

Catalogue for Flasher Units

Passenger Cars and Commercial Vehicles



PKC SEGU Systemelektrik GmbH is located in Barchfeld, Thuringia. We manufacture wiring harnesses as well as electronic and plastic components for commercial vehicle and automotive industries.

As a multinational and dynamic organisation we are focused on constant development of our operations and services. We are convinced that a skilled and committed staff is the foundation of our successful business.

PKC Group SEGU Systemelektrik GmbH
Am Eisberg 14
36456 Barchfeld, Thuringia, Germany

Catalogue for Flasher Units

Passenger Cars and Commercial Vehicles

Contact Persons:

Product Manager / Technical Account Manager

Wolfram Schneider

T: +49 (0) 36961 / 489-824

Email: Wolfram.Schneider@pkcgroup.com

Sales & Account Management

Christian Storandt

T: +49 (0) 36961 / 489-816

Mobile: +49 176 10180458

Email: Christian.Storandt@pkcgroup.com

Catalogue for Flasher Units

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Contents

Flasher Units 12V

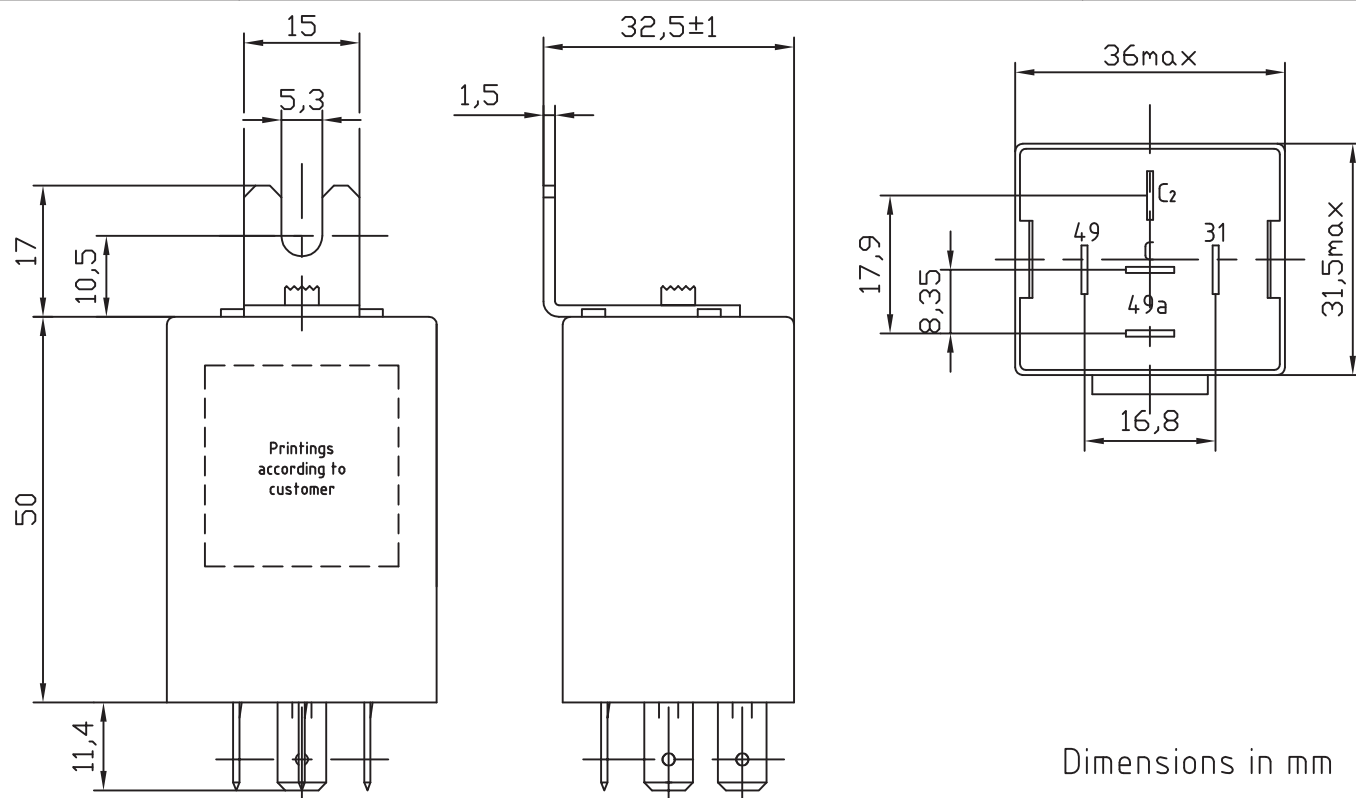
41 9 0019-001	12V (2+1 (6))x21W	*1)
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Flasher Units 24V

41 9 0114-001	24V 2(4)x21W+0...5(0...10)W	63	*1)
41 9 0115-001	24V 2(4)x21W+0...5(0...10)W	65	*1)
41 9 0116-001	24V (2+1(6))x21W + 0...5 (10)W	67	
41 9 0117-001	24V (2+1(6))x21W + 0...5 (10)W	69	
41 9 0127-001	24V 2(4)x21W + 2W or 3(6)x21W + 2W	71	
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41 9 0164-001	24V (2+1)x21W or LED bulbs*)	75	*2)
41 9 0165-001	24V (3+1)x21W or LED bulbs *)	77	*2)
41 9 0171-001	24V (2+1+1) resp. (3+1)x21W resp. (8x21W)+5 (10)W	79	
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*1) On request

*2) LED lights and LED flasher units have to be technical harmonised to guarantee the control of functions



Order Number.

41 9 0019

Nominal Voltage

12 V

Note

Control Lamps (C and C2) are connected to positive potential

Application:

Suitable for tractor with or without trailer

Functions:

Special feature: Works also without battery connected to the system

Direction indication (2+1)x21W resp. (2+2)x21W without control function

Warning flashing 6x21W resp. 8x21W

Control 1,2...2W

Control functions:

Control without trailer:

Failure of a flashing light 21W: C-Control remains dark

Control with trailer:

Failure of a flashing light 21W: C2-Control remains dark

Failure of two flashing lights 21W: C- and C2-Controls remain dark

Compliance:

The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-EA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH

Degree of protection:

IP 53 DIN 40 050-9

Operation frequency:

90±30 Flashes per minute for direction indication and warning flashing

90+60/-30 Flashes per minute for direction indication and warning flashing without battery

Duration of light pulse:

40%...70%

Operating voltage:

10,8 VDC...15 VDC

Operating temperature:

-40°C...+55°C

Storage temperature:

-40°C...+85°C

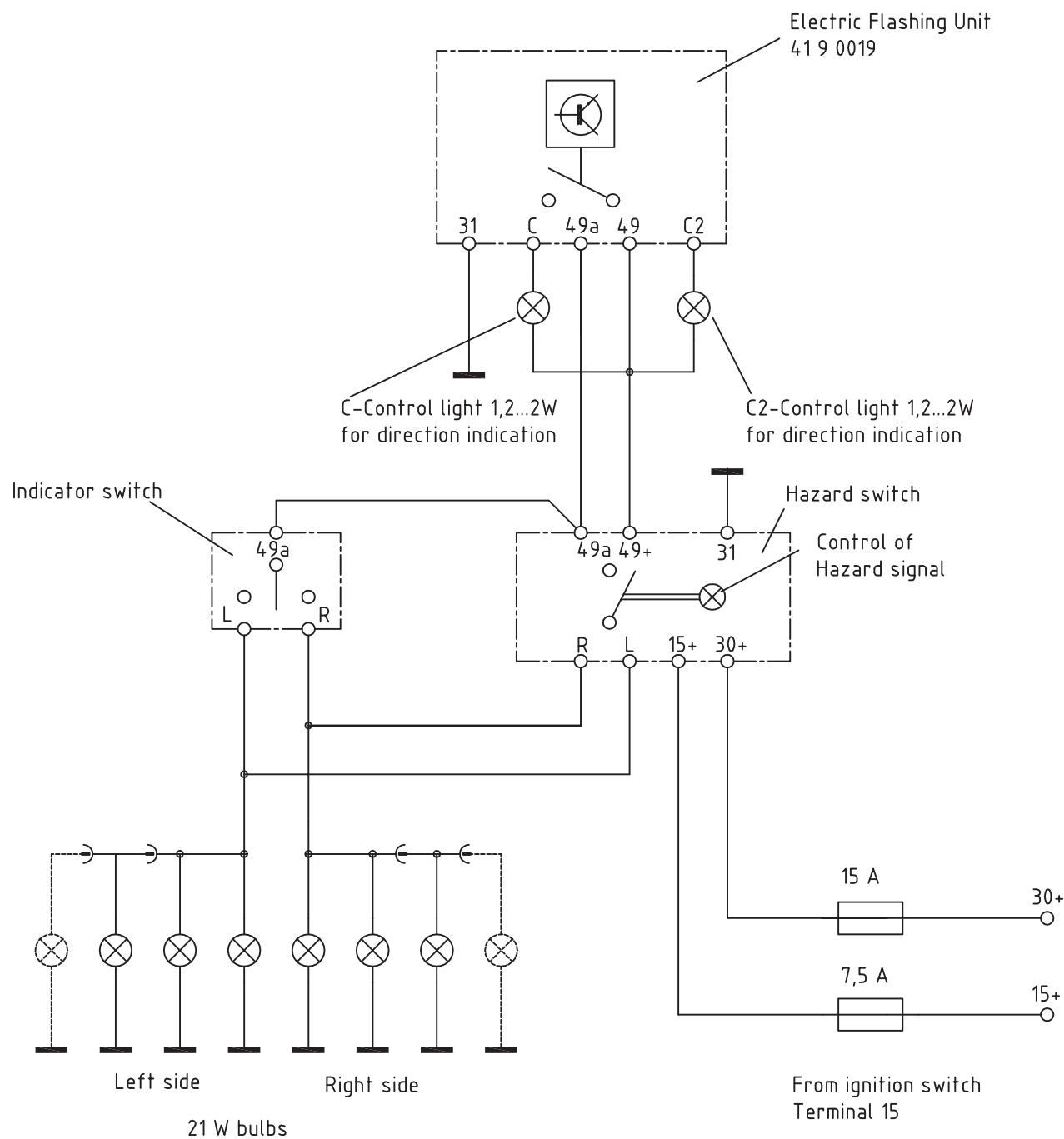
Electrical connection:

according to 41 9 0019 S Page 2

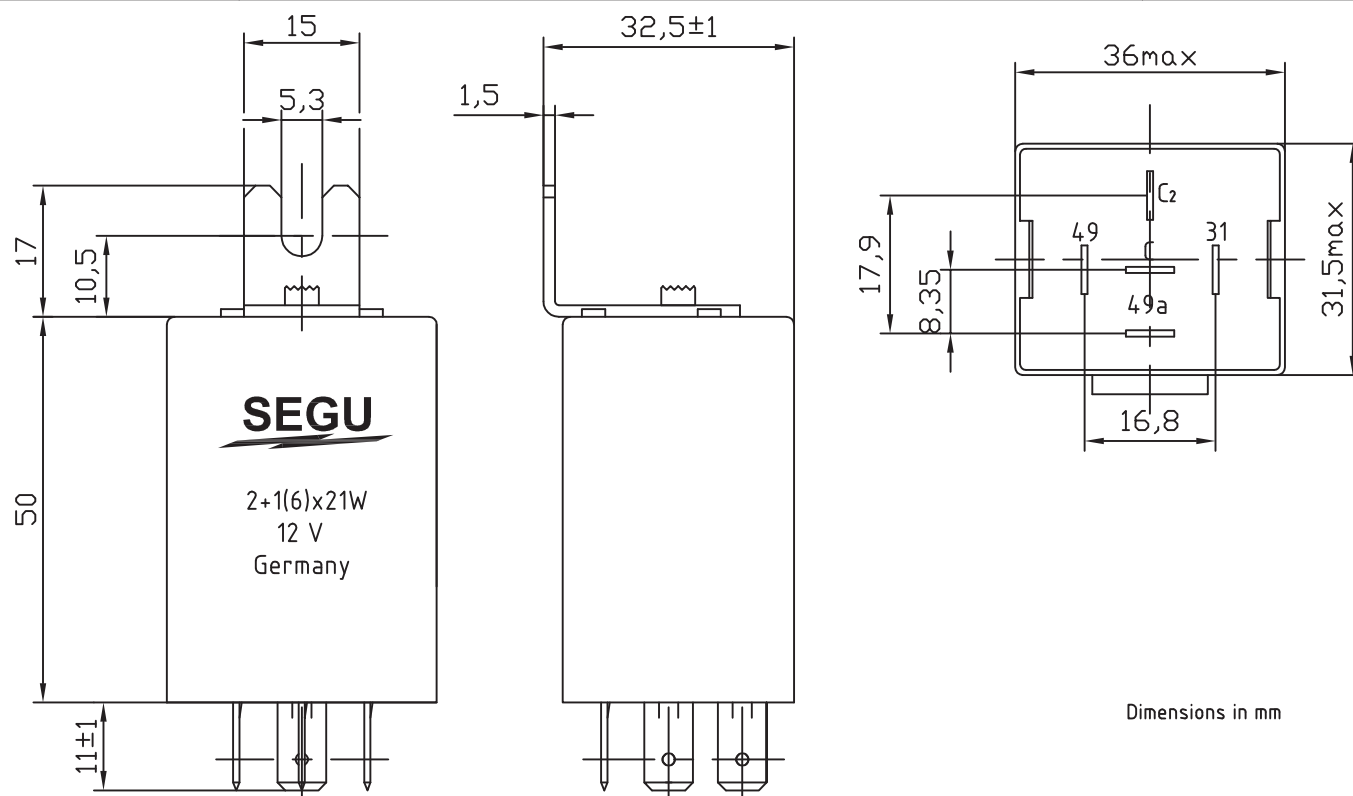
Installation:

Mounting vertically, with electrical connection downwards

Connections for the single-circuit flasher



Specifications Flasher Unit 2+1(6)x21W+0...5(0...10)W



Order number

413 29 0021

Nominal voltage

12 VDC

Note

Control lamp C2 is connected to positive potential

Application:

Suitable for passenger cars and commercial vehicles with or without trailer

Functions:

Direction indication (2+1)x21W+(0...5)W
Warning flashing 6x21W+(0...10)W
Control 1,2...2W

Control functions:

Control for passenger car / commercial vehicle with resp. without trailer:
Failure of a flashing light 21W: Frequency increase >100%
Control for passenger cars / commercial vehicles with trailer:
Failure of a flashing light 21W: C2-Control remains dark
Failure of two flashing lights 21W: Frequency increase >100%

Compliance:

The device complies with the ISO 4082 standard, plastic housing with fixation brackets ISO 7588-EA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.

Degree of protection:

IP 00 DIN 40 050-9

Frequency:

90±30 Flashes per minute for direction indication and warning flashing

Duration of light pulse:

40%...75%

Operating voltage:

10 VDC...15 VDC

Operating temperature:

-40°C...+85°C

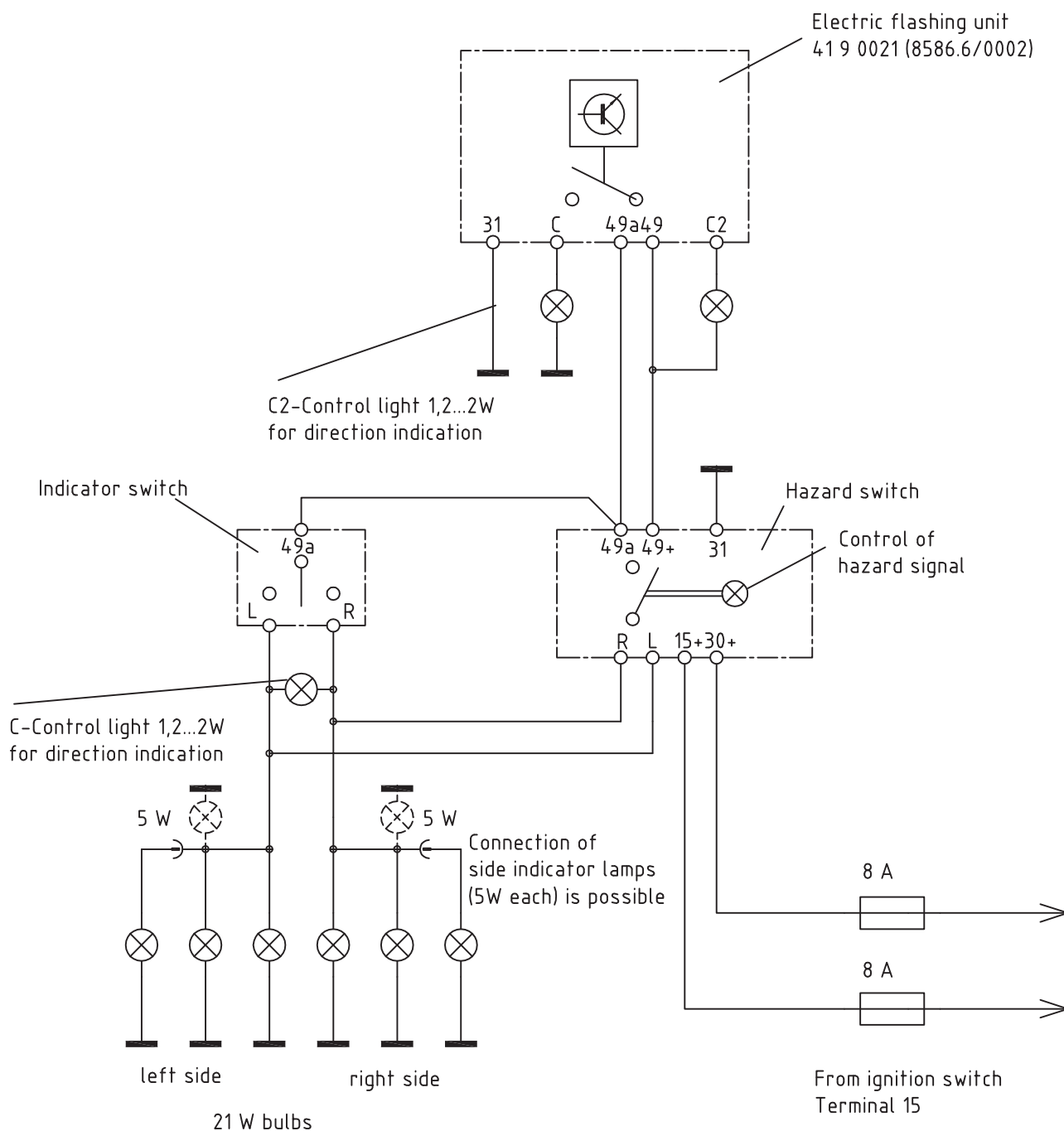
Electrical connection:

according to 419 0021 S Page 2

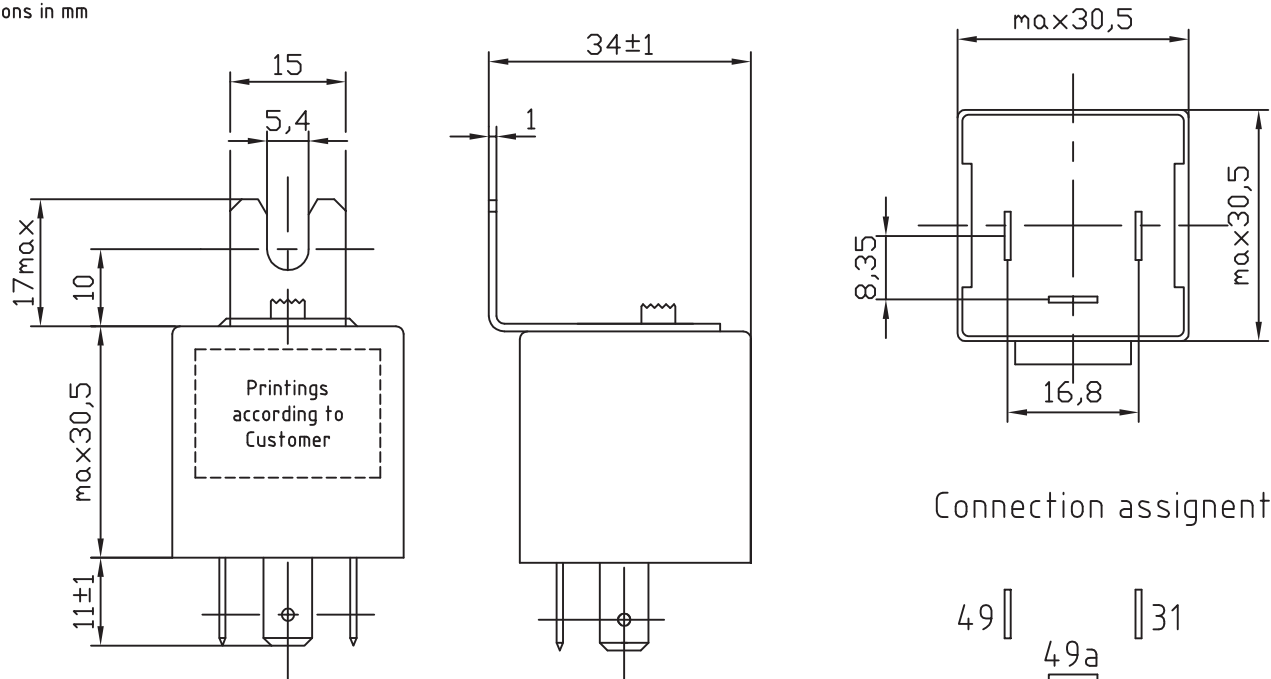
Installation:

Mounting vertically, with electrical connection downwards, protect against moisture and coarse dirt
Special installation: Mounting vertically, with electrical connection upwards for usage in Trabant 601 (no warranty against penetration of moisture in that case)

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W



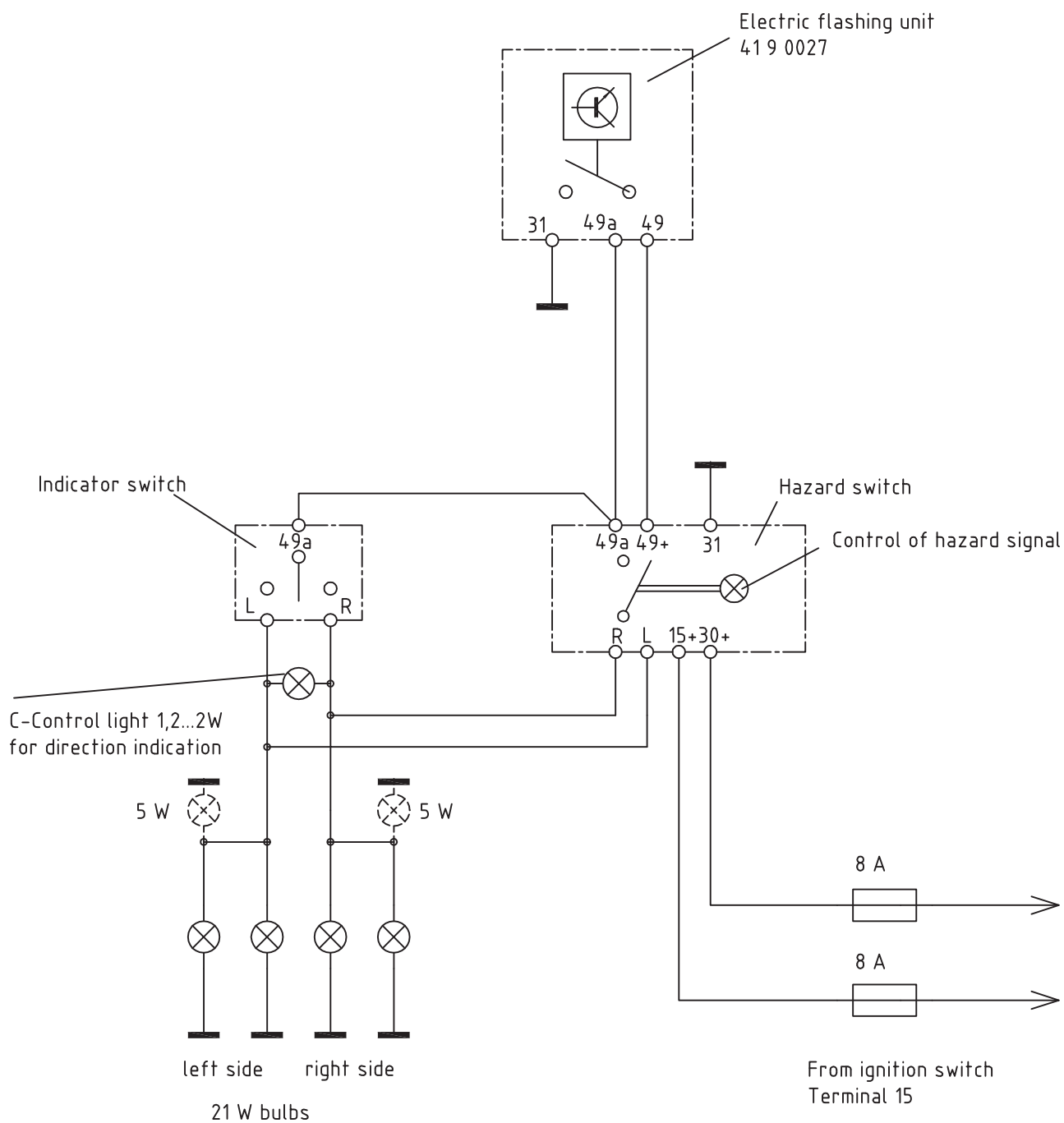
Dimensions in mm



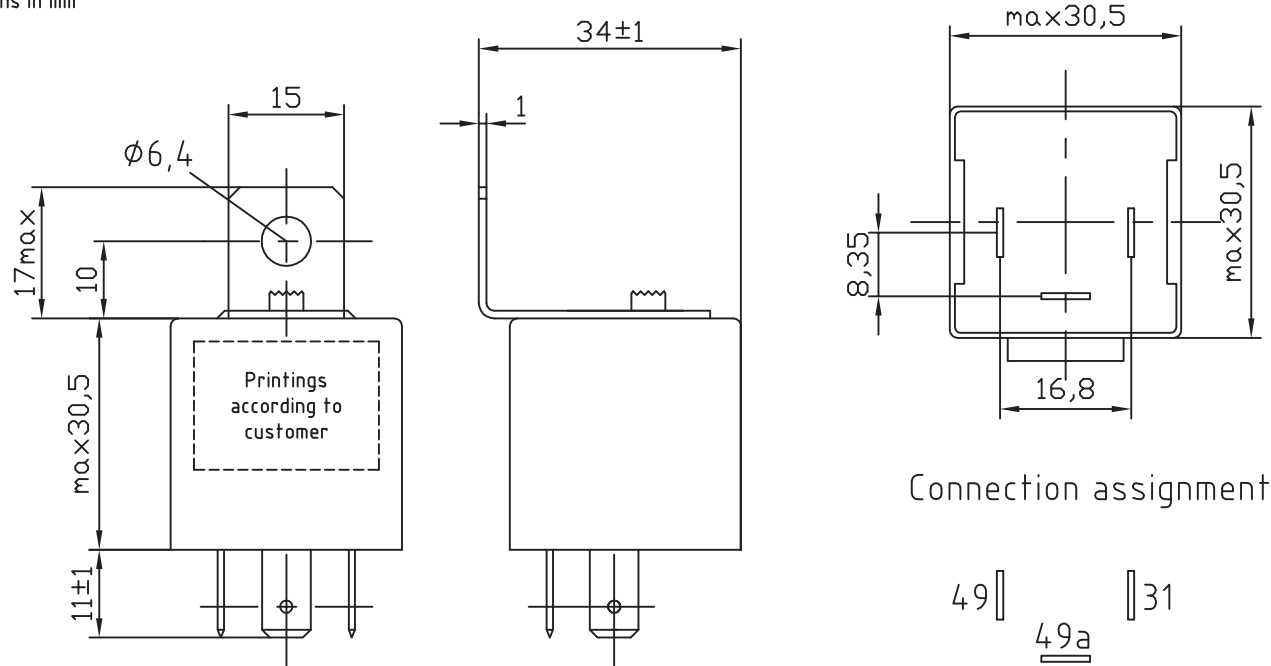
Order number: 41 9 0027

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles
<u>Functions:</u>	Direction indication 2 x 21 W Warning flashing 4 x 21 W
<u>Control of functions:</u>	Failure of a flashing light 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0027 S Page 2
<u>Installation:</u>	Terminals downwards Protect against moisture and coarse dirt

Connections for the flasher

$$2(4) \times 21W + 0.5(0.10)W$$


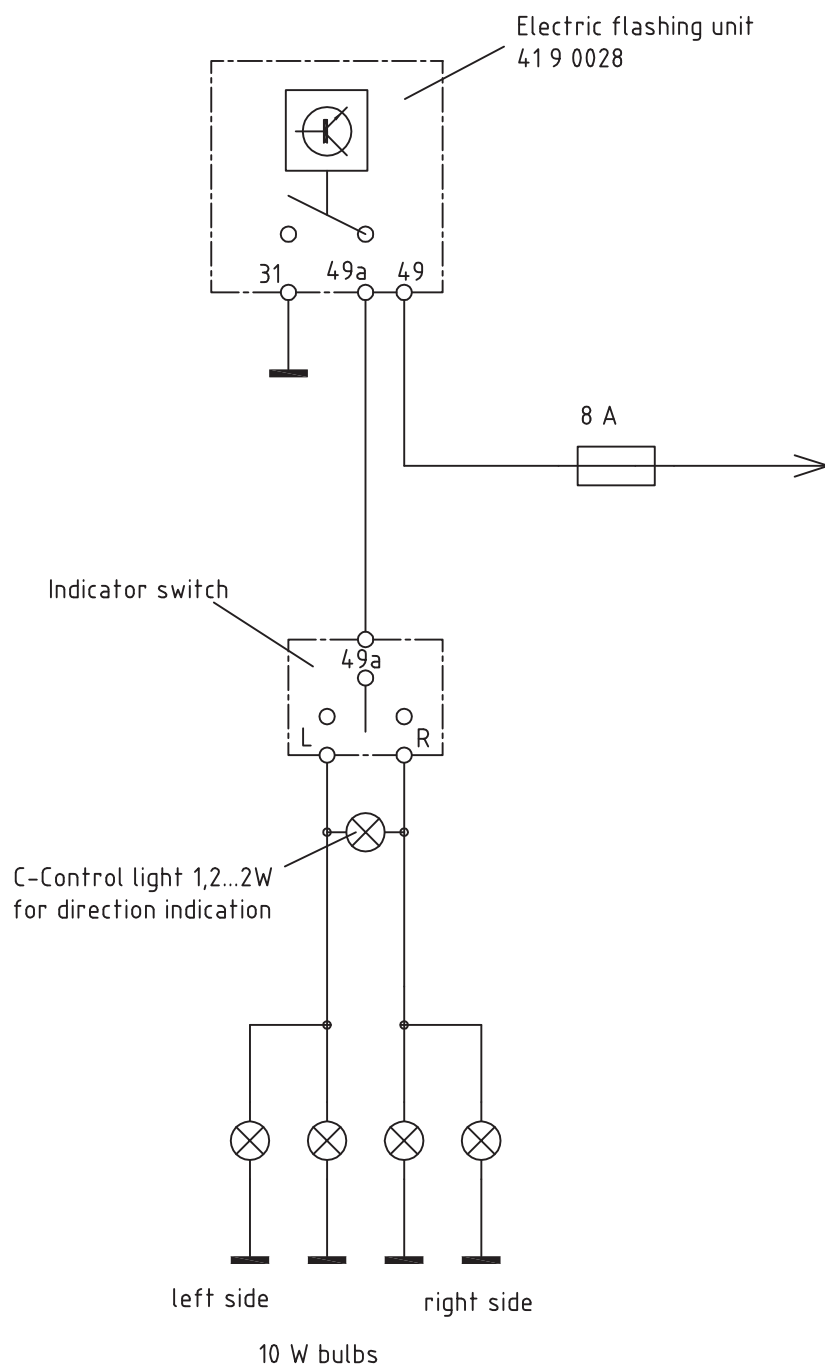
Dimensions in mm



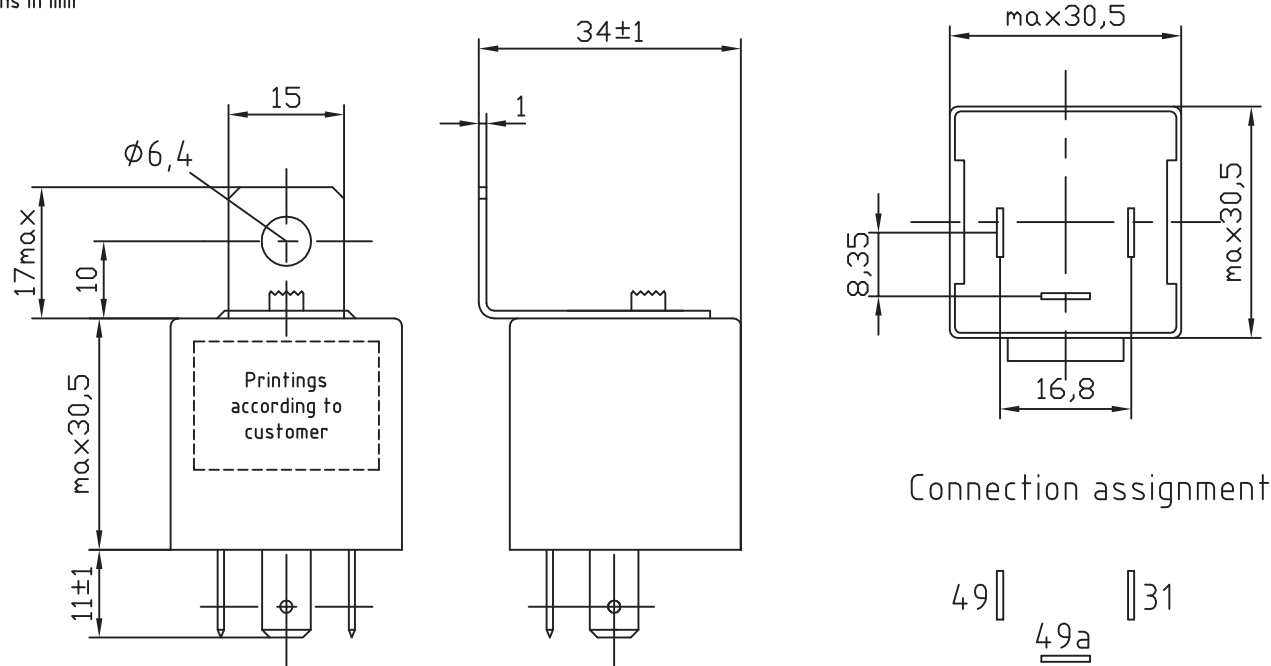
Order number: 41 9 0028

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for motorcycle
<u>Functions:</u>	Direction indication 2 x 10 W Warning flashing 4 x 10 W
<u>Control of functions:</u>	Failure of a flashing light 10W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 72/245/EWG standard
<u>Operation temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0028 S Page2
<u>Installation:</u>	Terminals downwards Protect against moisture and coarse dirt

Connection for the flasher 2(4)x10W



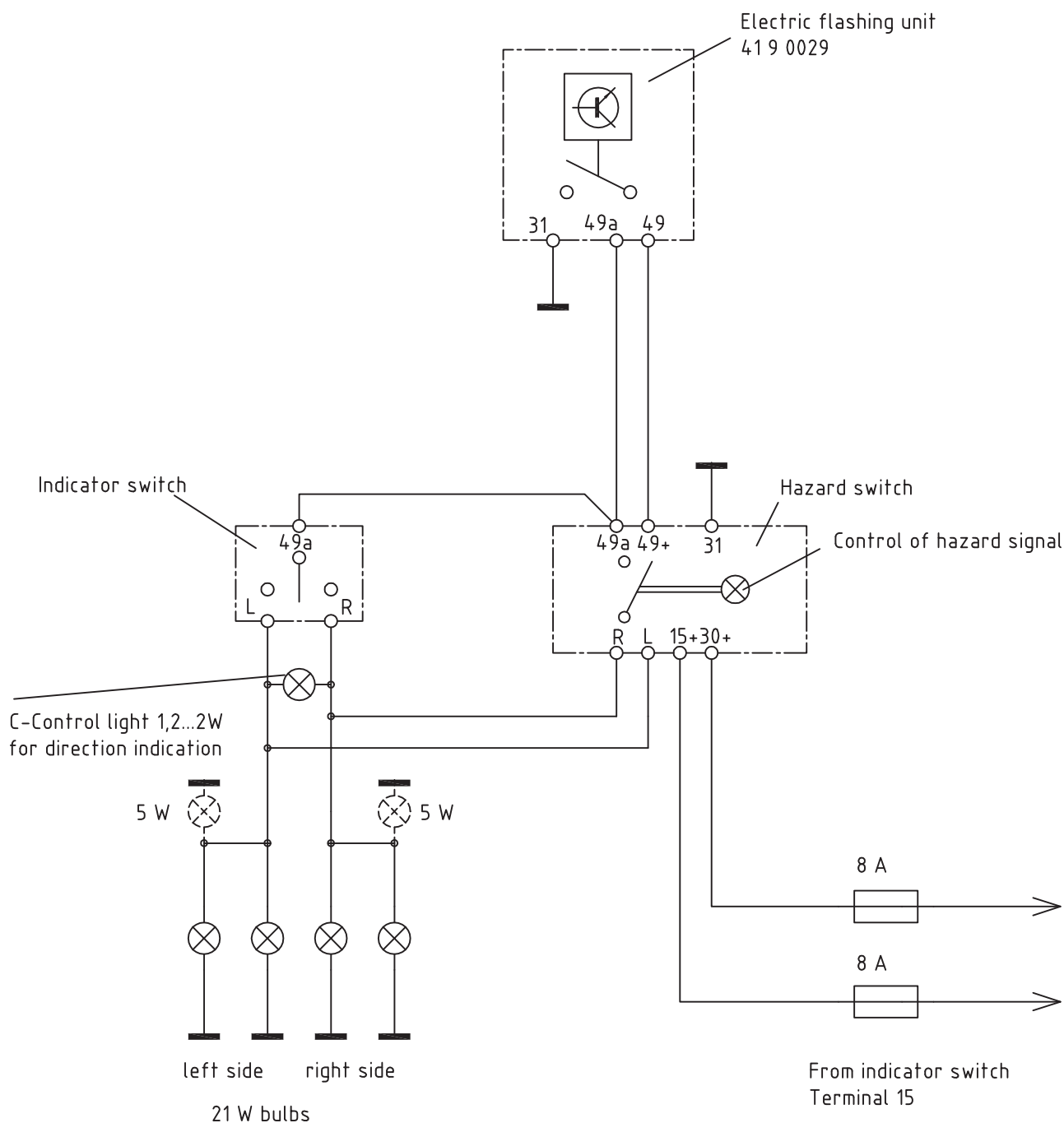
Dimensions in mm

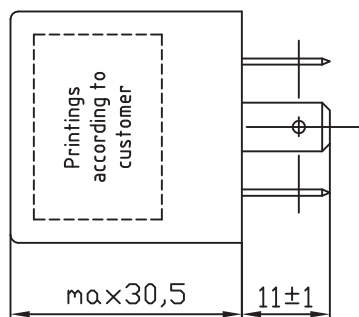
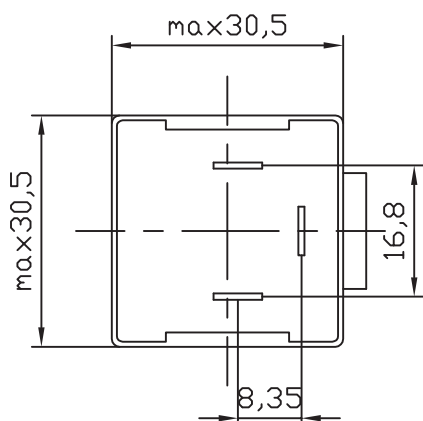


Order number: 41 9 0029

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for Motorcycle, passenger car and commercial vehicle
<u>Functions:</u>	Direction indication 2 x 21 W Warning flashing 4 x 21 W
<u>Control of functions:</u>	Failure of a flashing light 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0029 S Page 2
<u>Installation:</u>	Terminals downwards Protect against moisture and coarse dirt

Connections for the flasher 2(4)x21W+0...5(0...10)W





Connection assignment

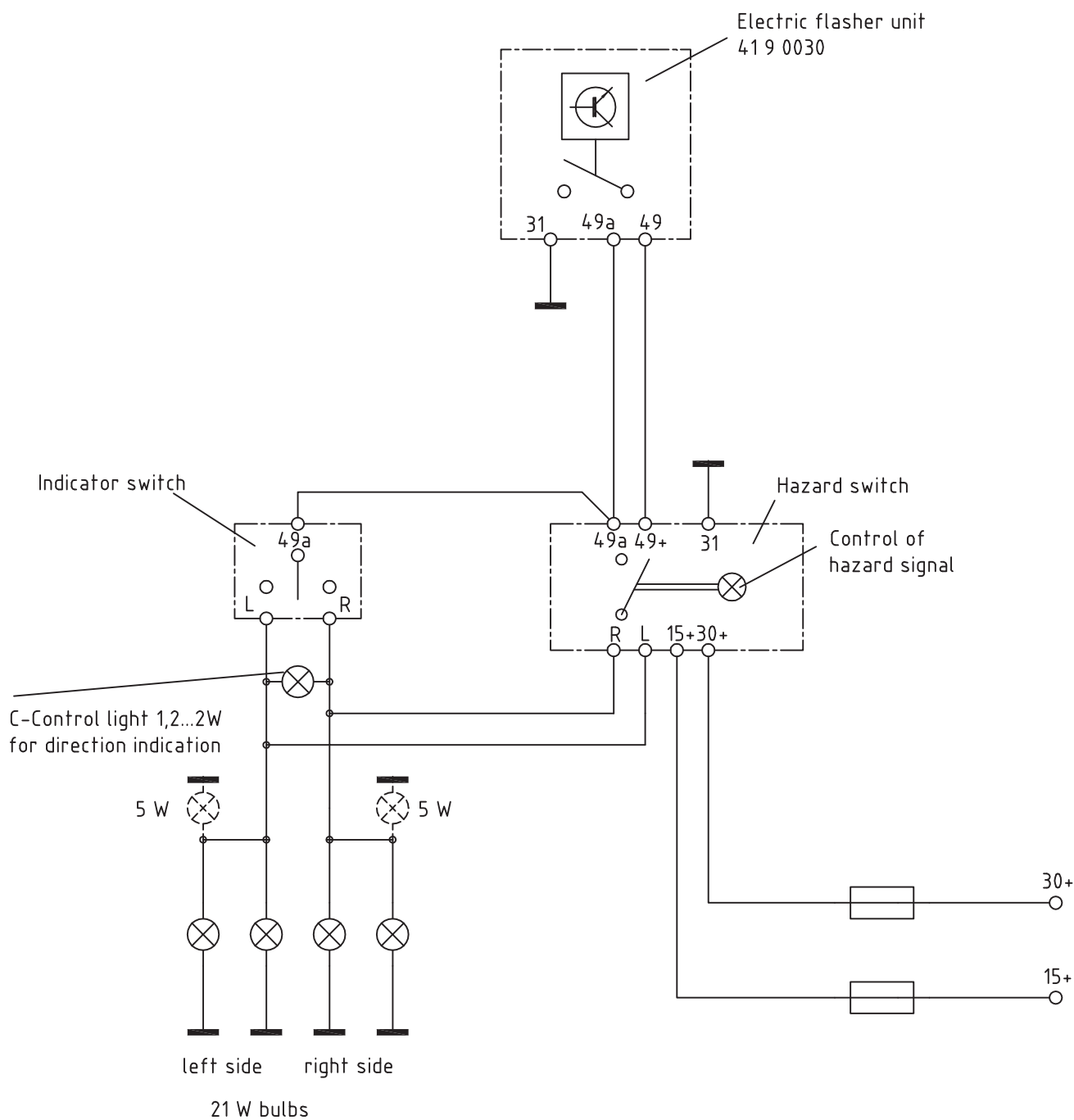
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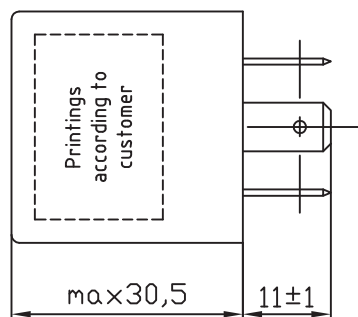
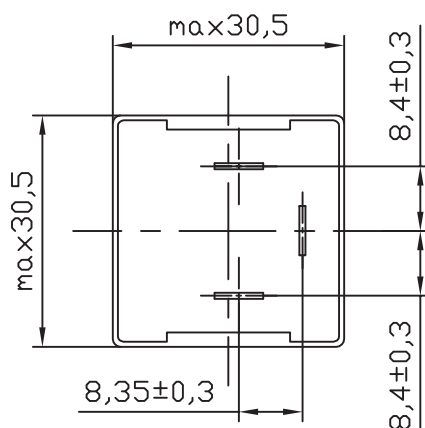
Dimensions in mm

