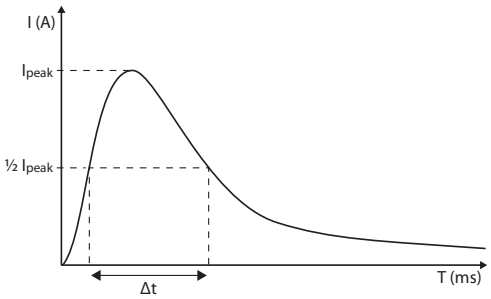
Type C MCB's are strongly recommended to use with fluorescent lighting.
- Other types can prove unsuitable due to their tripping properties.
- Practical quantities will depend strongly on the reactance of the actual circuit.

Conversion table for other types of Miniature Circuit Breaker	
MCB type	Relative quantity of ballasts
B 10 A	37 %
B 16 A	60 %
B 20 A	75 %
C 10 A	62 %
C 16 A	100 % (see tables)
C 20 A	125 %



Quantity of LED control gear for miniature circuit breakers (MCB's)

	Quantity of drivers per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
	Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
LL1x6-U-CC	220	220	2.5	45	0.0003
LL1x10-42-E-CC	57	62	23	176	0.0672
LL1x20-E-CC	98	98	6	36.0	0.000660
LL1x20-E-DA	98	98	6	36.0	0.000660
LC1x30-E-CC	74	74	6.2	25	0.000901
LC1x30-E-DA	73	73	6.7	26.4	0.0011
LC1x30-E-AN	73	73	7	27	0.0011
LL1x40-E-CC	51	51	9	23.0	0.001430
LL1x40-E-DA1	53	53	9	22.0	0.001400
LL1x40-E-DA2	51	51	9	22.0	0.001400
OL1x60-E- CC	39	18	50	270	0.3736
OL1x100-E-CC1	20	13	26	610	0.29240
OL1x100-E-CC2	19	12	25	690	0.28890
LC50-U-DX3	41	41	7	56.0	0.00120
LL1x70-E-CC	32	32	32	152.0	0.115800
LL1x70-E-DA	31	31	33	148.0	0.146500
LL2x35-E-CC	30	30	40	186.0	0.219800

EL-iDim

Lamp(s)	iDim	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1x14 T5	EL 1x14-35iDim	152	46	35	144,0	0,13
2x14 T5	EL 2x14-35iDim	79	38	38	173,0	0,18
4x14 T5	EL 4x14iDim	42	42	35	141,0	0,13
1x21 T5	EL 1x14-35iDim	110	46	35	144,0	0,13
2x21 T5	EL 2x14-35iDim	56	38	38	173,0	0,18
1x24 T5, TC-L	EL 1x24iDim	101	57	30	123,0	0,08
2x24 T5, TC-L	EL 2x24iDim	51	45	37	130,0	0,13
1x28 T5	EL 1x14-35iDim	81	46	35	144,0	0,13
2x28 T5	EL 2x14-35iDim	42	38	38	173,0	0,18
1x35 T5	EL 1x14-35iDim	66	46	35	144,0	0,13
2x35 T5	EL 2x14-35iDim	34	34	38	173,0	0,18
1x36 T8, TC-L	EL 1x36iDim	73	45	37	130,0	0,13
2x36 T8, TC-L	EL 2x36iDim	37	34	44	165,0	0,23
1x39 T5	EL 1x39iDim	61	45	37	130,0	0,13
2x39 T5	EL 2x39iDim	31	31	44	165,0	0,23
1x49 T5	EL 1x49iDim	47	45	37	130,0	0,13
2x49 T5	EL 2x49iDim	24	24	49	200,0	0,36
1x54 T5	EL 1x54iDim	44	44	37	130,0	0,13
2x54 T5	EL 2x54iDim	22	22	49	200,0	0,36
1x55 T5, TC-L	EL 1x55iDim	43	43	37	130,0	0,13
2x55 T5, TC-L	EL 2x55iDim	22	22	49	200,0	0,36
1x80 T5, TC-L	EL 1x80iDim	30	26	49	200,0	0,36
3x14 T5	EL3x14iDim	54	48	34	141,0	0,12
2x80 T5, TC-L	EL2x80iDim	16	12	49	323,0	0,46

