Technical specifications 3VF2 Standards IEC 60947, EN 60947 Max. rated current In Α 16 ... 100 Rated insulation voltage Ui V AC 415 Main current paths V AC 415 Control circuits Rated impulse withstand voltage U_{imp} Main current paths kV 6 Control circuits kV 4 Rated operational voltage Ue, 50/60 Hz V AC ... 415 **IEC** Permissible ambient temperature °C -20 ... +70 Permissible load At various ambient temperatures close to the circuit breaker, related to the rated current of the Up to 100 A circuit breaker at 40 °C % circuit breakers 100 for system protection 50 °C % 92 55 °C % 87 60 °C % 83 70 °C % 73 Rated short-circuit Α Switching capacity breaking capacity class up to 240 V Rated ultimate short-circuit kΑ 65 up to 415 V breaking capacity $I_{\rm cu}$ kΑ 18 Rated service short-circuit up to 240 V kΑ 33 breaking capacity $I_{\rm CS}$ up to 415 V kΑ 9 Rated short-circuit up to 240 V kΑ 143 making capacity $I_{\rm cm}$ up to 415 V kΑ 36 Main control switch properties acc. to IEC 60947-2 Yes In conjunction with lockable rotary operating mechanisms **EMERGENCY-STOP** switch properties Yes acc. to DIN VDE 0113 Mechanical endurance 10000 Operating cycles Switching frequency 1/h 120 Conductor cross-sections and connection types for main conductors (copper or aluminum) Connection type Circular conductor terminal $\,\mathrm{mm}^2$ up to 40 A Solid or stranded 2.5 ... 6 mm² 45 ... 100 A 16 ... 50 $\, mm^2 \,$ 125 A 70 Conductor cross-sections for control circuits mm² With terminal connection or terminal strip, solid 0.5 to 2.5 Power loss per circuit breaker At max. rated current I_n with 3-phase symmetrical load W 16 system protection Permissible mounting position 909 `90° 90° ф NSE0_00026a **Auxiliary switches** Rated thermal current Ith Rated making capacity Α 15 AC (AC-15) - rated operational voltage ٧ 240 - rated operational current Α 6 DC current (DC-13) - rated operational voltage V 125 - rated operational current Α 0.5 Back-up fuse Α 4 **Trip units** Shunt trip unit (f-release) Response voltage - pick-up (circuit breaker is tripped) Power consumption (short time) at: AC 50/60 Hz 12-24 V VA 108 AC 50/60 Hz 48-60 V VΔ 120 AC 50/60 Hz 48-127 V VA 162 12-24 V DC W 144 48-60 V DC W 19.2 110-125 V DC W 38.4 220-250 V DC W 44 Max. duration of operational voltage Interrupts automatically ms 50 Max. opening time