Specifications

Eaton 040643

Catalog Number: 040643

Eaton Moeller® series STI Control transformer, 0.5 kVA, Rated input voltage 230± 5 % V, Rated output voltage 230 V



General specifications

Product Name
Eaton Moeller® series STI Control transformer

Catalog Number
040643

EAN
4015080406433

Product Length/Depth
120 mm

Product Height
119 mm

Product Width
121 mm

Product Weight
6.589 kg

Certifications
CE
IEC/EN 60204-1, ÖVE-EN 13
VDE 0113, VDE 0100 Part 410
IEC/EN 61558-2-2
UL 506
VDE 0570 Part 2 -6 (safety transformers)
VDE 0570 Part 2-4 (isolating transformer)
UL Recognized
IEC/EN 61558-2-2/2-4/2-6
VDE 0570 Part 2-2
UL5085-1
CSA-C22.2 No. 66
UL File No.: E167225
UL Category Control No.: XPTQ2, XPTQ8
UL report applies to both US and Canada

Catalog Notes
Electrical characteristics: all details for no-load loss, short-circuit loss (copper losses), short-circuit voltage and efficiency values relate to a temperature of 20 °C

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Features & Functions

Features

Separate windings

Fully Vacuum-impregnated

Reinforced insulation

General

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

40 °C

Connection lug

Yes for > 115 A

Connection type

Terminations, < 115 A

Duty factor

100 %

Insulation class

B

Primary tapping

± 5 %

Product category

Single-phase control transformers ST

Suitable for

Branch circuits, (UL/CSA)

Type

Single-phase control, isolating and safety transformer

Electrical rating

Efficiency

93 %

No-load losses

15 W

Rated frequency - min

50 Hz

Rated frequency - max

60 Hz

Rated power

0.5 VA

Relative short-circuit voltage

3.9 %

Design verification

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0 W

Rated operational current for specified heat dissipation (In)

0 A

Static heat dissipation, non-current-dependent Pvs

39 W

10.2.2 Corrosion resistance

Meets the product standard's requirements.

Short-circuit losses

24 W

Short-time rating

1.6 kVA

Voltage rating - max

600 V

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.2.7 Inscriptions

Meets the product standard's requirements.

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

10.8 Connections for external conductors

Is the panel builder's responsibility.

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Resources

Application notes

eaton-transformer-stz-sti-stn-dtz-uti-ap009002-en-us.pdf

Brochures

eaton-transformers-brochure-br009002en-en-us.pdf

Catalogs

eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf

Declarations of conformity

DA-DC-00004447.pdf

DA-DC-00004421.pdf

Drawings

eaton-general-transformer-sti-control-transformer-dimensions-011.eps

eCAD model

ETN.040643.edz

mCAD model

DA-CS-sti0_5_230

DA-CD-sti0_5_230

System overview

eaton-general-diagram-sti-control-transformer-explosion-drawing.eps

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