

# DATI COPERTINA E PREMESSA DEL PROGETTO

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**UNI EN 16798-9**

**Lingua**

Italiana

**Titolo Italiano**

Appendice nazionale della UNI EN 16798-9 (Ventilazione per gli edifici) - Dati di ingresso e metodi - Scelte italiane

**Titolo Inglese**

Input and method selection data sheet - Italian choices

**Commissione Tecnica**

**Organo Competente**

UNI/CT 241 - CTI - Impianti di climatizzazione: progettazione, installazione, collaudo e prestazioni (UNI/TS 11300-3)

**Coautore**

**Sommario**

Il presente documento costituisce l'appendice nazionale della UNI EN 16798-9. Esso definisce le scelte tra i metodi, i dati di input richiesti e i riferimenti ad altre norme per la sua applicazione a livello nazionale. L'aggiunta della presente appendice nazionale (normativa) costituisce l'unica modifica rispetto alla versione precedente della norma.

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**2024-09-15**

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**Relazioni Nazionali**

La presente norma sostituisce la UNI EN 16798-9:2018.

**Relazioni Internazionali**

**Premessa**

La presente norma è stata elaborata sotto la competenza dell'ente federato all'UNI CTI - Comitato Termotecnico Italiano

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## **Annex NA**

### **(normative)**

## **Input and method selection data sheet — Italian choices**

### **NA.1 General**

The template in Annex NA to this standard shall be used to specify the choices between methods, the required input data and references to other standards.

NOTE 1 Following this template is not enough to guarantee consistency of data.

NOTE 2 Informative default choices are provided in Annex B. Alternative values and choices can be imposed by national / regional regulations. If the default values and choices of Annex B are not adopted because of the national / regional regulations, policies or national traditions, it is expected that:

- national or regional authorities prepare data sheets containing the national or regional values and choices, in line with the template in Annex NA; or
- by default, the national standards body will add or include a national annex (Annex NA) to this standard, in line with the template in Annex NA, giving national or regional values and choices in accordance with their legal documents.

NOTE 3 The template in Annex NA is applicable to different applications (e.g. the design of a new building, certification of a new building, renovation of an existing building and certification of an existing building) and for different types of buildings (e.g. small or simple buildings and large or complex buildings). A distinction in values and choices for different applications or building types could be made:

- by adding columns or rows (one for each application), if the template allows;
- by including more than one version of a Table (one for each application), numbered consecutively as a, b, c, ... For example: Table NA.3a, Table NA.3b.
- by developing different national / regional data sheets for the same standard. In case of a national annex to the standard these will be consecutively numbered (Annex NA, Annex NB, Annex NC, ...).

NOTE 4 In the section “Introduction” of a national / regional data sheet information can be added, for example about the applicable national / regional regulations.

NOTE 5 For certain input values to be acquired by the user, a data sheet following the template of Annex NA, could contain a reference to national procedures for assessing the needed input data. For instance, reference to a national assessment protocol comprising decision trees, tables and pre-calculations.

The shaded fields in the tables are part of the template and consequently not open for input.

## NA.2 References

The references, identified by the module code number, are given in Table NA.1.

**Table NA.1 — References**

| Reference | Reference document <sup>a</sup>                                                                                                                                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M1-9      | EN ISO 52000-1, <i>Energy performance of buildings — Overarching EPB assessment — Part 1: General framework and procedures</i> (ISO 52000-1:2017)                                                                                                                         |
| M1-13     | EN ISO 52010-1, <i>Energy performance of buildings — External climatic conditions - Part 1: Conversion of climatic data for energy calculations</i> (ISO 52010-1:2017)                                                                                                    |
| M2-2      | EN ISO 52016-1, <i>Energy performance of buildings — Energy needs for heating and cooling, internal temperatures and sensible and latent heat loads - Part 1: Calculation procedures</i> (ISO 52016-1:2017)                                                               |
| M4-5      | EN 15316-2, <i>Method for calculation of system energy requirements and system efficiencies -Part 2: Space emission systems (heating and cooling)</i> , Module M3-5, M4-5                                                                                                 |
| M4-6      | EN 15316-3, <i>Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 3: Space distribution systems (DHW, heating and cooling)</i> , Module M3-6, M4-6, M8-6                                               |
| M4-7      | EN 16798-15, <i>Energy performance of buildings — Ventilation for buildings - Part 15: Calculation of cooling systems</i> (Module M4-7) - Storage                                                                                                                         |
| M4-8      | EN 16798-13, <i>Energy performance of buildings — Part 13: Module M4-8 — Calculation of cooling systems — Generation</i>                                                                                                                                                  |
| M5-8-1    | EN 16798-5-1, <i>Energy performance of buildings — Ventilation for buildings - Part 5-1: Calculation methods for energy requirements of ventilation and air conditioning systems</i> (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Method 1: Distribution and generation |
| M5-8-2    | EN 16798-5-2, <i>Energy performance of buildings — Ventilation for buildings - Part 5-1: Calculation methods for energy requirements of ventilation systems</i> (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Method 2: Distribution and generation                      |

## NA.3 System design data

### NA.3.1 Default process design data choices

The default process design data are given in Table NA.2.

**Table NA.2 — Quantitative process design data**

| Symbol                            | Unit              | Value                               |
|-----------------------------------|-------------------|-------------------------------------|
| $\vartheta_{C;gen;out;set}$       | °C                | 6                                   |
| $\vartheta_{C;dis;flw;set;i}$     | °C                | 6                                   |
| $\vartheta_{C;dis;flw;set;max;i}$ | °C                | n/a with default control option     |
| $\vartheta_{C;dis;flw;set;min;i}$ | °C                | n/a with default control option     |
| $f_{e,i}$                         | —                 | n/a with default control option     |
| $\Delta\vartheta_{off;i}$         | K                 | n/a with default control option     |
| $q_{v;C;dis;i;des}$               | m <sup>3</sup> /h | From load calculation or inspection |
| $Q_{C;dis;out;i;des}$             | kWh               | From load calculation or inspection |

### NA 3.2 Default process control options

The default process control options are given in Table NA.3.

**Table NA.3 — Default process control options**

| Identifier           | Default option |
|----------------------|----------------|
| CLG_GEN_TMP_CTRL     | CONST          |
| CLG_DISTR_TMP_CTRL   | CONST          |
| CLG_DISTR_TMP_CTRL_I | CONST          |
| CLG_DISTR_FLW_CTRL   | CONST          |
| CLG_EN_DISTR_CTRL    | NO_CTRL        |

### NA.3.3 Factors for simplified distribution calculation

The factors for simplified distribution losses and for auxiliary energy calculation are given in Table NA.4.

**Table NA.4 — Factors for simplified distribution calculation**

| Factor          | value |
|-----------------|-------|
| $f_{C;dis;ls}$  | 0,05  |
| $f_{C;dis;aux}$ | 0,02  |

### NA 3.4 Energy weighting factors

The energy weighting factors are given in Table NA.5.

**Table NA.5 — Energy weighting factors**

| Weighting factor | value |
|------------------|-------|
| $f_{W;th}$       | 1,0   |
| $f_{W;el}$       | 1,0   |