



## Main

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Range of product                      | Phaseo Optimum                                                                          |
| Product or component type             | Safety and isolation transformer                                                        |
| Rated power in VA                     | 250 VA                                                                                  |
| Input voltage                         | 400 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...50 °C                                                                             |

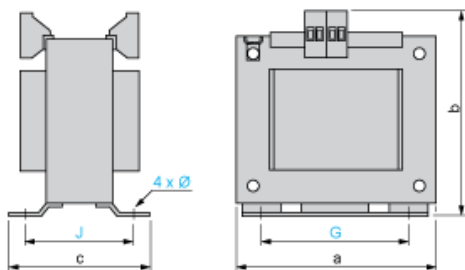
## Complementary

|                              |                                                                                                                                                                                                                                                                                                                     |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage limits         | 207...253 V<br>360...440 V                                                                                                                                                                                                                                                                                          |
| Network frequency limits     | 47...63 Hz                                                                                                                                                                                                                                                                                                          |
| Input voltage tolerance      | +/- 15 V                                                                                                                                                                                                                                                                                                            |
| Efficiency                   | 90 %                                                                                                                                                                                                                                                                                                                |
| Power dissipation in W       | 27.8 W                                                                                                                                                                                                                                                                                                              |
| Output sustained overvoltage | 6 % (no load, hot state)                                                                                                                                                                                                                                                                                            |
| Voltage drop at rated load   | 0.1 %                                                                                                                                                                                                                                                                                                               |
| No load losses               | 12.5 W                                                                                                                                                                                                                                                                                                              |
| Short-circuit voltage        | 0,0551                                                                                                                                                                                                                                                                                                              |
| Output protection type       | Against short-circuits, protection technology: external<br>Against overvoltage, protection technology: external<br>Against overload, protection technology: external                                                                                                                                                |
| Connections - terminals      | Screw type terminals for output connection, connection capacity: 2 x 4 mm <sup>2</sup> AWG gauge11<br>Screw type terminals for input ground connection, connection capacity: 1 x 4 mm <sup>2</sup> AWG gauge11<br>Screw type terminals for input connection, connection capacity: 5 x 4 mm <sup>2</sup> AWG gauge11 |
| Marking                      | CE                                                                                                                                                                                                                                                                                                                  |
| Fixing mode                  | By 4 screws, screw(s) Ø = 5.8 mm on vertical panel, operating position: vertical<br>By 4 screws, screw(s) Ø = 5.8 mm on vertical panel, operating position: horizontal<br>By 4 screws, screw(s) Ø = 5.8 mm on horizontal panel with derating to 90 %                                                                |
| Electrical insulation class  | Class B                                                                                                                                                                                                                                                                                                             |
| Product weight               | 4.4 kg                                                                                                                                                                                                                                                                                                              |

## Environment

|                                            |                                                                           |
|--------------------------------------------|---------------------------------------------------------------------------|
| Product certifications                     | UR                                                                        |
| IP degree of protection                    | IP20 conforming to EN/IEC 60529                                           |
| Protective treatment                       | TC                                                                        |
| Ambient air temperature for storage        | -40...80 °C                                                               |
| Class of protection against electric shock | Class I conforming to VDE 0106-1                                          |
| Dielectric strength                        | 4000 V between primary and secondary<br>2000 V between winding and ground |

Dimensions



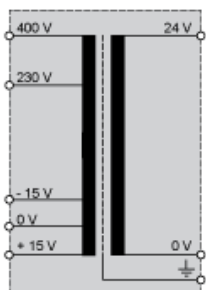
Dimensions in mm

| a   | b   | c  | G  | J    | Ø   |
|-----|-----|----|----|------|-----|
| 120 | 122 | 85 | 90 | 74.5 | 5.8 |

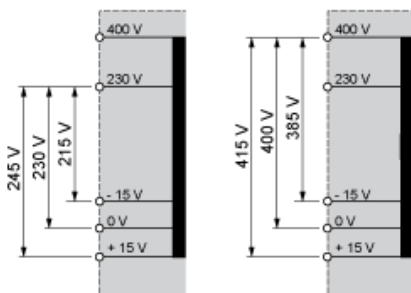
Dimensions in in.

| a    | b    | c    | G    | J    | Ø    |
|------|------|------|------|------|------|
| 4.72 | 4.80 | 3.35 | 3.54 | 2.93 | 0.23 |

## Internal Scheme



## Primary Voltage Wiring



## Secondary Voltage Wiring

