

BETA Switching

Switching Devices

5TT5 8 Insta contactors, AC technology

Switching of AC voltages DC-1

Permissible DC switching currents for NO contacts With resistive load				1 contact		2 contacts in series		3 contacts in series		4 contacts in series	
5TT5 80	2-pole, 20 A	I_e for	$U_e = 24$ V DC	A	20	20	--	--	--	--	--
			$U_e = 110$ V DC	A	6	10	--	--	--	--	--
			$U_e = 220$ V DC	A	0.6	6	--	--	--	--	--
5TT5 82, 5TT5 83	4-pole, 25 A	I_e for	$U_e = 24$ V DC	A	25	25	25	25	25	25	25
			$U_e = 110$ V DC	A	6	10	20	20	20	20	20
			$U_e = 220$ V DC	A	0.6	6	15	15	15	15	15
5TT5 84	4-pole, 40 A	I_e for	$U_e = 24$ V DC	A	40	40	40	40	40	40	40
			$U_e = 110$ V DC	A	4	10	30	30	30	30	30
			$U_e = 220$ V DC	A	1.2	8	20	20	20	20	20
5TT5 85	4-pole, 63 A	I_e for	$U_e = 24$ V DC	A	63	63	63	63	63	63	63
			$U_e = 110$ V DC	A	4	10	35	35	35	35	35
			$U_e = 220$ V DC	A	1.2	8	30	30	30	30	30

Switching of lamps

Incandescent lamp loads, lamp type				1000 W	500 W	200 W	100 W	60 W
5TT5 80 , 2-pole	20 A	Per NO/NC contact		1	3	10	20	33
5TT5 82 , 4-pole	25 A	Per NO/NC contact		2	4	10	20	33
5TT5 83 , 4-pole	25 A	Per NO/NC contact		1	3	10	20	33
5TT5 84 , 4-pole	40 A	Per NO/NC contact		4	8	20	40	65
5TT5 85 , 4-pole	63 A	Per NO/NC contact		5	10	25	50	85

Maximum number of lamps in units, per NO/NC contact at 230 V AC, 50 Hz.

Fluorescent and compact lamps in ballast operation (KVG) (permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

				Uncorrected			Parallel-corrected			DUO switching, 2-lamp		
Lamp type	W			L18	L36	L58	L18	L36	L58	2 × L18	2 × L36	2 × L58
Capacitor capacitance	μF			--	--	--	4.5	4.5	7.0	--	--	--
5TT5 80 , 2-pole	20 A	Per NO/NC contact		22	17	14	7	7	4	30	17	10
5TT5 82 , 4-pole	25 A	Per NO/NC contact		41	41	28	33	33	21	54	36	19
5TT5 83 , 4-pole	25 A	Per NO/NC contact		24	20	17	8	8	5	40	24	14
5TT5 84 , 4-pole	40 A	Per NO/NC contact		90	65	45	48	48	31	100	65	40
5TT5 85 , 4-pole	63 A	Per NO/NC contact		140	95	70	73	73	47	150	95	60

Fluorescent and compact lamps with electronic primary switching device (ECG) (permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

				1 lamp			2 lamps		
Lamp type	W			1 × L18	1 × L36	1 × L58	2 × L18	2 × L36	2 × L58
5TT5 80 , 2-pole	20 A	Per NO/NC contact		25	15	14	12	7	7
5TT5 82 , 4-pole	25 A	Per NO/NC contact		35	20	19	17	10	9
5TT5 83 , 4-pole	25 A	Per NO/NC contact		35	20	19	17	10	9
5TT5 84 , 4-pole	40 A	Per NO/NC contact		100	52	50	50	26	25
5TT5 85 , 4-pole	63 A	Per NO/NC contact		140	75	72	70	38	36

High-pressure mercury-vapor lamps (HQL) (permissible number of lamps in units per NO contact/NC contact at 230 V AC, 50 Hz)

				Uncorrected						Parallel-corrected							
Lamp type	W			50	80	125	250	400	700	1000	50	80	125	250	400	700	1000
Capacitor capacitance	μF			--	--	--	--	--	--	--	7	8	10	18	25	45	60
5TT5 80 , 2-pole	20 A	Per NO/NC contact		14	10	7	4	2	1	1	4	4	3	1	1	0	0
5TT5 82 , 4-pole	25 A	Per NO/NC contact		18	13	9	5	3	2	1	21	18	15	8	6	3	2
5TT5 83 , 4-pole	25 A	Per NO/NC contact		18	13	9	5	3	2	1	5	5	4	2	1	0	0
5TT5 84 , 4-pole	40 A	Per NO/NC contact		38	29	20	10	7	4	3	31	27	22	12	9	5	4
5TT5 85 , 4-pole	63 A	Per NO/NC contact		55	42	29	15	10	6	4	47	41	33	18	13	7	5

Halogen metal-vapor lamps (HQI)

