## **Technical specifications** 3VF2 Type Standards IEC 60947, EN 60947 Max. rated current In A 16 ... 100 Rated insulation voltage Ui Main current paths V AC 415 Control circuits V AC 415 Rated impulse withstand voltage U<sub>imp</sub> k۷ Main current paths 6 Control circuits k۷ 4 Rated operational voltage U<sub>e</sub>, 50/60 Hz V AC Up to 415 Permissible ambient temperature °C -20 ... +70 Permissible load At various ambient temperatures close to the circuit breaker, related to the rated current of the circuit breaker Up to 100 A - Circuit breakers At 40 °C % 100 50 °C % for system protection 92 55 °C % 87 60 °C % 83 70 °C % 73 Rated short-circuit Switching capacity breaking capacity class Rated ultimate short-circuit Up to 240 V breaking capacity $I_{\rm cu}$ Up to 415 V kΑ 18 Rated service short-circuit Up to 240 V kΑ 33 breaking capacity $I_{cs}$ Up to 415 V kΑ 9 Rated short-circuit Up to 240 V kΑ 143 making capacity I<sub>cm</sub> Up to 415 V 36 Main control switch properties Yes according to IEC 60947-2 In conjunction with lockable rotary operating mechanisms **EMERGENCY-STOP** switch properties Yes according to DIN VDE 0113 Mechanical endurance Operating cycles 10000 1/h 120 Switching frequency Conductor cross-sections and connection types for main conductors (copper or aluminum) Circular conductor terminal Connection type Solid or stranded Up to 40 A $mm^2$ 2.5 ... 6 $\,mm^{\overset{.}{2}}$ 16 ... 50 45 ... 100 A $\,mm^2\,$ 125 A 70 Conductor cross-sections for control circuits with terminal connection or terminal strip, solid mm<sup>2</sup> 0.5 to 2.5 Power loss per circuit breaker At max. rated current In with AC symmetrical load W 16 System protection Permissible mounting position 90° ф NSF0 01242 **Auxiliary switch** Rated thermal current Ith Α 6 Α 15 Rated making capacity AC (AC-15) ٧ 240 - Rated operational voltage Α - Rated operational current 6 DC current (DC-13) - Rated operational voltage ٧ 125 - Rated operational current Α 0.5 Α 4 Back-up fuse **Trip unit** Shunt trip unit (f-release) Response voltage - Pick-up (circuit breaker is tripped) Power consumption (short time) at: 50/60 Hz 12 ... 24 V AC VA 108 50/60 Hz 48 ... 60 V AC 120 50/60 Hz 48 ... 127 V AC VA 162 12 ... 24 V DC W 14.4 48 ... 60 V DC W 19.2 110 ... 125 V DC W 38.4 220 ... 250 V DC Max. duration of operational voltage Interrupts automatically Max. opening time ms