

Current ratings for UL-CSA cables

Current ratings

PVC-insulated single and multicore wiring cables according to UL-AWM and CSA-TEW standards are used in switchboard and distribution cabinets of electrical equipments and as well as for the installation of machines and transformers in protecting tubes.

PVC-insulation is allowed at maximum temperature range of 105°C.

The indicated values stated in the following tables are considered as guiding values. In critical situation the rules and recommendations for the current ratings should be followed.

- for **single core** cables at ambient temperature **up to 30°C**

| AWG No. | Cross-section mm ² | Load rating A |
|---------|-------------------------------|---------------|
| 24 | 0,21 | 3,5 |
| 22 | 0,33 | 5,0 |
| 20 | 0,52 | 6,0 |
| 18 | 0,82 | 9,5 |
| 16 | 1,31 | 20 |
| 14 | 2,08 | 24 |
| 12 | 3,32 | 34 |
| 10 | 5,26 | 52 |
| 8 | 8,35 | 75 |
| 6 | 13,29 | 95 |
| 4 | 21,14 | 120 |

| AWG No. | Cross-section mm ² | Load rating A |
|---------|-------------------------------|---------------|
| 3 | 26,65 | 154 |
| 2 | 33,61 | 170 |
| 1 | 42,38 | 180 |
| 1/0 | 53,43 | 200 |
| 2/0 | 67,40 | 225 |
| 3/0 | 84,97 | 275 |
| 4/0 | 107,17 | 325 |
| 250 | 127 | 345 |
| 300 | 152 | 390 |
| 400 | 178 | 415 |

- for **multicore cables** at ambient temperature **up to 30°C**

| AWG No. | Cross-section mm ² | Load rating up to 3 cores A | Load rating 4–6 cores A | Load rating 7–24 cores A | Load rating 25–42 cores A | Load rating 43 and above A |
|---------|-------------------------------|-----------------------------|-------------------------|--------------------------|---------------------------|----------------------------|
| 24 | 0,21 | 2 | 1,6 | 1,4 | 1,2 | 1 |
| 22 | 0,33 | 3 | 2,4 | 2,1 | 1,8 | 1,5 |
| 20 | 0,52 | 5 | 4 | 3,5 | 3 | 2,5 |
| 18 | 0,82 | 7 | 5,6 | 4,9 | 4,2 | 3,5 |
| 16 | 1,31 | 10 | 8 | 7 | 6 | 5 |
| 14 | 2,08 | 15 | 12 | 10,5 | 9 | 7,5 |
| 12 | 3,32 | 20 | 16 | 14 | 12 | 10 |
| 10 | 5,26 | 30 | 24 | 21 | 18 | 15 |
| 8 | 8,35 | 40 | 32 | 28 | 24 | 20 |
| 6 | 13,29 | 55 | 44 | 38 | 33 | 27 |
| 4 | 21,14 | 70 | 56 | 49 | 42 | 35 |
| 3 | 26,65 | 80 | 64 | 56 | 48 | 40 |
| 2 | 33,61 | 95 | 76 | 66 | 57 | 57 |
| 1 | 42,38 | 110 | 88 | 77 | 66 | 55 |

- **Correction-factors** at ambient temperature **over 30°C**

| Ambient temperature °C | Load rating values of above tables correction-factors f |
|------------------------|---|
| 31 – 40 | 0,82 |
| 41 – 45 | 0,71 |
| 46 – 50 | 0,58 |