

Description Installation Contactors CR25, CR40 and CR63

Contactors are frequently applied for switching of lamp loads, fans or pumps in both utility as well as industrial areas. All contactors with AC/DC coils ensure silent operation (hum-free) which is further enhanced by a low power consumption. Optimal contacts and low heat dissipation guarantee a long lifetime of the contactor.

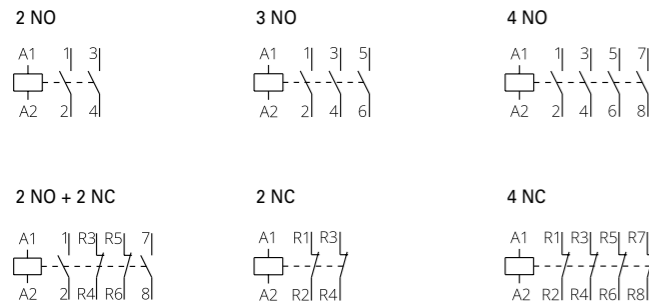
Technical characteristics

- Designed according to IEC 60947-4-1 and IEC 61095 standards
- Suitable for applications in general control, heating & lighting applications
- Available in 25 A, 40 A and 63 A rating with 2, 3 or 4-pole contacts
- Coil voltages: 12 V AC/DC, 24 V AC/DC, 48 V AC/DC and 230 V AC/DC
- Optional add-on auxiliary contact available
- DIN modular profile
- Spacers available to extend lifetime (it is recommended to use 1 spacer between every 2 contactors installed)

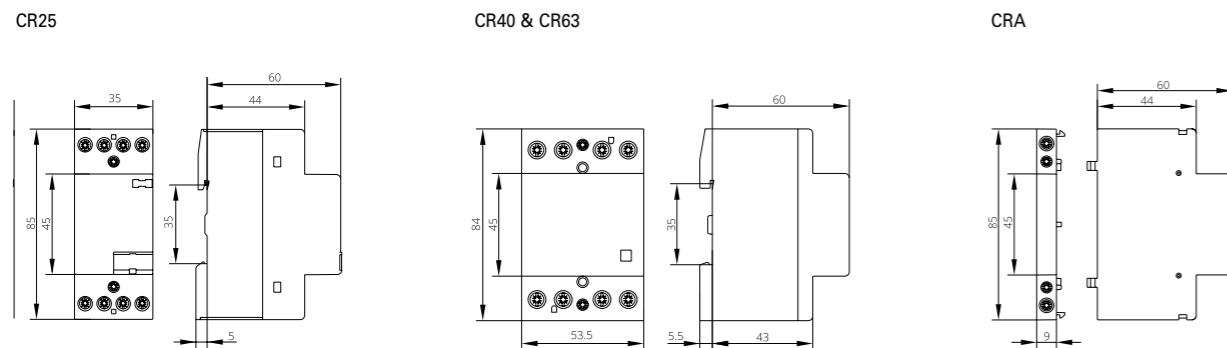
Advantages:

- Low inrush power for all AC/DC types
- Availability of combined AC/DC type contactors ensure silent operation (hum-free)
- Contactors of AC/DC coil type are operable on both AC and DC voltage.
- All combined AC/DC type versions are equipped with surge protection on the operating coil
- Equipped with contact indication
- Optimal quality of contacts and low heat dissipation ensure a long lifetime

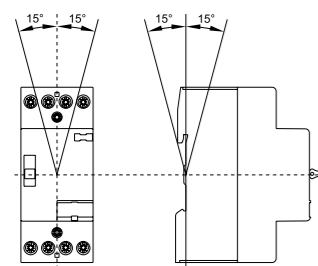
Connection diagrams



Dimensions (mm)

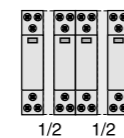


Permitted installation positions



Packing density

Spacers recommended! (Z-DST)



