

# DIN EN 14597:2015-02 (E)

## Temperature control devices and temperature limiters for heat generating systems

<b>Contents</b>		<b>Page</b>
Foreword.....		4
Introduction.....		5
1	Scope .....	8
2	Normative references .....	8
3	Terms and definitions .....	9
4	General requirements and general notes on tests.....	12
5	Rating.....	12
6	Classification.....	12
7	Information .....	13
8	Protection against electric shock .....	13
9	Provision for protective earthing .....	13
10	Terminals and terminations.....	13
11	Constructional requirements.....	13
12	Moisture and dust resistance .....	15
13	Electric strength and insulation resistance .....	15
14	Heating.....	15
15	Manufacturing deviation and drift.....	16
16	Environmental stress resulting from transport and storage .....	17
17	Endurance .....	17
18	Mechanical strength .....	17
19	Threaded parts and connections .....	17
20	Creepage distances, clearances and distances through insulation .....	17
21	Resistance to heat, fire, and tracking.....	17
22	Resistance to corrosion .....	17
23	Electromagnetic Compatibility (EMC) requirements — Emission.....	17
24	Components .....	18
25	Normal operation .....	18
26	Electromagnetic compatibility (EMC) requirements — Immunity .....	18
27	Abnormal operation.....	18
28	Guidance on the use of electronic disconnection .....	18

<b>Annex AX (normative) Actions required</b> .....	<b>21</b>
<b>Annex BX (normative) Information</b> .....	<b>24</b>
<b>Annex CX (normative) Maximum permissible time factor values</b> .....	<b>32</b>
<b>Annex DX (normative) Actuator devices with safety functions in heat generating systems</b> .....	<b>33</b>
<b>DX.11 Construction additions:</b> .....	<b>33</b>
<b>DX.14 Heating</b> .....	<b>34</b>
<b>DX.17 Endurance Addition to 17.1:</b> .....	<b>34</b>
<b>Annex EX (informative) Characteristics of typical temperature sensors and their fault modes</b> .....	<b>35</b>
<b>Bibliography</b> .....	<b>36</b>

## Tables

<b>Table 1 — List of standards (non-exhaustive) for equipment using temperature control devices within the scope of this document</b> .....	<b>6</b>
<b>Table 14.201 — Test parameters for temperature sensing controls used in specific applications</b> .....	<b>16</b>
<b>Table AX.1a — Actions required for operating and protective controls for HGS according to their device codes</b> .....	<b>21</b>
<b>Table AX.1b — Actions required for actuators for HGS according to their device code</b> .....	<b>23</b>
<b>Table BX.1 — Information according to temperature sensing controls for HGS</b> .....	<b>24</b>
<b>Table CX.1 — Maximum permissible time factor values according to the application</b> .....	<b>32</b>
<b>Table EX.1 — Characteristics of typical temperature sensors</b> .....	<b>35</b>