General data

More information

Type Size Number of poles			3RA2. 1 S00 3	3RA2. 2 S0 3
General data				
Standards			IEC 60947-1, EN 60947-1 (VDE 0660 Part 100) IEC 60947-2, EN 60947-2 (VDE 0660 Part 101) IEC 60947-4-1, EN 60947-4-1 (VDE 0660 Part 102)	
Max. rated current $I_{n\ max}$ (= max. rated operational current I_e)		A	16	32
Permissible ambient temperature		°C °C	-20 ... +60 for operation -55 ... +80 During storage/transport	
Rated operational voltage U_e		V	690	
Rated frequency		Hz	50/60	
Rated insulation voltage U_i (pollution degree 3)		V	690	
Rated impulse withstand voltage U_{imp}		kV	6	
Trip class (CLASS)	Acc. to IEC 60947-4-1, EN 60947-4-1 (VDE 0660 Part 102)		10	
Rated short-circuit current I_q at AC 50/60 Hz 400 V acc. to IEC 60947-4-1, EN 60947-4-1 (VDE 0660 Part 102)		kA	153	
Types of coordination acc. to IEC 60947-4-1, EN 60947-4-1 (VDE 0660 Part 102)			[1]	
Power loss $P_{v\ max}$ of all main current paths Dependent on the rated current I_n (upper setting range)	Up to 1.25 A 1.6 ... 6.3 A 8 ... 12 A 16 A 5 ... 6.3 A 8 ... 12 A 16 ... 32 A	W W W W W W W	2 2.3 3.5 4.3 -- -- --	-- -- -- -- 2.3 3.5 4.3
Power consumption of the solenoid coils for contactors as a function of the standard output P of the motor (when coil is cold and U_s, 50 Hz)				
• AC operation				
- Closing	Up to 4 kW 5.5 ... 7.5 kW Up to 5.5 kW 7.5 ... 15 kW P.f.	VA VA VA VA	27 37 -- -- 0.8	-- -- 65 77 0.82
- Closed	Up to 4 kW 5.5 ... 7.5 kW Up to 5.5 kW 7.5 ... 15 kW P.f.	VA VA VA VA	4.2 5.7 -- -- 0.25	-- -- 8.5 9.8 0.25
• DC operation	Closing = Closed	W	4	5.9
Solenoid coil operating range for contactors			0.8 ... 1.1 x U_s	
	Low limit at 55 °C at 60 °C		0.8 x U_s 0.85 x U_s	-- --
Endurance of the motor starter protector				
• Mechanical endurance	Operating cycles		100000	
• Electrical endurance	Operating cycles		100000	
• Max. switching frequency per hour (motor starts)		1/h	15	
Endurance of contactor				
• Mechanical endurance	Operating cycles		30 million	10 million
• Electrical endurance	Operating cycles		[2]	
Shock resistance (sine-wave pulse)	Acc. to IEC 60086 Part 2-27	g	Up to 6	Up to 6
Degree of protection	Acc. to IEC 60947-1		IP20	
Touch protection	Acc. to EN 50274		Finger-safe	
Phase failure sensitivity of the motor starter protector	Acc. to IEC 60947-1, EN 60947-1,(VDE 0660 Part 102)		Yes	
Isolating features of the motor starter protector	Acc. to IEC 60947-2, EN 60947-2,(VDE 0660 Part 101)		Yes	
Main control and EMERGENCY-STOP switch characteristics of the motor starter protector and accessories	Acc. to IEC 60204-1, EN 60204-1 (VDE 0113 Part 1)		Yes (with overvoltage releases of category 1 under conditions of proper use)	
Protective separation between main and auxiliary circuits	Acc. to EN 60947-1, Appendix N	V	Up to 400	
Mirror contacts for contactors			Yes	Yes, from main contact to auxiliary NC contact

[1] See Selection and ordering data.

[2] See endurance characteristics of the contactors under "Controls: Contactors and Contactor Assemblies.