Technical Data

CR Rating	Contactors			Aux. contact
	25 A	40 A	63 A	6 A
General				
Standards	IEC/EN 60947-4-1, IEC/EN 61095			IEC/EN 60947-5-1
Nominal operating voltage	U _n (V)			230 / 400
Mechanical endurance (switching cycles)	10,000,000			3,000,000
Protection class (according to DIN 40 050, IEC 529)	IP20			IP20
Permissible ambient temperature	(°C)			25 up to +55
4NO	-25..+70	-25..+70	-25..+70	
3NO	-15..+70	-15..+70		
2NO		-15 .. +70	-15 .. +70	
2NO+2NC	-15..+55			
2NC		-15..+55		
4NC	-15..+55			
Storage temperature	(°C)			-30 up to +80
Contact rating				
Rated insulation voltage	U _i (V)			500
Frequency	f (Hz)			50 / 60
Rated impulse withstand voltage	U _{imp} (kV)			4
Rated thermal current	I _{th} (A)			6
Power dissipation per contact at I _n	(W)			0.3
AC-1 / AC-7a Rated operational current	I _e (A)			
AC-1 / AC-7a Operational power rating	P _{max} (kW)			
Single phase 230 V	5.4	8.7	13.3 ²⁾	
Three phase 230 V	9	16	24 ²⁾	
Three phase 400 V	16	26	40 ²⁾	
AC-3 / AC-7b Operational power rating	P _{max} (kW)			
Single phase 230 V	1.3	3.7	5	
Three phase 230 V	2.2	5.5	8.5	
Three phase 400 V	4	11	15	
AC-15 Rated operational current	I _e (A)			
Single phase 230 V				
Single phase 400 V				
DC-1 (L/R ≤ 1 ms) Rated thermal current	I _e (A)			
1-pole: at U _e = 24/110/220 V DC	25/6/0.6	40/4/1.2	63/4/1.2	
2-poles in series: at U _e = 24/110/220 V DC	25/10/6	40/10/8	63/10/8	
3-poles in series: at U _e = 24/110/220 V DC	25/20/15	40/30/20	63/35/30	
4-poles in series: at U _e = 24/110/220 V DC	25/20/15	40/40/40	63/63/63	
DC-13 Rated thermal current	I _e (A)			
1-pole: at U _e = 24/110/220 V DC				6/0.3/0.05
2-poles in series: at U _e = 24/110/220 V DC				6/1/0.1
Contact material	AgNi	AgSnO ₂	AgSnO ₂	
Opening distance	(mm)	4.6 (NO)/4.2 (NC)	3.5 (NO)/2.8 (NC)	3.5 (NO)/2.8 (NC)
Electrical endurance				
AC-1 / AC-7a Application (maximum operating cycles)	200,000	100,000	100,000	
AC-3 / AC-7b Application (maximum operating cycles)	500,000	150,000	150,000	
AC-1/AC-3/AC-5b/AC-6b/AC-15 (max. op. cycles/hour)		600		
AC-15 / DC-13 (maximum operating cycles)				50,000
Operating coil				
Coil inrush power (for all voltage ratings)	(VA/W)	2.6/2.6 ¹⁾	5/5	5/5
Coil consumption (for all voltage ratings)		2.6/2.6 ¹⁾	5/5	5/5
Closing delay	(ms)	15 - 45	15 - 20	15 - 20
Opening delay	(ms)	20 - 70	35 - 45	35 - 45
Range of control voltage	U _c	85 up to 110%		
Kind of voltage		AC / DC		
Frequency (AC)	f (Hz)	40 .. 500		
Dimensions				
Width	(mm)	35	53.5	9
Height	(mm)	85	84	85
Depth	(mm)	65	65.5	60
Terminals for main				
Terminal capacity - fine stranded wire	(mm ²)	1 to 6	1.5 to 16	1.5 to 16
Terminal capacity - solid wire	(mm ²)	1 to 10	1.5 to 25	1.5 to 25
Terminal screw size		M3.5	M5	M5
Terminal screw head type (Pozidrive)		PZ1	PZ2	PZ2
Maximum torque	(Nm)	1.2	3.5	3.5
Terminals for operating coils				
Terminal capacity - fine stranded wire	(mm ²)	1 to 2.5		
Terminal capacity - solid wire	(mm ²)	1 to 2.5		
Terminal screw size		M3		
Terminal screw head type (Pozidrive)		PZ1		
Maximum torque	(Nm)	0.6		
Terminals for auxiliary circuit				
Terminal capacity - fine stranded wire	(mm ²)	1 to 2.5		
Terminal capacity - solid wire	(mm ²)	1 to 2.5		
Terminal screw size		M3		
Terminal screw head type (Pozidrive)		PZ Size 1		
Maximum torque	(Nm)	0.8		

