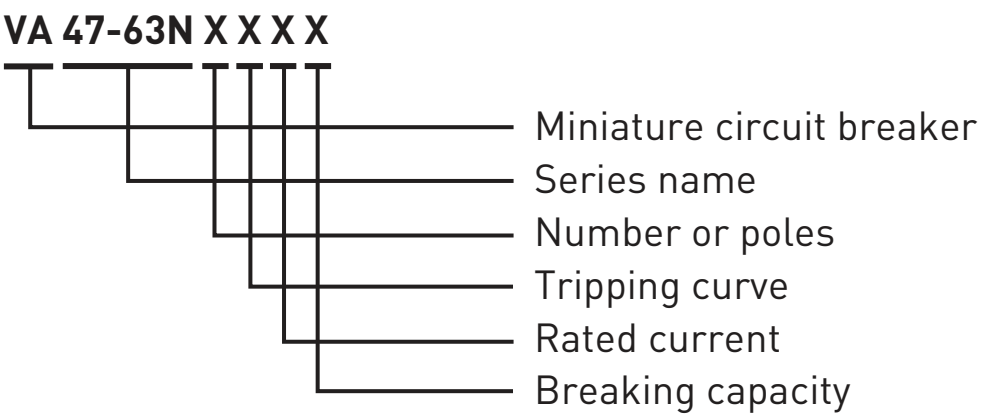
1 DESCRIPTION

The miniature circuit breakers VA 47-63N 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.

The MCBs of this series feature advanced design. The MCB has plastic screw shields that hide access to screw terminals to seal the MCB and thus prevent unauthorized access to wires.

The MCB is equipped with a convenient operating handle to ensure MCB reliable operation. The MCB front panel features an indicator of contact physical position.

Type code



2 TECHNICAL DATA

Characteristics	**Values**			
Rated operating voltage Ue, V	230 / 400			
Frequency, Hz	50 / 60			
Poles	1, 2, 3, 4			
Rated current In, A	1; 2; 3; 4; 6; 10; 16; 20; 25; 32; 40; 50; 63			
Rated impulse withstand voltage Uimp, kV	4			
Tripping curve	B, C, D (fig.1)			
Degree of protection	IP20			
Rated short-circuit breaking capacity Icn, A	4500/6000			
Mechanical endurance, O-C cycles	20 000			
Electrical endurance, O-C cycles	10 000			
Operating temperature, °C	-40 to +55			
Max. MCB weight, kg (depending on the number of poles)	1	2	3	4
	0,1	0,2	0,3	0,4
Minimum cross-section of connected wires, mm^2	1			
Maximum cross-section of connected wires, mm^2	25			

