UL/CSA Current Rating for flexible cables

Multi conductor cables at ambient temperature up to 30°C

acc. to DIN VDE 0891 part 1 point 7

AWG	Cross Section mm²	Current rating in Ampere (no. of conductors)				
		up to 3	4 -6	7 - 24	25 - 42	43 & above
24	0.21	3.7	2.8	1.6	1.2	0.9
22	0.33	5.1	3.8	2.2	1.7	1.2
20	0.52	6.7	5.0	2.8	2.3	1.6
18	0.82	9.2	6.9	4.0	3.1	2.2
16	1.31	12.2	9.2	5.3	4.1	2.9
14	2.08	16.0	12.0	6.9	5.4	3.8
12	3.32	22.4	16.8	9.6	7.5	5.3
10	5.26	28.8	21.6	12.4	9.7	6.8
8	8.35	38.4	28.8	16.5	12.9	9.0
6	13.29	51.2	38.4	22.1	17.2	12.0

in reference with DIN VDE 0298 part 4, table 9, column 5 and table 20 (until 10,0 mm²)

AWG	Cross Section mm²	Current rating in Ampere (no. of conductors)							
		up to 5	up to 7	up to 10	up to 14	up to 19	up to 24	up to 40	up to 61
18	0.82	9.8	8.5	7.2	6.5	5.9	5.2	4.6	3.9
16	1.31	12.8	11.1	9.4	8.5	7.7	6.8	6.0	5.1
14	2.08	16.9	14.6	12.4	11.3	10.1	9.0	7.9	6.8
12	3.32	22.5	19.5	16.5	15.0	13.5	12.0	10.5	9.0
10	5.26	30.2	26.2	22.1	20.1	18.1	16.1	14.1	12.1
8	8.35	40.4	35.0	29.6	27.0	24.3	21.6	18.9	16.2

VFD CABLE SELECTION GUIDE

Motor properties AWG size selection chart

Drive HP	230 V 3Ø AWG	460 V 3Ø AWG	575 V 3Ø AWG	Drive HP	230 V 3Ø AWG	460 V 3Ø AWG	575 V 3Ø AWG
1/4 - 3	18	18	18	60	2/0	3	4
5	14	18	18	75	4/0	2	3
7 1/2	12	18	18	100	300 MCM	1/0	2
10	10	16	18	125	500 MCM	2/0	1/0
15	8	12	14	150	*	3/0	2/0
20	6	10	12	200	*	300 MCM	4/0
25	4	8	10	250	*	400 MCM	300 MCM
30	3	8	10	300	*	*	400 MCM
40	2	6	8	350	*	*	500 MCM
50	1/0	4	6	400 - 500	*	*	*

Note: The above table references the suggested wire AWG to use based on Horse Power (HP) and the Full Load Current (FLC) times 125% per NEC Art. 430-22 (A). Amperes (FLC) were determined from NEC Art. 430-150.