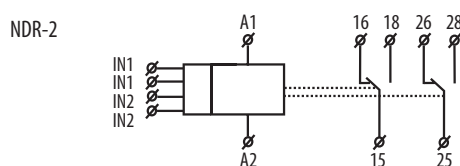




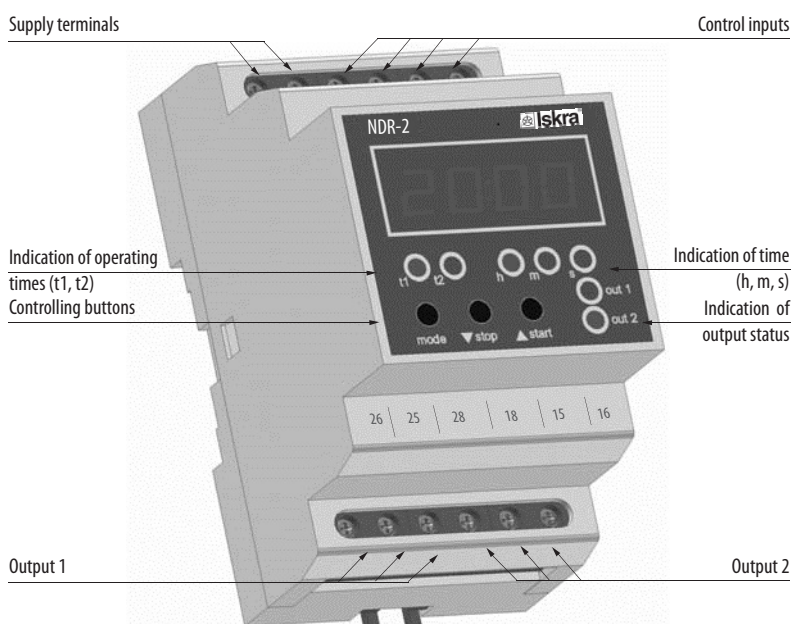
- Multifunction programmable digital relay with 4 digit red LED display
- Control and setting are done by 3 buttons, user-friendly menu, absolute accuracy in timer setting, time countdown on a display, galvanically separated START and STOP control inputs with UNI supply
- Thanks to its complexity, it is possible to program also more demanding time functions by using 2 independent times
- 2 independent times, with combination of 2 inputs and 2 outputs
- NDR-2/A: 16 functions, choice of functions of the other relay, 30 memory places for most frequently used times
- NDR-2/B: 10 functions, 1 output of 10 functions can be assigned to each relay = 2 relays in one device
- 2 independent times in range: 0.01 s - 100 hrs
- Supply voltage AC/DC 12 - 240 V or AC 230 V
- 3-MODULE, DIN rail mounting

