

Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (recast) (Text with EEA relevance)

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*Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.*

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## ANNEX V

### SPECIFIC REQUIREMENTS

#### 4. Permissible effect of disturbances

##### 4.3. *Permissible effect of transient electromagnetic phenomena*

4.3.1. The effect of an electromagnetic disturbance on an electrical energy meter shall be such that during and immediately after a disturbance:

- any output intended for testing the accuracy of the meter does not produce pulses or signals corresponding to an energy of more than the critical change value,

and in reasonable time after the disturbance the meter shall:

- recover to operate within the MPE limits, and
- have all measurement functions safeguarded, and
- allow recovery of all measurement data present prior to the disturbance, and
- not indicate a change in the registered energy of more than the critical change value.

The critical change value in kWh is

$$m \times U_n \times I_{\max} \times 10^{-6}$$

(m being the number of measuring elements of the meter,  $U_n$  in Volts and  $I_{\max}$  in Amps).

4.3.2. For overcurrent the critical change value is 1,5 %.