



## SIRIUS 3RT13 Contactors with 4 Main Contacts for Switching Resistive Loads

Contactor	Type	Unit of Measure	3RT1325/26	3RT1336	3RT1344	3RT1346												
Mechanical endurance		Oper. cycles	10 million															
Electrical endurance at $I_e$ / AC - 1		Oper. cycles	approx. 0.5 million															
Rated insulation voltage $U_i$ (pollution degree 3)		V	690	690	1000	1000												
Permissible ambient temperature	in operation when stored	°C °C	-25 to +60 -55 to +80															
Degree of protection acc. to IEC 60 947-1 and DIN 40 050 terminal compartment			IP 20	IP20 IP00	IP20 IP00	IP20 IP00												
Power consumption of the coils (with coil in cold state and $1.0 \times U_s$ ) AC operation		Hz	50	50/60	50	50/60	50	50/60										
	closing	VA	61	64/63	127	127/160	270	298/274	270	298/274								
	p.f.		0.82	0.82/0.74	0.82	0.82/0.85	0.68	0.72/0.62	0.68	0.72/0.62								
	closed	VA	7.8	8.4/6.8	13.5	13.5/14.2	22	27/20	22	27/20								
	p.f.		0.24	0.24/0.28	0.34	0.34/0.37	0.27	0.29/0.31	0.27	0.29/0.31								
DC operation	closing = closed	W	5.6		11.5		15		15									
Coil voltage tolerance			0.8 to $1.1 \times U_s$															
Operating times at $0.8$ to $1.1 \times U_s$ Break time = opening time + arcing time AC/DC operation	closing time	ms	6 to 30/ 30 to 90	4 to 35/ 50 to 110	20 to 50/ 110 to 200	20 to 60/ 110 to 200												
	opening time	ms	13 to 25/ 13 to 40	10 to 30/ 15 to 30	10 to 25/ 14 to 20	10 to 25/ 14 to 20												
	Arcing time	ms	10 to 15	10 to 15	10 to 15	10 to 15												
<b>Short-circuit protection of contactors without overload relays</b>																		
Main circuit Fuse links, utilization category gL/gG NH Type 3NA DIAZED Type 5SB, NEOZED Type 5SE - acc. to IEC 60 947-4/ EN 60 947-4-1 (VDE 0660 Part 102)	Type of coord. "1"⊙	A	63	160	250	250												
	Type of coord. "2"⊙	A	35	63	125	160												
	Weld-free	A	16	50	63	100												
<b>Load ratings with AC voltage</b>																		
AC-1 utilization category, switching resistive load Rated operational currents $I_e$ (at 40°C) up to 690V Ratings at 230V of three-phase loads p.f. = 0.95 (at 40°C) Minimum conductor cross-section with $I_e$ load at 40°C		A	33/40	60	100	140												
		kW	12.5/15	22	37	53												
		kW	22/26	39	65	92												
		mm <sup>2</sup>	10/10	16	50	50												
AC-2 and AC-3 utilization categories Rated operational current $I_e$ (at 60°C) at 400V Ratings of motors at 230V with slipping or squirrel-cage rotor at 50 Hz and 60 Hz 400V		A	17/25	26	—	—												
		kW	4/5.5	5.5	—	—												
		kW	7.5/11	11	—	—												
<b>Load ratings with DC voltage</b>																		
DC-1 utilization category, switching resistive load ( $L/R \leq 1$ ms) Rated operational currents $I_e$ (at 40°C) Number of conducting paths connected in series			1	2	3	4												
	up to 24V	A	35	35	35	35	50	50	50	50	70	70	70	70	80	80	80	80
	60V	A	20	35	35	35	23	45	45	45	23	70	70	70	60	80	80	80
	110V	A	4.5	35	35	35	4.5	45	45	45	4.5	70	70	70	9	80	80	80
	220V	A	1	5	35	35	1	5	45	45	1	5	70	70	2	10	80	80
440V	A	0.4	1	2.9	2.9	0.4	1	2.9	2.9	0.4	1	2.9	2.9	0.6	1.8	4.5	4.5	
DC-3 and DC-5 utilization categories, shunt and series motors ( $L/R \leq 15$ ms) Rated operational currents $I_e$ (at 40°C) Number of conducting paths connected in series			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	up to 24V	A	20	35	35	35	20	45	45	45	20	70	70	70	20	80	80	80
	60V	A	2	35	35	35	2	45	45	45	2	70	70	70	2.3	80	80	80
	110V	A	0.75	7	35	35	0.75	7	45	45	0.75	9.4	70	70	0.9	80	80	80
	220V	A	0.2	1	3.5	3.5	0.2	1	3.5	3.5	0.2	1	3.5	3.5	0.26	1.3	3.5	3.5
440V	A	0.09	0.27	0.6	0.6	0.09	0.3	0.6	0.6	0.09	0.27	0.5	0.6	0.11	0.3	0.6	0.6	

⊙According to excerpt from IEC 60 947-4-1 (VDE 0660 Part 102):  
Type of coordination "1":  
Destruction of the contactor and the overload relay is permissible. The contactor and/or overload relay must be replaced if necessary.

Type of coordination "2":  
No damage can be tolerated to the overload relay, but the contact welding on the contactor is permitted if the contacts can be easily separated.