| Technical parameters | NDR-2/A | NDR-2/B |
|-------------------------------------|--|----------------------------------|
| Function: | 16 | 10 |
| Supply terminals: | A1 - A2 | |
| Voltage range: | UNI | AC/DC 12 - 240 V (AC 50 - 60 Hz) |
| Burden: | AC 0.5 - 2.5 VA / DC 0.4 - 2.5 W | |
| Voltage range: | 230 | AC 230 V / 50 - 60 Hz |
| Consumption (apparent/loss): | AC max. 16 VA / 2.5 W | |
| Supply voltage tolerance: | -15 %; +10 % | |
| Time ranges: | 0.01 s - 100 h | |
| Repeat accuracy: | 0.2 % - set value stability | |
| Temperature coefficient: | 0.01 % / °C, at = 20 °C (0.01 % / °F, at = 68 °F) | |
| Output | | |
| Number of contacts: | 2x changeover / DPDT (AgNi / Silver Alloy) | |
| Current rating: | 16 A / AC1 | |
| Breaking capacity: | 4000 VA / AC1, 384 W / DC | |
| Inrush current: | 30 A / <3 s | |
| Switching voltage: | 250 V AC1 / 24 V DC | |
| Min. breaking capacity DC: | 500 mW | |
| Output indication: | red LED | |
| Mechanical life: | 3x10 ⁷ | |
| Electrical strength (AC1): | 0.7x10 ⁹ | |
| Control | | |
| Control input Burden: | AC 0.01 - 0.25 VA (UNI), AC 0.25 VA (AC 230 V) | |
| Glow lamps: | No | |
| Control. impulse length: | min. 1 ms / max. unlimited | |
| Reset time: | max. 200 ms | |
| Display - colour: | red | |
| Number and height of digits: | 4 positions with separating colon, height 10 mm (0.39") | |
| Luminance: | 2200 - 3800 ucd | |
| Light wavelength: | 635 nm | |
| Brightness setting: | range 20 - 100 % in 10 steps adjustable | |
| Memory - memory locations: | 30 (NDR-2/A) / 20 (NDR-2/B) for times ranges + service function | |
| Data stored for: | min. 10 years | |
| Other information | | |
| Operating temperature: | -20 °C to +55 °C (-4 °F to 131 °F) | |
| Storage temperature: | -30 °C to +70 °C (-22 °F to 158 °F) | |
| Electrical strength: | 4 kV (supply - output) | |
| Operating position: | any | |
| Mounting/DIN rail: | DIN rail EN 60715 | |
| Protection degree: | IP 40 from front panel / IP 20 terminals | |
| Overvoltage category: | III. | |
| Pollution degree: | 2 | |
| Max. cable size (mm ²): | solid wire max. 1x 2.5 or 2x1.5/ with sleeve max. 1x1.5 (AWG 12) | |
| Dimensions: | 90 x 52 x 65 mm (3.5" x 2" x 2.6") | |
| Weight: | (UNI) - 143 g (5 oz.), (230) - 134 g (4.7 oz.) | |
| Standards: | EN 61812-1, EN 61010-1 | |

Symbol



Description

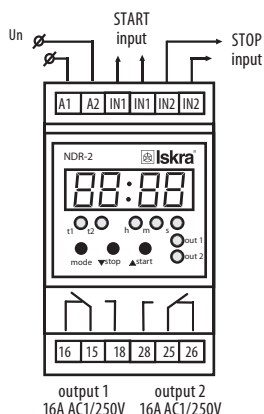


Time data

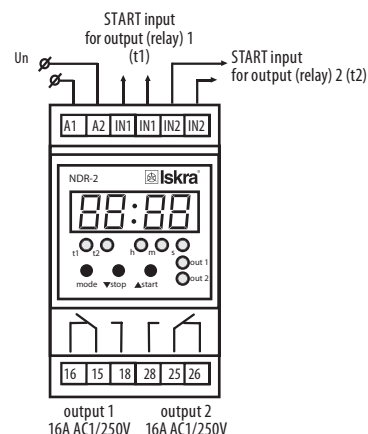
| | |
|--------------------------|-----------------------------------|
| Time range: | 0.01 s - 99 h 59 min 59 sec 99 ss |
| Minimal time step: | 0.01 s |
| Time deviation: | 0.01 % of set value |
| Setting error: | 0 % |
| Setting, reset accuracy: | 100 % |
| Digital places: | selected via program |

Connection

NDR-2/A



NDR-2/B



Function

Functions for NDR-2/A and NDR-2/B

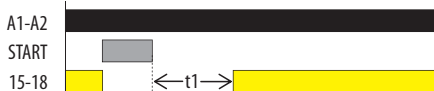
1. Delay ON



2. Delay OFF



3. Delay ON after switching off control contact



4. Delay ON by closing control contact



5. Delay OFF after switching off control contact



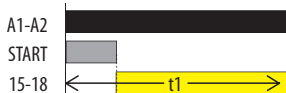
6. Delay OFF by closing control output



7. Delay OFF by opening control contact with instant output



8. Delay OFF by closing control contact with delayed output



9. Cycler beginning with impulse



10. Cycler beginning with pause



Functions for NDR-2/A

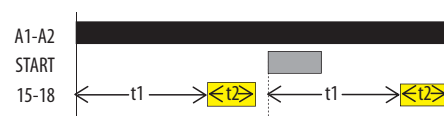
11. Cycler beginning with impulse with variable interval



12. Cycler beginning with pause with variable interval



13. Generator of impulse



14. Changeover star/delta



15A. Shift of pulse by 2 times



15B. Shift of impulse by 2 times



16A. Extended impulse by 2 times



16B. Extended impulse by 2 times



Recommendation:

NDR-2/B is replacing by 2 simple time relays = 2 in one.