Order number: 41 9 0030

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles
<u>Functions:</u>	Direction indication 2 x 21 W Warning flashing 4 x 21 W
<u>Control of functions:</u>	Failure of a flashing light 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, Terminals according to DIN EN ISO 8092 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Elektromagnetische Verträglichkeit:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0030 S Page 2
<u>Installation:</u>	on plug base resp. central electronics

Connections for the flasher

$$2(4) \times 21W + 0.5(0.10)W$$




Connection assignment

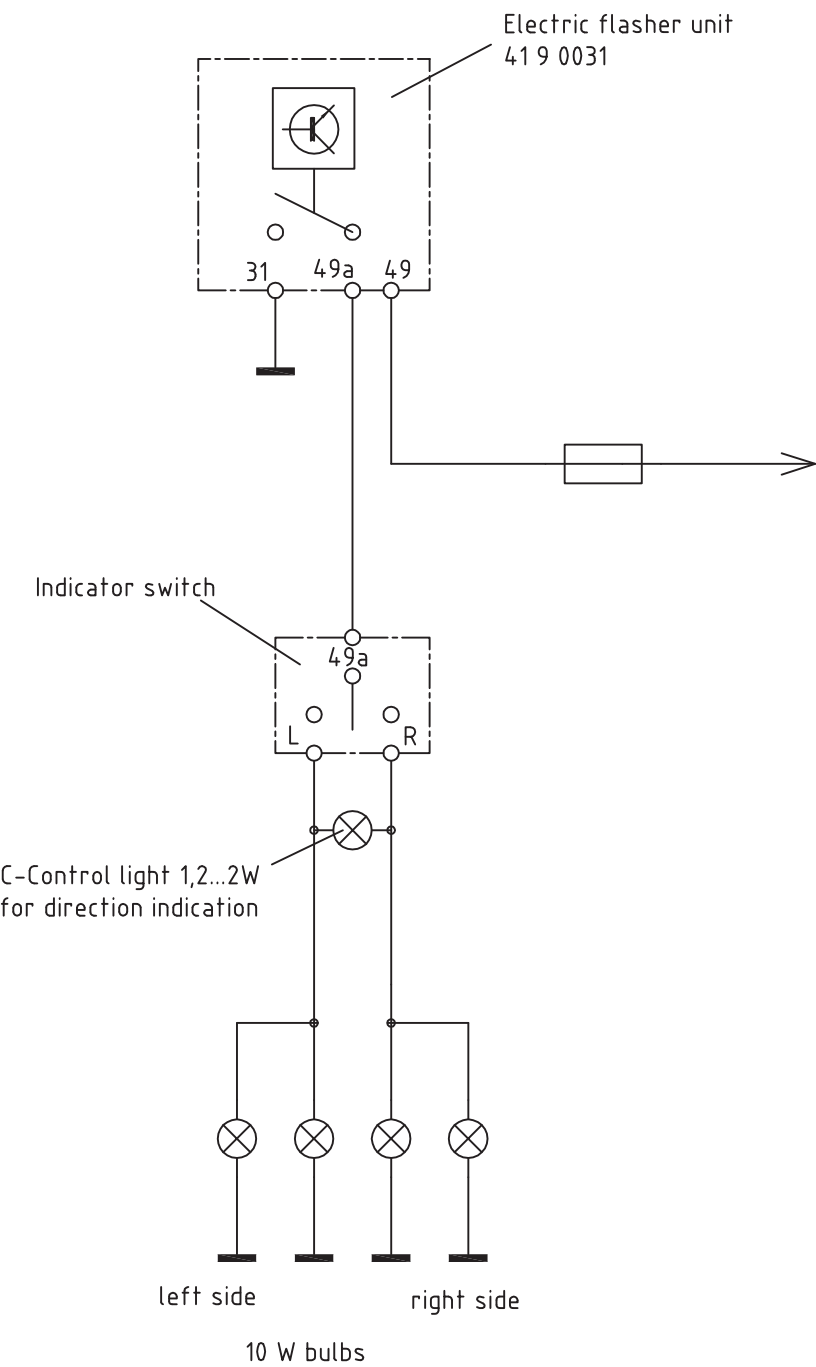
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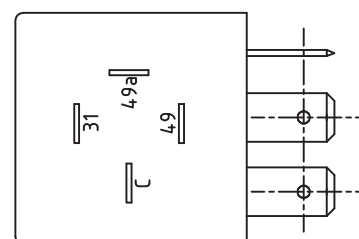
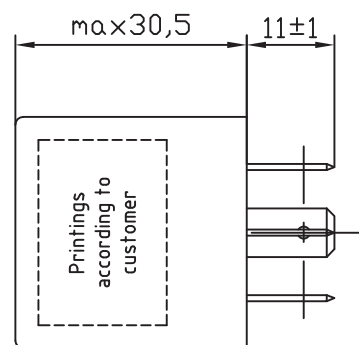
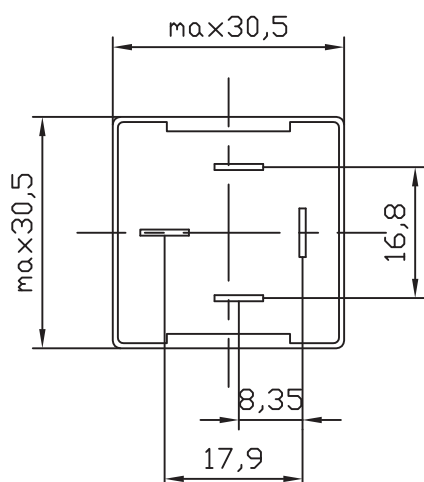
Dimensions in mm

Order number: 41 9 0031

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for Motorcycle
<u>Functions:</u>	Direction indication 2 x 10 W Warning flashing 4 x 10 W
<u>Control functions:</u>	Failure of a flashing light 10W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, Terminal according to DIN EN ISO 8092-1 6,3x0,8 OH
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	9 VDC...16 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0031 S Page 2

Connections for the flasher
2(4)x10W



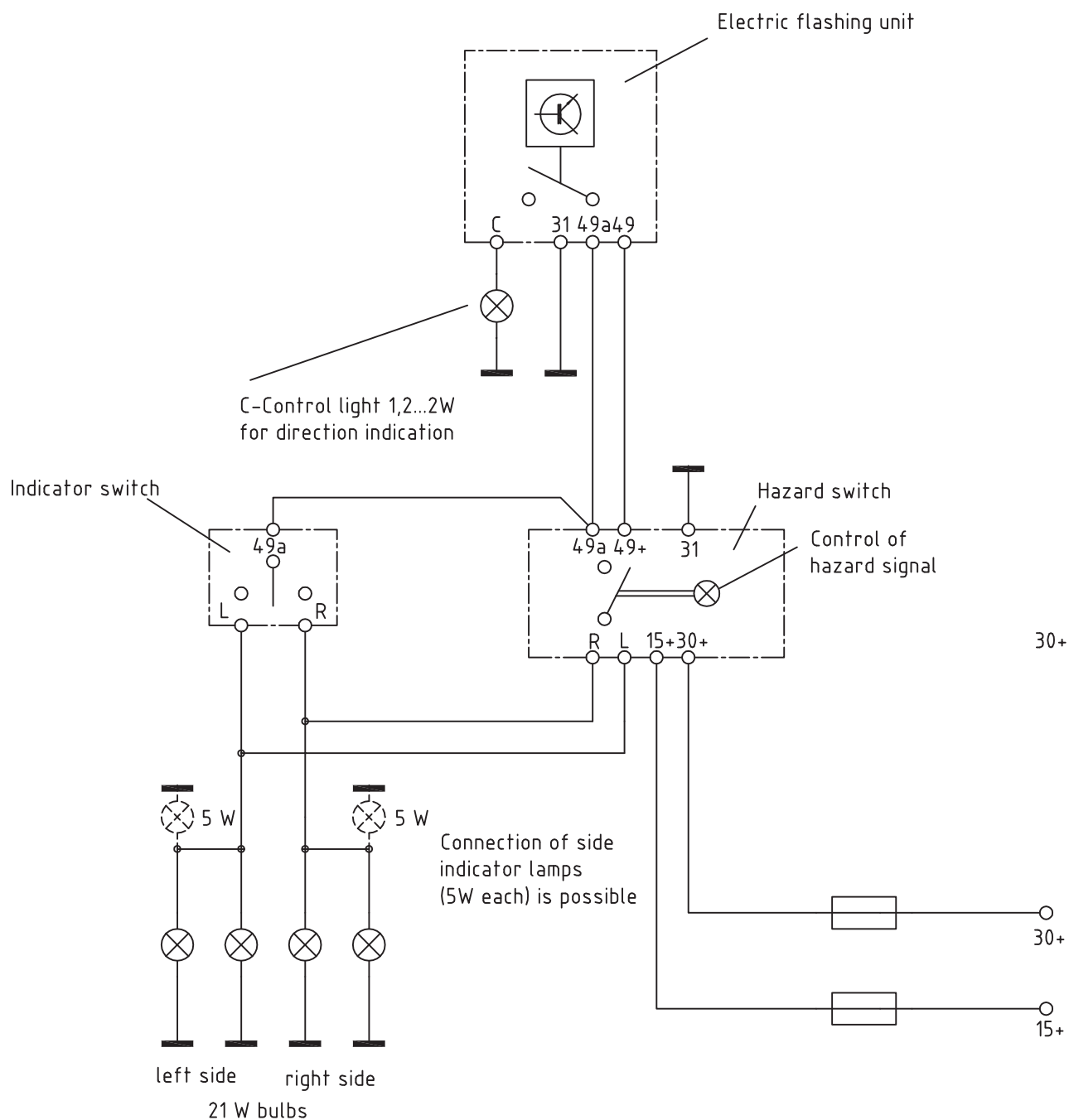


Dimensions in mm

Order number.: 41 9 0112

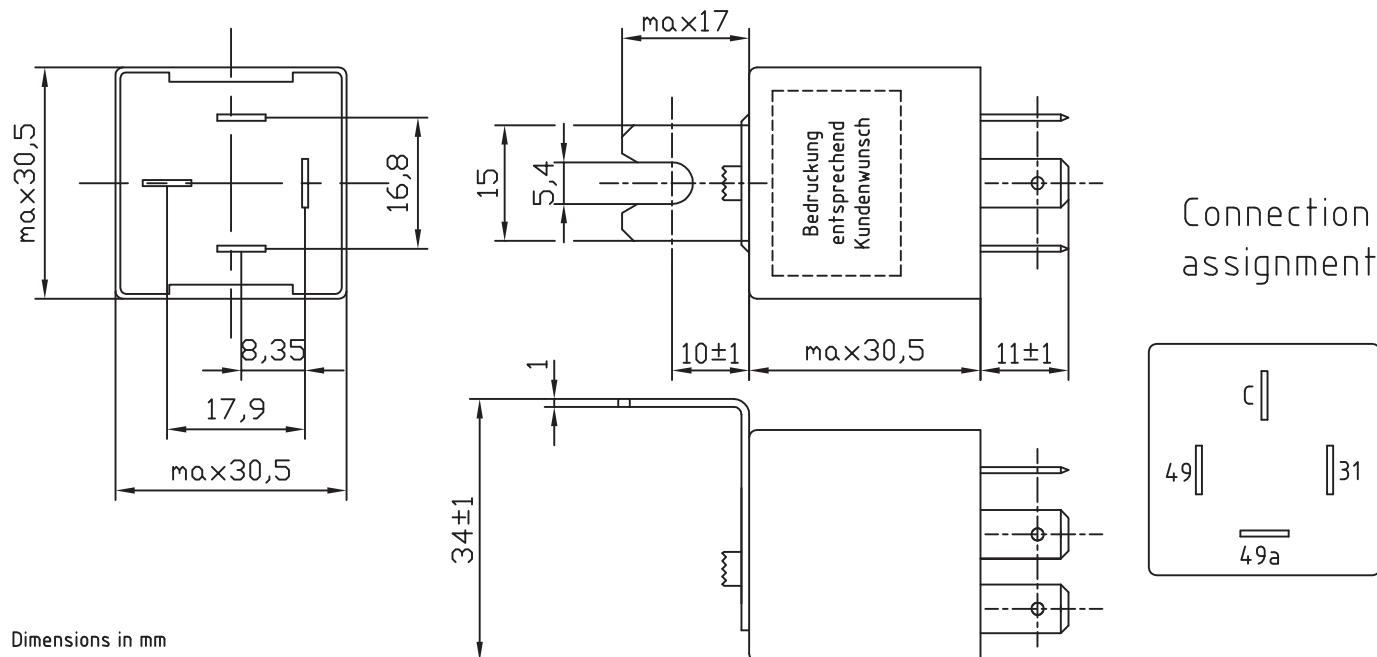
<u>Nominal voltage:</u>	12 VDC
<u>Usage:</u>	Suitable for passenger cars and commercial vehicles without trailer
<u>Functions:</u>	Direction indication 2 x 21W+(0...5)W Warning flashing 4 x 21W+(0...5)W Control 1,2...2 W
<u>Control of functions:</u>	Failure of a flashing light 21W: C-Control Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Protection degree:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operation voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Immunity and emitted interference according to guideline 72/245/EWG
<u>Operation temperature:</u>	-40°C...+85°C
<u>Connection:</u>	according to 41 9 0113 S page 2
<u>Installation:</u>	Plug base resp. central electronics

Connections for the single circuit flasher 2(4)x21W+0...5(0...10)W



Specification Flasher Unit 12V 2(4)x21W+0...5(0...10)W

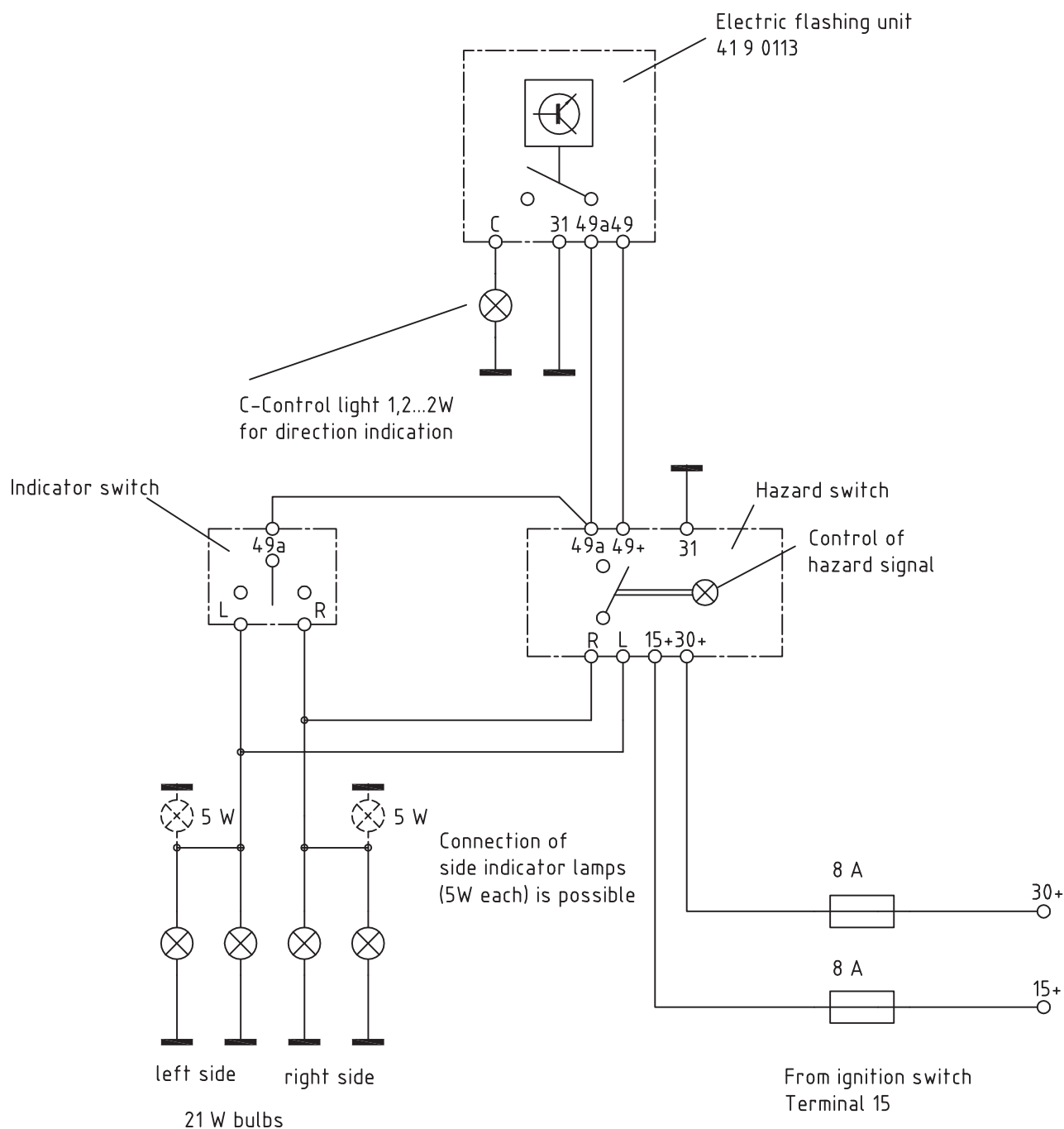
41 9 0113 S
Page 1

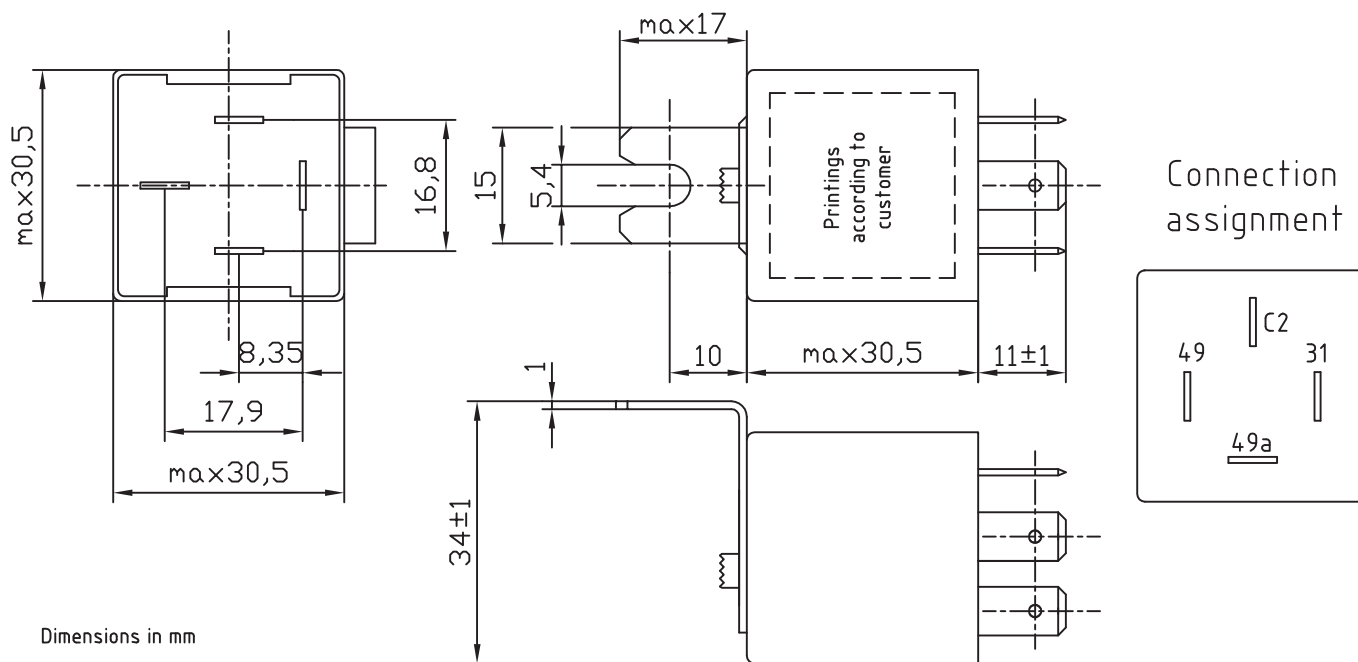


Order number: 41 9 0113

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles without trailer
<u>Functions:</u>	Direction indication 2 x 21W+(0...5)W Warning flashing 4 x 21W+(0...5)W Control 1,2...2 W
<u>Control of functions:</u>	Failure of a flashing light 21W: C-Control frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0113 S Page 2
<u>Installation:</u>	Terminals downwards, protect against moisture and coarse dirt

