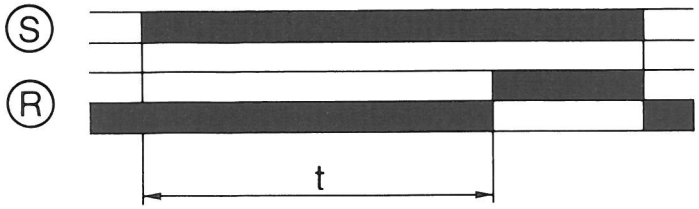
4 functions

- **LED-power on indication (green), output status indication (yellow)**
- **terminals for external potentiometer (Series *X*)**

Function A: on-delay
double-pole change-over



Time ranges (switchable):

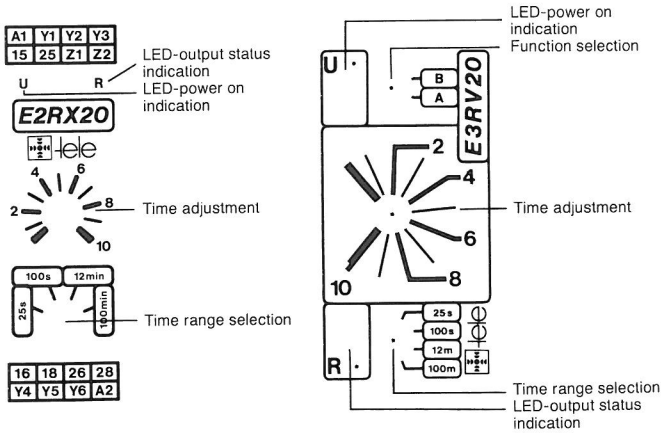
Version N:	**1 — 25 s**
	4 — 100 s
	0.5 — 12 min
	4 — 100 min
Version S: }	**see list**
Version L: }	**of types**

Timing starts when the supply voltage Ⓢ is connected to the supply terminals **A1—A2** (2—10).
At the end of the delay time **t** the output relays Ⓡ energise.
The relays Ⓡ drop out and the timer resets automatically when the supply voltage is removed.
If the supply voltage is removed during time **t** the remaining time is cancelled and the timer resets automatically.
When an external potentiometer is connected, the potentiometer on the timer must be set to zero.

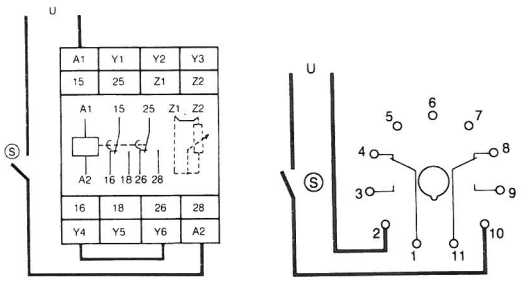
Accuracy:

Repeat accuracy at constant conditions (% of full range)	0.5%
Voltage effect in range of 0.85 to 1.1 U_N	0.5%
Temperature effect	0.1%/°C
Reset time	3V: 50 ms 2X: 100 ms

Front panel:



Connection:



Technical data:

Supply voltages:
(can be chosen by plug-in power unit)

2 X: 24, 42, 48, 110, 127, 220, 240 V AC
24, 36, 42, 48 V AC/DC
6, 12, 60, 110, 125, 220 V DC
(max. remaining ripple factor 10%)

3 V: 24, 42, 48, 110, 127, 220, 240, 380, 415, 440 V AC
24, 36, 42, 48 V AC/DC
6, 12, 60, 110, 125 V DC
(max. remaining ripple factor 10%)

Nominal power consumption:
2 X: 24 ... 240 V AC/2 VA
24 V AC/DC/1 VA, 36 V AC/DC/1.5 VA
42 V AC/DC/1.5 VA, 48 V AC/DC/1.7 VA
6 ... 125 V DC/2 W

3 V: 24 ... 440 V AC/4 VA
24 V AC/DC/2 VA, 36 V AC/DC/3 VA
42 V AC/DC/3.5 VA, 48 V AC/DC/4 VA
6 ... 220 V DC/3 W

Acceptable voltage variation 0.85 to 1.2 U_N
When using transformers 0.85 to 1.1 U_N

Frequency range 48—63 Hz

Duty cycle 100%, IEC class 1c

Environmental conditions:
Ambient temperature range —20° C to +55° C
Climate resistance F according to DIN 40040

Mechanical data/classifications:
Housing with plug-in power supply, self-quenching plastic material, protection class IP 40

Connections:
Series X: terminals shrouded to prevent human contact, max. 4 mm²
Series V: 11-pin socket

For standards and measurements,
comp. tabulation of housings on page 1

Classifications:
VDE 0435: dielectric strength 2000 V AC
VDE 0110: group C 250 V AC

