

# Ampacity Rating and Recommended Configurations

**For installation of single conductor COPPER cables IN DIRECT BURIAL**

**Types RWU90, RA90, TECK90, ACWU90, 0 to 5 kV**

**ATTENTION - Only these configurations are recommended by Nexans to obtain satisfactory load sharing and ampacity. See C.E.C. Code Rules 4-004, 8-104, 12-012, Appendix B, Appendix Tables D8A and D8B.**

1Cable/Phase ABC >   <190 mm OOO	2Cables/Phase ABC CBA OOOOOO	2Cables/Phase ABC CBA >   <610 mm OOO OOO	4Cables/Phase ABC CBA OOOOOO OOOOOO	4Cables/Phase ABC CBA >   <610 mm OOO OOO OOO OOO	6Cables/Phase ABC CBA OOOOOO OOOOOO OOOOOO	6Cables/Phase ABC CBA >   <610 mm OOO OOO OOO OOO OOO OOO
Detail 1	Detail 2	Detail 3	Detail 4	Detail 5	Detail 6	Detail 7

## Notes:

The ampacities in the tables on this page are based on the following conditions:

- 100% load factor
- Ambient soil temperature of 20°C
- Soil resistivity of 90°C-cm/W
- Conductor temperature of 90°C
- Spacing between conductor centres of 190 mm and 610mm between groups
- Burial depth of 915 mm to centre of top cable layer
- Open circuit sheath/shield operation

Neutral conductors to be located outside of the above groups in the most convenient manner.

Size AWG or kcmil	Detail 1	Detail 2	Detail 3	Detail 4	Detail 5	Detail 6	Detail 7
1/0 (19)	245	245	245	203	220	165	179
2/0 (19)	285	285	285	229	248	186	202
3/0 (19)	330	330	330	258	280	210	228
4/0 (19)	385	385	385	291	315	236	256
250 (37)	425	421	425	317	343	256	278
350 (37)	530	500	520	375	408	304	331
500 (37)	660	605	630	452	489	365	396
600 (61)	740	659	682	491	534	397	433
750 (61)	845	745	775	554	596	447	482
1000 (61)	980	846	890	627	683	505	551
1250 (91)	1083	935	985	691	753	556	607
1500 (91)	1176	1011	1068	746	813	600	655
1750 (127)	1257	1078	1140	793	865	637	696
2000 (127)	1325	1133	1200	832	909	669	730

**Note:**

- 1 This table gives allowable current for 90°C rated single copper conductors with spacings directly buried in earth, subject to Subrules 4-004(14) and (15), where
  - (a) for any load, the cable terminates at equipment of any type other than a fusible switch or circuit breaker; or
  - (b) the load is non-continuous and either end of the cable terminates at a fusible switch circuit breaker.
2. The ampacities provided in this Tables are the lesser of: (a) the value obtained in accordance with Rule 4-004(1)(d); or (b) the value obtained in accordance with Rule 8-104(7).

Size AWG or kcmil	Detail 1		Detail 2		Detail 3		Detail 4		Detail 5		Detail 6	Detail 7	
	100%	80%	100%	80%	100%	80%	100%	80%	100%	80%		100%	80%
<b>1/0 (19)</b>	208	172	208	172	208	172	203	172	208	172	165	179	172
<b>2/0 (19)</b>	242	200	242	200	242	200	229	200	242	200	186	202	200
<b>3/0 (19)</b>	280	231	280	231	280	231	258	231	280	231	210		228
<b>4/0 (19)</b>	327	270	327	270	327	270	291	270	315	270	236		256
<b>250 (37)</b>	361	298	361	298	361	298	317	298	343	298	256		278
<b>350 (37)</b>	450	371	450	371	450	371	375	371	408	371	304		331
<b>500 (37)</b>	561	462	561	462	561	462		452	489	462	365		396
<b>600 (61)</b>	629	518	629	518	629	518		491	534	518	397		433
<b>750 (61)</b>	718	592	718	592	718	592		554	596	592	447		482
<b>1000 (61)</b>	850	700	846	700	846	700		627		683	505		551
<b>1250 (91)</b>	960	791	935	791	935	791		691		753	556		607
<b>1500 (91)</b>	1071	882	1011	882	1011	882		746		813	600		655
<b>1750 (127)</b>	1165	959	1078	959	1078	959		793		865	637		696
<b>2000 (127)</b>	1250	1029	1133	1029	1133	1029		832		909	669		730

**Notes:**

- 1. This table gives allowable current for 90°C rated single copper conductors with spacings directly buried in earth, subject to Subrules 4-004(14) and (15), where (a) the load is continuous, and (b) either end terminates at a fusible switch, circuit breaker.**
- 2. The columns with the heading "80%" denote that the equipment identified in 1(b) is not marked as certified to carry its ampere rating continuously.**
- 3. The columns with the heading "100%" denote that the equipment identified in 1(b) is marked as certified to carry its ampere rating continuously.**
- 4. The ampacities provided in this Table are the lesser of: (a) the value obtained in accordance with the Rule 4-004(1)(d); or (b) the value obtained in accordance with Rule 8-104(7).**