EL-iDim-c

Lamp(s)	iDim-c	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1x18W TC-DE/TE	1/2x18iDim-c	119	56	26	171,0	0,08
2x18W TC-DE/TE	1/2x18iDim-c	63	56	26	171,0	0,08
1x18W TC-L/F	1/2x18/24iDim-c	107	56	26	171,0	0,08
1x24W TC-L/F	1/2x18/24iDim-c	82	56	26	171,0	0,08
1x22W TC-T5c	1/2x18/24iDim-c	82	56	26	171,0	0,08
1x40 W TC-T5c	1/2x18/24iDim-c	57	56	26	171,0	0,08
2x18W TC-L/F	1/2x18/24iDim-c	67	56	26	171,0	0,08
2x24W TC-L/F	1/2x18/24iDim-c	47	47	26	171,0	0,08
1x26W TC-DE/TE	1/2x26-42iDim-c	82	56	26	171,0	0,08
1x32W TC-TE	1/2x26-42iDim-c	67	56	26	171,0	0,08
1x42W TC-TE	1/2x26-42iDim-c	54	54	26	171,0	0,08
2x26W TC-DE/TE	1/2x26-42iDim-c	43	43	26	171,0	0,08
2x26W TC-DE/TE	2x26-42iDim-c	47	26	49	200,0	0,36
2x32W TC-TE	2x26-42iDim-c	37	26	49	200,0	0,36
2x42W TC-TE	2x26-42iDim-c	28	26	49	200,0	0,36

EL-sc

Lamp(s)	EL-sc	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1 x 14 W T5	EL1x14sc	152	86	25	49	0.26
2 x 14 W T5	EL2x14sc	83	71	31	44	0.35
4 x 14 W T5	EL4x14sc	42	42	31	44	0.35
1 x 21 W T5	EL1x21sc	107	86	25	49	0.26
2 x 21 W T5	EL2x21sc	56	56	31	44	0.35
1 x 24 W T5	EL1x24sc	99	86	25	49	0.26
2 x 24 W T5	EL2x24sc	52	52	31	44	0.35
1 x 28 W T5	EL1x28sc	83	83	25	49	0.26
2 x 28 W T5	EL2x28sc	40	40	31	44	0.35
1 x 35 W T5	EL1x35sc	66	66	31	44	0.35
2 x 35 W T5	EL2x35sc	33	33	47	149	2.43
1 x 39 W T5	EL1x39sc	61	61	31	44	0.35
2 x 39 W T5	EL2x39sc	31	31	47	149	2.43
1 x 49 W T5	EL1x49sc	48	48	31	44	0.35
2 x 49 W T5	EL2x49sc	24	24	47	205	3.37
1 x 54 W T5	EL1x54sc	43	43	31	44	0.35
2 x 54 W T5	EL2x54sc	22	22	47	205	3.37
1 x 80 W T5	EL1x80sc	29	27	47	205	3.37
1 x 18 W T8	EL1x18sc	136	86	25	49	0.26
2 x 18 W T8	EL2x18sc	70	70	31	44	0.35
4 x 18 W T8	EL4x18sc	36	34	47	149	2.43
1 x 24 W TCL	EL1x24sc	99	86	25	49	0.26
2 x 24 W TCL	EL2x24sc	52	52	31	44	0.35
1 x 36 W T8/TCL	EL1x36sc	70	70	31	44	0.35
2 x 36 W T8/TCL	EL2x36sc	36	34	47	149	2.43
1 x 58 W T8	EL1x58sc	47	47	31	44	0.35
2 x 58 W T8	EL2x58sc	24	24	47	205	3.37
1 x 70 W T8	EL1x70sc	40	34	47	149	2.43
1 x 55 W TCL	EL1x55sc	42	42	31	44	0.35
2 x 55 W TCL	EL2x55sc	22	22	47	205	3.37
1 x 80 W TCL	EL1x80sc	29	27	47	205	3.37

