Insta contactors, AC technology

Technical specifications

		Insta contactors			Auxiliary switches	
		5TT5 80 .	5TT5 83 .	5TT5 84 .	5TT5 85 .	5TT5 910
Standards		IEC 60947-4- VDE 0660	1, IEC 60947-5-1,	IEC 61095; EN	60947-4-1, EN 6	0947-5-1, EN 6109
Approved acc. to		VDE				
Number of poles		2	4	4	4	2
Rated frequency at AC	Hz	50/60				
Rated control voltage U _c	V AC	24, 230	24, 115, 230	24, 230	24, 230	
Operating range	x U _c	0.85 1.1				
Rated operational voltage U _e	V AC	250	440			230/400
Rated operational current I _e	А	20	25	40	63	6 (4 at AC-15)
Rated power dissipation P _v • Pick-up power (without manual switch or manual switch in "I" position)	VA/W	15/13	27/17	62/50		
Pick-up power (with manual switch in "AUTO" position) VA/W	6/3.8	5.2/2	15.4/6		
Holding power	VA/W	3/1.9	2.6/1	7.7/3		
Per contact	VA	1.7	2.2	4	8	
Switching times Closing (NO contacts)	ms	15 25	10 20	15 20		
Opening (NO contacts)	ms	20	20	10 20		
Closing (NC contacts)	ms	10	10	5 10		
Opening (NC contacts)	ms	20 25	25 30	10 15		
Rated impulse withstand voltage $U_{\rm imp}$	kV	4				
Rated insulation voltage <i>U</i> _i	V	440		500		
Contact gap, minimum	mm	3.6		3.4		4
Electrical service life at I _e and load • AC-1/AC-7a	for switching	200000		100000		
	cycles					
• AC-3/AC-7b		300000	500000	150000		
Mechanical service life	for switching cycles	3 million				
Maximum switching frequency at load	in switching cycles/h	600				
Switching of resistive loads AC-1/AC-7a for rated operational power P _S				10	0.4	
1-phase 230V3-phase 400V	kW kW	4	9 16	16 26	24 40	
Switching of three-phase asynchronous motors AC-s for rated operational power $P_{\rm S}$	B/AC-7b	1)				
1-phase 230V3-phase 400V	kW kW	1.3 ¹⁾	2.2	5.5 11	8.5 15	
Minimum switching capacity	V: mA	17; 50	7		10	12; 10
Overload withstand capability per conducting path at 10 s	A	72		176	240	
(NO contacts only) Short-circuit protection, according to coordination ty	rpe 1					
Back-up fuse characteristic gL/gG	A	20	35	63	80	6
Terminals ± screw (Pozidriv) • Coil connection • Main connection		1		2		 1
Tightening torques						
Coil connection Main connection	Nm Nm	0.6 1.2		2		0.8
Conductor cross-sections • Coil connection rigid flexible, with end sleeve	mm ² mm ²	1.0 2.5 1.0 2.5				
Main connection	mm ² mm ²	1.0 10 1.0 6		1 25 1 16		1 2.5 1 2.5
Permissible ambient temperature • For operation - For storage	°C	-5 +55				
• For storage	°C	-30 +80				
Degree of protection acc. to EN 60529 1) For NO contacts only		IP20, with co	nnected conduct	ors		

¹⁾ For NO contacts only