

Belastung von Leitungsschutzautomaten / *Miniature Circuit Breakers (MCB)* *max. load list*

Für den Betrieb von Leuchten werden Leitungsschutzautomaten mit **C** Charakteristik empfohlen. Bei mehrpoligen Automaten sind die Werte laut Herstellerangaben um 20% zu reduzieren. Die Tabellenwerte beziehen sich auf gleichzeitiges Einschalten im Netzspannungsscheitel bei $U_n = 230V$.

For use in lightings is C type of MCB's recommended.

The following table gives some typical values and is valid for one pole MCB.

For multi-pole MCB's it is advisable to reduce the number of ballasts by 20 per cent.

Belastung von Leitungsschutzautomaten bei $U_n = 230V$ / *Max. load per MCB at supply voltage 230V*

| Automaten | C10 | C13 | C16 | C20 | B 10 | B13 | B16 | B20 |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Installation Ø | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² |
| PC 1x18 E011 IDC | 46 | 80 | 104 | 110 | 23 | 40 | 52 | 55 |
| PC 2x18 E011 IDC | 30 | 46 | 68 | 84 | 15 | 23 | 34 | 42 |
| PC 3x18 E011 IDC | 32 | 46 | 66 | 80 | 16 | 23 | 33 | 40 |
| PC 4x18 E011 IDC | 20 | 30 | 40 | 44 | 10 | 15 | 20 | 22 |
| PC 1x36 E011 IDC | 32 | 48 | 70 | 84 | 16 | 24 | 35 | 42 |
| PC 2x36 E011 IDC | 20 | 30 | 40 | 44 | 10 | 15 | 20 | 22 |
| PC 3x36 E011 IDC | 10 | 14 | 20 | 22 | 5 | 7 | 10 | 11 |
| PC 1x58 E011 IDC | 32 | 46 | 66 | 80 | 16 | 23 | 33 | 40 |
| PC 2x58 E011 IDC | 14 | 20 | 26 | 30 | 7 | 10 | 13 | 15 |
| PC 1x70 E011 IDC | 20 | 30 | 40 | 44 | 10 | 15 | 20 | 22 |
| PC 2x70 E011 IDC | 10 | 14 | 20 | 22 | 5 | 7 | 10 | 11 |
| PC PRO 18/24 FSD b101 | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 2X18 FSD b101 | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 2X24 FSD b101 | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 1x36 FSD a101 | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 2X36 FSD a101 | 20 | 30 | 40 | 40 | 10 | 15 | 20 | 20 |
| PC PRO 1x40 FSD a101 | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 2X40 FSD a101 | 14 | 20 | 26 | 30 | 7 | 10 | 13 | 15 |
| PC PRO 1x55 FSD a101 | 20 | 30 | 40 | 40 | 10 | 15 | 20 | 20 |
| PC PRO 2X55 FSD a101 | 10 | 14 | 20 | 22 | 5 | 7 | 10 | 11 |
| PC INST 1x36 FD a001 | 32 | 48 | 70 | 84 | 16 | 24 | 35 | 42 |
| PC INST 2x36 FD a001 | 20 | 30 | 40 | 44 | 10 | 15 | 20 | 22 |
| PC INST 1x58 FD a001 | 32 | 46 | 66 | 80 | 16 | 23 | 33 | 40 |
| PC INST 2x58 FD a001 | 14 | 20 | 26 | 30 | 7 | 10 | 13 | 15 |

