

Contactors

Lamps for KNL

Switching of Lamps

Type	P [W]	C [μ F]	I [A]	Switching capacity	
				KNL9 / KNL9G	KNL12 / KNL12G
Incandescent lamps and tungsten halogen lamps	15	-	0.07	90	120
	25	-	0.11	55	73
	40	-	0.18	35	47
	60	-	0.26	23	31
	75	-	0.33	19	25
	100	-	0.44	14	19
	150	-	0.65	9	12
	200	-	0.87	7	9
	300	-	1.30	5	6
	500	-	2.17	2	3
	1000	-	4.35	1	1
Energy saving lamps	3	-	0.030	33	43
	5	-	0.040	30	40
	7	-	0.055	28	37
	8	-	0.065	25	33
	9	-	0.075	23	30
	10	-	0.080	23	30
	11	-	0.090	23	30
	12	-	0.100	20	27
	14	-	0.110	20	27
	15	-	0.120	18	23
	16	-	0.130	18	23
	18	-	0.145	15	20
	20	-	0.160	14	18
	21	-	0.170	13	17
	23	-	0.185	13	17
24	-	0.195	13	17	
30	-	0.160	13	17	
Compact fluorescent lamps - series correction	10	1.4	0.19	33	43
	13	1.4	0.18	33	43
	18	1.7	0.23	28	37
	26	2.5	0.33	19	25
	18	2.7	0.38	16	21
	24	2.7	0.35	16	21
Compact fluorescent lamps - parallel correction	36	3.4	0.44	14	18
	5	2.2	0.18	23	30
	7	2.1	0.18	24	31
	9	2.0	0.17	25	33
	10	2.2	0.19	23	30
	11	1.7	0.16	28	37
	13	1.8	0.18	28	37
	18	2.3	0.23	22	29
	26	3.3	0.33	15	20
	18	4.2	0.38	11	15
24	3.6	0.35	13	18	
36	4.4	0.44	11	15	
Compact fluorescent lamps with electronic control gear (ECG)	5	-	0.05	35	47
	7	-	0.05	35	47
	9	-	0.07	25	33
	10	-	0.07	25	33
	11	-	0.07	25	33

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Lamps for KNL

Max. number of lamps per pole at 230 V 50 Hz

KNL12G	KNL16 / KNL16G	KNL18 / KNL18G	KNL22 / KNL22G	KNL30 / KNL30G	KNL43	KNL63
	160	180	360	470	560	800
	100	110	220	280	340	480
	62	70	130	170	210	300
	41	46	92	118	140	200
	33	37	73	94	110	160
	25	28	55	71	85	120
	16	18	36	47	56	80
	12	14	27	35	42	60
	8	9	18	23	28	40
	4	5	10	13	17	24
	2	2	5	6	8	12
	58	65	150	200	650	1100
	53	60	135	180	500	900
	49	55	120	160	380	700
	44	50	110	150	320	600
	40	45	100	140	280	530
	40	45	100	140	260	500
	40	45	100	140	240	440
	35	40	95	120	210	400
	35	40	90	120	200	360
	30	35	85	115	180	330
	30	35	80	105	165	300
	26	30	70	95	150	270
	24	27	65	85	135	245
	22	25	60	80	125	230
	22	25	60	70	115	210
	22	25	55	70	110	200
	22	25	55	70	110	200
	58	65	105	165	200	280
	58	65	105	165	200	280
	49	55	85	135	165	230
	34	38	60	95	115	160
	28	32	50	80	100	140
	28	32	50	80	100	140
	24	27	45	70	85	120
	40	45	100	150	270	380
	42	47	104	157	285	400
	44	50	110	165	300	420
	40	45	100	150	270	380
	49	55	125	194	350	490
	49	55	120	183	330	460
	38	43	95	143	260	360
	27	30	66	100	180	250
	20	23	52	78	140	200
	24	27	61	91	160	230
	19	22	50	75	130	190
	62	70	180	250	400	700
	62	70	180	250	400	700
	45	50	128	180	300	500
	45	50	128	180	300	500
	45	50	128	180	300	500

