

12 Technical Data

UMC100.3

Main Power Lines

Voltage (three-phase systems)	Max. 1000 V AC Attention: For an U_{imp} of 8 kV and a voltage of 1000 V the device must be used according to Annex H IEC/EN 60947-1 in the range $600\text{ V} < U_e \leq 1000\text{ V}$. (IT Network) only for overvoltage category II. Otherwise overvoltage category III applies. Grounded networks: For voltages > 690 V isolated wires have to be used. Ungrounded networks: For voltages > 600 V isolated wires have to be used.			
Conductor holes in the current transformers	Max. diameter 11 mm incl. cable isolation			
Set current range for overload protection	UMC alone: 0.24-63 A (three phase) UMC alone: 0.24-20 A (single phase) UMC with provided current transformer: 60-850 A (see chapter 'Connecting External Current Transformers') For selecting the correct wire size see "Cross-section of wires"			
Overload protection for three-phase and single-phase motors	Acc. to IEC/EN 60947-4-1			
Trip classes, selectable by parameter	5E, 10E, 20E, 30E, 40E (acc. to IEC/EN 60947-4-1) Trip class 40E: Select the contactor and the protective elements with special care!			
Tolerance of tripping time (incl. total ranges of current, operational temperature range, rated frequency)	UMC alone: +/- 10 % UMC with provided current transformer: +/- 14 %			
Tolerance of phase imbalance	+/- 10 %			
Tripping time for phase loss	Trip class: 5 approx. 1.5 s 10 approx. 3 s 20 approx. 6 s 30 approx. 9 s 40 approx. 12 s			
Accuracy of current measurement (range 50 to 200 % of I_e with $I_e > 0.5\text{ A}$)	UMC alone 3 % UMC with provided external current transformer: 4 %			
Load per phase	Approx. 30 mΩ			
Frequency range	50/60 Hz Protection of frequency converters is not allowed.			
Short-circuit protection	Provided by external short-circuit protection device, e. g. MO, MCB, MCCB or fuse. Refer also to ABB coordination tables available here: http://applications.it.abb.com/SOC/Page/Selection.aspx			
Cross-section of wires	Acc. to the rated motor current referring to IEC/EN 60947-1 and the specific installation condition in IEC/EN 60204 or VDE 298-4 resp.			
Vibration according IEC/EN 60068-2-6	0.7 g (without LCD Panel)			
Shock according IEC/EN 60068-2-27	15 g / 11 ms			
Performance under short-circuit conditions. Coordination type 2 Iq: Rated conditional short circuit current.	Iq	100 kA	50 kA	100 kA
	Up	690 V AC	1000 V AC	600 V AC
	Fuse	200 A gG	200 A gG	300A RK5