1) Coil consumption for version 4NC is 3.8 VA/3.8 W

2) Rated power (AC-1) for CR63 4NC: single phase 230 V = 10.9 kW, three phase 230 V = 18.9 kW, three phase 400 V = 32.9 kW

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz		
	W	A	µF	CR25	CR40	CR63
Incandescent lamps and halogen lamps	11	0.05	-	200	364	455
	15	0.07	-	147	267	333
	18	0.08	-	122	222	278
	20	0.09	-	110	200	250
	25	0.11	-	88	160	200
	28	0.12	-	79	143	179
	30	0.13	-	73	133	167
	33	0.14	-	67	121	152
	35	0.15	-	63	114	143
	40	0.17	-	55	100	125
	42	0.18	-	52	95	119
	46	0.2	-	48	87	109
	48	0.21	-	46	83	104
	50	0.22	-	44	80	100
	53	0.23	-	42	75	94
	57	0.25	-	39	70	88
	60	0.26	-	37	67	83
	70	0.3	-	31	57	71
	75	0.33	-	29	53	67
	77	0.34	-	29	52	65
	80	0.35	-	28	50	63
	100	0.44	-	22	40	50
	116	0.5	-	19	34	43
	120	0.52	-	18	33	42
	150	0.65	-	15	27	33
	160	0.7	-	14	25	31
	200	0.87	-	11	20	25
205	0.89	-	11	20	24	
230	1	-	10	17	22	
300	1.3	-	7	13	17	
400	1.74	-	6	10	13	
500	2.17	-	4	8	10	
750	3.26	-	3	5	7	
1000	4.35	-	2	4	5	
1500	6.52	-	1	3	3	
2000	8.7	-	1	2	3	
Transformators for low-voltage halogen lamps (electromagnetic and electronic)	10	0.04	-	120	270	430
	20	0.09	-	60	135	215
	30	0.13	-	40	90	143
	40	0.17	-	30	68	108
	50	0.22	-	24	54	86
	60	0.26	-	20	45	72
	70	0.3	-	17	39	61
	80	0.35	-	15	34	54
	90	0.39	-	13	30	48
	100	0.44	-	12	27	43
	150	0.65	-	8	18	29
	200	0.87	-	6	14	22
	300	1.3	-	4	9	14
400	1.74	-	3	7	11	
Compact fluorescent lamps with internal ballasts	3	0.04	-	200	550	700
	5	0.06	-	120	330	420
	6	0.07	-	100	275	350
	7	0.08	-	86	236	300
	8	0.09	-	75	206	263
	9	0.1	-	67	183	233
	10	0.11	-	60	165	210
	11	0.12	-	55	150	191
	12	0.13	-	50	138	175
	13	0.14	-	46	127	162
	14	0.15	-	43	118	150
	15	0.16	-	40	110	140
	16	0.18	-	38	103	131
	18	0.2	-	33	92	117

