ISO/IEC TS 29125

Edition 1.0 2017-04

Information technology - Telecommunications cabling requirements for remote powering of terminal equipment

AMENDMENT 2

CORRIGENDUM 1

6.4.4 Reducing temperature increase

Replace Table 9, Figure 4, Table 10, Figure 6, Table 11 and Figure 7 with the following new Table 9, Figure 4, Table 10, Figure 6, Table 11 and Figure 7.

ISO/IEC TS 29125:2017-04/AMD2:2024-10/COR1:2025-12(en)

Table 9 – Temperature rise for a 0,57 mm conductor diameter 1-pair cable versus current for different bundle sizes in conduit

Bundle size	Current mA									
	200	400	600	800	1 000	1 200	1 400	1 600	1 800	2 000
	ΔT K									
7	0,2	0,6	1,4	2,4	3,8	5,4	7,4	9,6	12,2	15,0
19	0,3	1,0	2,3	4,1	6,4	9,3	12,5	16,3	20,7	25,5
37	0,4	1,5	3,3	5,9	9,2	13,2	18,0	23,5	29,7	36,7
61	0,5	1,9	4,4	7,8	12,1	17,5	23,8	31,0	39,3	48,5
91	0,6	2,4	5,5	9,8	15,2	22,0	29,9	39,0	49,4	61,0

Temperature rise above 10 K shown in grey background is not recommended for cables installed in an environment that can reach 50 °C.

The values in this table are based on the DC resistance of the cable conductors. Manufacturers' and/or suppliers' specifications give information relating to a specific cable.

NOTE The temperature rise for a particular cable is also dependent on the cable construction.

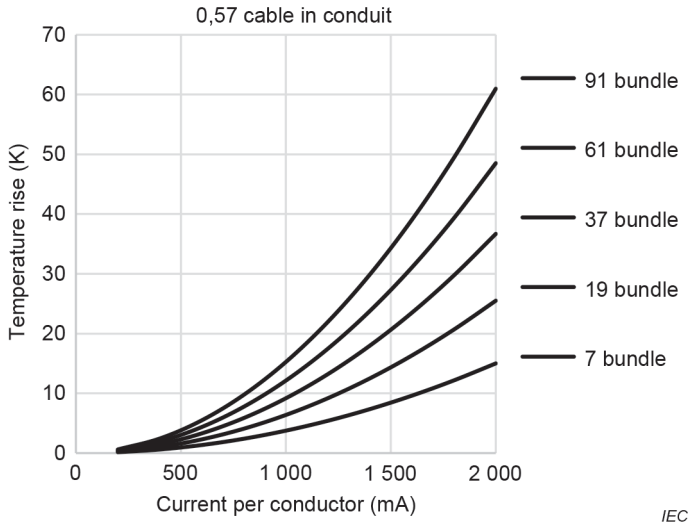

Figure 4 – Temperature rise for a 0,57 mm conductor diameter 1-pair cable versus current for different bundle sizes in conduit

Table 10 – Temperature rise for a 1,02 mm conductor diameter 1-pair cable versus current for different bundle sizes in air

Bundle size	Current mA									
	200	400	600	800	1 000	1 200	1 400	1 600	1 800	2 000
	ΔT K									
7	0,0	0,1	0,3	0,5	0,8	1,2	1,6	2,1	2,6	3,2
19	0,1	0,2	0,5	0,9	1,4	2,0	2,8	3,6	4,6	5,6
37	0,1	0,3	0,7	1,3	2,1	3,0	4,1	5,3	6,7	8,3
61	0,1	0,4	1,0	1,8	2,8	4,0	5,5	7,2	9,1	11,2
91	0,1	0,6	1,3	2,3	3,6	5,2	7,1	9,2	11,7	14,4

Temperature rise above 10 K shown in grey background is not recommended for cables installed in an environment that can reach 50 °C.

The values in this table are based on the DC resistance of the cable conductors. Manufacturers' and/or suppliers' specifications give information relating to a specific cable.

