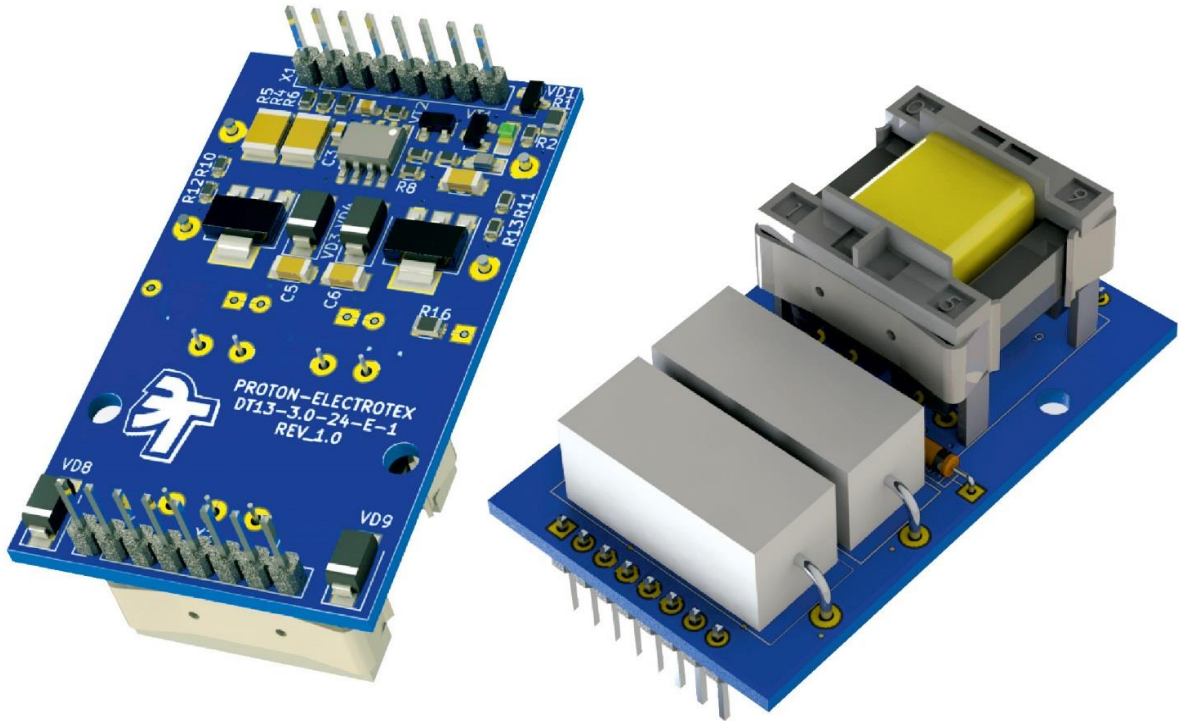




PROTON-ELECTROTEX
POWER SEMICONDUCTOR DEVICES

One Channel Thyristor Driver



Product description

DT13-3.0-24-E-1 is a single-channel thyristor driver designed to control thyristors with a voltage class up to 1.8 kV and current up to 5000 A.

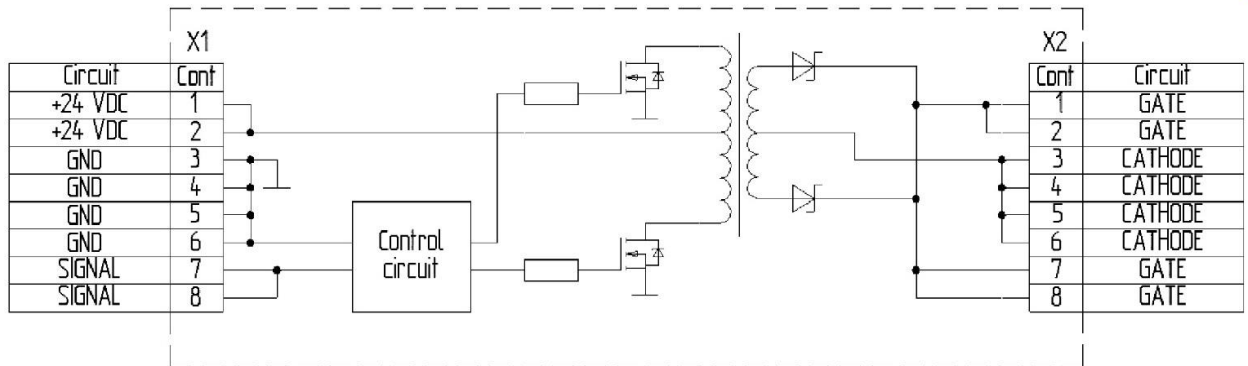
Features

- Single-channel thyristor driver
- Can be soldered directly onto a printed circuit board
- Isolation by transformer
- Dielectric test voltage 3 kV AC
- Made to drive thyristors up to 1.8 kV voltage class
- Ultra compact design 54x32x26 mm
- High output impulse current 3 A

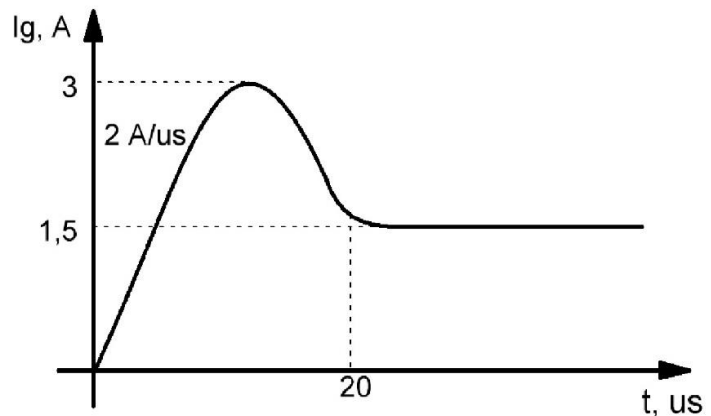
Typical application

- Thyristor switches
- Pulse discharge devices
- Soft starters for asynchronous motors
- Rectifiers

Block diagram



Typical current form



Key data

| Parameter | Min | Typ. | Max | Unit |
|-------------------------------------|------|------|------|-----------------|
| Supply voltage | 21.6 | 24 | 26.4 | V |
| Turn-on delay | | | 20 | μs |
| Continuous positive control current | 1.0 | | 1.5 | A |
| Trigger current | | 3.0 | | A |
| Rate of rise of current | 2.0 | | | A/ μs |
| Switching frequency | | | 10 | kHz |
| Turn-on threshold | 18 | | | V |
| Turn-off threshold | | | 8 | V |
| Delay (Min. pause between pulses) | 50 | | | μs |
| Isolation test voltage input-output | 3.0 | | | V _{AC} |
| Operating temperature | 0 | | +40 | $^{\circ}C$ |
| Storage temperature | -40 | | +55 | $^{\circ}C$ |