ABB Inc.
305 Gregson Drive
Cary, NC 27511
electrification.us.abb.com

TYPICAL TEST DATA

LV Dry Type Transformer

Industrial Solutions

MODEL #: 9T10C1009G31 Underwriters' Laboratories Inc. Listed

RATINGS

KVA	500	Conductor	CU
Frequency (Hz)	60	Phase	3
Primary Voltage	480D+2,-2(2.5%taps)	Secondary Voltage	208Y/120
Current Line Primary (A)	601.41	Current Line Secondary (A)	1387.86
Frame	DX79C	Insulation System (°C)	220C
K Factor	1	Efficiency level	DoE 2016 (10CFR 431)
Temp. Rise (°C)	115	Average Sound Level (dB)	60

LOSS DATA @ 100% LOAD

Core Loss or No Load Loss @ 100% voltage (Watts)	758.0
Impedance Loss or Coil Loss @ Rise + 20 °C reference (Watts)	6,996.6
Total Loss @ Rise + 20 °C reference (Watts)	7,754.6

DIELECTRIC AND PRODUCTION TESTING

Induce Test @ Twice rated voltage 400 Hz per UL1561 and NEMA ST-20
Hipot Test for High Voltage winding to Low Voltage and Ground @ 4000 volts 60 Hz, 60 Sec
Hipot Test for Low Voltage winding to High Voltage and Ground @ 2500 volts 60 Hz, 60 Sec
Polarity additive in accordance with UL1561 and NEMA ST-20

EFFICIENCY:

DoE 2016 (10CFR 431) Efficiency Level

Load (%)	Efficiency (%)
16	98.87
25	99.10
35	99.14
50	99.10
75	98.90
100	98.65

IMPEDANCE:

Impedance at reference temperature of Rise + 20 °C (Calculated)

%R	1.4
%X	4.8
%Z	5.0
X/R Ratio	3.4

REGULATION:

Regulation at reference temperature of Rise + 20 °C (Calculated)

Power Factor	Regulation (%)
1	1.6
0.9	3.1
0.8	3.6

REFERENCE VALUES:

Inrush Current (Calculated)	t= 8.33ms
Imax(RMS)	≈ 3227.97 A

by ABB