

# Product datasheet

Specifications



## voltage transformer - 230 V - 1 x 24 V - 400 VA

ABT7ESM040B

⚠ Discontinued on: 01-Jun-2024

⚠ To be end-of-service on: 01-Jun-2025

⚠ Discontinued

### Main

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Range of product                      | Modicon Transformer Economic                                                            |
| Product or component type             | Safety and isolation transformer                                                        |
| Rated power in VA                     | 400 VA                                                                                  |
| Input voltage                         | 230 V AC phase to phase, terminal(s): L1-L2<br>230 V AC single phase, terminal(s): N-L1 |
| Output voltage                        | 24 V AC                                                                                 |
| Secondary winding                     | Single                                                                                  |
| Protective cover                      | Without                                                                                 |
| Ambient air temperature for operation | -20...40 °C                                                                             |

### Complementary

|                                    |                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage limits               | 207...253 V                                                                                                                                                                                                                                                                                                                                                                               |
| Network frequency limits           | 47...63 Hz                                                                                                                                                                                                                                                                                                                                                                                |
| Input voltage tolerance            | +/- 15 V                                                                                                                                                                                                                                                                                                                                                                                  |
| Efficiency                         | 90 %                                                                                                                                                                                                                                                                                                                                                                                      |
| Power dissipation in W             | 44.4 W                                                                                                                                                                                                                                                                                                                                                                                    |
| Voltage variation at nominal load  | 0,0429 at 230 V                                                                                                                                                                                                                                                                                                                                                                           |
| Output sustained overvoltage       | 5 % (no load, hot state)                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum voltage drop at rated load | 5.75 %                                                                                                                                                                                                                                                                                                                                                                                    |
| No load losses                     | 19.3 W                                                                                                                                                                                                                                                                                                                                                                                    |
| Short-circuit voltage              | 0,055                                                                                                                                                                                                                                                                                                                                                                                     |
| Output protection type             | Against overload, protection technology: with additional protection fuses or circuit-breakers in Selection of Protection<br>Against overvoltage, protection technology: with additional protection fuses or circuit-breakers in Selection of Protection<br>Against short-circuits, protection technology: with additional protection fuses or circuit-breakers in Selection of Protection |
| Connections - terminals            | For input connection: screw type terminals, connection capacity: 4 x 2.5...4 x 4 mm² AWG 14...AWG 11<br>For input ground connection: screw type terminals, connection capacity: 1 x 2.5...1 x 4 mm² AWG 14...AWG 11<br>For output connection: screw type terminals, connection capacity: 2 x 2.5...2 x 4 mm² AWG 14...AWG 11                                                              |
| Marking                            | CE                                                                                                                                                                                                                                                                                                                                                                                        |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                             |                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixing mode                 | By 4 screws diameter: 5 mm on vertical panel, operating position: horizontal<br>By 4 screws diameter: 5 mm on vertical panel, operating position: vertical<br>By 4 screws diameter: 5 mm on horizontal panel with derating to 90 % |
| Operating altitude          | 3000 m                                                                                                                                                                                                                             |
| Electrical insulation class | Class B                                                                                                                                                                                                                            |
| width                       | 120.0 mm                                                                                                                                                                                                                           |
| Height                      | 104.0 mm                                                                                                                                                                                                                           |
| Depth                       | 122.0 mm                                                                                                                                                                                                                           |
| Net weight                  | 5.12 kg                                                                                                                                                                                                                            |

## Environment

|                                     |                                                                                                        |
|-------------------------------------|--------------------------------------------------------------------------------------------------------|
| Product certifications              | EAC<br>DNV-GL                                                                                          |
| IP degree of protection             | IP20                                                                                                   |
| Environmental characteristic        | EMC conforming to IEC 62041<br>Safety conforming to EN 61558-1<br>Safety conforming to EN 61558-2-6    |
| Ambient air temperature for storage | -40...80 °C                                                                                            |
| Relative humidity                   | 0...95 % during operation                                                                              |
| Overvoltage category                | Class I conforming to VDE 0106-1                                                                       |
| Dielectric strength                 | 3200 V between input and ground<br>3200 V between output and ground<br>5100 V between input and output |

## Packing Units

|                              |            |
|------------------------------|------------|
| Unit Type of Package 1       | PCE        |
| Number of Units in Package 1 | 1          |
| Package 1 Height             | 25.500 cm  |
| Package 1 Width              | 18.500 cm  |
| Package 1 Length             | 14.800 cm  |
| Package 1 Weight             | 5.430 kg   |
| Unit Type of Package 2       | P06        |
| Number of Units in Package 2 | 22         |
| Package 2 Height             | 75.000 cm  |
| Package 2 Width              | 60.000 cm  |
| Package 2 Length             | 80.000 cm  |
| Package 2 Weight             | 132.460 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

# Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

How this information helps you >

## Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard

No

Packaging without single use plastic

No

EU RoHS Directive

Pro-active compliance  
(Product out of EU RoHS legal scope)

SCIP Number

93c35204-c30d-4a1c-be25-b7657ea12b91

REACH Regulation

[REACH Declaration](#)

China RoHS Regulation

[China RoHS declaration](#)

PVC free

Yes

## Use Again

### Repack and remanufacture

Circularity Profile

[No need of specific recycling operations](#)

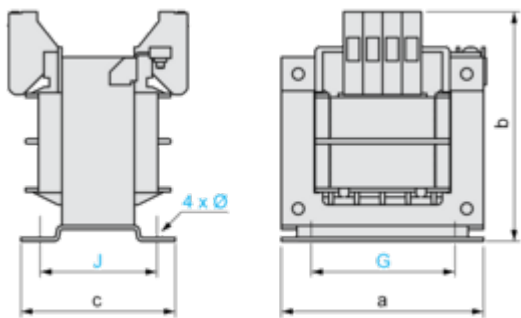
Take-back

No

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Dimensions Drawings

Dimensions



Dimensions in mm

| a   | b   | c   | G  | J  | Ø   |
|-----|-----|-----|----|----|-----|
| 120 | 122 | 104 | 90 | 86 | 5.8 |

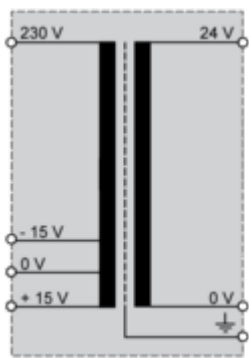
Dimensions in in.

| a    | b    | c    | G    | J    | Ø    |
|------|------|------|------|------|------|
| 4.72 | 4.80 | 4.09 | 3.54 | 3.39 | 0.23 |

Connections and Schema

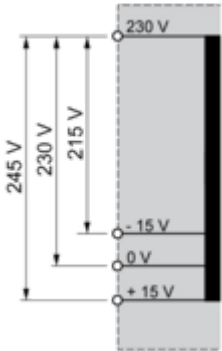
Internal Scheme

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Primary Voltage Wiring

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Secondary Voltage Wiring

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