

■ Technical characteristics

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

Contactors 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
 - ≤ 25 A for 25 A rating
 - ≤ 40 A for 40 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 A		230 V A low noise	230 V A	
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 A		230 V A	
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 4063 07 p. 156):
 - 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

• Incandescent lamps

Tungsten and halogen filaments 230 VA								
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
16 A	32	20	15	12	9	6	60	40	28	18	14
25 A	52	30	24	16	12	8	80	50	40	26	20
40 A	68	39	31	21	16	10	112	70	56	36	28
63 A	88	51	41	27	20	14	157	98	78	51	39

■ Contactor selection charts (continued)

• Fluorescent tubes with ferromagnetic ballast

Single parallel compensated fluorescent						Double series compensated fluorescent				
Nominal wattage	18 W	20 W	36 W	58 W	115 W	2 x 20 W	2 x 36 W	2 x 40 W	2 x 58 W	2 x 140 W
16 A	24	24	16	11	5	30	24	22	15	6
25 A	33	30	25	17	9	45	38	35	24	10
40 A	43	39	33	22	12	68	57	53	36	15
63 A	56	51	42	29	15	101	86	79	54	23

Quadruple series compensated fluorescent				Compact fluorescent with built-in starter			
Nominal wattage	4 x 18 W			7 W	10 W	18 W	26 W
16 A	16			50	40	28	19
25 A	24			60	50	42	28
40 A	36			78	65	55	36
63 A	54			101	85	71	47

• Fluorescent tubes with electronic ballast

Single fluorescent					Double fluorescent		
Nominal wattage	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

Triple fluorescent (series compensated)			Quadruple fluorescent (series compensated)	
Nominal wattage	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

Metal halogenide							Low pressure sodium vapour					
Nominal wattage	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

High pressure sodium vapour						High pressure mercury vapour				
Nominal wattage	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