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz			
	W	A	µF	CR25	CR40	CR63	
	20	0.21	-	30	83	105	
	21	0.22	-	29	79	100	
	22	0.23	-	27	75	95	
	23	0.24	-	26	72	91	
	24	0.25	-	25	69	88	
	25	0.26	-	24	66	84	
	26	0.27	-	23	63	81	
	27	0.124	-	22	61	78	
	30	0.15	-	20	55	70	
	33	0.155	-	18	50	64	
	35	0.164	-	17	47	60	
	40	0.2	-	15	41	53	
	50	0.24	-	12	33	42	
	70	0.312	-	9	24	30	
	Compact fluorescent lamps with external electromagnetic ballasts - uncorrected	5	0.05	-	106	190	294
		2x5	0.07	-	76	136	210
		7	0.05	-	106	190	294
		2x7	0.07	-	76	136	210
		9	0.06	-	88	158	245
2x9		0.08	-	66	119	184	
10		0.07	-	76	136	210	
11		0.08	-	66	119	184	
13		0.08	-	66	119	184	
16		0.1	-	53	95	147	
18		0.12	-	44	79	123	
2x18		0.21	-	25	45	70	
21		0.12	-	44	79	123	
22		0.2	-	27	48	74	
24		0.15	-	35	63	98	
26	0.15	-	35	63	98		
28	0.15	-	35	63	98		
32	0.22	-	24	43	67		
36	0.21	-	25	45	70		
38	0.21	-	25	45	70		
40	0.21	-	25	45	70		
58	0.32	-	17	30	46		
Compast fluorescent lamps with external electromagnetic ballasts - parallel corrected	5	0.05	2	18	110	165	
	2x5	0.07	2	18	110	165	
	7	0.05	2	18	110	165	
	2x7	0.07	2	18	110	165	
	9	0.06	2	18	110	165	
	2x9	0.08	2	18	110	165	
	10	0.07	2	18	110	165	
	11	0.08	2	18	110	165	
	13	0.08	2	18	110	165	
	16	0.1	2	18	110	165	
	18	0.12	4.5	8	49	73	
	2x18	0.21	4	9	55	83	
	21	0.12	3	12	73	110	
	22	0.2	4.5	8	49	73	
	24	0.15	4.5	8	49	73	
26	0.15	4.5	8	49	73		
28	0.15	3.5	10	63	94		
32	0.22	4	9	55	83		
36	0.21	4.5	8	49	73		
38	0.21	4.5	8	49	73		
40	0.21	4.5	8	49	73		
58	0.32	7	5	31	47		

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz		
	W	A	µF	CR25	CR40	CR63
Compact fluorescent lamps with external electronic ballasts	5	0.03	-	105	300	417
	7	0.04	-	79	225	313
	9	0.05	-	63	180	250
	2x9	0.09	-	35	100	139
	10	0.05	-	63	180	250
	2x10	0.09	-	35	100	139
	11	0.07	-	45	129	179
	2x11	0.12	-	26	75	104
	13	0.07	-	45	129	179
	2x13	0.12	-	26	75	104
	14	0.08	-	39	113	156
	2x14	0.15	-	21	60	83
	16	0.07	-	45	129	179
	17	0.1	-	32	90	125
	2x17	0.18	-	18	50	69
	18	0.09	-	35	100	139
	2x18	0.17	-	19	53	74
	22	0.13	-	24	69	96
	2x22	0.21	-	15	43	60
	24	0.12	-	26	75	104
	2x24	0.23	-	14	39	54
	3x24	0.32	-	10	28	39
	4x24	0.43	-	7	21	29
	26	0.12	-	26	75	104
	2x26	0.24	-	13	38	52
	28	0.14	-	23	64	89
	32	0.16	-	20	56	78
	2x32	0.31	-	10	29	40
	36	0.16	-	20	56	78
	2x36	0.31	-	10	29	40
	38	0.17	-	19	53	74
	2x38	0.35	-	9	26	36
	40	0.2	-	16	45	63
	2x40	0.39	-	8	23	32
	42	0.2	-	16	45	63
	2x42	0.41	-	8	22	30
	55	0.27	-	12	33	46
	2x55	0.52	-	6	17	24
	57	0.28	-	11	32	45
	2x57	0.57	-	6	16	22
	60	0.31	-	10	29	40
	2x60	0.61	-	5	15	20
	70	0.34	-	9	26	37
	80	0.38	-	8	24	33
	2x80	0.76	-	4	12	16
85	0.42	-	8	21	30	
100	0.46	-	7	20	27	
120	0.58	-	5	16	22	
150	0.69	-	5	13	18	
Fluorescent lamps with external electromagnetic ballasts - uncorrected	4	0.17	-	66	118	188
	6	0.16	-	70	125	200
	8	0.15	-	75	133	213
	10	0.17	-	66	118	188
	11	0.16	-	70	125	200
	13	0.17	-	66	118	188
	14	0.4	-	28	50	80
	15	0.33	-	34	61	97
	16	0.2	-	56	100	160
	18	0.37	-	30	54	86
	20	0.38	-	29	53	84
	22	0.37	-	30	54	86
	25	0.29	-	39	69	110
	30	0.37	-	30	54	86

