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1. INTRODUCTION

The AL3 stair case lighting time relay is available within the COMATRELECO-DIN 17,5mm industrial enclosure range.

The range time varies from 0,5 min to 1 hour.

The functions step by step, switching between top or flick step contact, light duration are available.

The control status is indicated via LEDs.

The special features of this device are the function range (power supply range up to 265V) and the time range. One special characteristic is it's long operating life, i.e. robustness and the high switching capability (2kW) of lamp (with a inrush current up to 80A)

The short circuit is secure with a 10 A fuse connected in series with the input supply

 Technical specifications subject to change without previous notice

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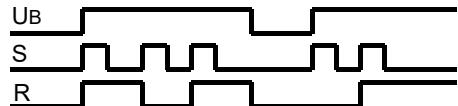
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wie				16.9.98		7	M:	Stair case lighting relay
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2. ORDER DESIGNATION

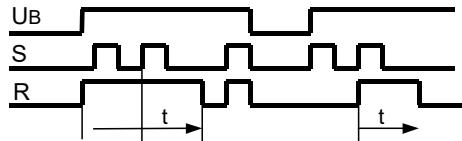
Time relay AL3/UC24V
 AL3/AC48-60
 AL3/AC110-127V
 AL3/AC220-240V

3. FUNCTION

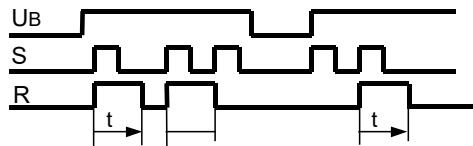
S Step on-step off



L Pulse shaping



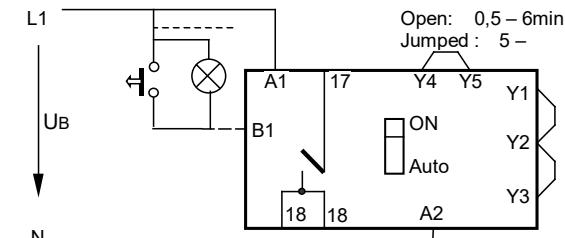
LS Pulse shaping retrigger.



3.1. Further function characteristics

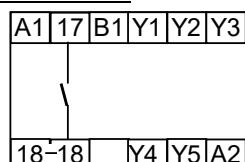
The triggering input (B1) is edge triggered.

4. CIRCUIT



Open: S-Function
see Pt. 6.3

Connection



5. TECHNICAL DATA

5.1. Time range

Time range	30s – 60min
range 1	0,5min – 6min
range 2	5min – 60min

Time range tolerance t_{min}

0 ÷ -30%

Time range tolerance t_{max}

0 ÷ + 30%

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Data sheet

AL3

Stair case lighting relay

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connected in parallel). Control with DC is indeed possible due the low residual current. The "Activ" mode condition is displayed by a LED.

9.3. Time / Logic

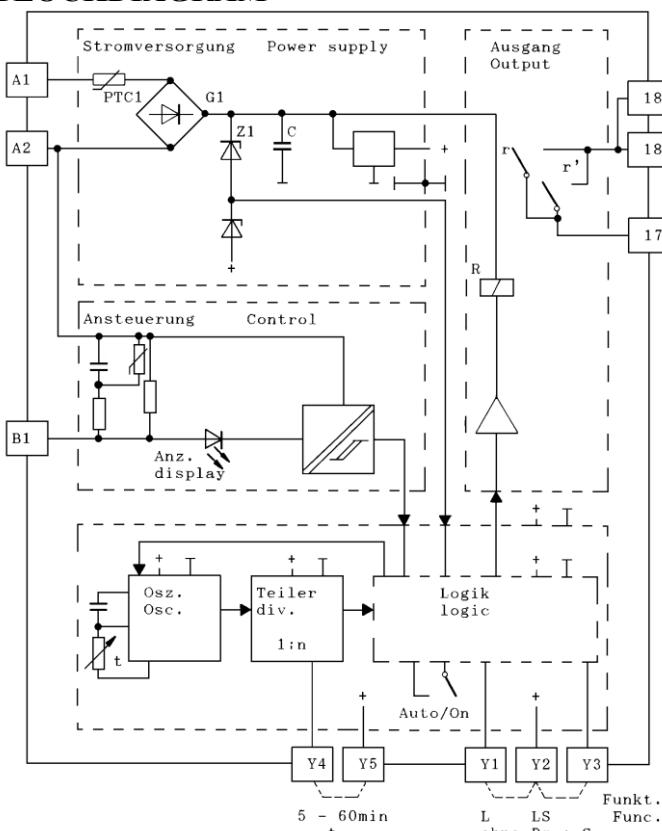
The time data is generated by a variable RC oscillator in series with a programmable divider. This circuit has the advantage of being resistance to interferences. Through the terminals Y4-Y5 it is possible to set in the divider a 10 factor ratio. The period of the output being active is programmable through the switch and the connections Y1, Y2; Y3 is for the functions: step on-step off (without connection), pulse shaping retrigger (LS) connection Y2-Y3 and the pulse shaping through (L) the connections Y1-Y2.

It is important to notice the especial behaviour when the net is "ON". In contrast to AL1 and AL2, the device does not switch on automatically.

9.4. Output circuit

The output counts with a Tungsten contact which allows to connect lamp load or inductive loads. They are also protected against short circuit.

10. BLOCKDIAGRAM



11. APPLIKATION

Gilt für Spannungsversion AL3/AC 48-60V

Die Verwendung der Spannungsversion AL3/AC 48-60V ist auch für den Betrieb mit DC Spannung erlaubt, mit folgenden ergänzenden Technischen Daten:

Betriebsspannungsbereich	43 – 72 V DC
Ansteuernsbereich an B1	43 – 72V DC
Maximaler Reststrom an B1	< 2,0 mA DC

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