EL-ngn5

Lamp(s)	EL-ngn5	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1x14 W T5	EL1x14-35ngn5	161	88	21	139	0.04
2x14 W T5	EL2x14-35ngn5	83	50	34	152	0.13
3x14 W T5	EL3/4x14ngn5	56	50	34	149	1.3
4x14 W T5	EL3/4x14ngn5	42	50	34	149	1.3
4x14 W T5	EL4x14ngn5	41	50	34	152	0,13
1x21 W T5	EL1x14-35ngn5	112	88	21	139	0.04
2x21 W T5	EL2x14-35ngn5	57	50	34	152	0.13
1x24 W T5	EL1x24ngn5	101	88	21	136	0.04
2x24 W T5	EL2x24ngn5	53	80	22	142	0.05
3x24 W T5	EL3/4x24ngn5	35	33	47	165	2.67
4x24 W T5	EL3/4x24ngn5	27	33	47	165	2.67
1x28 W T5	EL1x14-35ngn5	86	88	21	139	0.04
2x28 W T5	EL2x14-35ngn5	43	50	34	152	0.13
1x35 W T5	EL1x14-35ngn5	68	88	21	139	0.04
2x35 W T5	EL2x14-35ngn5	34	50	34	152	0.13
1x36 W T5	EL1x39/36ngn5	70	88	21	136	0.04
2x36 W T5	EL2x39/36ngn5	37	50	34	152	0.13
1x39 W T5	EL1x39ngn5	60	88	21	136	0.04
2x39 W T5	EL2x39/36ngn5	32	50	34	152	0.13
1x49 W T5	EL1x49ngn5	47	57	23	183	0.07
2x49 W T5	EL2x49ngn5	25	33	40	183	0.22
1x54 W T5	EL1x54ngn5	44	80	23	141	0.05
2x54 W T5	EL2x54ngn5	22	26	40	230	0.27
1x55 W T5	EL1x55ngn5	43	57	23	183	0.07
2x55 W T5	EL2x55ngn5	22	26	40	230	0.27
1x80 W T5	EL1x80ngn5	30	45	36	156	0.15
2x80 W T5	EL2x80ngn5	15	16	49	287	0,40

EL-ngn

Lamp(s)	EL-ngn	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1 x 18 W T8	EL1x18ngn	136	74	23	131	0.51
2 x 18 W T8	EL2x18ngn	70	70	22	132	0.48
4 x 18 W T8	EL4x18ngn	36	36	37	193	2.00
3 x 18 W T8	EL3/4x18ngn	50	47	34	149	1.30
4 x 18 W T8	EL3/4x18ngn	37	37	34	149	1.30
1 x 36 W T8	EL1x36ngn	72	71	24	134	0.57
2 x 36 W T8	EL2x36ngn	37	37	30	152	0.90
1 x 58 W T8	EL1x58ngn	47	47	23	128	0.52
2 x 58 W T8	EL2x58ngn	24	24	50	136	2.59

EL-es

Lamp(s)	EL-ngn	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
4x18 W T8	EL4x18es	35	60	29	148	0.91
2x36 W T8	EL2x36es	38	58	29	153	0.93
2x58 W T8	EL2x58es	24	29	37	215	2.13

EL-s / EL-su

Lamp(s)	EL-s	EL-su	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
			Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1 x 18 W T8	EL1x18s	-	143	122	17	69	0.16
2 x 18 W T8	EL2x18s	-	75	75	17	69	0.16
1 x 36 W T8	EL1x36/40/18s	EL1x36/40s-u	74	74	17	69	0.16
2 x 36 W T8	EL2x36/40s	EL2x36/40s-u	37	37	34	149	1.30
1 x 58 W T8	EL1x58s	EL1x58s-u	48	47	34	149	1.30
2 x 58 W T8	EL2x58s	EL2x58s-u	24	24	47	165	2.67
1 x 70 W T8	EL1x70s	-	40	40	34	149	1.30
2 x 70 W T8	EL2x70s	-	20	20	49	180	3.17

