

# DIN CEN/TR 16798-16:2018-03 (E)

**Energy performance of buildings - Ventilation for buildings - Part 16: Interpretation of the requirements in EN 16798-15 - Calculation of cooling systems (Module M4-7) - Storage; English version CEN/TR 16798-16:2017**

---

## Contents

	Page
European foreword.....	4
Introduction .....	7
1    Scope.....	9
2    Normative references.....	9
3    Terms and definitions .....	9
4    Symbols and abbreviations .....	9
4.1  Symbols.....	9
4.2  Abbreviations .....	9
5    Brief description of the method.....	9
5.1  Output of the method.....	9
5.2  General description of the method.....	10
5.2.1  General.....	10
5.2.2  Assumptions.....	10
5.2.3  Number of volumes to model the storage .....	11
5.2.4  Calculation information.....	11
5.3  Flowchart of the calculation procedure.....	11
5.4  Technologies covered by the standard .....	11
5.5  Description of cooling systems.....	11
6    Calculation method.....	11
6.1  Output data.....	11
6.2  Calculation time interval and calculation period .....	11
6.3  Input data.....	12
6.3.1  Source of data .....	12
6.3.2  Product data.....	12
6.3.3  System design data .....	12
6.3.4  Operating conditions .....	13
6.3.5  Constants and physical data .....	13
6.3.6  Input data from Annex A (Annex B) .....	13
6.4  Calculation procedure, hourly method .....	13
7    Quality control .....	13
8    Compliance check.....	13
9    Worked out examples.....	13
9.1  Storage model using water / ice .....	13
9.1.1  Description .....	13
9.1.2  Calculation details .....	13
9.2  Storage with PCM materials .....	13
9.2.1  Description .....	13
9.2.2  Calculation details .....	14
9.3  Remarks and comments .....	14
Annex A (informative) Input and method selection data sheet — Template .....	15
A.1  General.....	15
A.2  References .....	15
A.3  Hourly, monthly and annual method.....	15

<b>A.4 Additional information for monthly method.....</b>	<b>15</b>
<b>Annex B (informative) Input and method selection data sheet — Default choices .....</b>	<b>16</b>
<b>B.1 General .....</b>	<b>16</b>
<b>B.2 References.....</b>	<b>16</b>
<b>B.3 Hourly, bin, monthly and annual method.....</b>	<b>16</b>
<b>B.4 Additional information for monthly and annual method.....</b>	<b>16</b>
<b>Annex C (informative) Calculation flowchart .....</b>	<b>17</b>
<b>Annex D (informative) Calculation example.....</b>	<b>18</b>
<b>D.1 Spreadsheet .....</b>	<b>18</b>
<b>D.2 Example 1: water/ice as storage material.....</b>	<b>18</b>
<b>Bibliography .....</b>	<b>27</b>