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	Capacitor capacitance μF	Uncorrected						Parallel-corrected						With electronic ballast PCI			
			70	150	250	400	1000	2000	70	150	250	400	1000	2000	20	35	70	150
5TT5 80, 2-pole	20 A	Per NO/NC contact	10	5	3	3	1	0	2	1	0	0	0	0	9	6	5	4
5TT5 82, 4-pole	25 A	Per NO/NC contact	12	7	4	3	1	0	12	7	4	4	1	1	9	6	5	4
5TT5 83, 4-pole	25 A	Per NO/NC contact	12	7	4	3	1	0	3	1	0	0	0	9	6	5	4	
5TT5 84, 4-pole	40 A	Per NO/NC contact	23	12	7	6	2	1	18	11	6	6	2	1	18	11	10	8
5TT5 85, 4-pole	63 A	Per NO/NC contact	32	18	10	9	3	1	25	15	9	8	3	2	20	13	12	10

High-pressure sodium-vapor lamps (NAV)

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	Capacitor capacitance μF	Uncorrected				Parallel-corrected				With electronic ballast PCI			
			150	250	400	1000	150	250	400	1000	20	35	70	150
5TT5 80, 2-pole	20 A	Per NO/NC contact	5	3	2	0	1	0	0	9	6	5	4	
5TT5 82, 4-pole	25 A	Per NO/NC contact	6	4	2	1	7	4	3	1	9	6	5	4
5TT5 83, 4-pole	25 A	Per NO/NC contact	6	4	2	1	1	0	0	9	6	5	4	
5TT5 84, 4-pole	40 A	Per NO/NC contact	17	10	6	3	11	6	4	2	18	11	10	8
5TT5 85, 4-pole	63 A	Per NO/NC contact	22	13	8	3	16	10	6	3	20	13	12	12

High-pressure sodium-vapor lamps

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	Capacitor capacitance μF	Uncorrected					Parallel-corrected						
			18	35	55	90	135	180	18	35	55	90	135	180
5TT5 80, 2-pole	20 A	Per NO/NC contact	22	7	7	4	3	3	6	1	1	1	--	--
5TT5 82, 4-pole	25 A	Per NO/NC contact	27	9	9	5	4	4	30	7	7	5	3	3
5TT5 83, 4-pole	25 A	Per NO/NC contact	27	9	9	5	4	4	7	1	1	1	--	--
5TT5 84, 4-pole	40 A	Per NO/NC contact	71	23	23	14	10	10	44	11	11	8	4	5
5TT5 85, 4-pole	63 A	Per NO/NC contact	90	30	30	19	13	13	66	16	16	12	7	8

Fluorescent Lumilux lamps T5 type FC, with electronic ballast (ECG)

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	1 lamp			2 lamps			
		22	40	55	2 × 22	2 × 40	2 × 55	
5TT5 80, 2-pole	20 A	Per NO/NC contact	22	12	8	11	6	4
5TT5 82, 4-pole	25 A	Per NO/NC contact	30	15	12	15	7	6
5TT5 83, 4-pole	25 A	Per NO/NC contact	30	15	12	15	7	6
5TT5 84, 4-pole	40 A	Per NO/NC contact	80	40	30	40	20	15
5TT5 85, 4-pole	63 A	Per NO/NC contact	110	60	45	55	30	22

Fluorescent Lumilux lamps T5 type HE, with electronic ballast (ECG)

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	1 lamp				2 lamps				
		14	21	28	35	2 × 14	2 × 21	2 × 28	2 × 35	
5TT5 80, 2-pole	20 A	Per NO/NC contact	30	22	18	14	15	11	9	7
5TT5 82, 4-pole	25 A	Per NO/NC contact	40	30	22	18	20	15	11	9
5TT5 83, 4-pole	25 A	Per NO/NC contact	40	30	22	18	20	15	11	9
5TT5 84, 4-pole	40 A	Per NO/NC contact	105	80	60	48	52	40	30	24
5TT5 85, 4-pole	63 A	Per NO/NC contact	150	115	90	70	75	57	45	35

Fluorescent Lumilux lamps T5 type HO, with electronic ballast (ECG)

(permissible number of lamps in units per NO/NC contact at 230 V AC, 50 Hz)

Lamp type	W	1 lamp					2 lamps					
		24	39	49	54	80	2 × 24	2 × 39	2 × 49	2 × 54	2 × 80	
5TT5 80, 2-pole	20 A	Per NO/NC contact	20	12	10	9	6	10	6	5	4	3
5TT5 82, 4-pole	25 A	Per NO/NC contact	26	16	14	13	8	13	8	7	6	4
5TT5 83, 4-pole	25 A	Per NO/NC contact	26	16	14	13	8	13	8	7	6	4
5TT5 84, 4-pole	40 A	Per NO/NC contact	70	42	35	32	22	35	21	17	16	11
5TT5 85, 4-pole	63 A	Per NO/NC contact	100	62	52	47	32	50	31	26	23	16