Connections for the single circuit flasher 2(4)x21W+0...5(0...10)W

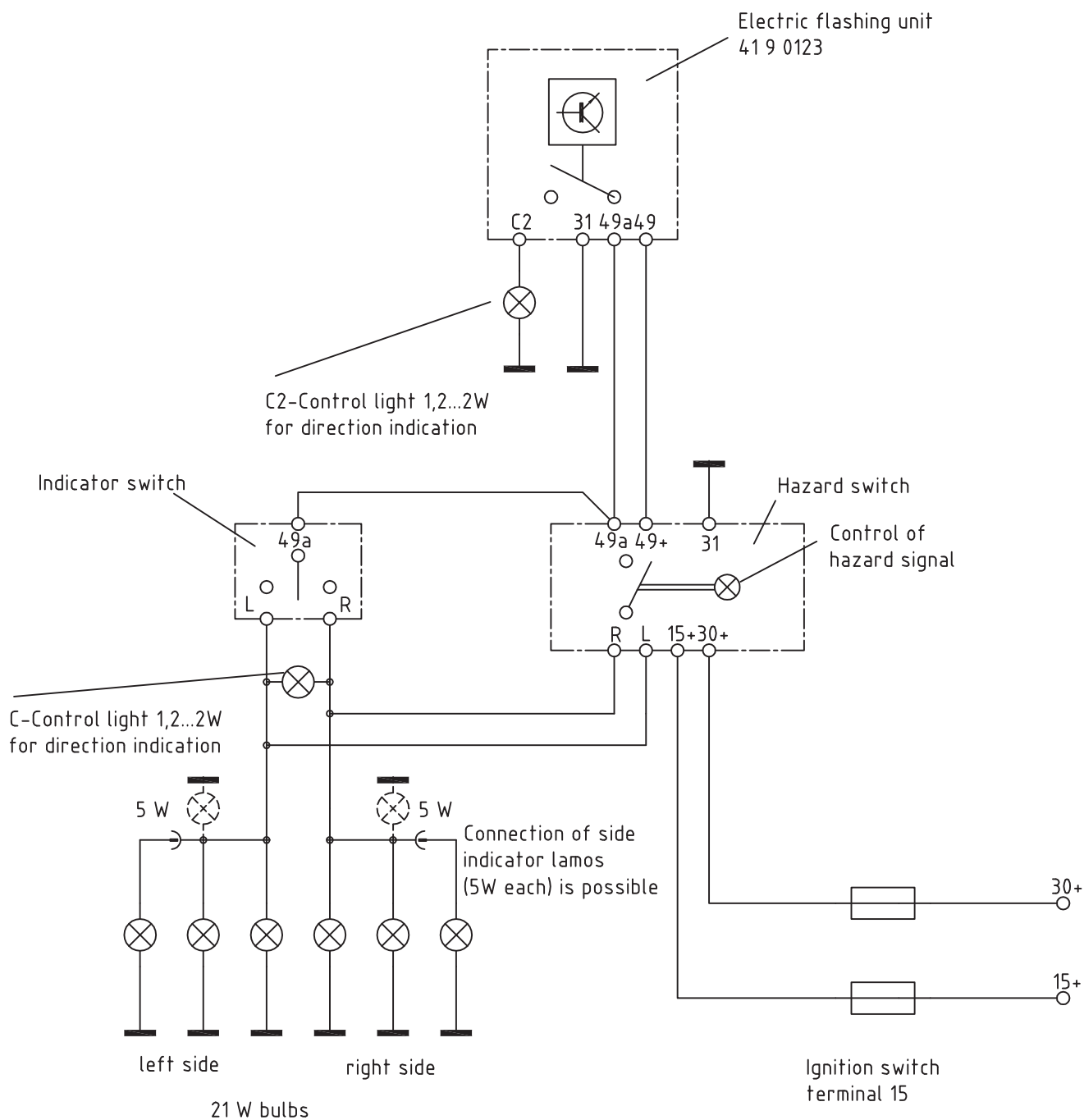




Order number: 41 9 0123

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control 1,2...2W
<u>Control of functions:</u>	Control for passenger cars or commercial vehicles without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger cars or commercial vehicles with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092 6,3x0,8 OH
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to Page 2
<u>Installation:</u>	On plug base resp. central electronics Protect against wet and dirt

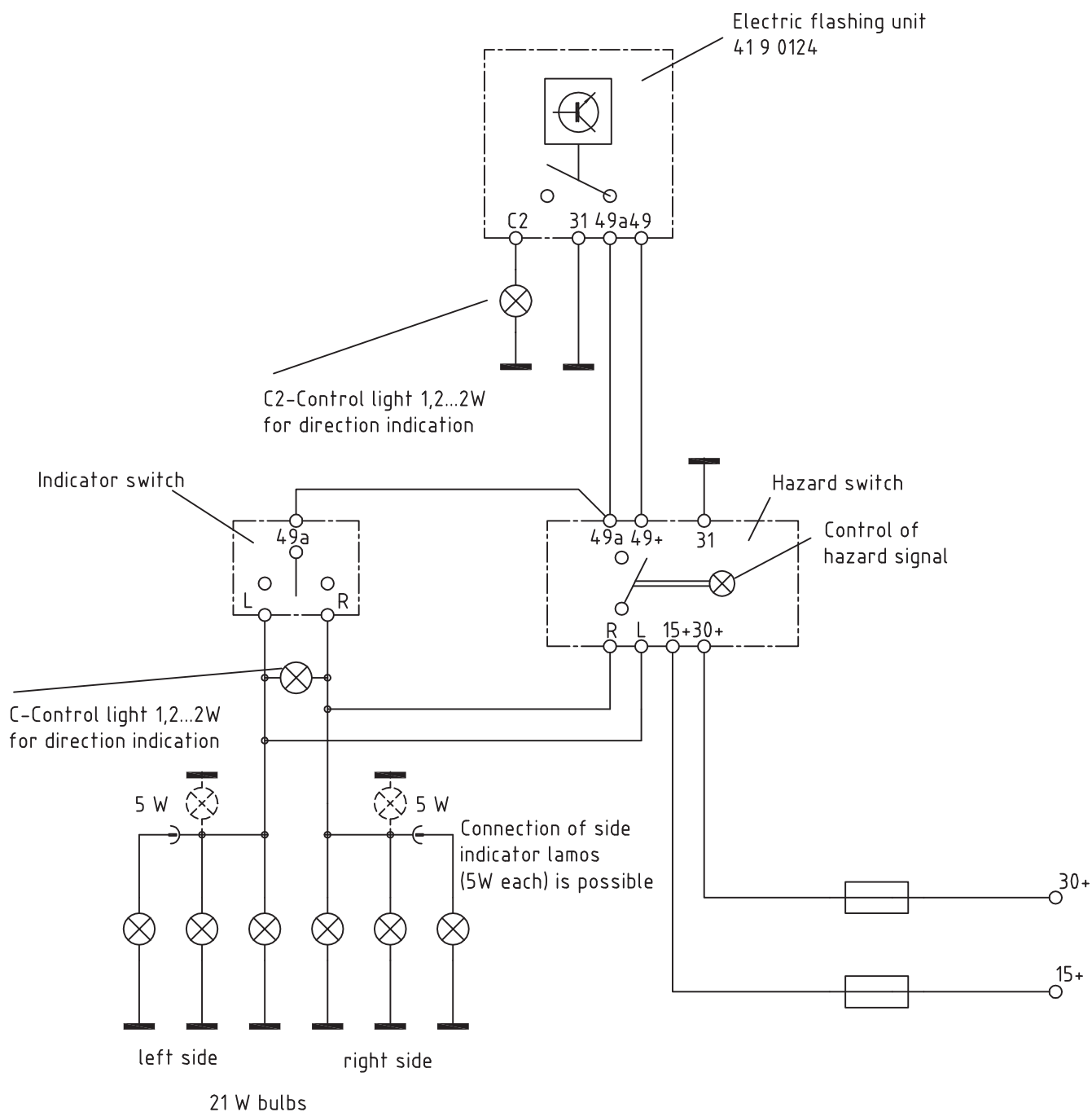
Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

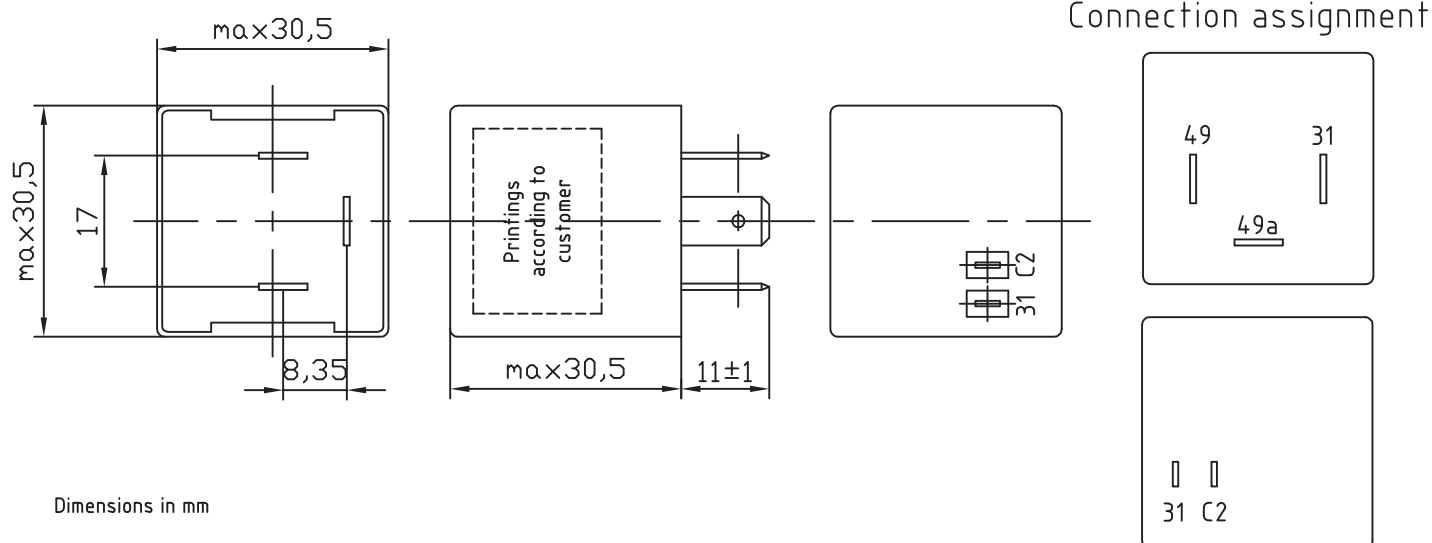




<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0..10)W Control 1,2...2W
<u>Control of functions:</u>	Control for passenger cars or commercial vehicles without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger cars or commercial vehicles with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Anschluß:</u>	According to 41 9 0124 S Page 2
<u>Installation:</u>	On plug base resp. central electronics

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

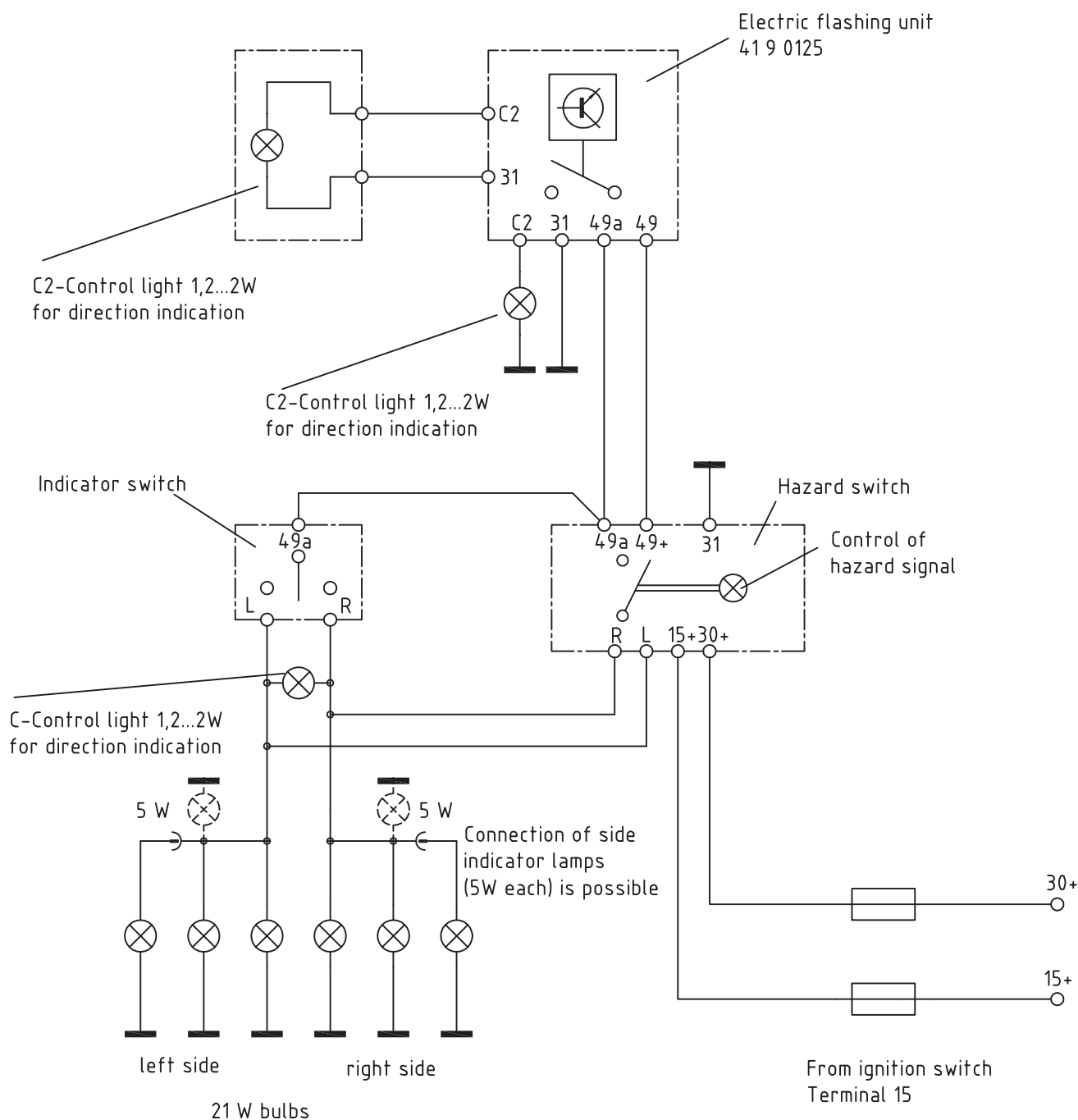


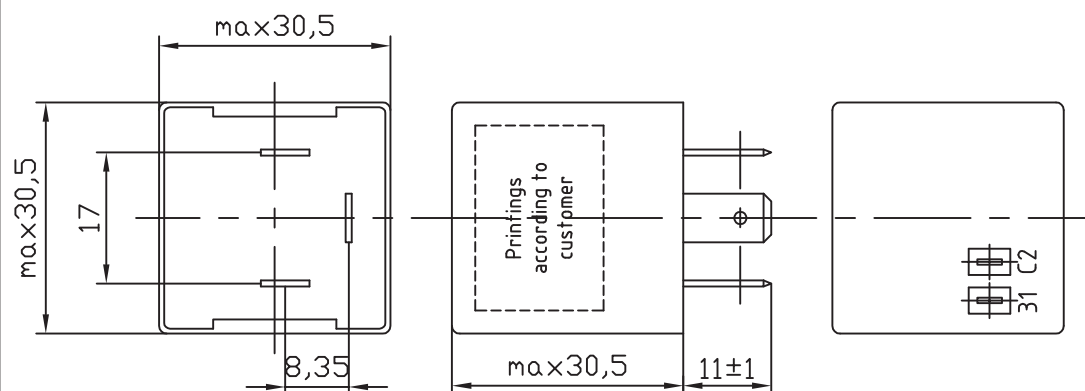


Order number: 41 9 0125

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control 1,2...2W
<u>Control of functions:</u>	Control for passenger cars or commercial vehicles without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger cars or commercial vehicles with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 2,8x0,5 OH / 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0125 S Page 2
<u>Installation:</u>	On plug base resp. central electronics, C2-Control with sleeve 2,8-0,5 according to DIN 46 247-1 at backside of device

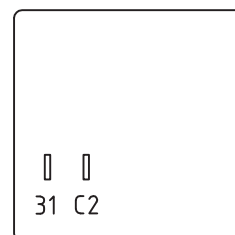
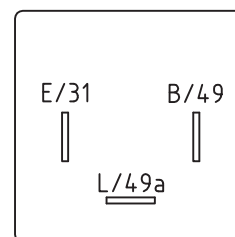
Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W





