

# DIN EN 13215:2020-12 (E)

## Condensing units for refrigeration - Rating conditions, tolerances and presentation of manufacturer's performance data (includes Amendment : 2020)

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
<b>1</b>	<b>Scope .....</b>	<b>5</b>
<b>2</b>	<b>Normative references .....</b>	<b>5</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>5</b>
<b>4</b>	<b>Symbols and abbreviations .....</b>	<b>6</b>
<b>5</b>	<b>Parameters for the presentation of performance data .....</b>	<b>7</b>
<b>6</b>	<b>General requirements .....</b>	<b>7</b>
<b>7</b>	<b>Performance data .....</b>	<b>8</b>
7.1	General .....	8
7.2	Part load performance data .....	8
7.3	Tabular or graphical form .....	8
7.4	Determination of the power absorbed by the condensing unit .....	8
7.4.1	Condensing units including the compressor motor .....	8
7.4.2	Motors with a specific factory assembled or factory specified means for variable speed ....	9
7.4.3	Externally driven compressors without motor .....	9
<b>8</b>	<b>Rating conditions .....</b>	<b>9</b>
8.1	General .....	9
8.2	Standard reference points .....	9
8.3	Air cooled condensing units .....	10
8.3.1	General .....	10
8.3.2	Data for SEPR calculation .....	10
8.4	Water cooled condensing units .....	11
<b>9</b>	<b>Tolerances .....</b>	<b>11</b>
<b>10</b>	<b>Correction factors .....</b>	<b>11</b>
10.1	Superheat .....	11
10.2	Compressors speed .....	12
<b>Annex A(normative) Calculation of SEPR .....</b>		<b>13</b>
A.1	General .....	13
A.2	Condensing unit without capacity control .....	13
A.3	Condensing unit with stepwise capacity control .....	13
A.4	Calculation of SEPR .....	14
<b>Annex B(normative) Determination of evaporating temperature with refrigerant mixtures .....</b>		<b>18</b>
<b>Annex ZA(informative) Relationship between this European Standard and the eco-design requirements of Commission Regulation (EU) No 2015/1095 .....</b>		<b>20</b>
<b>Bibliography .....</b>		<b>21</b>

<b>Tables Table 1 -- Symbols and abbreviations .....</b>	<b>6</b>
<b>Table 2 -- Indices .....</b>	<b>7</b>
<b>Table 3 -- Parameters for the presentation of performance data .....</b>	<b>7</b>
<b>Table 4 -- Standard reference points .....</b>	<b>9</b>
<b>Table 5 -- Actual performance in relation to published data .....</b>	<b>11</b>
<b>Table A.1 -- Required input for SEPR calculation .....</b>	<b>14</b>
<b>Table A.2 -- Ambient temperatures and duration for SEPR determination .....</b>	<b>15</b>
<b>Table ZA.1 -- Correspondence between this European Standard and Commission Regulation (EU) No 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers and Commission's standardization request M/495 (Ecodesign) .....</b>	<b>20</b>