EL-TCs

Lamp(s)	EL1/2x-TCs	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1 x 9 W TC-SE	1/2x9-13TCs	229	34	41	182	0.23
1 x 10 W TC-DE	1/2x9-13TCs	224	34	41	182	0.23
1 x 10 W TC-DD	1/2x9-13TCs	215	34	41	182	0.23
1 x 11 W TC-SE	1/2x9-13TCs	167	34	41	182	0.23
1 x 13 W TC-DE/TE	1/2x9-13TCs	160	34	41	182	0.23
1 x 16 W TC-DD	1/2x9-13TCs	160	34	41	182	0.23
2 x 9 W TC-SE	1/2x9-13TCs	129	34	41	182	0.23
2 x 10 W TC-DE	1/2x9-13TCs	120	34	41	182	0.23
2 x 11 W TC-SE	1/2x9-13TCs	90	34	41	182	0.23
2 x 13 W TC-DE/TE	1/2x9-13TCs	84	34	41	182	0.23
1 x 18 W TC-DE/TE	1/2x18TCs	127	35	41	181	0.22
2 x 18 W TC-DE/TE	1/2x18TCs	67	35	41	181	0.22
1 x 21 W TC-DD	1/2x18TCs	102	35	41	181	0.22
1 x 18 W TC-L/F	1/2x18-42TCs	147	33	40	192	0.23
1 x 24 W TC-L/F	1/2x18-42TCs	96	33	40	192	0.23
1 x 26 W TC-DE/TE	1/2x18-42TCs	88	33	40	192	0.23
1 x 32 W TC-TE	1/2x18-42TCs	75	33	40	192	0.23
1 x 42 W TC-TE	1/2x18-42TCs	55	33	40	192	0.23
1 x 22 W TC-T5c	1/2x18-42TCs	96	33	40	192	0.23
1 x 40 W TC-T5c	1/2x18-42TCs	59	33	40	192	0.23
2 x 18 W TC-L/F	1/2x18-42TCs	68	33	40	192	0.23
2 x 24 W TC-L/F	1/2x18-42TCs	46	33	40	192	0.23
2 x 26 W TC-DE/TE	1/2x18-42TCs	42	33	40	192	0.23
2 x 26 W TC-DE/TE	2x32/42TCs	45	33	42	184	0.24
2 x 32 W TC-TE	2x32/42TCs	38	33	42	184	0.24
2 x 42 W TC-TE	2x32/42TCs	28	28	42	184	0.24
22 + 40 W TC-T5c	2x32/42TCs	38	33	42	184	0.24
40 + 40 W TC-T5c	2x32/42TCs	32	32	42	184	0.24
1x14W PL-R	1/2x14-17TCs	133	33	41	190	0.25
2x14W PL-R	1/2x14-17TCs	76	33	41	190	0.25
1x17W PL-R	1/2x14-17TCs	110	33	41	190	0.25
2x17W PL-R	1/2x14-17TCs	60	33	41	190	0.25
1x36TC-L	1/2x36/38TCs	63	33	42	184	0.24
2x36TC-L	1/2x36/38TCs	33	33	42	184	0.24
1x38TC-DD	1/2x36/38TCs	62	33	42	184	0.24
2x38TC-DD	1/2x36/38TCs	32	32	42	184	0.24

EP-h

Lamp(s)	EP-h	Quantity of ballasts per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
		Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
1x20 HI	EP1x20h	104	75	22	135.0	0.05
1x35 HI	EP1x35h	58	52	32	137.0	0.10
1x50 HI	EP1x50h	46	37	28	222.0	0.13
1x70 HI	EP1x70h	32	32	41	188.0	0.22