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz			
	W	A	µF	CR25	CR40	CR63	
	32	0.43	-	26	47	74	
	36	0.43	-	26	47	74	
	38	0.43	-	26	47	74	
	40	0.43	-	26	47	74	
	58	0.67	-	17	30	48	
	65	0.67	-	17	30	48	
	75	0.67	-	17	30	48	
	80	0.8	-	14	25	40	
	85	0.8	-	14	25	40	
	100	0.96	-	12	21	33	
	125	0.94	-	12	21	34	
	Fluorescent lamps with external electromagnetic ballasts - parallel corrected	4	0.09	2	18	110	165
		6	0.08	2	18	110	165
		8	0.08	2	18	110	165
		10	0.09	2	18	110	165
11		0.08	2	18	110	165	
13		0.09	2	18	110	165	
14		0.2	4.5	8	49	73	
15		0.17	4.5	8	49	73	
16		0.1	2.5	14	88	132	
18		0.19	4.5	8	49	73	
20		0.19	4.5	8	49	73	
22		0.19	5	7	44	66	
25		0.15	3.5	10	63	94	
30		0.24	4.5	8	49	73	
32		0.29	5	7	44	66	
36	0.29	4.5	8	49	73		
38	0.29	4.5	8	49	73		
40	0.29	4.5	8	49	73		
58	0.46	7	5	31	47		
65	0.46	7	5	31	47		
75	0.46	6	6	37	55		
80	0.57	7	5	31	47		
85	0.57	8	5	28	41		
100	0.66	10	4	22	33		
125	0.65	18	2	12	18		
Series circuit for two fluorescent lamps with external electromagnetic ballast - uncorrected	2x4	0.34	-	33	59	94	
	2x6	0.32	-	35	63	100	
	2x8	0.3	-	37	67	107	
	2x10	0.34	-	33	59	94	
	2x11	0.32	-	35	63	100	
	2x13	0.34	-	33	59	94	
	2x14	0.8	-	14	25	40	
	2x15	0.66	-	17	30	48	
	2x16	0.4	-	28	50	80	
	2x18	0.74	-	15	27	43	
	2x20	0.76	-	15	26	42	
	2x22	0.74	-	15	27	43	
	2x25	0.58	-	19	34	55	
	2x30	0.74	-	15	27	43	
	2x32	0.86	-	13	23	37	
2x36	0.86	-	13	23	37		
2x38	0.86	-	13	23	37		
2x40	0.86	-	13	23	37		
2x58	1.34	-	8	15	24		
2x65	1.34	-	8	15	24		
2x75	1.34	-	8	15	24		
2x80	1.6	-	7	13	20		
2x85	1.6	-	7	13	20		
2x100	1.92	-	6	10	17		
2x125	1.88	-	6	11	17		

