

CTL DECISION SHEET (DSH)

Standard(s) (incl. year)	Subclause(s)	Tracking No.	Year																						
IEC 60669-1:2017	17.1	DSH 2100	2018																						
Category																									
INST																									
Subject	Keywords	Developed by	Approved at																						
Cross-sectional area to be used for temperature rise test	- Temperature rise test - Cross-sectional area	ETF 4	2019 CTL Plenary Meeting																						
Question																									
How to interpret the footnote a) of table 16 for switches having a rated current of 16 A? It is not clear how to read this footnote.																									
Decision																									
The following table with the relevant rated current vs. cross-sectional area, representing footnote a) of table 16, shall be applied for the temperature rise test on switches having a rated current of 16 A:																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">a)</th> <th colspan="2" style="text-align: center;">Cross-sectional area</th> </tr> <tr> <th colspan="2" style="text-align: left;">Switch construction</th> <th style="text-align: center;">Rated voltage ≤ 250 V</th> <th style="text-align: center;">Rated voltage > 250 V</th> </tr> </thead> <tbody> <tr> <td rowspan="2" style="text-align: center;">Screw-type terminals</td> <td style="text-align: center;">Switch pattern no. 1,2,4,5,6,7, etc.</td> <td style="text-align: center;">4 mm²</td> <td style="text-align: center;">4 mm²</td> </tr> <tr> <td style="text-align: center;">Switch pattern no. 3,03</td> <td style="text-align: center;">4 mm²</td> <td style="text-align: center;">4 mm²</td> </tr> <tr> <td rowspan="2" style="text-align: center;">Screwless terminals (with respect to clause 12.3.2, table 8)</td> <td style="text-align: center;">Switch pattern no. 1,2,4,5,6,7, etc.</td> <td style="text-align: center;">2,5 mm²</td> <td style="text-align: center;">2,5 mm²</td> </tr> <tr> <td style="text-align: center;">Switch pattern no. 3,03</td> <td style="text-align: center;">2,5 mm²</td> <td style="text-align: center;">2,5 mm²</td> </tr> </tbody> </table>				a)		Cross-sectional area		Switch construction		Rated voltage ≤ 250 V	Rated voltage > 250 V	Screw-type terminals	Switch pattern no. 1,2,4,5,6,7, etc.	4 mm ²	4 mm ²	Switch pattern no. 3,03	4 mm ²	4 mm ²	Screwless terminals (with respect to clause 12.3.2, table 8)	Switch pattern no. 1,2,4,5,6,7, etc.	2,5 mm ²	2,5 mm ²	Switch pattern no. 3,03	2,5 mm ²	2,5 mm ²
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<p>This DSH was prepared in close consultation with IEC SC 23B.</p> <p>According to table 8 of IEC 60669-1, for rated current from 6 A up to and including 16 A, the maximum value for the connectable cross-sectional area of copper conductors for screwless terminals is 2,5 mm². Therefore the temperature rise test on switches with screwless terminals and rated current of 16 A shall be performed with conductors of a cross-sectional area of 2,5 mm².</p>																									