Dimensions in mm

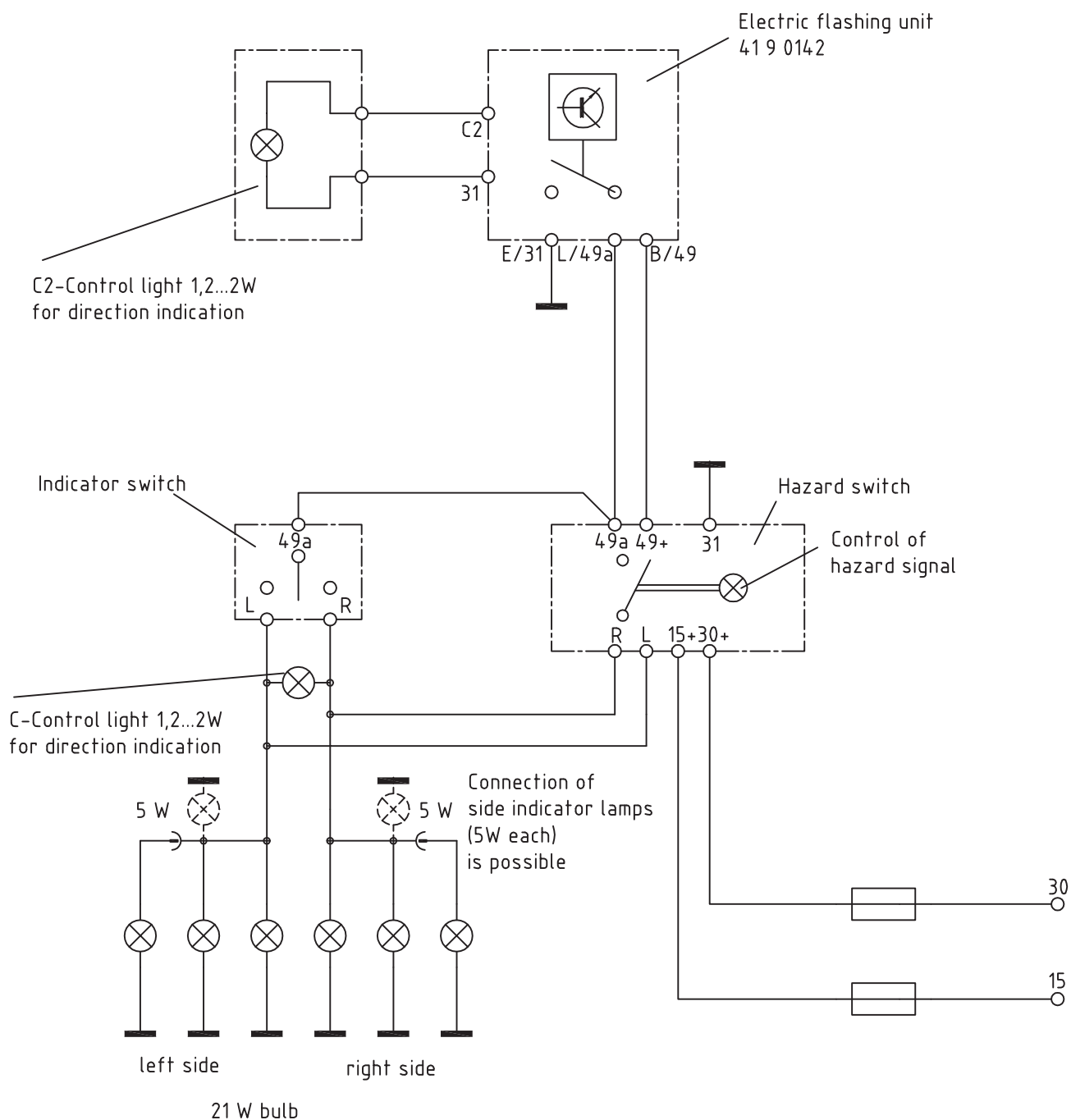
Connection

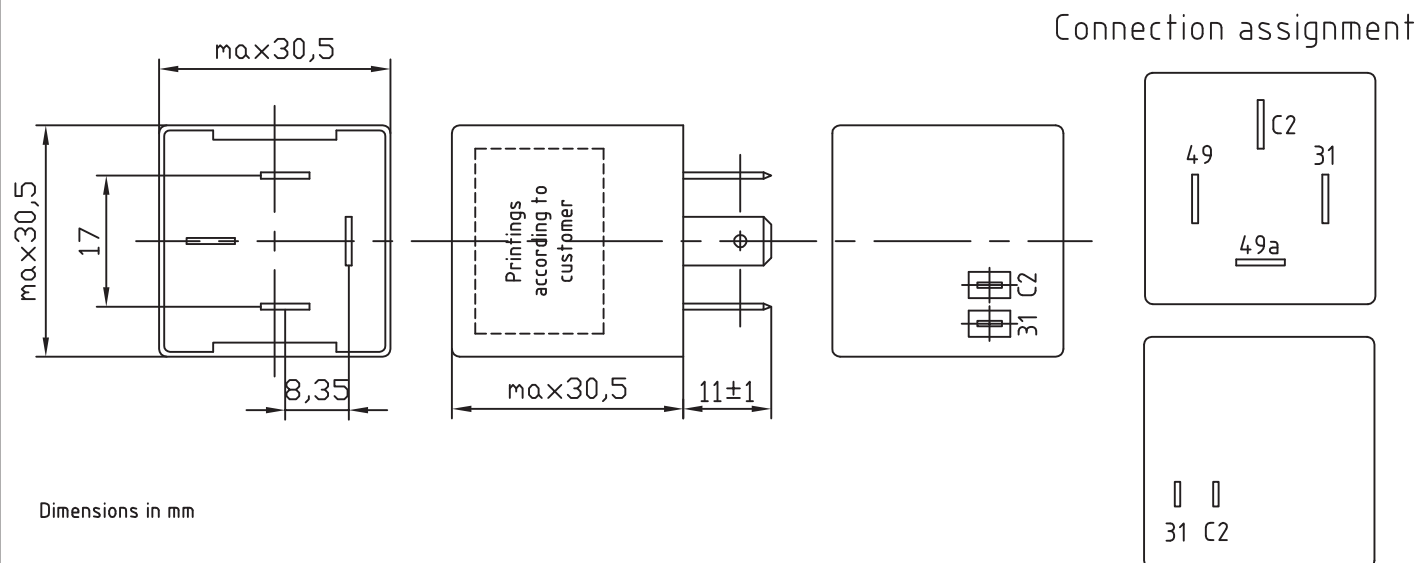


Order number: 41 9 0142

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Connection values:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control C2 1,2...2W
<u>Control of functions:</u>	Control for passenger cars or commercial vehicles without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger cars or commercial vehicles with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100% Control output C2 is short-circuit-proof.
<u>Compliance:</u>	The device complies with ISO 4082 plastic housing with fixation bracket ISO 7588-Cc, terminals according to DIN EN ISO 8092-1 2,8x0,5 OH/6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±15 flashes per minute for direction flashing and warning flashing
<u>Duration of light pulse:</u>	40%...55%
<u>Operating voltage:</u>	21 VDC...30 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according 72/245/EWG and ISO 7637-2
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to page 2
<u>Installation:</u>	On plug base resp. central electronics, C2-Control with push-on contact 2,8-0,5 according to DIN 46 247-1 on backside of the device

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

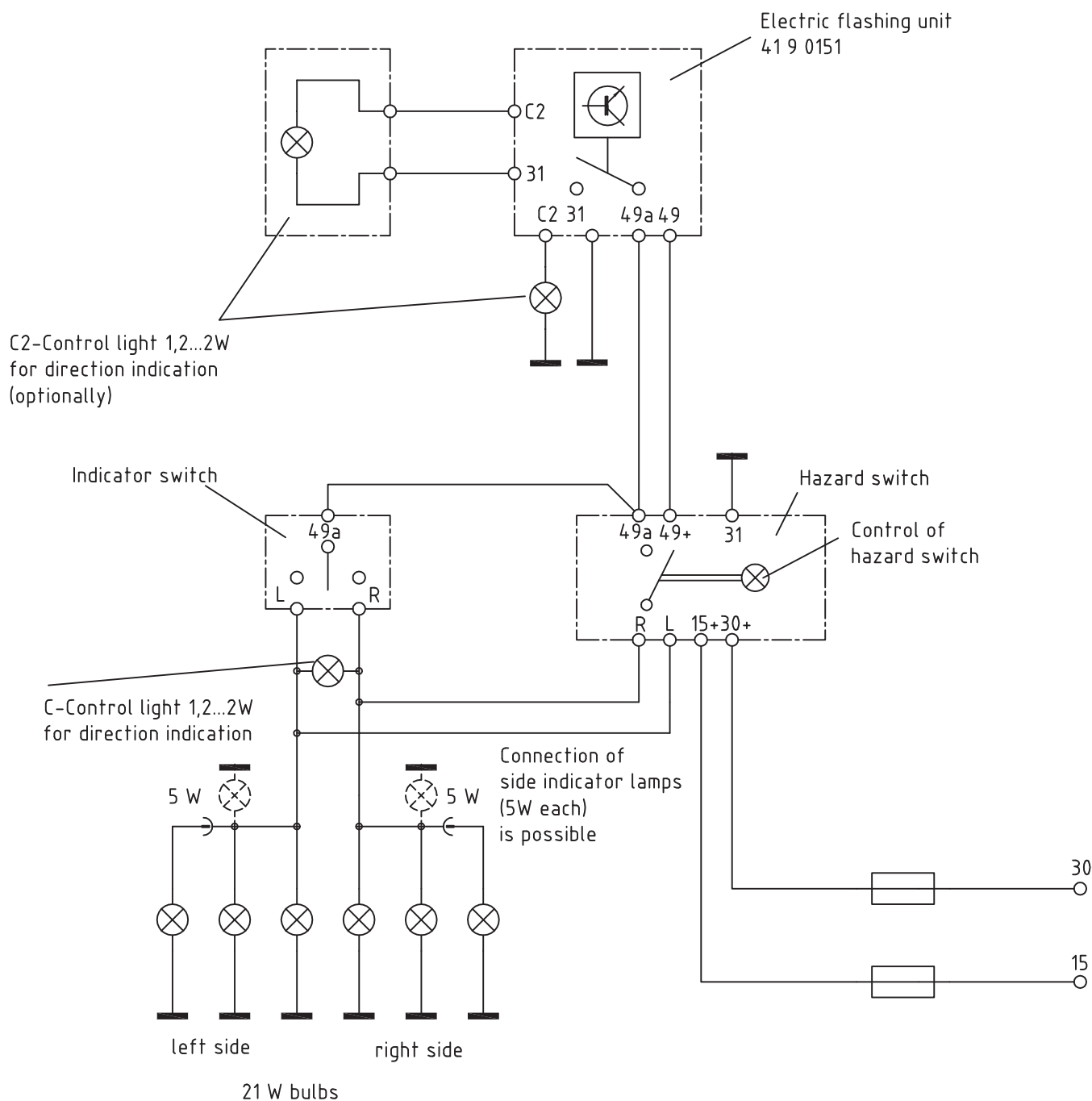


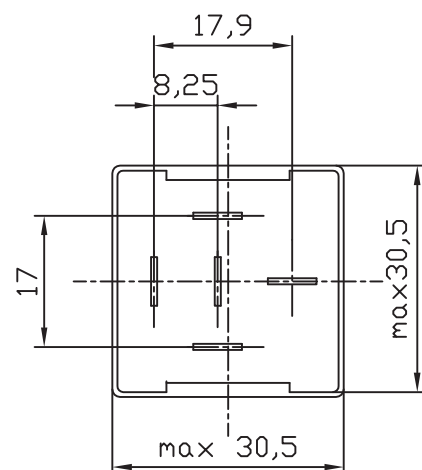
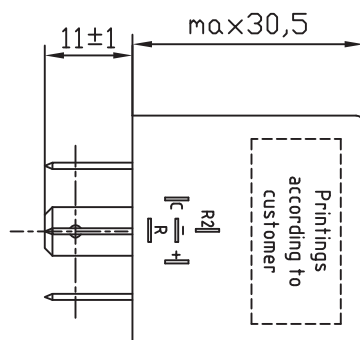
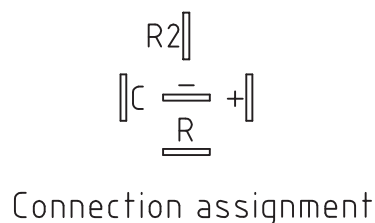


Order number: 41 9 0151

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control C2 1,2...2W
<u>Control of functions:</u>	Control for passenger car or commercial vehicle without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger car or commercial vehicle with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 2,8x0,5 OH/6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction flashing and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according 72/245/EWG
<u>Operating temperature:</u>	-40°C...+85°C
<u>Connection:</u>	According to page 2
<u>Installation:</u>	On plug base resp. central electronics, optionally C2-control by means of push-on contact 2,8 according to DIN 46 247-1 on backside of the device

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W



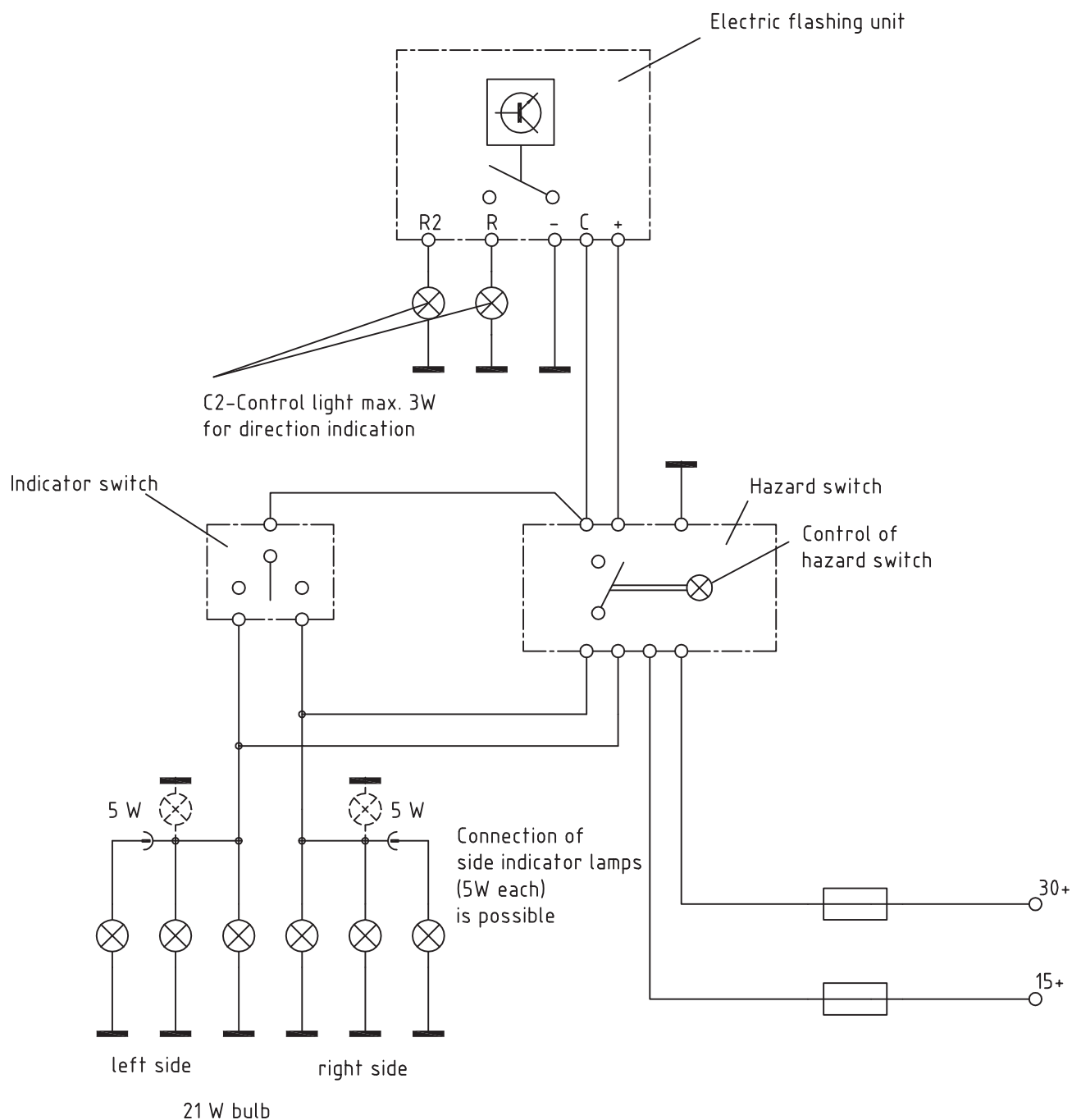


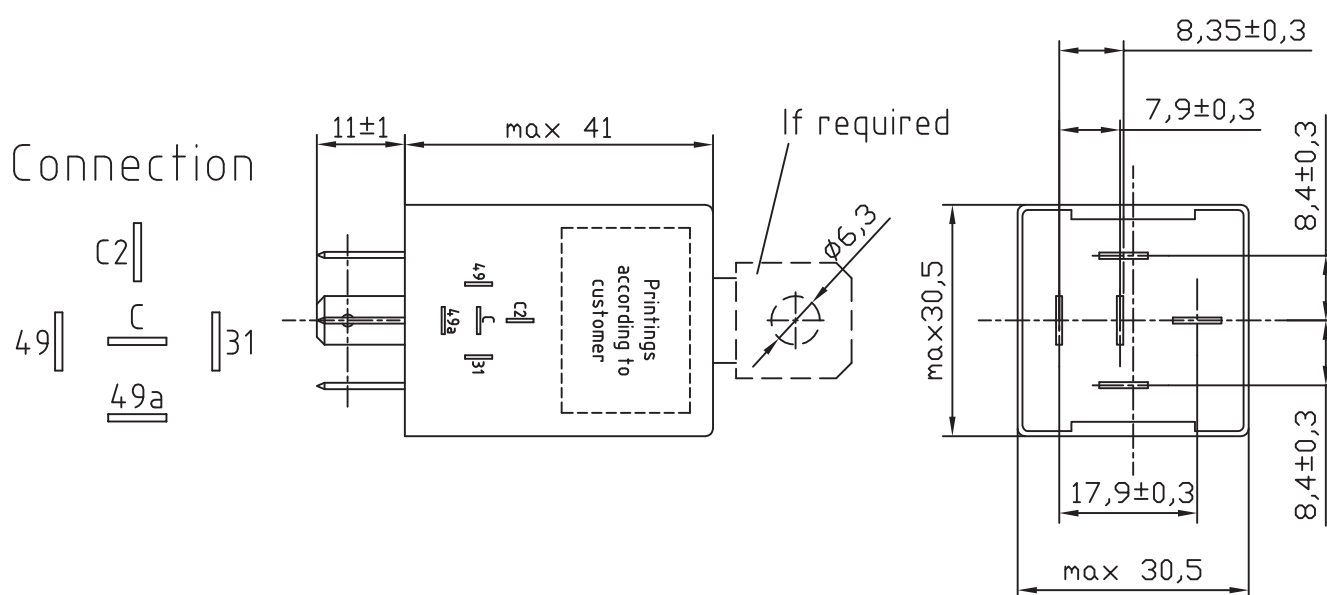
Dimensions in mm

Order number: 41 9 0159

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Connection values:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control max. 3W
<u>Control of functions:</u>	Control for passenger car or commercial vehicle without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger car or commercial vehicle with trailer: Failure of a flashing light 21W: R2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 95/54/EWG
<u>Operating temperature:</u>	-40°C...+85°C
<u>Connection:</u>	According to page 2
<u>Installation:</u>	On plug base resp. central electronics

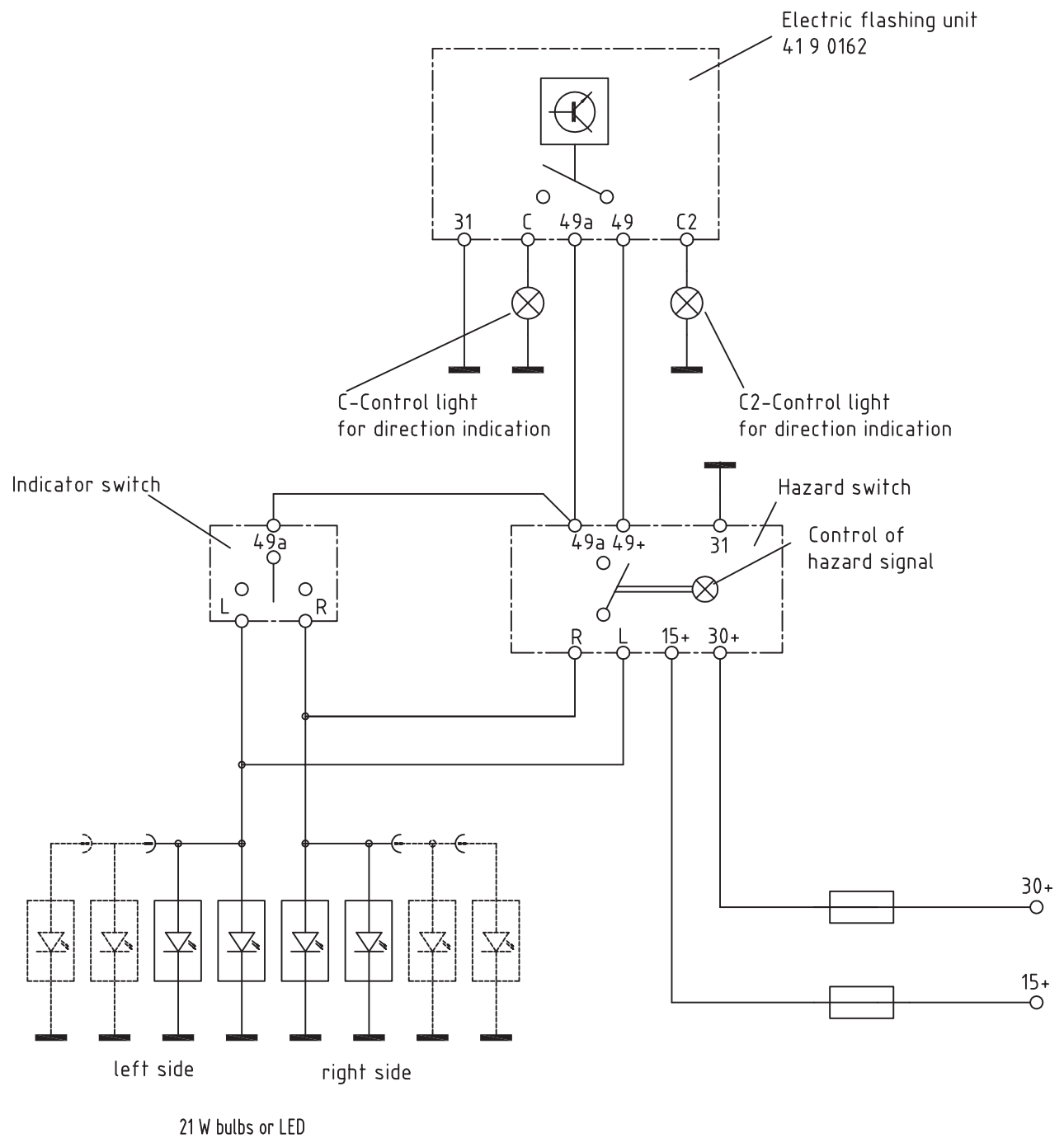
Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