Lamps Type	Power W	Current A	Capacitor µF	Maximum number of lamps per pole at 230 V, 50 Hz		
				CR25	CR40	CR63
Series circuit for two fluorescent lamps with external electromagnetic ballast - parallel corrected	2x4	0.17	2	18	110	165
	2x6	0.16	2	18	110	165
	2x8	0.15	2	18	110	165
	2x10	0.17	2	18	110	165
	2x11	0.16	2	18	110	165
	2x13	0.17	2	18	110	165
	2x14	0.4	4.5	8	49	73
	2x15	0.33	4.5	8	49	73
	2x16	0.2	2.5	14	88	132
	2x18	0.37	4.5	8	49	73
	2x20	0.38	4.5	8	49	73
	2x22	0.37	5	7	44	66
	2x25	0.29	3.5	10	63	94
	2x30	0.37	4.5	8	49	73
	2x32	0.43	5	7	44	66
	2x36	0.43	4.5	8	49	73
	2x38	0.43	4.5	8	49	73
	2x40	0.43	4.5	8	49	73
	2x58	0.67	7	5	31	47
	2x65	0.67	7	5	31	47
	2x75	0.67	6	6	37	55
	2x80	0.8	7	5	31	47
	2x85	0.8	8	5	28	41
	2x100	0.96	10	4	22	33
	2x125	0.94	18	2	12	18
Lead-lag circuit for fluorescent lamps with external electromagnetic ballasts - series corrected	2x18	0.26	2.7	40	100	150
	2x36	0.48	4.5	22	54	81
	2x40	0.48	4.5	22	54	81
	2x58	0.78	7	13	33	50
	2x65	0.78	7	13	33	50
	2x80	0.96	9	11	27	41
	2x85	0.96	9	11	27	41
2x125	1.2	18	9	22	33	
Fluorescent lamps with external electronic ballasts	4	0.03	-	158	417	600
	6	0.033	-	144	379	545
	2x6	0.06	-	79	208	300
	8	0.04	-	119	313	450
	2x8	0.08	-	59	156	225
	10	0.05	-	95	250	360
	2x10	0.09	-	53	139	200
	11	0.06	-	79	208	300
	13	0.07	-	68	179	257
	14	0.08	-	59	156	225
	2x14	0.15	-	32	83	120
	3x14	0.21	-	23	60	86
	4x14	0.28	-	17	45	64
	15	0.08	-	59	156	225
	2x15	0.13	-	37	96	138
	16	0.07	-	68	179	257
	2x16	0.14	-	34	89	129
	3x16	0.2	-	24	63	90
	4x16	0.28	-	17	45	64
	18	0.09	-	53	139	200
	2x18	0.17	-	28	74	106
	3x18	0.24	-	20	52	75
	4x18	0.31	-	15	40	58
	19	0.11	-	43	114	164
	2x19	0.22	-	22	57	82
	20	0.11	-	43	114	164
	2x20	0.22	-	22	57	82
	21	0.11	-	43	114	164
	2x21	0.22	-	22	57	82
	22	0.11	-	43	114	164
2x22	0.23	-	21	54	78	

Lamps Type	Power W	Current A	Capacitor µF	Maximum number of lamps per pole at 230 V, 50 Hz		
				CR25	CR40	CR63
	24	0.12	-	40	104	150
	2x24	0.22	-	22	57	82
	3x24	0.33	-	14	38	55
	4x24	0.43	-	11	29	42
	25	0.15	-	32	83	120
	2x25	0.28	-	17	45	64
	28	0.14	-	34	89	129
	2x28	0.27	-	18	46	67
	30	0.14	-	34	89	129
	2x30	0.27	-	18	46	67
	32	0.17	-	28	74	106
	2x32	0.35	-	14	36	51
	34	0.17	-	28	74	106
	2x34	0.35	-	14	36	51
	35	0.17	-	28	74	106
	2x35	0.34	-	14	37	53
	36	0.16	-	30	78	113
	2x36	0.31	-	15	40	58
	3x36	0.46	-	10	27	39
	38	0.15	-	32	83	120
	2x38	0.31	-	15	40	58
	39	0.19	-	25	66	95
	2x39	0.36	-	13	35	50
	40	0.21	-	23	60	86
	2x40	0.42	-	11	30	43
	45	0.24	-	20	52	75
	2x45	0.46	-	10	27	39
	49	0.24	-	20	52	75
	2x49	0.46	-	10	27	39
	50	0.25	-	19	50	72
	2x50	0.48	-	10	26	38
	51	0.22	-	22	57	82
	2x51	0.42	-	11	30	43
54	0.26	-	18	48	69	
2x54	0.52	-	9	24	35	
55	0.28	-	17	45	64	
2x55	0.55	-	9	23	33	
58	0.25	-	19	50	72	
2x58	0.48	-	10	26	38	
65	0.25	-	19	50	72	
2x65	0.48	-	10	26	38	
70	0.3	-	16	42	60	
2x70	0.57	-	8	22	32	
73	0.38	-	13	33	47	
2x73	0.7	-	7	18	26	
80	0.4	-	12	31	45	
2x80	0.76	-	6	16	24	
High pressure mercury vapour lamps with external electromagnetic ballasts - uncorrected	50	0.6	-	18	38	55
	80	0.8	-	13	29	42
	125	1.2	-	9	20	29
	250	2.2	-	5	10	15
	400	3.3	-	3	7	10
700	5.4	-	2	4	6	
1000	7.5	-	1	3	4	
High pressure mercury vapour lamps with external electromagnetic ballasts - parallel corrected	50	0.3	7	5	31	47
	80	0.4	8	5	27	41
	125	0.6	10	4	22	33
	250	1.2	18	2	12	18
	400	1.8	25	1	9	13
	700	3.4	40	0	5	7
1000	4.8	60	0	4	5	