Output:
Contact
double-pole change over

Contact voltage
2 X: 250 V AC/DC
3 V: 380 V AC,
250 V DC

Permanent current
2 X: max. 5 A
3 V: max. 8 A

Contact rating
2 X: 1000 VA
3 V: 1500 VA

Electrical life
220 V AC 5 A resist. load
appr. 2.10^5 operations

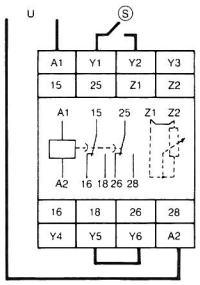
Mechanical life
≧ 20.10^6 operations

Contact material
Ag gold plated

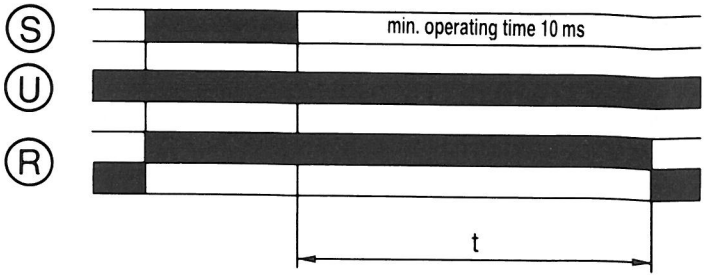
4 functions

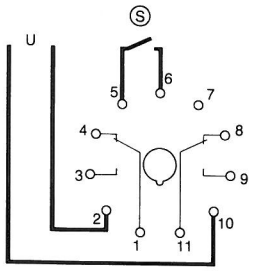
Function B:

This function requires a continuous supply voltage during the operating period and is started by a volt-free initiating contact. With the supply voltage connected to the supply terminals **A1**–**A2** (2–10) the output relays Ⓡ are energised by closing the volt-free contact Ⓢ between terminals **Y1**–**Y2** (5–6). The off-delay time **t** begins when the contact Ⓢ is opened. The output relays drop out at the end of the delay time **t** and can be re-energised by closing the contact Ⓢ again. If the contact Ⓢ is closed during time **t** the remaining time will be cancelled and full delay time will be available when the contact is opened again. The timer resets automatically when the supply voltage is removed and the output relays, if energised, will drop out. Notice should be taken of the different operation when re-connecting the supply with the contact Ⓢ open or closed.

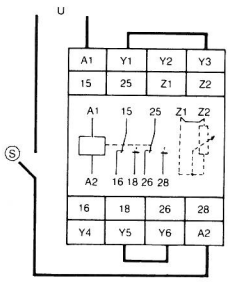


Function B/I: off-delay double-pole change over

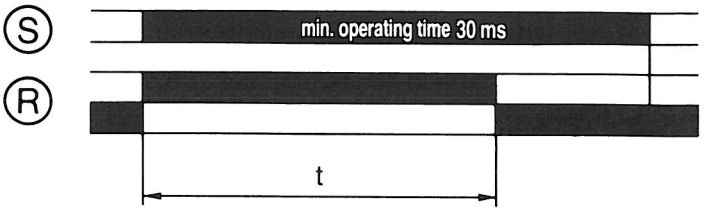


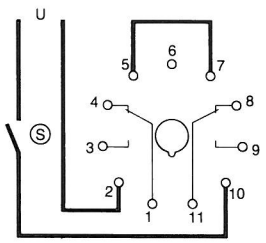


Link terminals **Y1**–**Y3** (5–7).
When the supply voltage Ⓢ is connected to supply terminals **A1**–**A2** (2–10) the output relays Ⓡ energise and will drop out at the end of delay time **t**. The output relays Ⓡ will re-energise if the supply voltage is connected again.
If the supply voltage is removed before the end of the delay time the remaining time will be cancelled, the output relays will drop out and the timer will reset automatically.

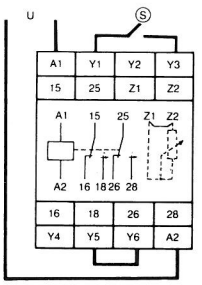


Function B/II: interval timer double-pole change over





This function requires a continuous supply voltage during the operating period and is started by a volt-free contact. With the supply voltage connected to the supply terminals **A1**–**A2** (2–10) the output relays Ⓡ will latch for the duration of the delay time **t** when the volt-free contact Ⓢ between terminals **Y1**–**Y3** (5–7) is closed for a period of 10 ms or longer. At the end of the delay time **t** the output relays will drop out. If the contact Ⓢ is closed during time **t** it will have no effect on the output relays Ⓡ except that on dropping out at the end of the delay time the relay will immediately re-energise for time **t** if the contact Ⓢ is still closed. The timer resets automatically when the supply voltage is removed and the output relays, if energised, will drop out. Notice should be taken of the different operation when reconnecting the supply with the contact Ⓢ open or closed.



Function B/III: pulse operated interval timer double-pole change over