# TE/DER

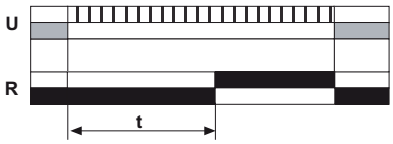
## overview



- single or dual supply voltage options
- SPCO or DPCO output relay
- 6 selectable time ranges
- LED indicators for power supply and contact
- 22.5mm DIN rail mount housing or 11pin plug in housing

### On delay

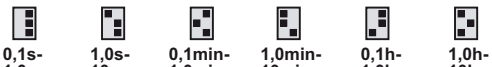
Supply voltage on
Supply voltage off
Output relay contact closed
Output relay contact open




Remove supply voltage before making any changes to either time range or timing function.

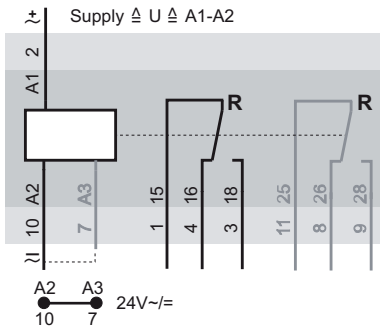
On the application of the supply voltage, time delay ***t*** commences. At the end of the time delay the output relay pulls in. When the supply voltage is removed the output relay drops out and the time relay resets ready for the next timing cycle.
If the supply voltage ist removed during time ***t***, the output relay will drop out, the unexpired time will be cancelled and the time relay will reset.

### Time ranges



| 0,1s-1,0s | 1,0s-10s | 0,1min-1,0min | 1,0min-10min | 0,1h-1,0h | 1,0h-10h |
|---|---|---|---|---|---|

The time ranges are selected using the DIP switch settings illustrated left, and the required delay time is set using the potentiometer on the front plate.




## specification

| | | | |
|---|---|---|---|
| **supply voltage variation** | | nominal voltage +10% / -15% | |
| **frequency range** | | 48 - 63 Hz | |
| **max. delay time** | | 100% | |
| **repeat accuracy** | | < 1% of the selected range | |
| **relay type** | | 1 | 2 |
| **output relay spec** | 230V~ | 6A | 10A |
| Ie AC-15* | 120V~ | 4A | 5A |
| Ie AC-15* | 240V~ | 3A | 4A |
| Ie DC-13* | 24V= | 2A | 4A |
| **expected life time** | | DPCO | SPCO |
| mechanical | | $2 \times 10^6$ resp. | $1 \times 10^7$ operations |
| electrical | | $1 \times 10^5$ resp. | $1 \times 10^5$ operations |
| **screws** | | pozidrive 1 | |
| **screw tightening torque** | | 0,6..0,8Nm | |
| **operating conditions** | | -20 to +60°C non condensing | |

* EN 60947-5-1 VDE 0435

## ordering information

| part no | supply | | output | relay type | cULus | housing types |
|---|---|---|---|---|---|---|
| **TE01** | 230V~ / 24V~= | 6VA / 1W | DPCO | 1 | yes | B |
| **TE04** | 115V~ / 24V~= | 6VA / 1W | DPCO | 1 | yes | B |
| **DER230** | 230V~ / 24V~= | 6VA / 1W | SPCO | 2 | yes | A |
| **DER115** | 115V~ / 24V~= | 6VA / 1W | SPCO | 2 | yes | A |
| **TE12** | 230V~ | 6VA | SPCO | 2 | yes | A |
| **TE13** | 24V~= | 1W | SPCO | 2 | yes | A |
| **TE15** | 115V~ | 6VA | SPCO | 2 | yes | A |
| **TE41** | 230V~ / 24V~= | 6VA / 1W | DPCO | 1 | no | G |
| **TE42** | 230V~ / 24V~= | 6VA / 1W | SPCO | 1 | no | G |
| **TE71** | 230V~ w. transf. | 2VA | DPCO | 1 | no | G |

other voltages on request





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