| Automaten | C10 | C13 | C16 | C20 | B 10 | B13 | B16 | B20 |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Installation Ø | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² |
| PC PRO 5/7 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 2x5/7 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 9/11 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 2x9/11 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 10/13 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 2x10/13 FSD | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 18 FSQ | 80 | 80 | 80 | 100 | 40 | 40 | 40 | 50 |
| PC PRO 2x18 FSQ | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 26/32/42 FSM | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PC PRO 2x26 FSQ | 32 | 50 | 80 | 80 | 16 | 25 | 40 | 40 |
| PC PRO 2x32/42 FSM | 16 | 22 | 30 | 44 | 8 | 11 | 15 | 22 |
| PC PRO 57 FSM | 20 | 30 | 30 | 44 | 10 | 15 | 15 | 22 |
| PC 1/14 T5 PRO | 46 | 80 | 80 | 140 | 23 | 40 | 40 | 70 |
| PC 2/14 T5 PRO | 46 | 80 | 80 | 140 | 23 | 40 | 40 | 70 |
| PC 3/14 T5 PRO | 30 | 46 | 50 | 64 | 15 | 23 | 25 | 32 |
| PC 4/14 T5 PRO | 30 | 46 | 50 | 64 | 15 | 23 | 25 | 32 |
| PC 1/21 T5 PRO | 46 | 80 | 86 | 98 | 23 | 40 | 43 | 49 |
| PC 2/21 T5 PRO | 46 | 78 | 80 | 100 | 23 | 39 | 40 | 50 |
| PC 1/28 T5 PRO | 44 | 78 | 80 | 90 | 22 | 39 | 40 | 45 |
| PC 2/28 T5 PRO | 18 | 28 | 30 | 36 | 9 | 14 | 15 | 18 |
| PC 1/35 T5 PRO | 46 | 80 | 80 | 140 | 23 | 40 | 40 | 70 |
| PC 2/35 T5 PRO | 20 | 30 | 30 | 44 | 10 | 15 | 15 | 22 |
| PC 1/24 T5 PRO | 46 | 80 | 80 | 140 | 23 | 40 | 40 | 70 |
| PC 2/24 T5 PRO | 30 | 50 | 50 | 64 | 15 | 25 | 25 | 32 |
| PC 1/39 T5 PRO | 30 | 40 | 50 | 60 | 15 | 20 | 25 | 30 |
| PC 2/39 T5 PRO | 18 | 28 | 30 | 36 | 9 | 14 | 15 | 18 |
| PC 1/49 T5 PRO | 30 | 46 | 50 | 58 | 15 | 23 | 25 | 29 |
| PC 2/49 T5 PRO | 18 | 28 | 30 | 36 | 9 | 14 | 15 | 18 |
| PC 1/54 T5 PRO | 30 | 46 | 50 | 80 | 15 | 23 | 25 | 40 |
| PC 2/54 T5 PRO | 14 | 20 | 24 | 30 | 7 | 10 | 12 | 15 |
| PC 1/80 T5 PRO | 18 | 28 | 30 | 36 | 9 | 14 | 15 | 18 |
| PC 1/18 T8 PRO | 46 | 80 | 140 | 140 | 23 | 40 | 70 | 70 |
| PC 2/18 T8 PRO | 44 | 80 | 140 | 140 | 22 | 40 | 70 | 70 |
| PC 1/36 T8 PRO | 46 | 80 | 140 | 140 | 23 | 40 | 70 | 70 |
| PC 2/36 T8 PRO | 20 | 30 | 42 | 44 | 10 | 15 | 21 | 22 |
| PC 1/58 T8 PRO | 32 | 46 | 66 | 80 | 16 | 23 | 33 | 40 |
| PC 2/58 T8 PRO | 14 | 20 | 26 | 30 | 7 | 10 | 13 | 15 |