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Switching of Lamps

Type	P [W]	C [μ F]	I [A]	Switching Capacity	
				KNL9 / KNL9G	KNL12 / KNL12G
Compact fluorescent lamps with electronic control gear (ECG)	13	-	0.07	25	33
	18	-	0.22	10	13
	24	-	0.22	10	13
	26	-	0.22	10	13
	32	-	0.22	10	13
	36	-	0.22	10	13
	40	-	0.22	10	13
	42	-	0.22	10	13
	55	-	0.28	8	11
	57	-	0.28	8	11
	70	-	0.35	7	10
	80	-	0.41	6	8
	120	-	0.58	5	6
	2 x 9	-	0.11	2 x 12	2 x 16
	2 x 10	-	0.11	2 x 12	2 x 16
	2 x 11	-	0.11	2 x 12	2 x 16
	2 x 13	-	0.11	2 x 12	2 x 16
	2 x 18	-	0.30	2 x 5	2 x 6
	2 x 24	-	0.31	2 x 5	2 x 6
	2 x 26	-	0.31	2 x 5	2 x 6
2 x 32	-	0.31	2 x 5	2 x 6	
2 x 36	-	0.31	2 x 5	2 x 6	
2 x 40	-	0.40	2 x 4	2 x 5	
2 x 42	-	0.40	2 x 4	2 x 5	
2 x 55	-	0.55	2 x 3	2 x 4	
2 x 57	-	0.55	2 x 3	2 x 4	
Fluorescent lamps - uncorrected or series correction	11	1.3	0.16	43	65
	18	2.7	0.37	22	26
	24	2.5	0.35	20	24
	36	3.4	0.43	17	21
	58	5.3	0.67	11	14
	65	5.3	0.67	11	14
Fluorescent lamps - lead-lag circuit	2 x 11	-	0.07	2 x 50	2 x 64
	2 x 18	-	0.11	2 x 30	2 x 36
	2 x 24	-	0.14	2 x 28	2 x 35
	2 x 36	-	0.22	2 x 17	2 x 20
	2 x 58	-	0.35	2 x 10	2 x 12
	2 x 65	-	0.35	2 x 9	2 x 11
Fluorescent lamps - parallel correction	2 x 85	-	0.47	2 x 6	2 x 9
	11	3.5	0.16	25	33
	18	4.5	0.37	20	27
	24	4.5	0.35	20	27
	36	4.5	0.43	20	27
	58	7.0	0.67	13	17
Fluorescent lamps with electronic control gear (ECG)	65	7.0	0.67	13	17
	85	8.0	0.80	11	15
	18	-	0.09	55	60
	36	-	0.16	31	34
	58	-	0.25	20	22
	2 x 18	-	0.17	2 x 31	2 x 34
2 x 36	-	0.32	2 x 15	2 x 17	
2 x 58	-	0.49	2 x 10	2 x 11	

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Max. number of lamps per pole at 230 V 50 Hz

KNL12G	KNL16 / KNL16G	KNL18 / KNL18G	KNL22 / KNL22G	KNL30 / KNL30G	KNL43	KNL63
	45	50	128	180	300	500
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	17	20	40	57	95	180
	14	16	32	45	75	140
	14	16	32	45	75	140
	13	15	25	36	55	110
	11	13	22	30	50	95
	8	10	15	22	35	65
	2 x 22	2 x 25	2 x 90	2 x 125	2 x 150	2 x 250
	2 x 22	2 x 25	2 x 90	2 x 125	2 x 150	2 x 250
	2 x 22	2 x 25	2 x 90	2 x 125	2 x 150	2 x 250
	2 x 22	2 x 25	2 x 90	2 x 125	2 x 150	2 x 250
	2 x 7	2 x 8	2 x 20	2 x 28	2 x 47	2 x 90
	2 x 7	2 x 8	2 x 20	2 x 28	2 x 47	2 x 90
	2 x 7	2 x 8	2 x 20	2 x 28	2 x 47	2 x 90
	2 x 7	2 x 8	2 x 20	2 x 28	2 x 47	2 x 90
	2 x 7	2 x 8	2 x 20	2 x 28	2 x 47	2 x 90
	2 x 6	2 x 7	2 x 18	2 x 26	2 x 45	2 x 85
	2 x 6	2 x 7	2 x 18	2 x 26	2 x 45	2 x 85
	2 x 5	2 x 6	2 x 16	2 x 22	2 x 37	2 x 70
	2 x 5	2 x 6	2 x 16	2 x 22	2 x 37	2 x 70
	75	85	150	200	240	340
	34	42	74	90	110	145
	32	40	70	85	100	140
	28	34	59	79	85	125
	17	21	37	50	60	80
	17	21	37	50	60	80
	15	17	31	42	50	65
	2 x 80	2 x 100	2 x 170	2 x 240	2 x 280	2 x 400
	2 x 46	2 x 58	2 x 102	2 x 135	2 x 180	2 x 250
	2 x 45	2 x 57	2 x 100	2 x 120	2 x 140	2 x 200
	2 x 25	2 x 32	2 x 56	2 x 75	2 x 100	2 x 125
	2 x 16	2 x 21	2 x 37	2 x 45	2 x 60	2 x 80
	2 x 15	2 x 20	2 x 35	2 x 43	2 x 60	2 x 80
	2 x 12	2 x 15	2 x 26	2 x 35	2 x 50	2 x 60
	45	50	79	120	170	240
	35	40	62	90	130	180
	35	40	62	90	130	180
	35	40	62	90	130	180
	22	25	40	60	85	120
	22	25	40	60	85	120
	20	22	34	52	75	100
	70	80	160	220	270	450
	40	44	88	122	150	250
	26	29	59	82	100	160
	2 x 40	2 x 44	2 x 88	2 x 122	2 x 135	2 x 225
	2 x 20	2 x 22	2 x 45	2 x 62	2 x 75	2 x 125
	2 x 13	2 x 15	2 x 30	2 x 42	2 x 50	2 x 80

