

# Errata to IEEE Guide for Loading Mineral-Oil- Immersed Transformers

Sponsor  
**Transformers Committee**  
of the  
**IEEE Power Engineering Society**

*Correction Sheet*  
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**Page 6**

In Equation (1) the “1500” should be replaced with “15000” The equation should read as follows:

$$\text{Per unit life} = 9.80 \times 10^{-18} \text{EXP} \left[ \frac{15000}{\Theta_H + 273} \right] \quad (1)$$

**Page 6**

In Equation (2) the “1500” should be replaced with “15000” The equation should read as follows:

$$F_{AA} = \text{EXP} \left[ \frac{15000}{383} - \frac{15000}{\Theta_H + 273} \right] \quad (2)$$

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In Equation (C1) the term “ $\Delta\Theta_i$ ” is missing. The equation should read as follows:

$$\Delta\Theta_{TO} = (\Delta\Theta_{TO,U} - \Delta\Theta_i) \left( 1 - \exp^{-\frac{t}{\tau_{TO}}} \right) + \Delta\Theta_{TO,i} \quad (C1)$$

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Last equation on page, the “29.8” should be replaced with “29.87” The equation should read as follows:

$$\Delta\Theta_{TO,U} = 29.87K^2 + 6.13 = 29.87(0.634)^2 + 6.13 = 18.14 \text{ } ^\circ\text{C}$$

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The following equation replaces the equation labeled (G 11-B) :

$$\text{IF } \Theta_{TDO} < \Theta_{TO} \text{ THEN } \Theta_{WO} = \Theta_{TO}$$

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The following equation replaces the equation labeled (G 18-B) :

$$Q_C = P_{C,OE} \Delta t$$

**Page 68**

The sentence after equation (G.21) is missing. The following sentence should be placed after the equation:

y=0.8 for OA, n0.9 for FA and NDFOA, and 1.0 for DFOA

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The following equation replaces the equation labeled (G.26) :

$$\Delta\Theta_{T/B} = (\Theta_{TO} - \Theta_{BO}) = \left[ \frac{Q_{LOST, O}}{P_T \Delta t} \right]^z (\Theta_{TO, R} - \Theta_{BO, R})$$

**Page 69**

The equation before G.3.7 has the wrong subscript. The equation should read as following

$$\Theta_{TO} = \Theta_{AO} + \frac{\Delta\Theta_{T/B}}{2}$$

**Page 71**

The following equation replaces the equation labeled (G-33) :

$$\Delta\Theta'_{DO/BO, R} = \Delta\Theta_{DO/BO, R} \left[ \frac{I'_R}{I_R} \right]^{2x}$$

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The following equation replaces the equation labeled (G-35A) :

$$\Delta\Theta'_{H/A, R} = [\Delta\Theta_{H/A, R} - \Delta\Theta_{BO, R} - \Delta\Theta_{DO/BO, R}] \left[ \frac{I'_R}{I_R} \right]^{1.6} + \Delta\Theta'_{BO, R} + \Delta\Theta'_{DO/BO, R}$$

**Page 71**

The following equation replaces the equation labeled (G-35B) :

$$\Delta\Theta'_{H/A, R} = [\Delta\Theta_{H/A, R} - \Delta\Theta_{BO, R} - \Delta\Theta_{DO/BO, R}] \left[ \frac{I'_R}{I_R} \right]^{2.0} + \Delta\Theta'_{BO, R} + \Delta\Theta'_{DO/BO, R}$$

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The following equation replaces the equation labeled (H-1) :

$$q_{TANK} = (0.00365) (S) (\Delta\Theta_{AO, R})^{1.21}$$