

# DIN EN ISO 18497-1:2025-04 (E)

**Agricultural machinery and tractors - Safety of partially automated, semi-autonomous and autonomous machinery - Part 1: Machine design principles and vocabulary (ISO 18497-1:2024)**

---

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered</b> .....	<b>4</b>
<b>Foreword</b> .....	<b>11</b>
<b>Introduction</b> .....	<b>12</b>
<b>1 Scope</b> .....	<b>14</b>
<b>2 Normative references</b> .....	<b>14</b>
<b>3 Terms and definitions</b> .....	<b>15</b>
<b>4 Safety requirements and protective or risk reduction measures</b> .....	<b>21</b>
4.1 General.....	21
4.2 Design principles.....	21
4.2.1 General.....	21
4.2.2 Operator presence.....	21
4.2.3 Start-up.....	22
4.2.4 States, modes and actions.....	22
4.2.5 Visual indication.....	23
4.2.6 Audible indication.....	23
4.2.7 Obstacle protective system.....	24
4.2.8 Operating zone (semi-autonomous and autonomous).....	24
4.2.9 Monitoring.....	24
4.2.10 Faults and failures.....	25
4.3 Visual and audible alarms.....	26
4.3.1 General.....	26
4.3.2 Visual alarm (semi-autonomous and autonomous).....	26
4.3.3 Audible alarm (semi-autonomous and autonomous).....	28
4.4 Labelling and identification.....	28
4.5 Information for use.....	28
<b>Bibliography</b> .....	<b>30</b>