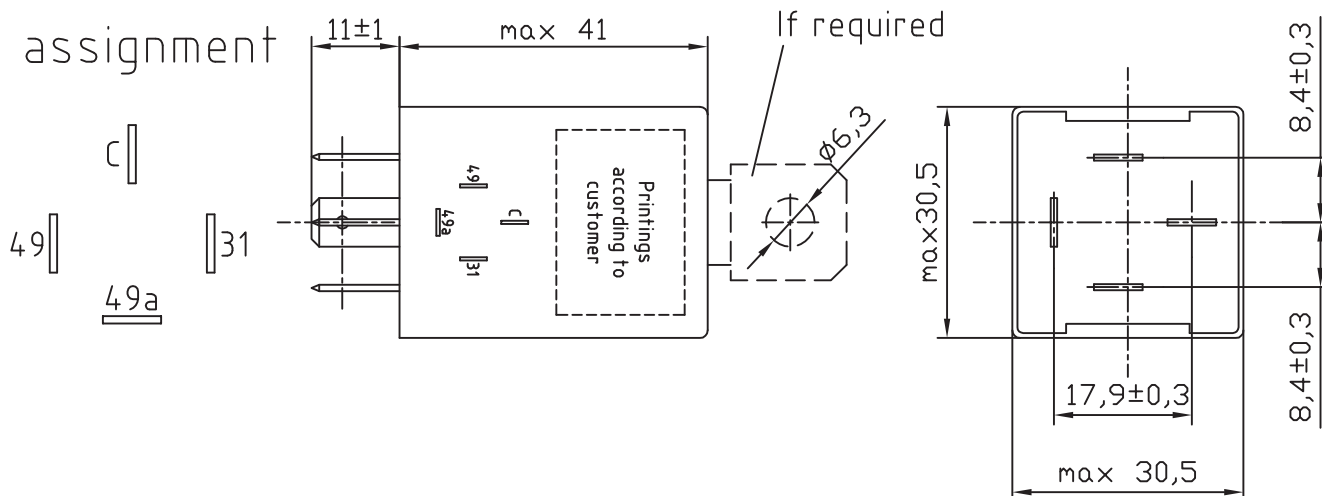




Order number: 41 9 0162

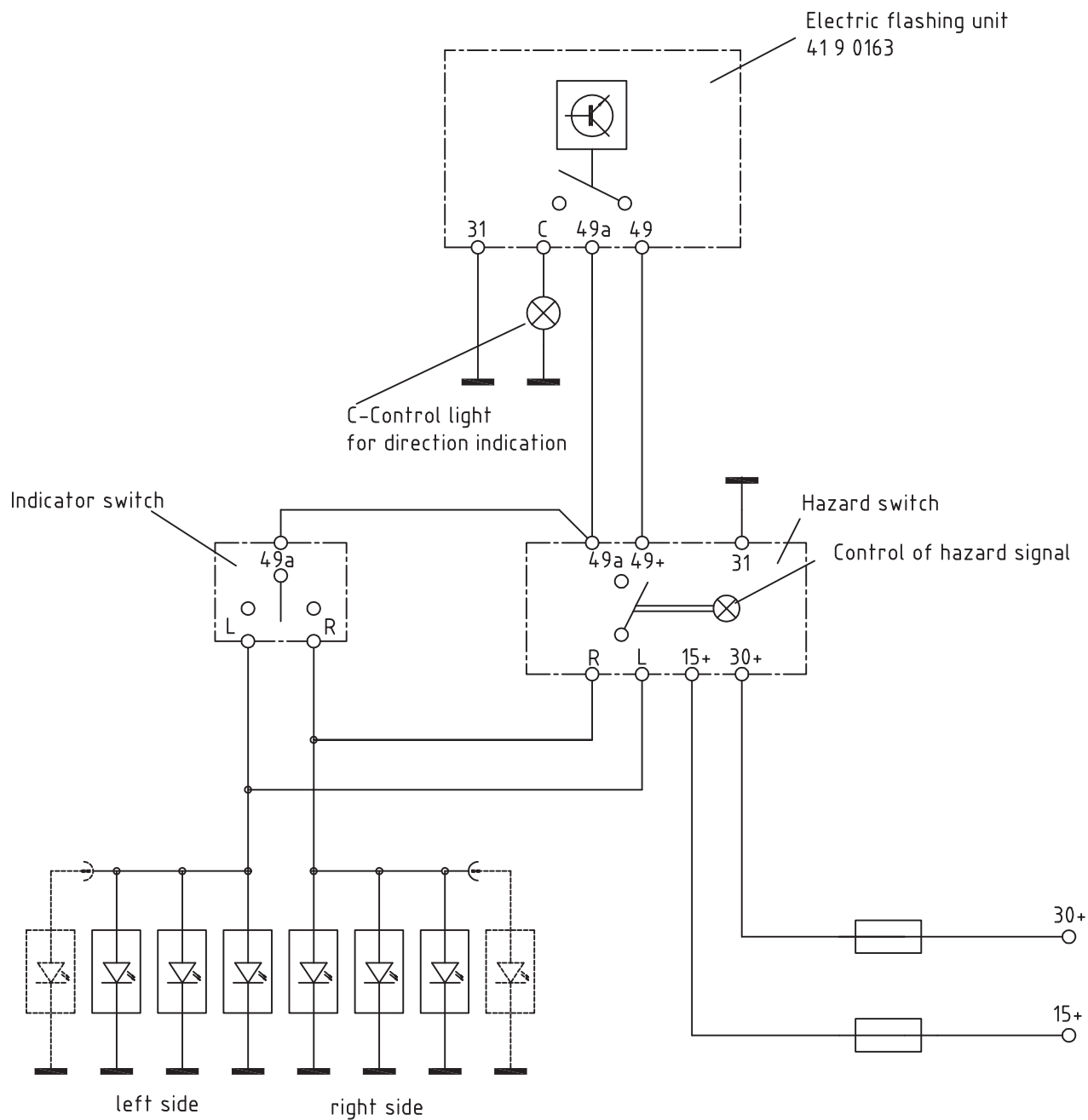
<u>Nominal voltage:</u>	12V
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without one or two trailers
<u>Functions:</u>	Direction indication: (2+1+1)x21W or LED-Lights, freely combinable Warning flashing: 8x21W or LED-Lights Control: max 3W
<u>Control of functions:</u>	Control for passenger car or commercial vehicle without trailer: Failure of a flashing light or LED: Frequency increase = 100% Control for passenger car or commercial vehicle with trailer: Failure of a flashing light or LED: C2-Control remains dark Failure of two flashing lights or LED: C2 and C1-Controls remain dark Failure of three flashing lights or LED: Frequency increase = 100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 53 DIN 40050-9
<u>Frequency:</u>	90 ± 30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40...75%
<u>Operating voltage:</u>	10..15VDC
<u>Function voltage:</u>	11...14VDC
<u>Overvoltage protection:</u>	80V
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG, ISO 7637-2DIS 2000
<u>Operating temperature:</u>	-40...+85°C
<u>Electrical connection:</u>	According to page 2
<u>Installation:</u>	On plug socket





Order number: 419 0163

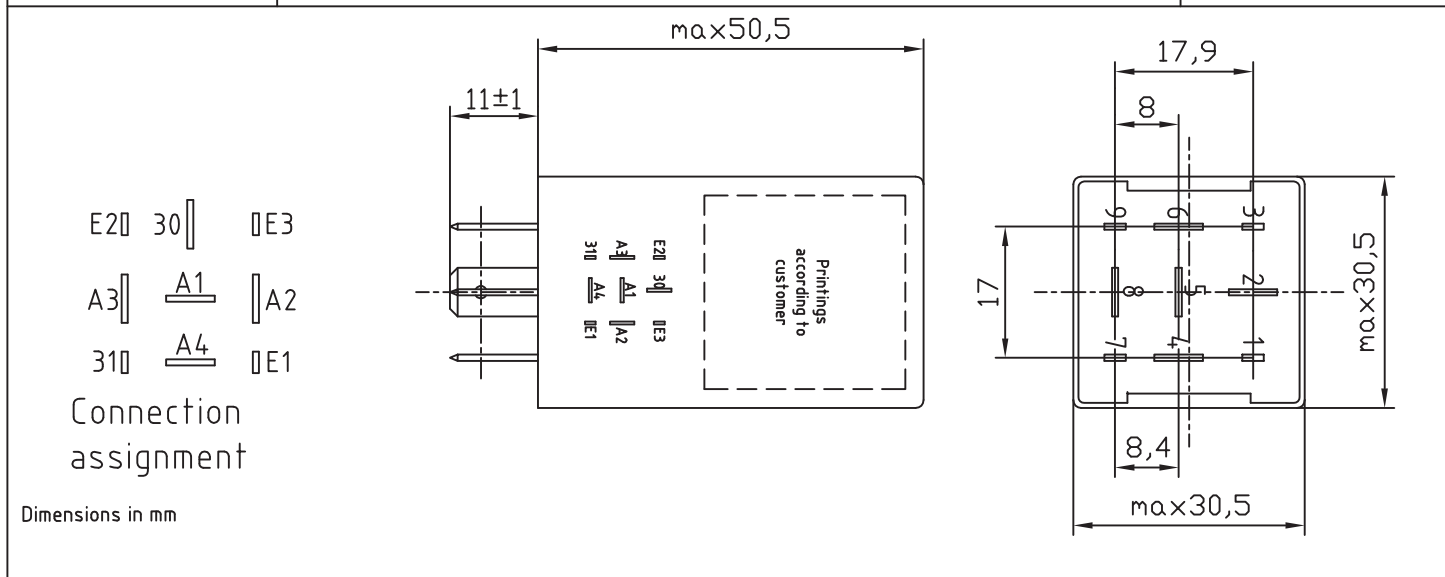
<u>Nominal voltage:</u>	12V
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with or without trailer
<u>Functions:</u>	Direction indication: (3+1) x 21W or LED- Lights, bulbs and LED- Lights freely combinable Warning flashing: 8x21W or LED- Lights Control: max 3W
<u>Control of functions:</u>	Passenger car or commercial vehicle without trailer: Failure of a flashing light or LED: Frequency increase =100% Passenger car or commercial vehicle with trailer: Failure of a flashing light or LED: C-Control remains dark Failure of two flashing lights or LEDs: Frequency increase =100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 53 DIN 40050-9
<u>Frequency:</u>	90 ± 30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40...75%
<u>Operating voltage:</u>	10VDC...15VDC
<u>Function voltage:</u>	11VDC...14VDC
<u>Overvoltage protection:</u>	80V
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 72/245/EWG, ISO 7637-2DIS 2000
<u>Operating temperature:</u>	40...+85°C
<u>Electrical connection:</u>	According to 41 9 0163 S Page 2
<u>Installation:</u>	On socket



Choice between 21W bulbs or LED-Lights, freely combinable

Operating voltage: 10... 15 Volt

Function voltage: 11... 14 Volt



Order number: 41 9 0169

Nominal voltage:

12 VDC

Usage:

suitable for tractor according to North American regulations

Functions:

Input signals:

E1 = Warning flashing, terminal 30 from Hazard switch

E2 = direction indication left, terminal 15 from indicator switch

E3 = direction indication right, terminal 15 from indicator switch

Output signals:

A1 = Warning flashing left, P max = 110W

A2 = Warning flashing right, P max = 110W

A3 = turn signal left, P max = 50W

A4 = turn signal, P max = 50W

Functions:

Warning flashing:

Warning flashing lights front/rear and optional additional lamps front/rear

flashing with a Frequency of (60...85) Imp/min

direction indication left

Warning flashing left front/rear and optional additional lamps front/rear

such as die flash light turning left

with frequency of (80...105) Imp/min.

flashing lights on the right side light continuously.

direction indication right

according to direction indication left

Compliance:

plastic housing with fixation bracket ISO 7588,

Terminals according to

DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8-OH.

Duration of light pulse:

50%...75%

Operating voltage:

8 VDC...16 VDC

Over voltage strength:

26V (5min)

Operating temperature:

-30°C...+80°C

Electromagnetic compatibility:

according to 75/322/EWG

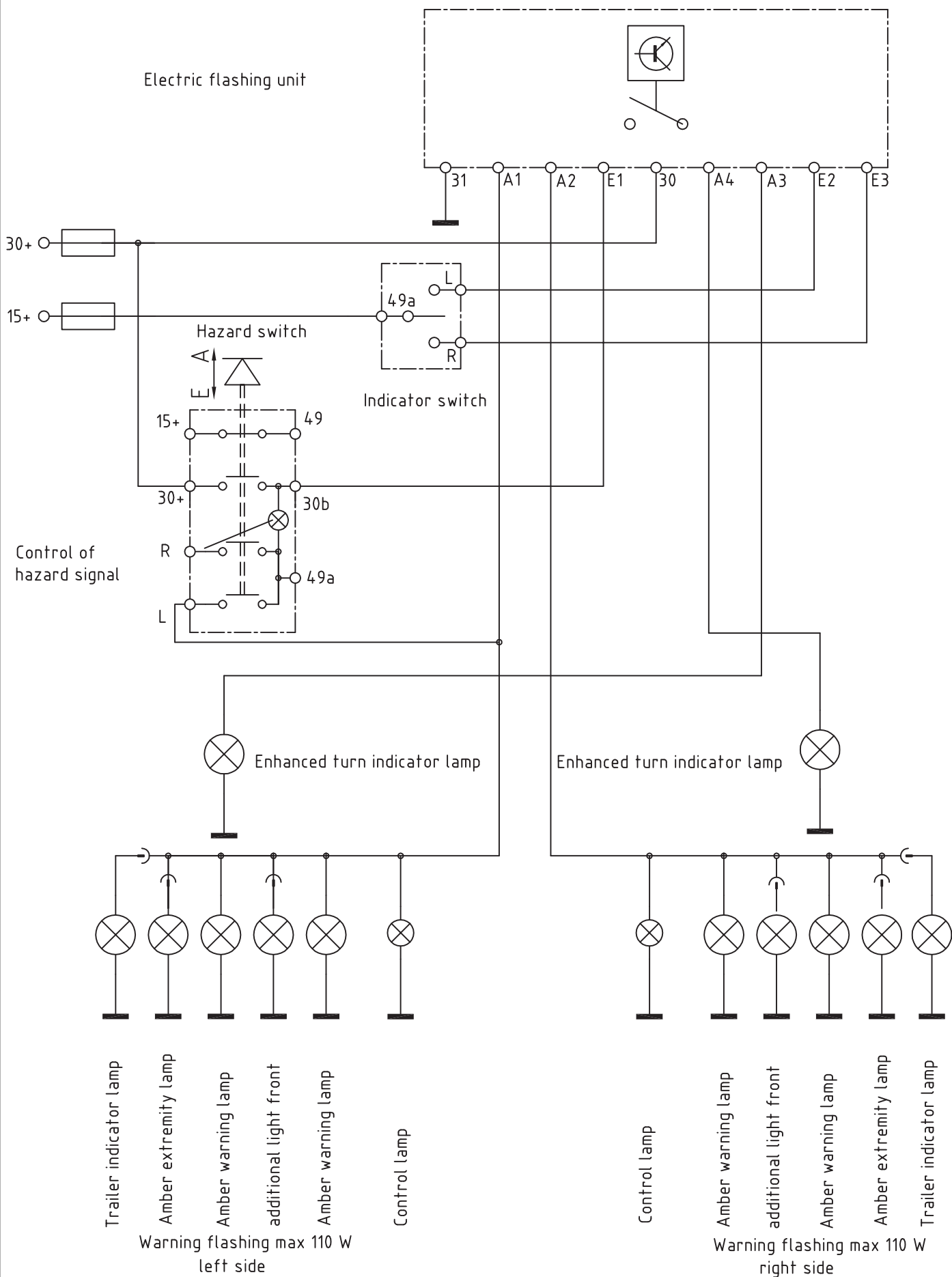
Connection:

according to 41 9 0169 S Page 2

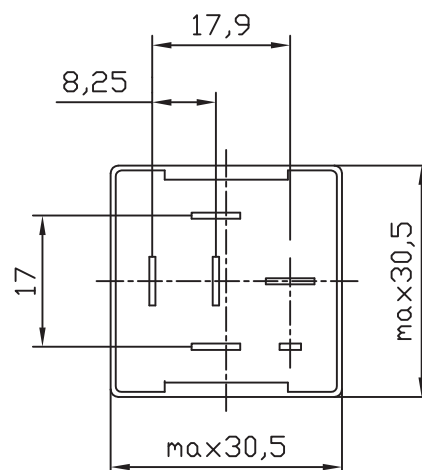
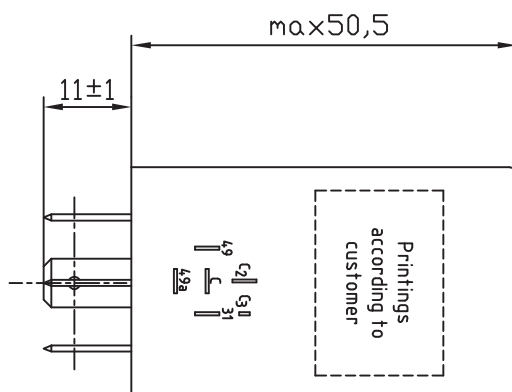
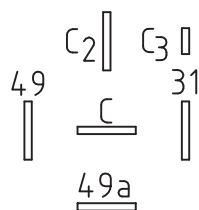
Installation:

Plug base resp. central electronics

Connection for flasher lights



Connection assignment



Dimensions in mm

Order number: 41 9 0170

Nominal voltage:

12V

Application:

Suitable for passenger cars and commercial vehicles without or up to two trailers

Installation of an additional front device possible (single circuit flasher)

Functions:

Direction indication: (2+1+1) x 21W or (2+1+1+1)x21W

Warning flashing: 8x21W or 10x21W

Control: 1,2W...2W

Control of functions

Failure of a flashing light (2+1+1)x21W:

C3-Control remains dark

Failure of a flashing light (2+1)x21W:

C3- and C2-Controls remain dark

Failure of a flashing light 2x21W:

C3- and C2-Controls remain dark

Compliance:

The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8 OH.

Frequency :

90 ± 30 flashes per minute for direction indication and warning flashing

Duration of light pulse:

30...75%

Operating voltage:

10VDC...16VDC

Electromagnetic compatibility:

Interference immunity and interference emissions according to 75/322/EWG

Operating temperature:

-40...+85°C

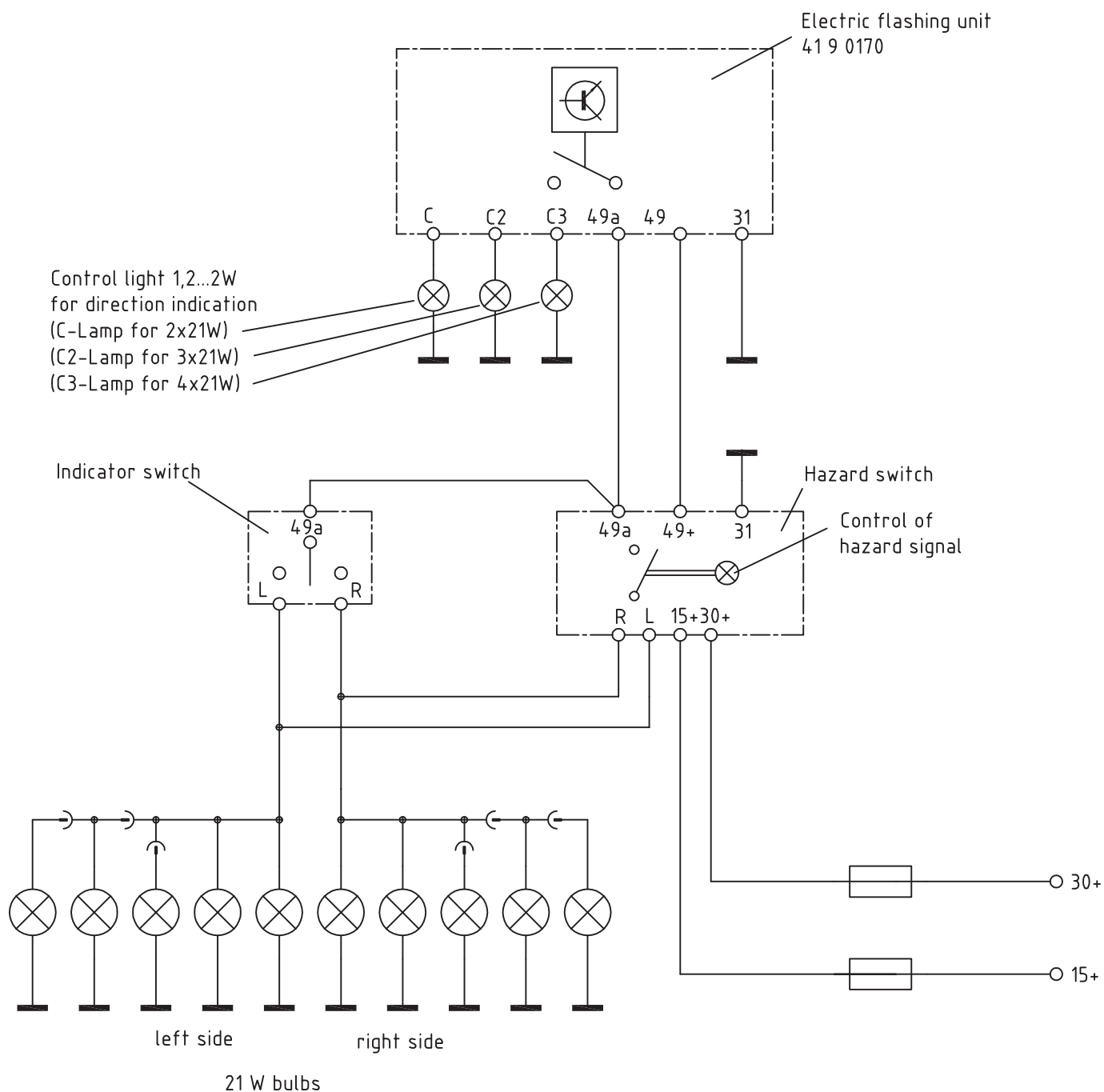
Electrical connection:

