

## 5 Temperatures

### 5.1 Environmental influences

#### 5.1.1 Ambient temperature

Equipment designed for use in a normal ambient temperature range of  $-20\text{ °C}$  to  $+40\text{ °C}$  does not require marking of the ambient temperature range. However, equipment designed for use in other than this normal ambient temperature range is considered to be special. The marking shall then include either the symbol  $T_a$  or  $T_{amb}$  together with both the upper and lower ambient temperatures or, if this is impracticable, the symbol “X” shall be used to indicate specific conditions of use that include the upper and lower ambient temperatures. See item e) of 29.3 and Table 1.

NOTE The ambient temperature range is permitted to be a reduced range, e.g.  $-5\text{ °C} \leq T_{amb} \leq 15\text{ °C}$ .

**Table 1 – Ambient temperatures in service and additional marking**

Equipment	Ambient temperature in service	Additional marking
Normal	Maximum: $+40\text{ °C}$ Minimum: $-20\text{ °C}$	None
Special	Specified by the manufacturer	$T_a$ or $T_{amb}$ with the special range, for example, $-30\text{ °C} \leq T_a \leq +40\text{ °C}$ or the symbol “X”