

# DIN EN ISO 1680:2014-04 (E)

## Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machines (ISO 1680:2013)

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
<b>1</b>	<b>Scope .....</b>	<b>4</b>
<b>2</b>	<b>Normative references .....</b>	<b>4</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>5</b>
<b>4</b>	<b>Description of machinery family .....</b>	<b>7</b>
<b>5</b>	<b>Sound power determination .....</b>	<b>8</b>
<b>5.1</b>	<b>General .....</b>	<b>8</b>
<b>5.2</b>	<b>Guidelines for the selection of the most appropriate basic standard .....</b>	<b>8</b>
<b>5.3</b>	<b>Additional requirements .....</b>	<b>8</b>
<b>6</b>	<b>Installation and mounting conditions .....</b>	<b>11</b>
<b>6.1</b>	<b>Mounting of the machine .....</b>	<b>11</b>
<b>6.2</b>	<b>Auxiliary equipment and loaded machines .....</b>	<b>12</b>
<b>7</b>	<b>Operating conditions .....</b>	<b>12</b>
<b>7.1</b>	<b>General .....</b>	<b>12</b>
<b>7.2</b>	<b>Load .....</b>	<b>13</b>
<b>7.3</b>	<b>Variable speed devices .....</b>	<b>13</b>
<b>8</b>	<b>Measurement uncertainty .....</b>	<b>13</b>
<b>9</b>	<b>Determination of the emission sound pressure level .....</b>	<b>15</b>
<b>9.1</b>	<b>General .....</b>	<b>15</b>
<b>9.2</b>	<b>Selection of the relevant work station .....</b>	<b>15</b>
<b>9.3</b>	<b>Selection of basic standard to be used .....</b>	<b>15</b>
<b>9.4</b>	<b>Measurement uncertainty .....</b>	<b>15</b>
<b>10</b>	<b>Indication of noise emission quantities determined according to this International Standard .....</b>	<b>15</b>
<b>11</b>	<b>Information to be recorded .....</b>	<b>16</b>
<b>12</b>	<b>Information to be reported .....</b>	<b>16</b>
<b>13</b>	<b>Declaration and verification of noise emission values (if required) .....</b>	<b>16</b>
<b>Annex A (informative)</b>	<b>Overview of standards for the determination of sound power levels of machines and equipment .....</b>	<b>18</b>
<b>Annex B (informative)</b>	<b>Example of a dual-number declaration for rotating electrical machines .....</b>	<b>21</b>
<b>Bibliography .....</b>		<b>22</b>