NOTE The temperature rise for a particular cable is also dependent on the cable construction.

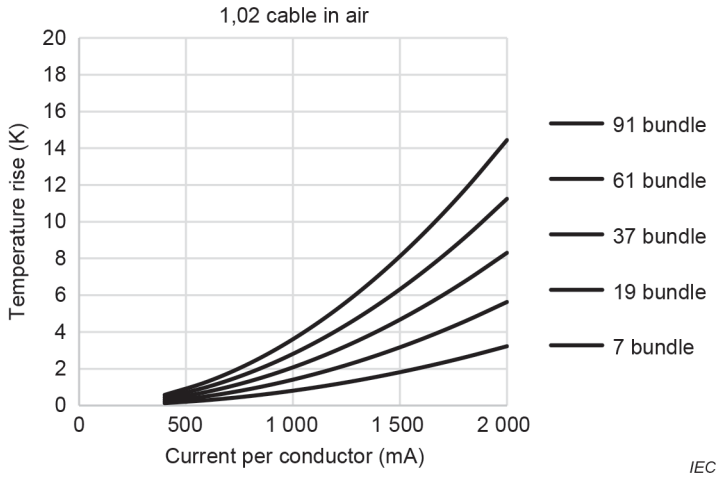

Figure 6 – Temperature rise for a 1,02 mm conductor diameter 1-pair cable versus current for different bundle sizes in air

Table 11 – Temperature rise for a 1,02 mm conductor diameter 1-pair cable versus current for different bundle sizes in conduit

Bundle size	Current mA									
	200	400	600	800	1 000	1 200	1 400	1 600	1 800	2 000
	ΔT K									
7	0,0	0,2	0,4	0,8	1,2	1,7	2,3	3,0	3,8	4,7
19	0,1	0,3	0,7	1,3	2,0	2,9	3,9	5,1	6,5	8,0
37	0,1	0,5	1,0	1,8	2,9	4,1	5,6	7,3	9,3	11,5
61	0,2	0,6	1,4	2,4	3,8	5,5	7,4	9,7	12,3	15,2
91	0,2	0,8	1,7	3,0	4,8	6,9	9,3	12,2	15,4	19,1

Temperature rise above 10 K shown in grey background is not recommended for cables installed in an environment that can reach 50 °C.

The values in this table are based on the DC resistance of the cable conductors. Manufacturers' and/or suppliers' specifications give information relating to a specific cable.

NOTE The temperature rise for a particular cable is also dependent on the cable construction.

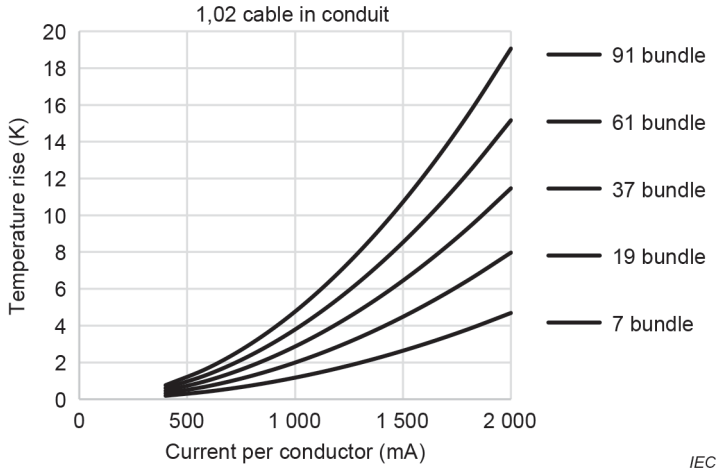

Figure 7 – Temperature rise for a 1,02 mm conductor diameter 1-pair cable versus current for different bundle sizes in conduit

B.3.2 Typical values for constant ρ_u

Delete the following paragraph that was added at the end of the subclause:

"In this document all calculated conduit tables assume a ρ-factor of 0,25. Environments with different ρ-factors shall be recalculated."