| Automaten | C10 | C13 | C16 | C20 | B 10 | B13 | B16 | B20 |
|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Installation Ø | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² |
| PCA 1/14 T5 ECO/EXCEL | 30 | 50 | 70 | 80 | 15 | 25 | 35 | 40 |
| PCA 2/14 T5 ECO/EXCEL | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 |
| PCA 3/14 T5 ECO/EXCEL | 16 | 26 | 34 | 42 | 8 | 13 | 17 | 21 |
| PCA 4/14 T5 ECO/EXCEL | 16 | 24 | 34 | 38 | 8 | 12 | 17 | 19 |
| PCA 1/21 T5 ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/21 T5 ECO/EXCEL | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 |
| PCA 1/24 T5 ECO/EXCEL | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 |
| PCA 2/24 T5 ECO/EXCEL | 22 | 32 | 46 | 52 | 11 | 16 | 23 | 26 |
| PCA 1/28 T5 ECO/EXCEL | 32 | 50 | 72 | 80 | 16 | 25 | 36 | 40 |
| PCA 2/28 T5 ECO/EXCEL | 16 | 22 | 30 | 34 | 8 | 11 | 15 | 17 |
| PCA 1/35 T5 ECO/EXCEL | 32 | 50 | 70 | 80 | 16 | 25 | 35 | 40 |
| PCA 2/35 T5 ECO/EXCEL | 16 | 22 | 30 | 34 | 8 | 11 | 15 | 17 |
| PCA 1/39 T5 ECO/EXCEL | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 |
| PCA 2/39 T5 ECO/EXCEL | 14 | 22 | 28 | 34 | 7 | 11 | 14 | 17 |
| PCA 1/54 T5 ECO/EXCEL | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 |
| PCA 2/54 T5 ECO/EXCEL | 14 | 22 | 28 | 34 | 7 | 11 | 14 | 17 |
| PCA 1/80 T5 ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/18 ECO/EXCEL | 30 | 50 | 80 | 80 | 15 | 25 | 40 | 40 |
| PCA 2/18 ECO/EXCEL | 20 | 30 | 40 | 46 | 10 | 15 | 20 | 23 |
| PCA 3/18 ECO/EXCEL | 12 | 18 | 24 | 30 | 6 | 9 | 12 | 15 |
| PCA 4/18 ECO/EXCEL | 12 | 16 | 24 | 28 | 6 | 8 | 12 | 14 |
| PCA 1/30 ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/30 ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/36 ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/36 ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/58 ECO/EXCEL | 20 | 30 | 40 | 46 | 10 | 15 | 20 | 23 |
| PCA 2/58 ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/11/13 TCD ECO/EXCEL | 40 | 60 | 80 | 80 | 20 | 30 | 40 | 40 |
| PCA 2/11/13 TCD ECO/EXCEL | 28 | 40 | 60 | 64 | 14 | 20 | 30 | 32 |
| PCA 1/18 TCL ECO/EXCEL | 52 | 56 | 64 | 96 | 26 | 28 | 32 | 48 |
| PCA 2/18 TCL ECO/EXCEL | 52 | 56 | 64 | 96 | 26 | 28 | 32 | 48 |
| PCA 1/24 TCL ECO/EXCEL | 52 | 56 | 64 | 96 | 26 | 28 | 32 | 48 |
| PCA 2/24 TCL ECO/EXCEL | 20 | 26 | 32 | 40 | 10 | 13 | 16 | 20 |
| PCA 1/36 TCL ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/36 TCL ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/40 TCL ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/40 TCL ECO/EXCEL | 10 | 20 | 30 | 30 | 5 | 10 | 15 | 15 |
| PCA 1/55 TCL ECO/EXCEL | 20 | 30 | 40 | 46 | 10 | 15 | 20 | 23 |
| PCA 2/55 TCL ECO/EXCEL | 10 | 14 | 18 | 20 | 5 | 7 | 9 | 10 |
| PCA 1/11/13 TCD ECO/EXCEL | 40 | 60 | 80 | 80 | 20 | 30 | 40 | 40 |
| PCA 2/11/13 TCD ECO/EXCEL | 28 | 40 | 60 | 64 | 14 | 20 | 30 | 32 |
| PCA 1/18 TCD ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/18 TCD ECO/EXCEL | 22 | 32 | 46 | 68 | 11 | 16 | 23 | 34 |
| PCA 1/26 TCD ECO/EXCEL | 30 | 50 | 70 | 76 | 15 | 25 | 35 | 38 |
| PCA 2/26 TCD ECO/EXCEL | 22 | 32 | 46 | 56 | 11 | 16 | 23 | 28 |
| PCA 1/32/42 TCT ECO/EXCEL | 26 | 38 | 50 | 58 | 13 | 19 | 25 | 29 |
| PCA 2/32/42 TCT ECO/EXCEL | 10 | 18 | 24 | 28 | 5 | 9 | 12 | 14 |