Contactors

Lamps for KNL

Switching of Lamps

Type	P [W]	C [μ F]	I [A]	Switching capacity		
				KNL9 / KNL9G	KNL12 / KNL12G	
Fluorescent lamps T5 with electronic control gear (ECG)	FC	22	-	0.11	30	40
		40	-	0.21	15	20
		55	-	0.28	10	13
	HE	14	-	0.08	40	53
		21	-	0.11	30	40
		28	-	0.14	25	33
	HO	35	-	0.18	18	23
		24	-	0.12	28	38
		39	-	0.20	18	23
	2 x FC	49	-	0.24	14	19
		54	-	0.27	13	17
		80	-	0.39	9	11
		2 x 22	-	0.23	2 x 15	2 x 20
		2 x 40	-	0.42	2 x 7	2 x 10
		2 x 55	-	0.55	2 x 5	2 x 6
		2 x 14	-	0.15	2 x 20	2 x 26
		2 x 21	-	0.22	2 x 15	2 x 20
		2 x 28	-	0.28	2 x 12	2 x 16
		2 x 35	-	0.36	2 x 9	2 x 11
	2 x HE	2 x 24	-	0.24	2 x 14	2 x 19
2 x 39		-	0.39	2 x 9	2 x 11	
2 x 49		-	0.48	2 x 7	2 x 9	
2 x 54		-	0.54	2 x 6	2 x 8	
2 x HO	2 x 80	-	0.74	2 x 4	2 x 5	
High-pressure mercury-vapour lamps - uncorrected	50	-	0.61	8	11	
	80	-	0.80	6	8	
	125	-	1.15	4	5	
	250	-	2.15	2	2	
	400	-	3.25	1	1	
	700	-	5.40	-	1	
1000	-	7.50	-	-		
High-pressure mercury-vapour lamps - parallel correction	50	7	0.28	12	17	
	80	8	0.41	11	15	
	125	10	0.65	7	9	
	250	18	1.22	4	5	
	400	25	1.95	2	2	
	700	45	3.45	1	1	
1000	60	4.80	-	1		
Metal halide lamps - uncorrected	35	-	0.53	14	18	
	70	-	1.00	8	11	
	150	-	1.80	4	5	
	250	-	3.00	2	2	
	400	-	3.50	1	1	
	1000	-	9.50	-	1	
2000	-	16.50	-	-		
Metal halide lamps - parallel correction	35	6	0.25	16	21	
	70	12	0.45	8	10	
	150	20	0.75	5	6	
	250	33	1.50	2	3	
	400	35	2.50	1	2	
	1000	95	5.80	-	1	
2000	148	11.50	-	-		
Metal halide lamps with electronic control gear (PCI)	20	-	0.10	8	12	
	35	-	0.20	5	7	
	70	-	0.36	4	6	