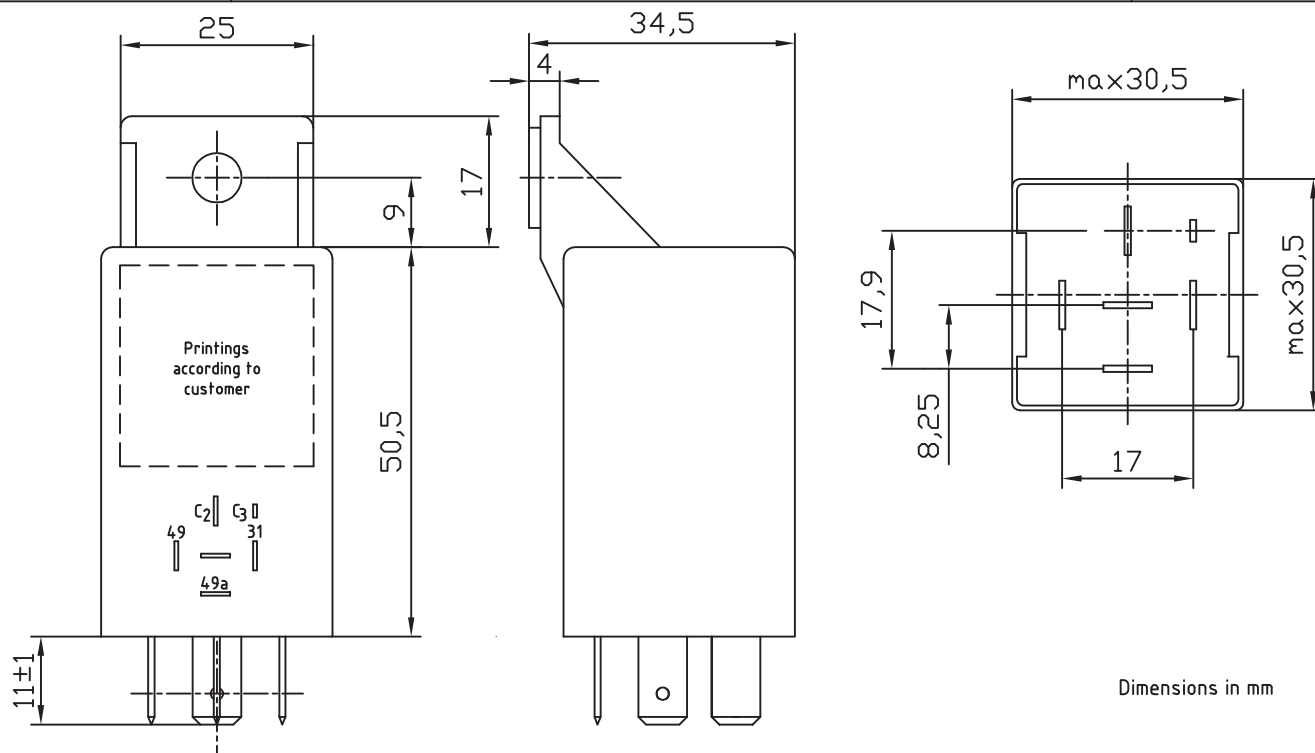
According to 41 9 0170 S Page 2

Installation:

On socket

Connections for the single circuit flasher

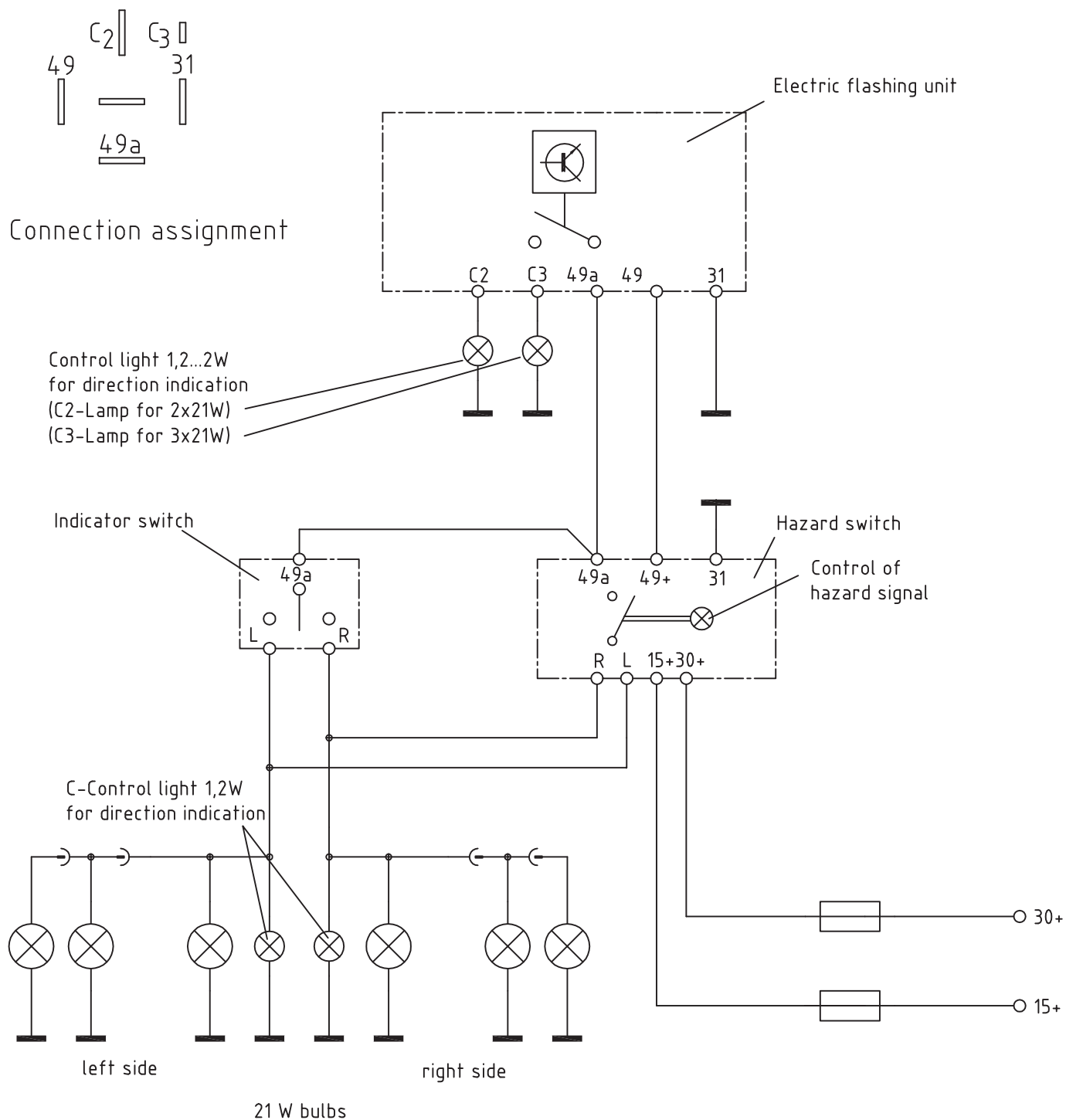


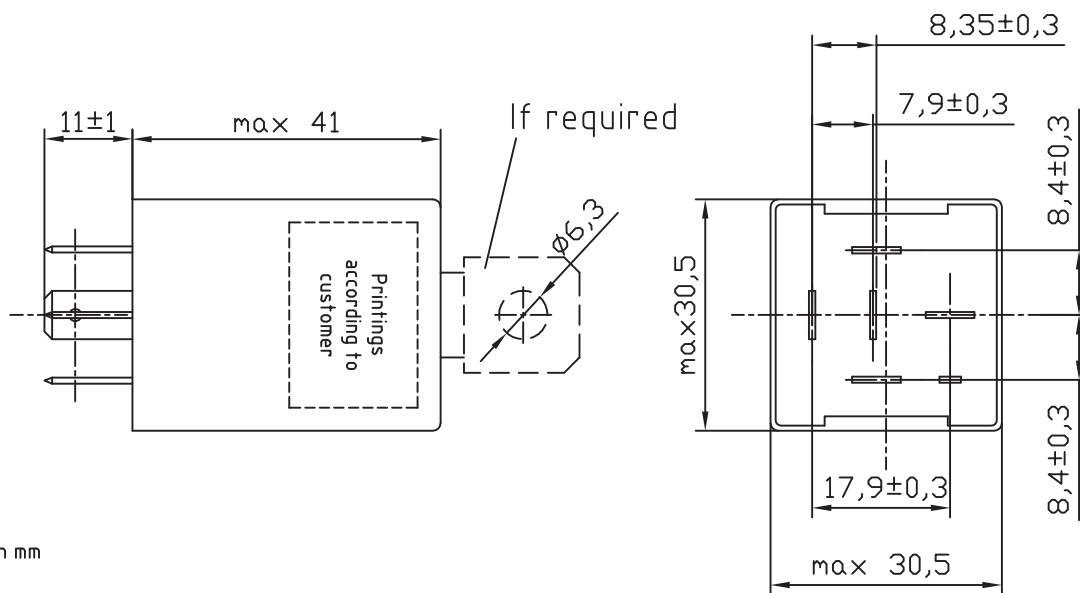


Order number: 41 9 0172

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for commercial vehicles without or up to two trailers (single circuit flasher)
<u>Functions:</u>	Direction indication (1+1+1)x21W Warning flashing 6x21W Control 1,2W
<u>Control of functions:</u>	Failure of a flashing light (2+1+1)x21W or (3+1)x21W: C3-Control remains dark Failure of a flashing light (2+1)x21W or 3x21W: C3- and C2-Controls remain dark Failure of a flashing light 2x21W: C3- and C2-Controls remain dark C-Control light: flashing frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588, Terminals according to DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8 OH.
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	30%...75%
<u>Operating voltage:</u>	10 VDC...16 VDC
<u>Electromagnetic compatibility:</u>	According to 75/322/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0172 S Page 2
<u>Installation:</u>	On socket

Connections for the single circuit flasher



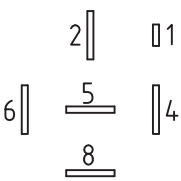


Dimensions in mm

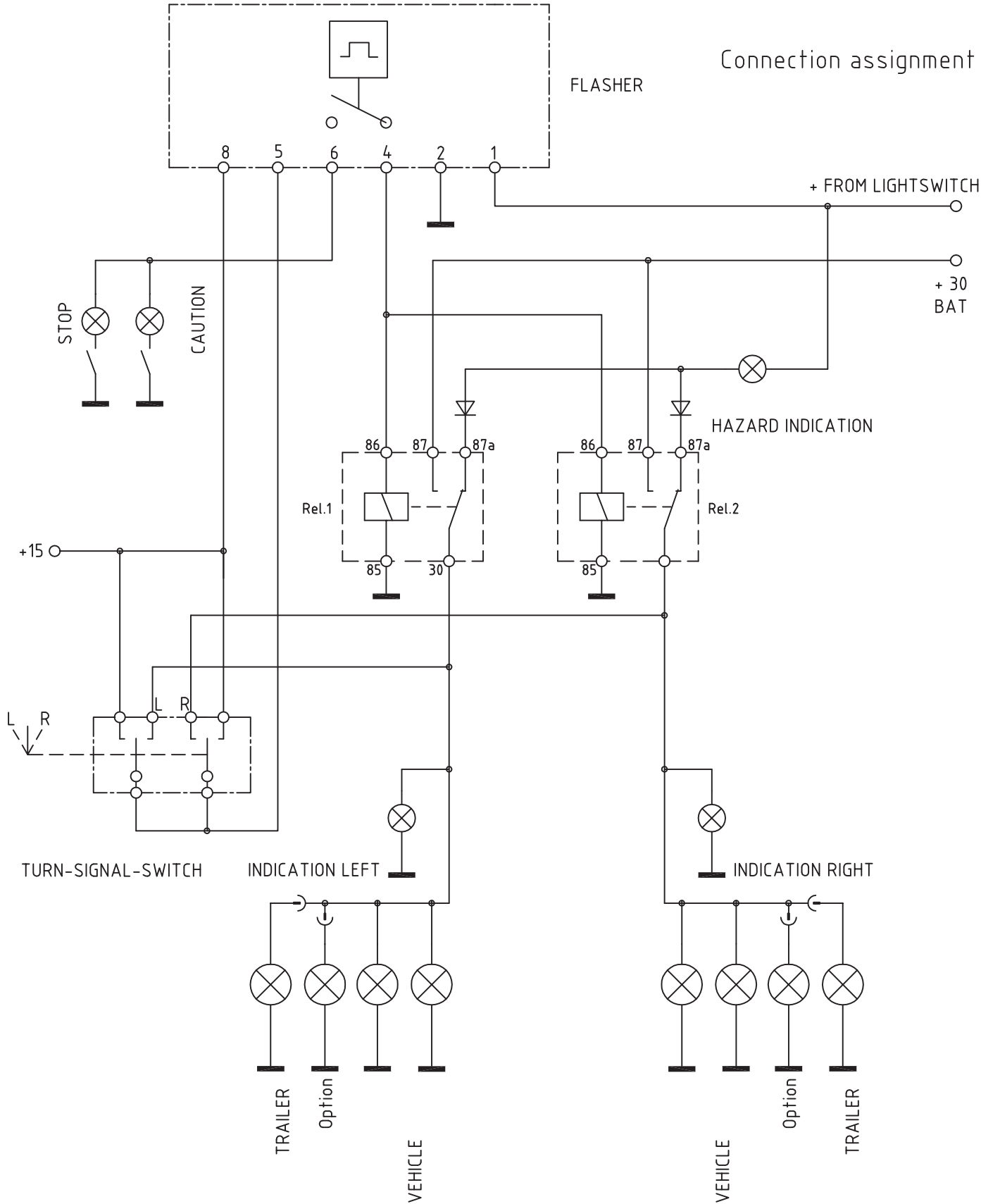
Order number: 41 9 0175

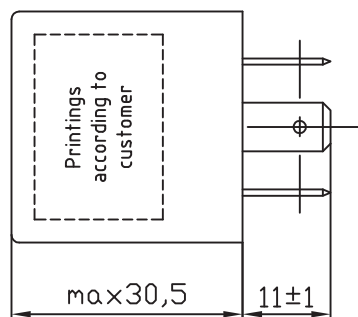
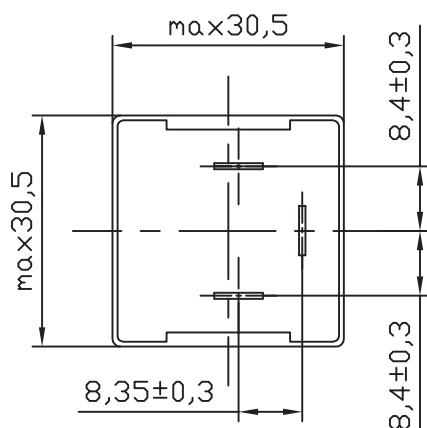
<u>Nominal Voltage:</u>	12 VDC
<u>Application:</u>	Flasher unit for SAE 137 application
<u>Functions:</u>	3 = nominal load 400mA (2 Relays) 4 = nominal load 1A (2x5W bulbs)
<u>Bulb loads:</u>	Direction indication: 3(4) x 32cp + 1 x 3W Warning flashing: 6(8) x 32cp + 2 x 3W "Stop"-bulb: 1 x 5W "Attention"-bulb: 1 x 5W
<u>Functions:</u>	Warning flashing: flashing frequency 73 Imp/min $\pm$ 10 Imp/min Direction Indication: flashing frequency 97 Imp/min $\pm$ 10 Imp/min
<u>Compliance:</u>	Plastic housing with fixation bracket according to ISO 7588, terminals according to DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8-OH.
<u>Duration of light pulse:</u>	50% $\pm$ 5%
<u>Operating voltage:</u>	10 VDC...15 VDC
<u>Over voltage strength:</u>	26V (5min)
<u>Operating temperature:</u>	30°C...+70°C
<u>Electromagnetic compatibility:</u>	Load bounded disturbances according to DIN 40 839 Impulse 1,2,3a,3b assessment B HF-Interference up to 100 V/m 1 MHz...220 MHz no functional disturbances
<u>Degree of protection:</u>	IP 53 according to DIN 40 050-9
<u>Electrical connection:</u>	According to page 22

Connection assignment



Connection assignment





Connection assignment

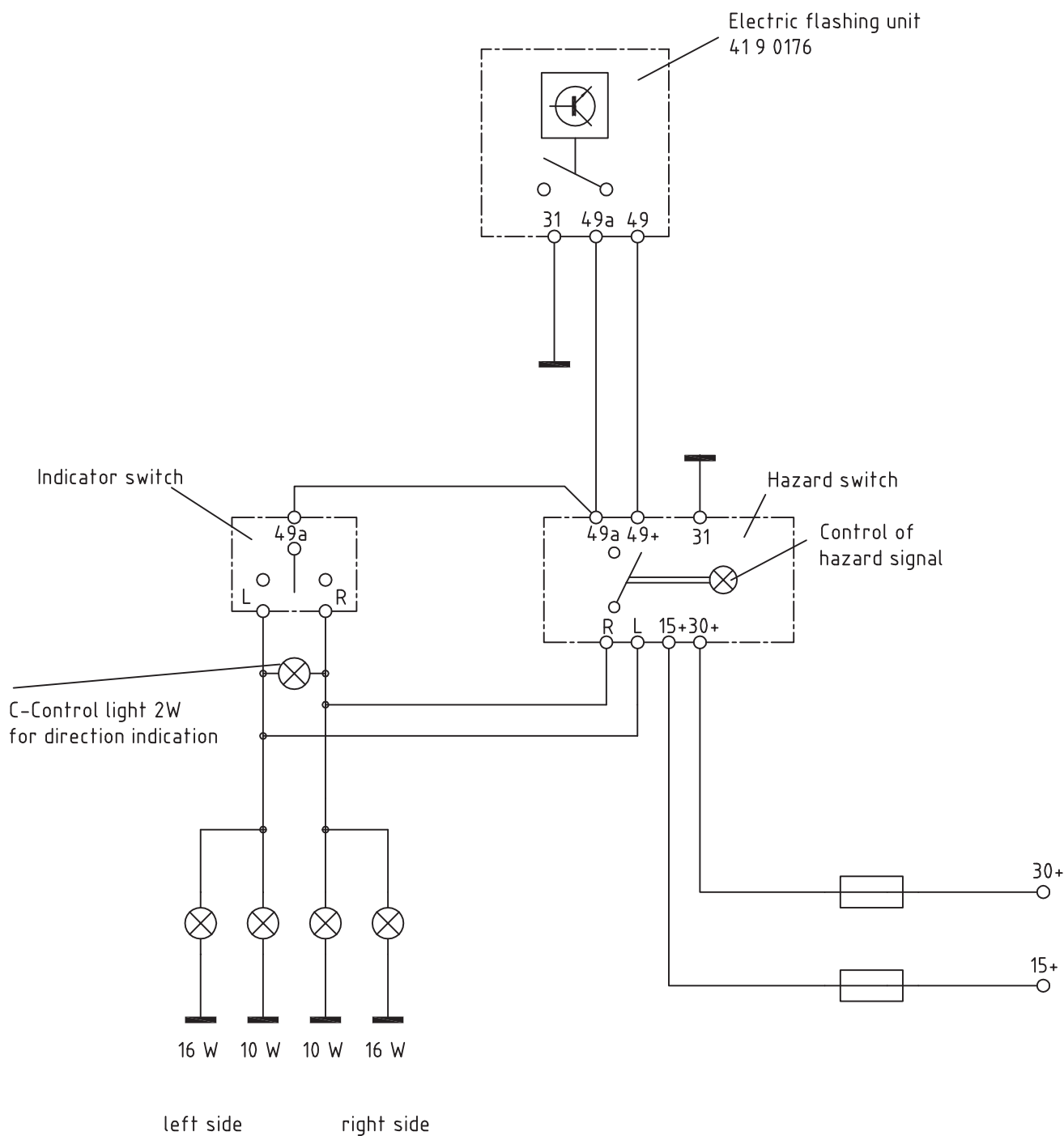
49 || 31
49a

Dimensions in mm

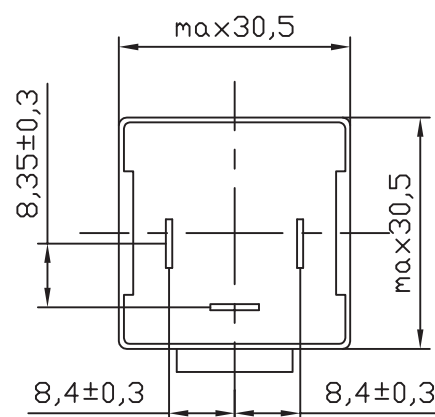
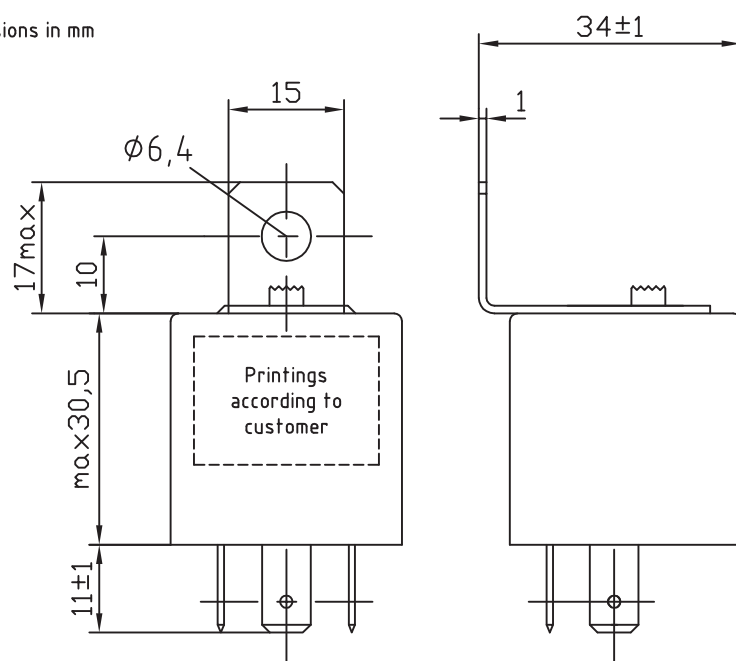
Order number: 41 9 0176

