



- § 2 three light signal heads can be connected
- § For 12 VDC lamps
- § 2 relay outputs for controlling coordination impulses for following systems, for example
- § 4 electrically isolated inputs for detectors or for system coordination
- § For installation in the signal head case
- § (1) Traffic light controller
- § (2) DC/DC converter
- § (3) Rectifier



### Technical data

<b>Operating temperature</b>	-25°C...+60°C with condensation
<b>Storage temperature</b>	-25°C...+85°C
<b>Operating voltage</b>	42 VAC
<b>Standards</b>	TL-Transportable Lichtsignalanlagen (Portable traffic light systems) 97 1997 edition DIN VDE 0832 (Feb. 2002) DIN EN 12675 (Dec. 2000) DIN VDE 0100 Guidelines for Traffic Signals (RiLSA). Cologne 1996 with partial continuation 2003

### Switch card 12 VDC:

<b>Dimensions</b>	Dimensions (of 1): approx. 180 mm x 100 mm x 23 mm Weight: approx. 150 g
<b>IP protection</b>	IP21 (installed in the signal head, cover closed)
<b>Operating voltage</b>	Controller: 5 V ±5%, 200 mA CAN element: 5 V ±5%, 100 mA Power element: 12 V ±10%, 100 mA...10 A
<b>Signal head</b>	6 low voltage lamps (12 V, 4 – 20 W) on 2 channels (blocking, transient, releasing signal)
<b>Signal backup</b>	Red signal: adjustable undercurrent threshold Green signal: recognition of incorrect signals $U_{ext} > 1,5 V$ All lamps: lamp failure CRC monitoring of the signal backup information
<b>Configuration</b>	Over the control computer deTRAcon
<b>Fieldbus</b>	CAN bus 100 kb/s, V2.0 part B (active), galvanically isolated
<b>Address setting</b>	Using DIP switch LSB left MSB right Switch setting: 0 – up 1 – down $01_{hex}...FE_{hex}$ : CAN node address $FF_{hex}$ : CAN node is deactivated

### Technical data



### Digital inputs:

<b>Number</b>	4
<b>Galvanic isolation</b>	Yes
<b>Rated voltage</b>	24 VDC
<b>0 state</b>	Input open
<b>1 state</b>	Input connected with 0 V
<b>Power <math>I_0</math> through switch</b>	0 mA
<b>Power <math>I_1</math> through switch max.</b>	15 mA

### Additional outputs:

<b>Supervising</b>	No
<b>Number</b>	2
<b>Galvanic isolation</b>	Yes, between the outputs as well as between the output and internal circuit
<b>Output type</b>	Electromechanical relay outputs
<b>Contact type</b>	Two-way contact
<b>Rated voltage</b>	230 VAC
<b>Max. switching voltage</b>	6 A ( $\cos\phi = 1$ ) / 1 A ( $\cos\phi = 0.6$ )
<b>Max. switching current</b>	100 mA / 5 VDC
<b>Current type</b>	AC / DC
<b>Operating cycles</b>	$5 \times 10^6$
<b>Contact resistance max.</b>	100 m $\Omega$
<b>Short-circuit proof</b>	No
<b>Closing speed max.</b>	8 ms
<b>Opening speed max.</b>	4 ms
<b>Function</b>	Non-storing

### Technical details

#### DC/DC converter:

<b>Dimensions</b>	200 mm x 100 mm
<b>Input voltage</b>	15 VDC – 70 VDC (wide range)
<b>Output</b>	12 VDC / 12,5 A

Datasheet upon request

### Scope of delivery

Switch card 12 VDC  
incl. rectifier and DC/DC converter

(Article no. 185)

Scope of  
delivery

- technical information subject to change without notice -

