Application information

The resistance of the wolfram filaments used in low voltage lamps is temperature dependant. Therefore when a cold lamp is switched on and there is low or zero inductivity in a magnetic transformer during the first half wave, the inrush current can be up to 10 times the nominal current

Therefore we recommend to use a Miniature Circuit Breaker (MCB) with C characteristics. Switch elements with C characteristics disengage with an inrush current of around 10 times nominal.
In this case you can load the MCB with almost the nominal load (see table).
MCB with B characteristic disengage with approximately 5 times the nominal current and because of this the switch elements are cannot function with the nominal load.

Transformers with maximum load per MCB

		C-characteristic		**B-characteristic**	
transformer type	wattage	10A	16A	10A	16A
	W				
TMAx / TMDx	20	42	67	21	33
	35	35	56	17	28
	40	26	43	13	21
	50	23	37	11	18
	60	21	33	10	16
	70	16	26	8	13
	80	13	21	6	10
	105	9	14	4	7
TMBx / OMTx	20	58	93	29	46
	35	41	65	20	32
	50	21	35	10	17
	70	15	24	7	12
	80	14	22	7	11
	105	8	13	4	6
	150	4	6	2	3
	210	2-3	4-5	1	2
	300	1-2	2-3	not recommended, possible false trip	1
OGT	250	3-4	5-6	1-2	2-3
	300	2	3-4	1	1-2
	500	1	1-2	not recommended, possible false trip	not recommended, possible false trip