

Switching of light fittings

The following tables show the number of lamps which can be connected per phase at 230 V/ 60 Hz. Note the following:

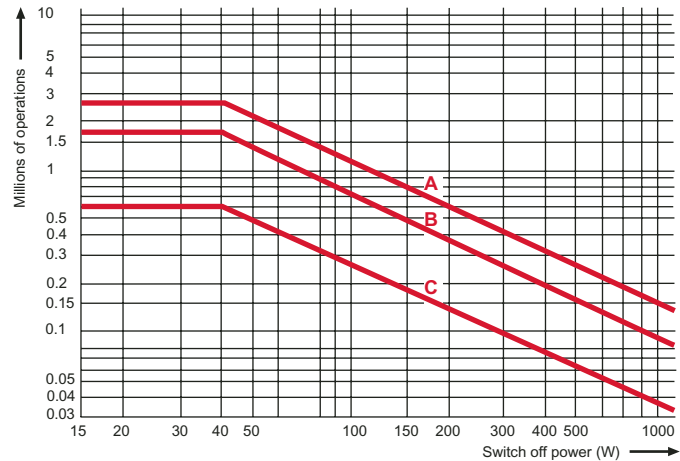
- 4 a) Increased current consumption for 1.1 times the rated voltage is considered.
- b) Failure of about 5% of the lamps is considered since not ignited lamps additionally charge the contactor with their preheating current.
- c) This data only apply to connection of the lamps at main pole terminals 1 ...8

Lamp type	Lamp data			Permissible number of lamps per phase (230 V, 60 Hz) for contactor type B6, B7, BC6, BC7
	Watt	cm	A	
Incandescent lamps	60		0.27	20
	100		0.45	12
	200		0.91	6
	300		1.36	4
	500		2.27	2
	1000		4.5	1
Fluorescent lamps uncompensated	15	44	0.35	25
	20	59	0.37	23
	40	120	0.43	20
	42	105	0.54	16
	65	150	0.67	12
	115	120	1.5	5
	140	150	1.5	5
Fluorescent lamps in two-lamp circuit	2 x 20	59	2 x 0.13	2 x 26 lamp pairs
	2 x 40	120	2 x 0.22	2 x 20
	2 x 42	105	2 x 0.24	2 x 16
	2 x 65	150	2 x 0.34	2 x 12
	2 x 115	120	2 x 0.65	2 x 5
	2 x 140	150	2 x 0.75	2 x 5
Metal halogen lamps uncompensated	35		0.53	10
	70		1.0	5
	150		1.8	3
	250		3.0	2
	400		3.5	1
Low pressure sodium vapor lamps uncompensated	35		1.5	4
	55		1.5	4
	90		2.4	2
	135		3.5	2
	150		3.3	2
	180		3.3	2
	200		2.3	2
High pressure mercury vapor lamps uncompensated	150		1.8	3
	250		3.0	2
	330		3.7	2
	400		4.7	1
High pressure mercury vapor lamps uncompensated	50		0.61	10
	80		0.8	7
	125		1.15	5
	250		2.15	3
	400		3.25	2
	700		5.40	1

Endurance curves for DC1, DC3, DC5

The following shows endurance curves for DC1, DC3 and DC5 for 3 poles in series. If only one current path is used, the corresponding breaking capacity is multiplied by 0.33, for two current paths by 0.66.

Varying time constants L/R (ms) have been considered.



- A = 3 poles in series DC 1
- B = 3 poles in series DC 3
- C = 3 poles in series DC 5