Errata to
IEEE GUIDE TO THE MEASUREMENT
OF PARTIAL DISCHARGES IN ROTATING
MACHINERY

Sponsor

Electric Machinery Committee
of the
IEEE Power Engineering Society

Correction Sheet
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Page 2, Clause 2 References

IEC 60270(1981-01), Partial Discharge Measurements.

should be changed to read as follows:

(This should also be changed in Clause 8 and 10.2.3.)

IEEE Std 286-2000, IEEE Recommended Practice for Measurement of Power Tip-Up of Rotating
Machinery Stator Coil Insulation.

should read as follows:

Stator Coil Insulation.

Page 3, Clause 3 Definitions, 3.1 apparent charge should read as follows:

3.1 apparent charge: The apparent charge \( (Q) \) of an individual partial discharge (PD) is that charge which,
if injected instantaneously between the terminals of the test object, would momentarily change the voltage
between its terminals by the same amount as the partial discharge itself. The apparent charge is expressed in
coulombs.

Page 5, Clause 3 Definitions, 3.24 partial discharge (PD) quantity should read as follows:

3.24 partial discharge (PD) quantity: The magnitude of an individual discharge in an insulation system
expressed in terms of the apparent charge transfer \( (Q) \) measured at the terminals of the test object expressed
in coulombs. In the case of complete windings, such measurements are limited to the frequency range of 10
kHz to 1 MHz, and the results obtained are a function of the bandwidth of the particular detection system.

Page 8, Clause 3 Definitions, 3.28 pulse discharge should read as follows:

3.28 pulse discharge: A type of partial discharge (PD) phenomenon characterized by a spark-type
breakdown. The resultant detected pulse discharge has a short rise time, and its frequency spectrum may
extend as far as \( \geq 100 \text{ MHz} \). Such a pulse discharge may be readily detected at the terminals of the winding
or component under tests by means of conventional pulse detectors, that are generally designed for PD
measurements within the frequency band from 10 kHz to several megahertz.

Page 31, first paragraph, there are two references to footnote 12, these should be changed to footnote 13.

Page 41, 11.4 Integrated quantities

The first item in the dashed list, \( NQN \): The reference to 3.24 should be changed to 3.17.

The second item in the dashed list, \( \text{Quadratic rate} \): The reference to 3.23 should be changed to 3.32.

Page 42, 11.5, last sentence in 4th item in dashed list should read as follows:
Surface discharges, especially, will be more prominent at low gas pressure.