| Automaten | C10 | C13 | C16 | C20 | B 10 | B13 | B16 | B20 |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Installation Ø | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² |
| 15 ET-T Eco Tronic | 77 | 100 | 124 | 155 | 46 | 60 | 74 | 93 |
| 16 ET-T Eco Tronic | 75 | 97 | 120 | 150 | 45 | 58 | 72 | 90 |
| 18 ET-T Eco Tronic | 76 | 100 | 123 | 153 | 46 | 60 | 73 | 92 |
| 36/1 ET-T Eco Tronic | 45 | 58 | 72 | 90 | 27 | 35 | 43 | 54 |
| 36 ET-T Eco Tronic | 46 | 60 | 74 | 93 | 28 | 36 | 44 | 56 |
| 58 ET-T Eco Tronic | 33 | 43 | 53 | 66 | 20 | 26 | 32 | 40 |
| 2/15 ET-T Eco Tronic | 56 | 73 | 90 | 113 | 34 | 44 | 54 | 68 |
| 2/16 ET-T Eco Tronic | 57 | 75 | 92 | 115 | 34 | 45 | 55 | 69 |
| 2/18 ET-T Eco Tronic | 52 | 68 | 84 | 105 | 31 | 41 | 50 | 63 |
| 2/36 ET-T Eco Tronic | 26 | 34 | 41 | 52 | 15 | 20 | 25 | 31 |
| 2/58 ET-T Eco Tronic | 16 | 21 | 26 | 32 | 9 | 12 | 15 | 19 |

Belastung von Leitungsschutzautomaten mit PCI / Max. load per MCB with PCI

| Automaten | C10 | C13 | C16 | C20 | B 10 | B13 | B16 | B20 |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Installation Ø | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² | 1,5 mm ² | 1,5 mm ² | 1,5 mm ² | 2,5 mm ² |
| PCI 0020 A101 | 24 | 33 | 42 | 48 | 12 | 15 | 19 | 19 |
| PCI 0035 A101 | 16 | 22 | 28 | 32 | 8 | 11 | 14 | 16 |
| PCI 0035 A001 | 16 | 22 | 28 | 32 | 8 | 10 | 13 | 13 |
| PCI 0035 A002** | 16 | 22 | 28 | 32 | 8 | 10 | 13 | 13 |
| PCI 0070 A001 | 10 | 18 | 26 | 30 | 6 | 10 | 13 | 13 |
| PCI 0070 A002** | 10 | 18 | 26 | 30 | 6 | 10 | 13 | 13 |
| PCI 0150 A001 | 7 | 14 | 20 | 20 | 4 | 6 | 7 | 7 |
| PCI 0150 A002** | 7 | 14 | 20 | 20 | 4 | 6 | 7 | 7 |
| PCI 0150 A201 | 7 | 14 | 20 | 20 | 4 | 6 | 7 | 7 |
| PCI 0150 A202** | 7 | 14 | 20 | 20 | 4 | 6 | 7 | 7 |

** Die angegebenen Zahlen beziehen sich nur auf das PCI, bei Verwendung einer Zündzeitüberbrückungslampe muss der Einschaltstrom der Überbrückungslampe berücksichtigt werden.

** The indicated numbers refer only to the PCI, on use of a time bypass lamp must the starting current of the bypass lamp be considered.

Info :

Im Zuge einer internationalen Harmonisierung der Auslösewerte von Leitungsschutzschaltern wurden die neuen Charakteristiken B,C und D eingeführt, welche bisher üblichen Charakteristiken L,U und K ersetzen.

To the course of an international harmonization of the release values of miniature circuit breakers the new characteristics B,C and D were introduced, which usual characteristics L,U and K to replace.

früher/before

L: 3,5...5 x I_n

U: 7...12 x I_n

jetzt/now

B: 3...5 x I_n

C: 5...10 x I_n