3 TRIPPING CHARACTERISTICS

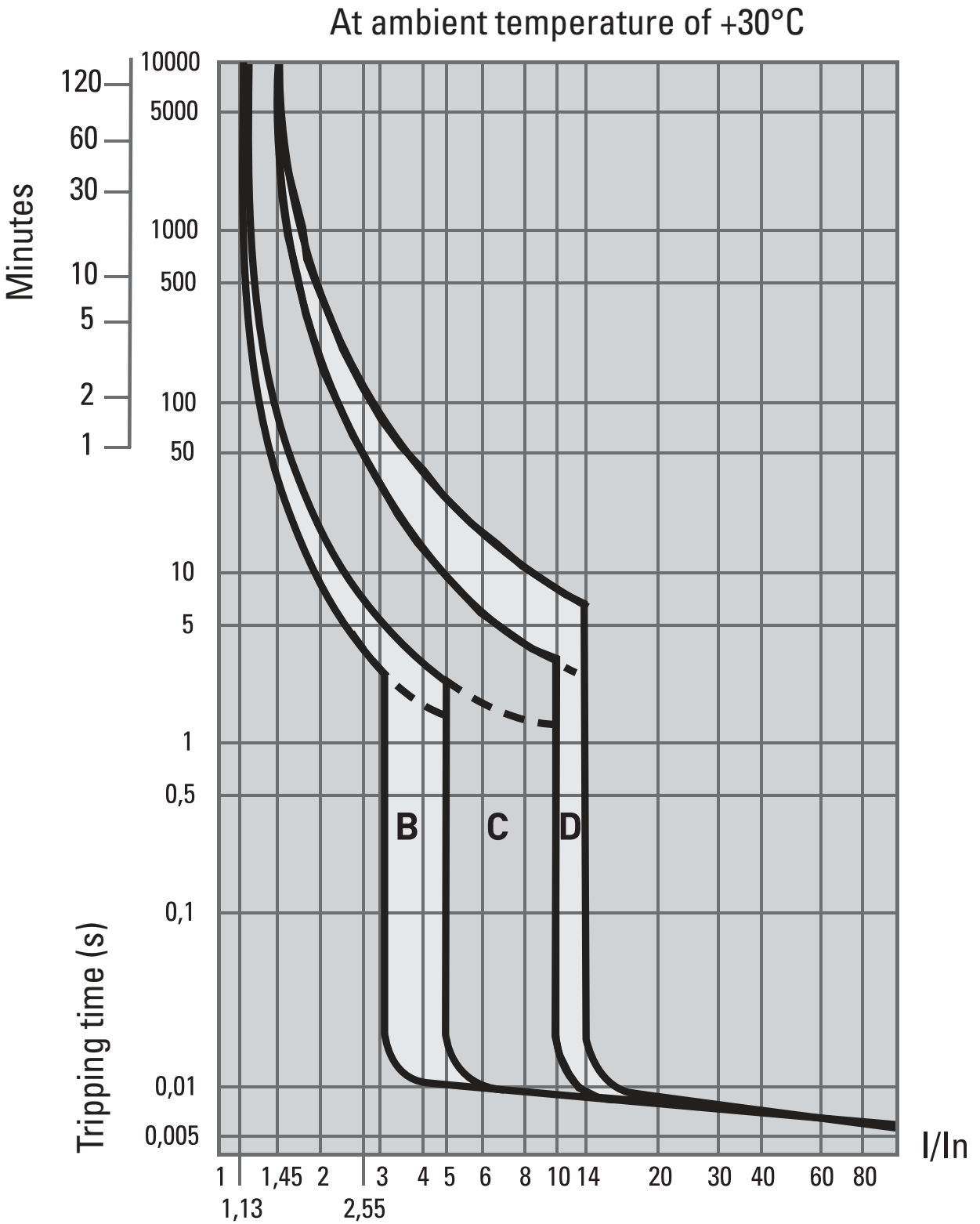


Figure 1. Tripping curve

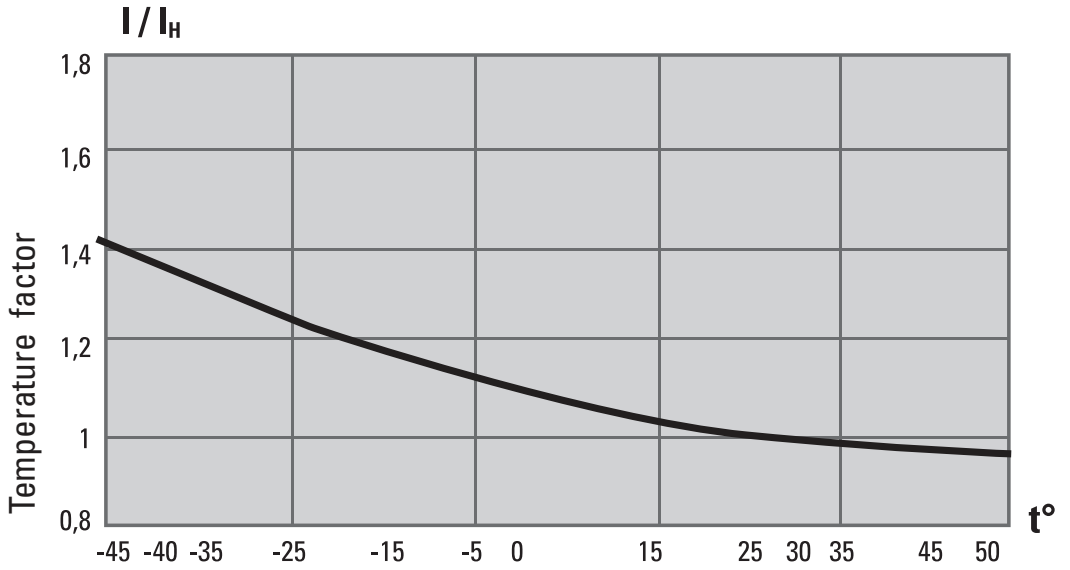
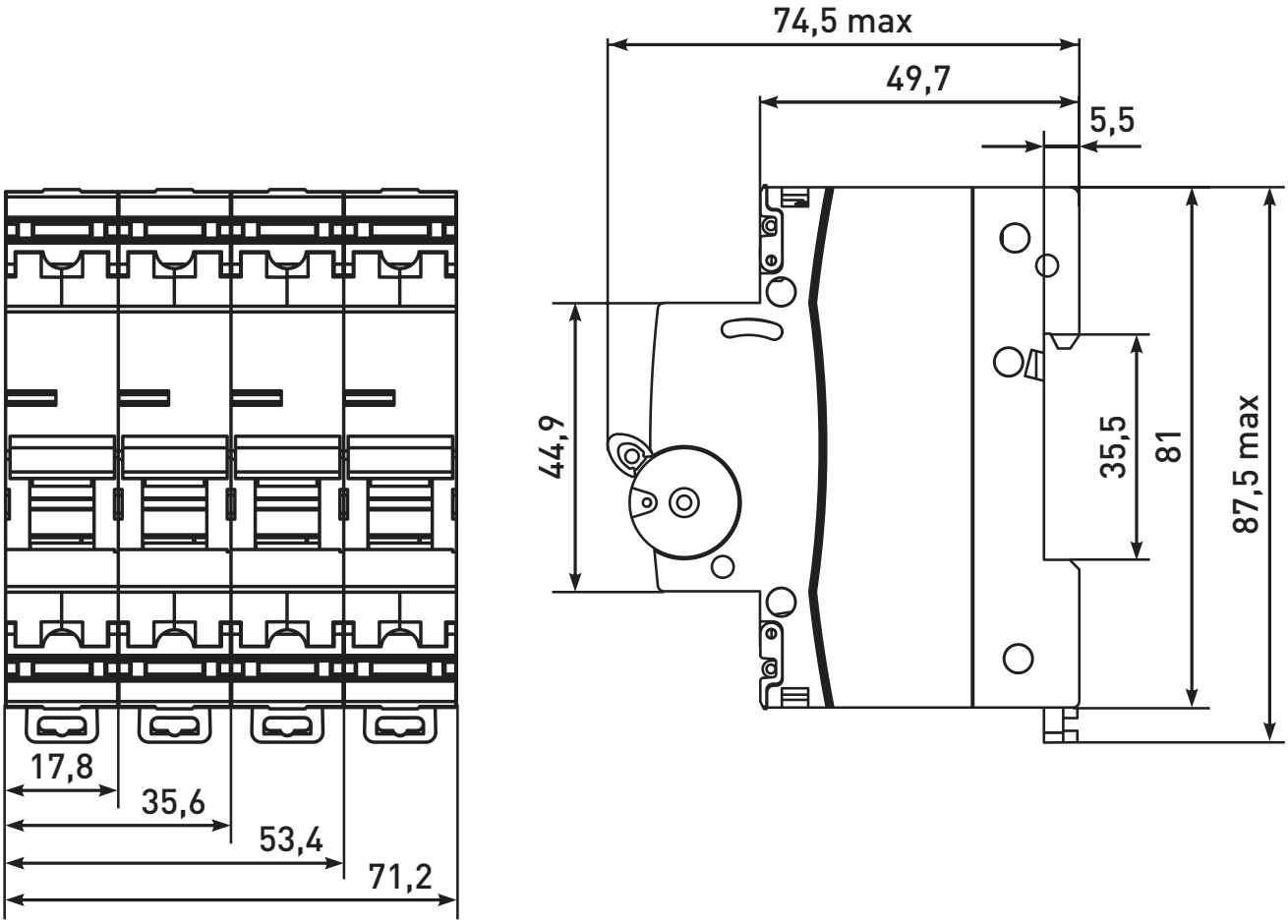