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz		
	W	A	µF	CR25	CR40	CR63
High pressure mercury vapour lamps which do not require ballasts	160	0.8	-	12	22	28
	250	1.2	-	8	15	18
	500	2.4	-	4	7	9
Metal halide lamps with external electromagnetic ballasts - uncorrected	35	0.5	-	22	43	60
	70	1	-	12	23	32
	100	1.2	-	10	19	26
	150	1.8	-	7	12	18
	250	3	-	4	7	10
	400	4.6	-	3	6	9
	600	6.2	-	2	3	4
	1000	9.7	-	1	2	3
2000	12.2	-	0	1	2	
Metal halide lamps with external electromagnetic ballasts - parallel corrected	35	0.23	6	6	36	50
	70	0.42	12	3	18	25
	100	0.55	12	3	18	25
	150	0.77	20	1	11	15
	250	1.26	32	1	6	9
	400	2	45	0	5	7
	600	3	65	0	3	5
	1000	5	85	0	2	3
2000	10.5	125	0	1	2	
Metal halide lamps with external electronic ballasts	20	0.11	-	25	51	64
	35	0.21	-	13	27	33
	2x35	0.38	-	7	15	18
	50	0.29	-	10	19	24
	70	0.38	-	7	15	18
	2x70	0.71	-	4	8	10
	100	0.56	-	5	10	13
	150	0.72	-	4	8	10
	250	1.3	-	2	4	5
	400	2	-	1	2	3
	1000	5	-	0	1	1
	2000	6	-	0	0	1
High pressure sodium vapour lamps with external electromagnetic ballasts - uncorrected	35	0.53	-	18	55	70
	50	0.8	-	12	35	45
	70	1	-	10	30	35
	100	1.2	-	8	25	30
	150	1.8	-	6	17	22
	250	3	-	4	10	13
	400	4.4	-	2	6	8
	600	6.2	-	1	4	5
1000	10.3	-	1	3	3	
High pressure sodium vapour lamps with external electromagnetic ballasts - parallel corrected	35	0.22	6	6	36	55
	50	0.3	8	4	27	41
	70	0.4	12	3	18	27
	100	0.55	12	3	18	27
	150	0.77	20	1	11	16
	250	1.26	32	1	6	10
	400	2	45	0	4	6
	600	2.9	65	0	3	5
1000	5.1	100	0	2	3	
High pressure sodium vapour lamps with external electronic ballasts	35	0.21	-	13	27	33
	50	0.25	-	11	22	28
	70	0.38	-	7	15	18
	100	0.56	-	5	10	13
	150	0.72	-	4	8	10
	250	1.3	-	2	4	5
	400	2	-	1	3	4
	600	3.1	-	0	1	2
1000	5	-	0	1	1	

Lamps Type	Power	Current	Capacitor	Maximum number of lamps per pole at 230 V, 50 Hz		
	W	A	µF	CR25	CR40	CR63
Low pressure sodium vapour lamps with external electromagnetic ballasts - uncorrected	18	0.4	-	27	71	90
	35	0.6	-	9	23	30
	55	0.6	-	9	23	30
	90	0.9	-	5	14	19
	135	0.9	-	4	10	13
180	0,9	-	4	10	13	
Low pressure sodium vapour lamps with external electromagnetic ballasts - parallel corrected	18	0.35	5	7	44	66
	35	0.28	20	1	11	16
	55	0.35	20	1	11	16
	90	0.55	26	1	8	12
	135	0.8	40	0	4	7
180	1	40	0	5	8	
Low pressure sodium vapour lamps with ECG	35	0.16	-	18	35	44
	55	0.25	-	11	22	28
LED lamps				max. 3.8 A	max. 11 A	max. 18 A
Power supplies for LEDs				per pole	per pole	per pole