

3TM vacuum contactors – applications

- **Switching of three-phase motors in AC-3 or AC-4 operation**
For example in conveying and elevator systems, compressors, pumping stations, ventilation and heating
- **Switching of transformers**
For example in transformer or transfer substations (secondary distribution level)
- **Switching of capacitors**
For example in power factor correction systems, capacitor banks
- **Switching of reactors**
For example in industrial distribution systems, DC-link reactors, power factor correction systems
- **Switching of resistive consumers**
For example heating resistors, electrical furnaces
- **Switching of special applications**
For example data centers, photovoltaic installations, wind power plants

Published by
Siemens AG

Energy Management
Siemensstr. 10
93055 Regensburg
Germany

Article No. EMLP-T10084-00-7600
Dispo 25600 • 0417 • 2.0
Printed in Germany

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The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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3TM vacuum contactors

Safe switching of operational currents in medium-voltage power distribution

[siemens.com/vacuum-contactors](https://www.siemens.com/vacuum-contactors)

3TM vacuum contactors – highlights



Flexible application

- Individually adjustable switching times
- Various mounting positions
- Flexible control of linking system



Robust construction

- Highly shock-resistant
- Suitable for ambient temperatures from -40°C to $+70^{\circ}\text{C}$
- Suitable for applications at altitudes of up to 5,000 m



Variable design

- Freely definable pole-center distances
- 1-pole, 2-pole, and 3-pole versions
- Easy replacement and modification as well as easy retrofitting of components



Global conformity to standards

- Certification IEC 62271-106
- Certification UL 347
- Certification GOST P 52565-2006
- Certification CSA C22.2 253-09
- Certification GB/T14808
- Certification DNVGL-CG-0339

Technical information

3TM vacuum contactors are the optimal choice for medium-voltage power distribution. The compact, flexibly usable, energy-efficient products are suitable for all relevant ranges, including rated voltages from 7.2 to 15 kV and rated operational currents up to 450 A. They guarantee the safe switching of operational currents and overload currents in the categories AC-1 to AC-4 – including voltage dips – and thus ensure that plants operate with all-round protection.

Selection information	3TM31	3TM32	3TM33	3TM34	3TM35	3TM36
Rated voltage U_r	7.2 kV	7.2 kV	7.2 kV	12 kV	12 kV	15 kV
Rated operational current I_e	400 A	450 A	450 A	450 A	450 A	250 A
Rated lightning impulse withstand voltage U_p	60 kV	60 kV	60 kV	75 kV	75 kV	75 kV
Rated short-duration power frequency withstand voltage U_d	20 kV	20 kV	32 kV	28 kV	42 kV	28 kV
Rated short-circuit-breaking current I_{sc}	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Rated short-time withstand current I_k	8 kA	8 kA	8 kA	8 kA	8 kA	8 kA
Switching capacity (rated making current)	4,000 A	4,500 A	4,500 A	4,500 A	4,500 A	On request
Switching capacity (rated breaking current)	3,200 A	3,600 A	3,600 A	3,600 A	3,600 A	On request
Switching rate (operating cycles/h)	1,200	1,200	1,200	1,200	1,200	On request
Mechanical endurance (operating cycles)	250,000	1 million	1 million	1 million	1 million	On request
Electrical endurance AC-3 (operating cycles)	250,000	250,000	500,000	250,000	500,000	On request

Ordering information

Your direct ordering channel

[siemens.com/product?3TM31](https://www.siemens.com/product?3TM31)

[siemens.com/product?3TM32](https://www.siemens.com/product?3TM32)

[siemens.com/product?3TM33](https://www.siemens.com/product?3TM33)

[siemens.com/product?3TM34](https://www.siemens.com/product?3TM34)

[siemens.com/product?3TM35](https://www.siemens.com/product?3TM35)

3TM36: on request