Figure 2. MCB derating factor depending on ambient temperature

4 OVERALL DIMENSIONS



5 INSTALLATION AND CONNECTION

Miniature circuit breakers shall be installed and connected by qualified electrical personnel.
Connection options with copper and aluminum wires 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.
MCB shall be mounted onto 35mm DIN rail.
Tightening torque: max. 3,5 N•m for copper wires; max. 2,2 N•m for aluminum-alloy wires, series 8000.
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.

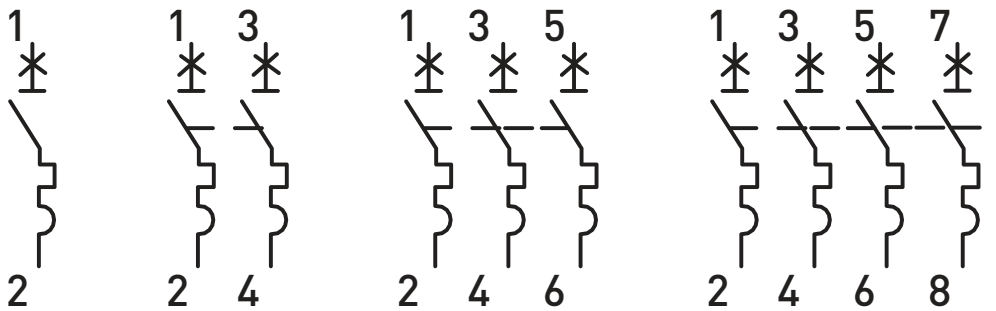


Figure 3. Wiring diagram

6 OPERATION CONDITIONS

Operating temperature: –40°C to +55°C. Relative humidity: max. 98% at +25°C. Altitude above sea level: max. 2000 m.

7 DELIVERY SCOPE

Miniature circuit breakers VA 47-63N are supplied in one 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 miniature circuit breakers with visual mechanical damage. By protection method against electric shock, miniature circuit breakers belong to protection class "0" according to IEC 61140 and shall be installed in distribution enclosures with protection class "1" and 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 the MCB, if visual damage to the MCB housing is found.

10 TRANSPORTATION AND STORAGE

Miniature circuit breakers can be transported by any means of enclosed transport that ensures protection of packed products against mechanical and atmospheric impacts.
Miniature circuit breakers shall be stored indoors in the original package 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 products 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 miniature circuit breakers comply with the declared characteristics, provided that the consumer follows 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.

13 CERTIFICATE OF ACCEPTANCE

The miniature circuit breaker VA 47-63N EKF PROXIMA has been approved for operation.

Date of manufacture:

For information, refer to the product package.

Quality control stamp



ekfgroup.com

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