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Lamps for KNL

Max. number of lamps per pole at 230 V 50 Hz

KNL12G	KNL16 / KNL16G	KNL18 / KNL18G	KNL22 / KNL22G	KNL30 / KNL30G	KNL43	KNL63
	53	60	90	100	145	230
	25	30	45	55	75	120
	18	20	35	40	60	90
	70	80	120	150	200	310
	53	60	90	100	145	230
	44	50	70	80	110	180
	30	35	50	60	85	140
	50	55	70	100	130	200
	30	35	40	60	80	125
	24	28	35	50	65	100
	22	25	30	45	60	90
	15	17	20	30	40	65
	2 x 26	2 x 30	2 x 45	2 x 50	2 x 72	2 x 115
	2 x 12	2 x 15	2 x 22	2 x 27	2 x 37	2 x 60
	2 x 9	2 x 10	2 x 17	2 x 20	2 x 30	2 x 45
	2 x 35	2 x 40	2 x 60	2 x 75	2 x 100	2 x 155
	2 x 26	2 x 30	2 x 45	2 x 50	2 x 72	2 x 115
	2 x 22	2 x 25	2 x 35	2 x 40	2 x 55	2 x 90
	2 x 15	2 x 17	2 x 25	2 x 30	2 x 42	2 x 70
	2 x 25	2 x 27	2 x 35	2 x 50	2 x 65	2 x 100
	2 x 15	2 x 17	2 x 20	2 x 30	2 x 40	2 x 62
	2 x 12	2 x 14	2 x 17	2 x 25	2 x 32	2 x 50
	2 x 11	2 x 12	2 x 15	2 x 22	2 x 30	2 x 45
	2 x 7	2 x 8	2 x 10	2 x 15	2 x 20	2 x 32
	14	16	26	36	43	72
	10	12	20	27	33	55
	6	8	13	18	23	38
	3	4	7	10	12	20
	2	3	5	6	8	13
	1	1	3	4	5	8
	1	1	2	2	3	5
	22	25	40	60	85	120
	20	22	35	52	75	105
	12	14	22	31	60	80
	6	7	12	16	30	40
	3	4	7	10	20	30
	2	2	4	6	10	15
	1	1	3	4	7	10
	25	28	50	66	47	80
	14	16	28	40	25	45
	7	8	14	20	13	25
	3	3	5	7	9	15
	2	2	4	6	8	12
	1	1	1	2	3	4
	-	-	-	1	2	2
	26	33	60	65	100	140
	13	20	36	40	50	70
	8	9	17	18	25	40
	4	5	7	8	16	22
	3	4	5	6	15	20
	1	1	1	2	4	7
	-	-	-	1	2	3
	14	15	20	22	28	35
	8	9	13	15	20	26
	7	8	12	14	18	22

Contactors

Lamps for KNL

Switching of Lamps

Type	P [W]	C [μ F]	I [A]	Switching Capacity	
				KNL9 / KNL9G	KNL12 / KNL12G
Metal halide lamps with electronic control gear (PCI)	150	-	0.70	3	5
High-pressure sodium-vapour lamps - uncorrected	150	-	1.8	5	6
	250	-	3.0	2	2
	400	-	4.7	1	1
	600	-	7.1	-	1
	1000	-	10.3	-	-
High-pressure sodium-vapour lamps - correction	150	20	0.83	5	6
	250	33	1.50	3	4
	400	48	2.40	2	2
	600	68	3.50	1	1
	1000	106	6.30	-	1
High-pressure sodium-vapour lamps with electronic control gear (PCI)	20	-	0.10	8	12
	35	-	0.20	5	7
	70	-	0.36	4	6
	150	-	0.70	3	5
Low-pressure sodium-vapour lamps - uncorrected	18	-	0.35	14	18
	35	-	1.50	5	6
	55	-	1.50	5	6
	90	-	2.40	3	4
	135	-	3.50	2	3
	180	-	3.30	1	2
Low-pressure sodium-vapour lamps - parallel correction	18	5	0.35	13	18
	35	20	0.31	3	6
	55	20	0.42	3	6
	90	26	0.63	3	4
	135	45	0.94	1	2
	180	40	1.16	1	1
Transformers for low-voltage tungsten halogen lamps	20	-	-	44	56
	50	-	-	20	25
	75	-	-	14	17
	100	-	-	10	13
	150	-	-	7	9
	200	-	-	5	6
	300	-	-	3	4

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Lamps for KNL

Max. number of lamps per pole at 230 V 50 Hz

KNL12G	KNL16 / KNL16G	KNL18 / KNL18G	KNL22 / KNL22G	KNL30 / KNL30G	KNL43	KNL63
	6	7	10	13	15	20
	7	8	10	12	15	25
	3	4	5	7	9	15
	2	2	3	4	5	9
	1	1	2	3	3	6
	-	1	1	2	3	4
	8	9	14	19	28	38
	4	5	7	10	16	22
	3	3	5	6	10	17
	2	2	3	4	6	10
	1	1	1	2	4	7
	14	15	18	20	26	32
	8	9	11	13	18	24
	7	8	10	12	16	20
	6	7	8	10	14	18
	25	27	30	42	70	100
	8	9	12	14	18	30
	8	9	12	14	18	30
	5	6	7	9	11	18
	4	5	6	7	9	12
	3	4	5	6	8	10
	22	25	30	42	100	150
	7	8	10	14	30	40
	7	8	10	14	30	40
	5	5	6	9	23	30
	3	4	5	7	10	17
	2	3	4	6	9	15
	70	88	110	174	250	320
	32	40	50	80	110	140
	22	28	35	54	73	93
	17	22	27	43	55	70
	12	15	19	29	36	45
	8	11	14	23	27	35
	6	7	9	14	18	23