

Power contactors CX³

Technical characteristics

- Rated impulse withstand voltage (Uimp): 4 kV
- Mechanical endurance (no. of operating cycles): 10⁶ cycles
- Operating temperatures: - 25 °C to + 40 °C
- Storage temperatures: - 40 °C to + 70 °C

Contactor protection against short circuits according to standard EN 61095, conditional short-circuit current:

- I_q = 6 kA for 16 to 25 A contactors
- I_q = 3 kA for 40 to 63 A contactors

Circuit breaker or gG fuse rated:

- ≤ 16 A for 16 A rating • ≤ 40 A for 40 A rating
- ≤ 25 A for 25 A rating • ≤ 63 A for 63 A rating

Consumption of a contactor control coil

16 A and 25 A power contactors					
Coil voltage	24 V \sim		230 V \sim low noise	230 V \sim	
Current	16 A and 25 A	25 A	25 A	16 A and 25 A	16 A and 25 A
Type of contact	NC + NO 2 NO	4 NO	2 NO	NC + NO 2 NO 2 NC	2 NC + 2 NO 4 NO 4 NC
Dimensions	1 mod.	2 mod.	1 mod.	1 mod.	2 mod.
Holding current	200 mA	300 mA	12 mA	20 mA	20 mA
Inrush current	970 mA	2500 mA	60 mA	90 mA	200 mA

40 A and 63 A power contactors				
Coil voltage	24 V \sim		230 V \sim	
Current	40 A and 63 A	40 A and 63 A	40 A and 63 A	40 A and 63 A
Type of contact	2 NO	4 NO	2 NO 2 NC	3 NO 4 NO 4 NC
Dimensions	2 mod.	3 mod.	2 mod.	3 mod.
Holding current	250 mA	270 mA	15 mA	30 mA
Inrush current	1750 mA	1500 mA	150 mA	200 mA

Recommendations

Insert a spacing module (Cat.No 4 063 07 p. 73):

- every two contactors when the ambient temperature is below 40 °C
- every contactor when the ambient temperature is between 40 and 60 °C

Contactor rating	40 °C	50 °C	60 °C
I _e = 16 A	16 A	14 A	12 A
I _e = 25 A	25 A	22 A	20 A
I _e = 40 A	40 A	36 A	32 A
I _e = 63 A	63 A	57 A	50 A

Max. connection cross-section in mm²

Conductor type	Ratings ≤ 25 A	Ratings 40 & 63 A
Rigid	6 ² or 2 x 2.5 ²	25 ² or 2 x 10 ²
Flexible	6 ² or 2 x 2.5 ²	25 ² or 2 x 10 ²
Flexible with single end cap	6 ²	16 ²
Flexible with double end cap	2 x 4 ²	2 x 16 ²

Contactor selection charts (number of lamps per contactor)

Incandescent lamps

Tungsten and halogen filaments 230 V \sim								
Nominal wattage	40 W	60 W	75 W	100 W	150 W	200 W	500 W	1000 W
16 A	45	30	24	19	13	10	4	2
25 A	60	48	38	30	20	15	6	3
40 A	96	77	61	48	32	24	10	5
63 A	154	123	97	77	51	38	15	8

ELV halogen bulbs with ferromagnetic ballast						ELV halogen bulbs with electronic ballast						
Nominal wattage	20 W	35 W	50 W	75 W	100 W	150 W	20 W	35 W	50 W	75 W	100 W	150 W
16 A	32	20	15	12	9	6	60	40	28	18	14	9
25 A	52	30	24	16	12	8	80	50	40	26	20	13
40 A	68	39	31	21	16	10	112	70	56	36	28	18
63 A	88	51	41	27	20	14	157	98	78	51	39	25

Contactor selection charts (number of lamps per contactor) (continued)

LED lamps

Nominal wattage	Non-dimmable LED lamps (without driver)									
	2 W	5 W	7 W	9 W	12 W	18 W	22 W	30 W	40 W	50 W
16 A	16	16	16	16	16	15	14	12	10	9
25 A	30	30	30	30	30	27	25	22	18	15
40 A	90	90	85	85	85	80	75	65	50	37
63 A	150	150	140	140	140	115	100	80	70	55

Nominal wattage	Dimmable LED lamps (equipped with driver)									
	2 W	5 W	7 W	9 W	12 W	18 W	22 W	30 W	40 W	50 W
16 A	40	40	40	35	35	33	30	27	23	20
25 A	65	65	65	60	60	56	51	45	33	30
40 A	170	170	170	162	162	129	113	95	77	65
63 A	265	265	265	260	260	214	176	139	121	105

Fluorescent tubes with electronic ballast

Nominal wattage	Single fluorescent				Double fluorescent		
	18 W	30 W	36 W	58 W	2 x 18 W	2 x 36 W	2 x 58 W
16 A	72	42	36	22	36	20	12
25 A	110	68	58	36	56	30	19
40 A	165	102	87	54	84	45	29
63 A	248	153	131	81	126	68	43

Nominal wattage	Triple fluorescent (series compensated)		Quadruple fluorescent (series compensated)	
	3 x 14 W	3 x 18 W	4 x 14 W	4 x 18 W
16 A	34	26	26	20
25 A	46	38	37	28
40 A	62	51	52	39
63 A	84	69	73	55

Compact fluorescent with built-in electronic power supply					
Nominal wattage	7 W	11 W	15 W	20 W	23 W
16 A	120	80	64	50	43
25 A	200	125	90	70	60
40 A	280	175	126	98	84
63 A	392	245	176	137	118

Discharge lamps with compensation

Nominal wattage	Metal halogenide						Low pressure sodium vapour					
	35 W	70 W	100 W	150 W	250 W	400 W	18 W	35 W	55 W	90 W	135 W	180 W
16 A	10	6	5	3	2	1	12	6	5	3	2	2
25 A	15	9	7	5	3	2	20	10	7	5	3	3
40 A	23	14	11	8	5	3	30	15	11	8	5	5
63 A	34	20	16	11	7	5	45	23	16	11	7	7

Nominal wattage	High pressure sodium vapour					High pressure mercury vapour				
	70 W	150 W	250 W	400 W	1000 W	50 W	80 W	125 W	250 W	400 W
16 A	8	7	5	3	1	11	8	6	3	2
25 A	10	9	6	4	2	15	10	8	4	3
40 A	15	14	9	6	3	21	14	11	6	4
63 A	23	20	14	9	5	29	20	16	8	6

High pressure mixed				
Nominal wattage	100 W	160 W	250 W	400 W
16 A	9	6	4	2
25 A	11	7	5	3
40 A	14	9	7	4
63 A	19	12	8	5

Fluorescent lamps with ferromagnetic ballast, please consult us