<u>Nominal Voltage:</u>	12 VDC
<u>Application:</u>	Suitable for motorcycle
<u>Functions:</u>	Direction indication 10 W + 16W Warning flashing 10 W + 16W + 10W + 16W
<u>Control of functions:</u>	Outage of flashing bulb 10W resp. 16W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	75...100 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	47%...53%
<u>Operating Voltage:</u>	11 VDC...15 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operation temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to page 2

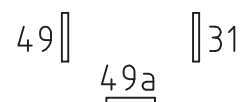
Connection plan for flasher unit



Dimensions in mm



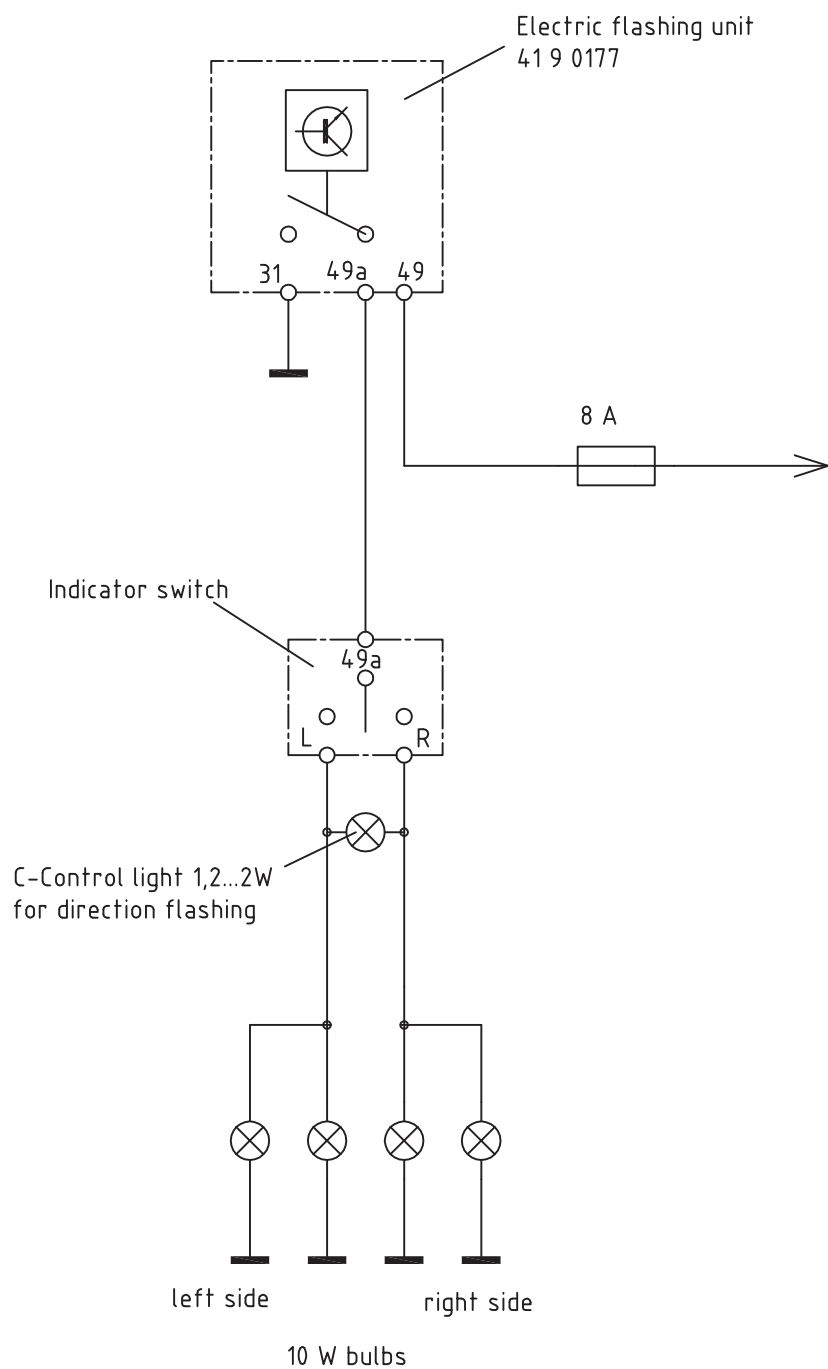
Connection assignment

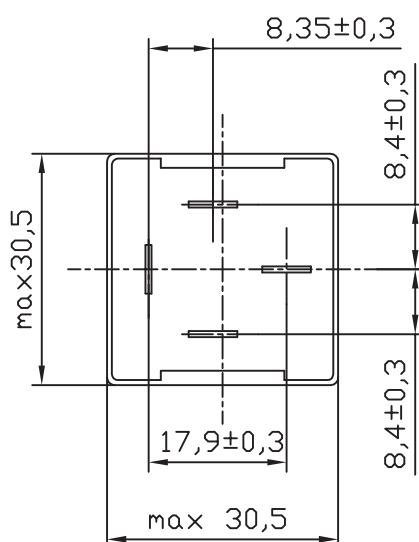
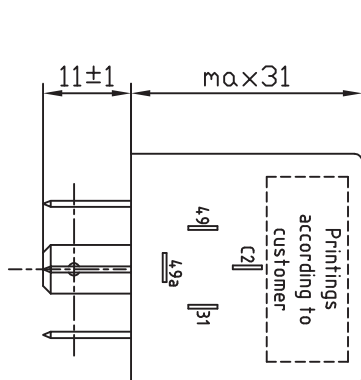


Order number: 41 9 0177

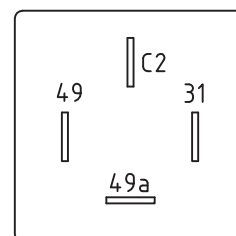
Nominal voltage:	12 VDC
Application:	Suitable for motorcycle
Connection values:	Direction indication 2 x 10 W Warning flashing 4 x 10 W
Control of functions:	Failure of a flashing light 10W: Frequency increase >100%
Compliance:	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN-EN ISO 8092-1 6,3x0,8 OH
Degree of Protection:	IP 53 DIN 40 050-9
Frequency:	90±30 flashes per minute for direction indication and warning flashing
Duration of light pulse:	40%...75%
Operation voltage:	10 VDC...15 VDC
Electromagnetic compatibility:	Interference immunity and interference emission according to 72/245/EWG
Operation temperature:	-40°C...+85°C
Electrical connection:	According to page 2
Installation:	Terminal downwards, protect against wet and coarse dirt

Connection plan for flasher unit 2(4)x10W





Connection assignment



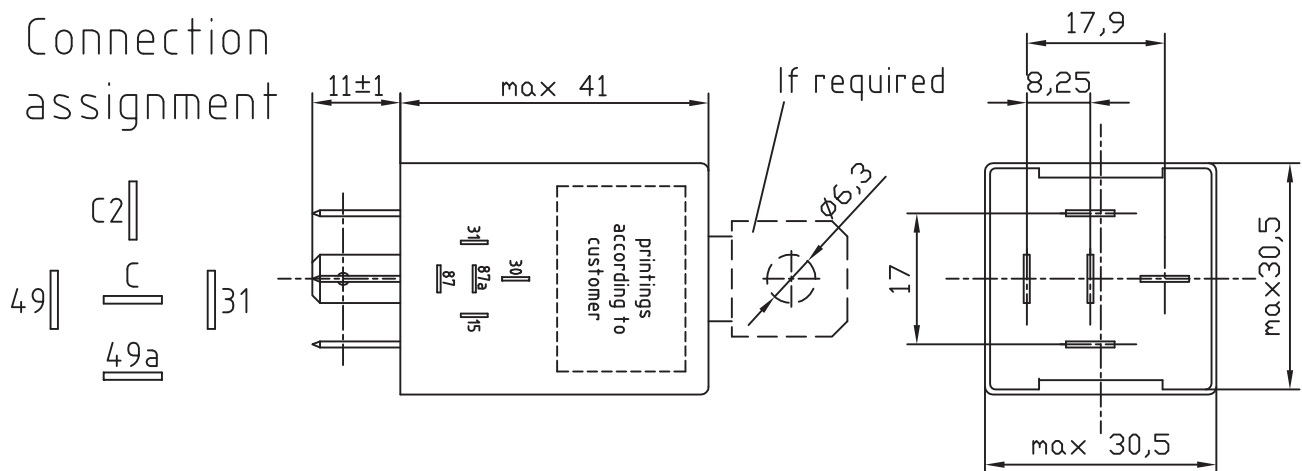
Order number: 41 9 0178

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with resp. without trailer
<u>Functions:</u>	Direction indication (3+1)x21W Warning flashing 8x21W Control 1,2...2W
<u>Control of functions:</u>	Control for passenger cars or commercial vehicles without trailer: Failure of a flashing light 21W: Frequency increase >100% Control for passenger cars or commercial vehicles with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	46%...55%
<u>Operating voltage:</u>	9 VDC...16 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0178 S Page 2
<u>Installation:</u>	On plug base resp. central electronics

The diagram illustrates the electrical circuit for a vehicle's lighting system. Key components and their connections are as follows:

- Electric flashing unit (41 9 0178):** Contains a relay and a switch. It is connected to terminals C2, 31, 49a, and 49. Terminal 31 is grounded. Terminal 49a is connected to the indicator switch. Terminals 49 and 49+ are connected to the control of the hazard signal.
- Indicator switch:** A switch with terminals L, R, and 49a. It is connected to the electric flashing unit and the control light.
- Control light (1,2...2W):** A small light bulb used for direction indication. It is connected to the indicator switch and the control of the hazard signal.
- Hazard switch:** A switch used to control the hazard signal. It is connected to terminals 49a, 49+, and 31. Terminal 31 is grounded.
- Control of hazard signal:** A circuit that controls the hazard signal, connected to terminals 49a, 49+, 31, R, L, 15+, and 30+.
- Main side lights:** A set of eight 21 W bulbs, four on the left side and four on the right side. They are connected to the main power supply (30+) and ground.

Connection assignment



Order number:

41 9 0180

Nominal Voltage

12 V

Note

Control lamps (C and C2 are connected to positive potential)

Application:

Suitable for tractor with resp. without trailer

Works also without battery connected to system

Functions:

Direction indication (2+1)x21W resp. (2+2)x21W without controlling

Warning flashing 6x21W resp. 8x21W

Control 1,2...2W

Control of functions:

Control without trailer:

Failure of a flashing light 21W: C-Control remains dark

Control with trailer:

Failure of a flashing light 21W: C2-control remains dark

Failure of two flashing lights 21W: C- and C2-Controls remain dark

Compliance:

The device complies with the ISO 4082 standard,
plastic housing with fixation bracket ISO 7588-EA,
terminals according to DIN EN ISO 8092-1 6,3x0,8 OH

Degree of protection:

IP 53 DIN 40 050-9

Frequency:

90±30 flashes per minute for direction indication
and warning flashing

90+60/-30 flashes per minute for direction indication
and warning flashing without battery

Duration of light pulse:

40%...70%

Operating voltage:

10,8 VDC...15 VDC

Operating temperature:

-40°C...+55°C

Storage temperature:

-40°C...+85°C

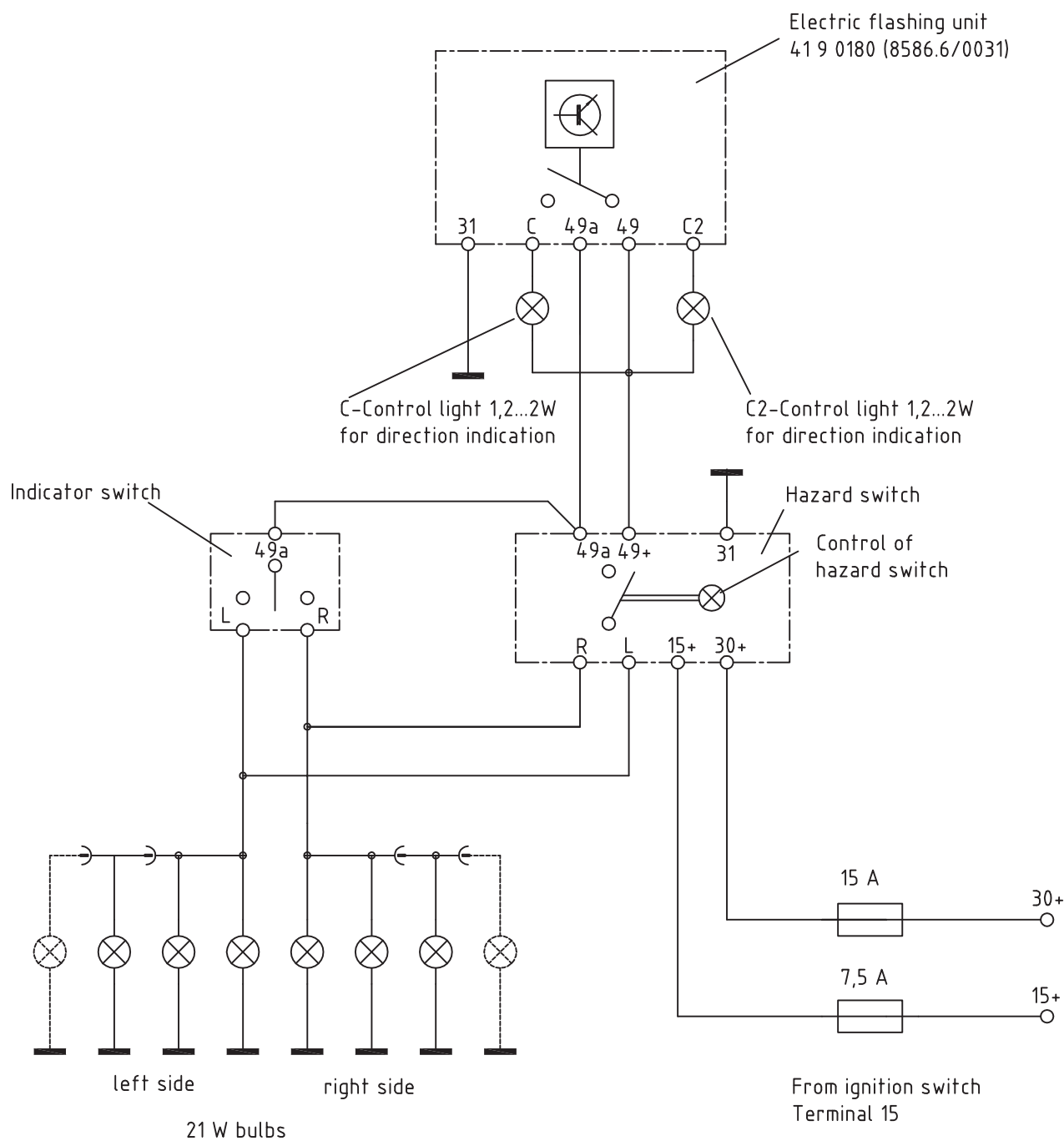
Connection:

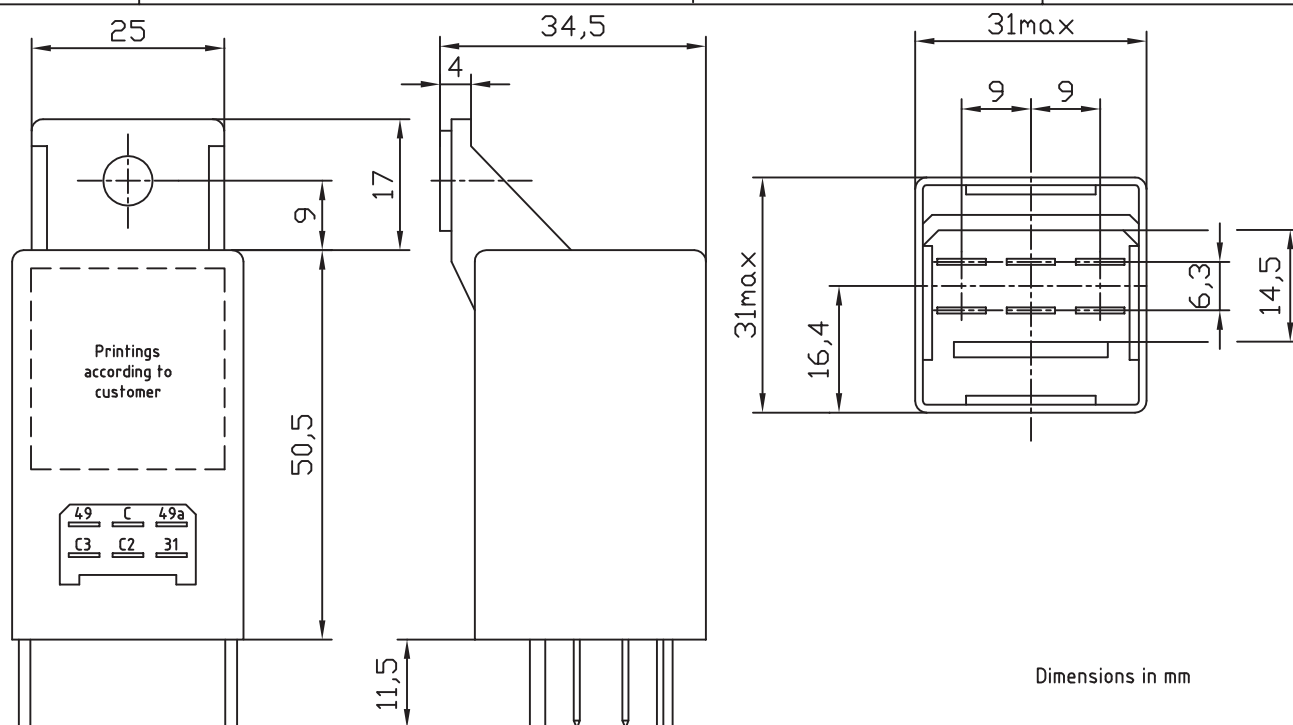
According to 41 9 0180 S Page 2

Installation:

Mounting vertically, connections downwards

Connections for the single circuit flasher

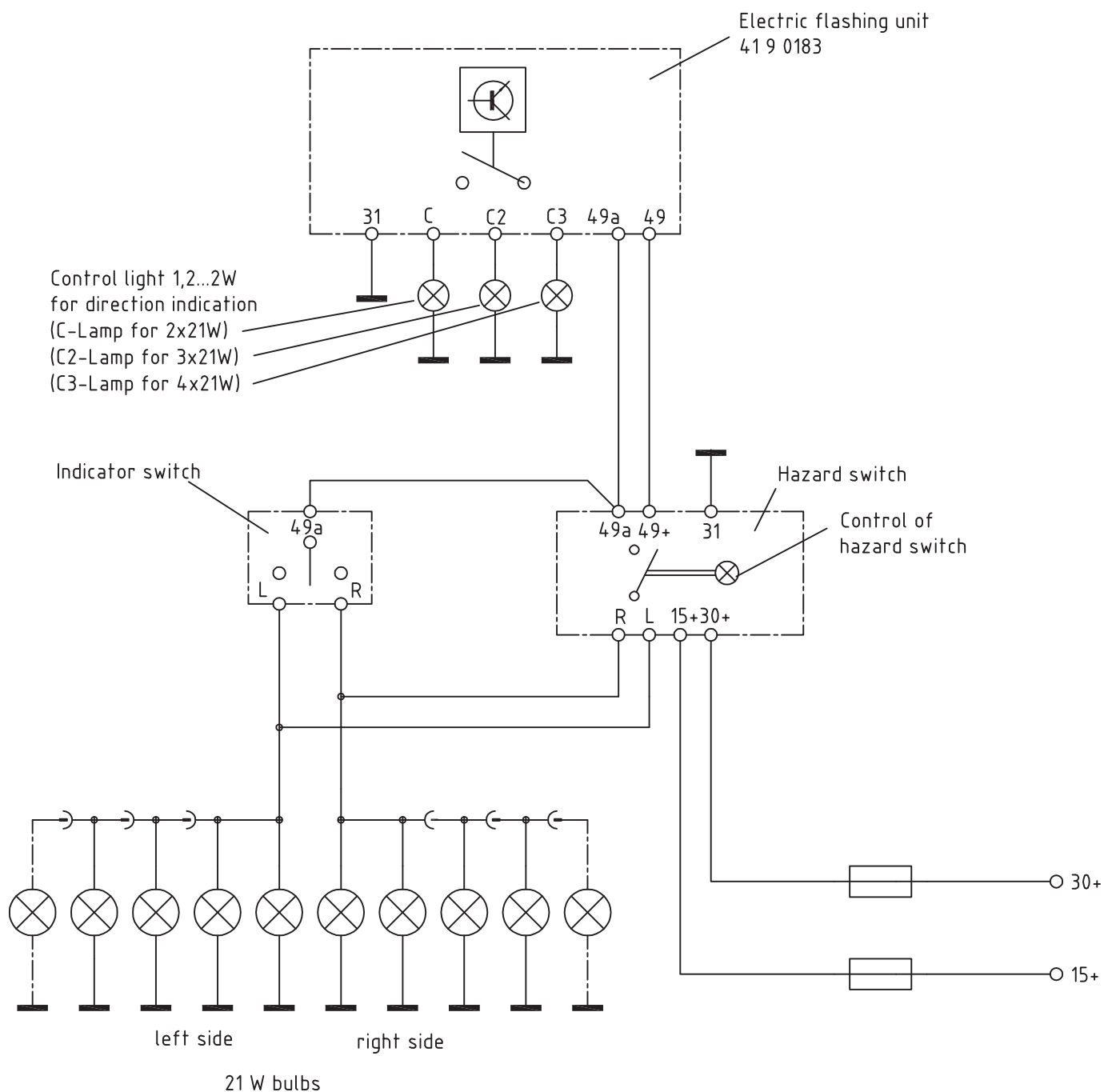


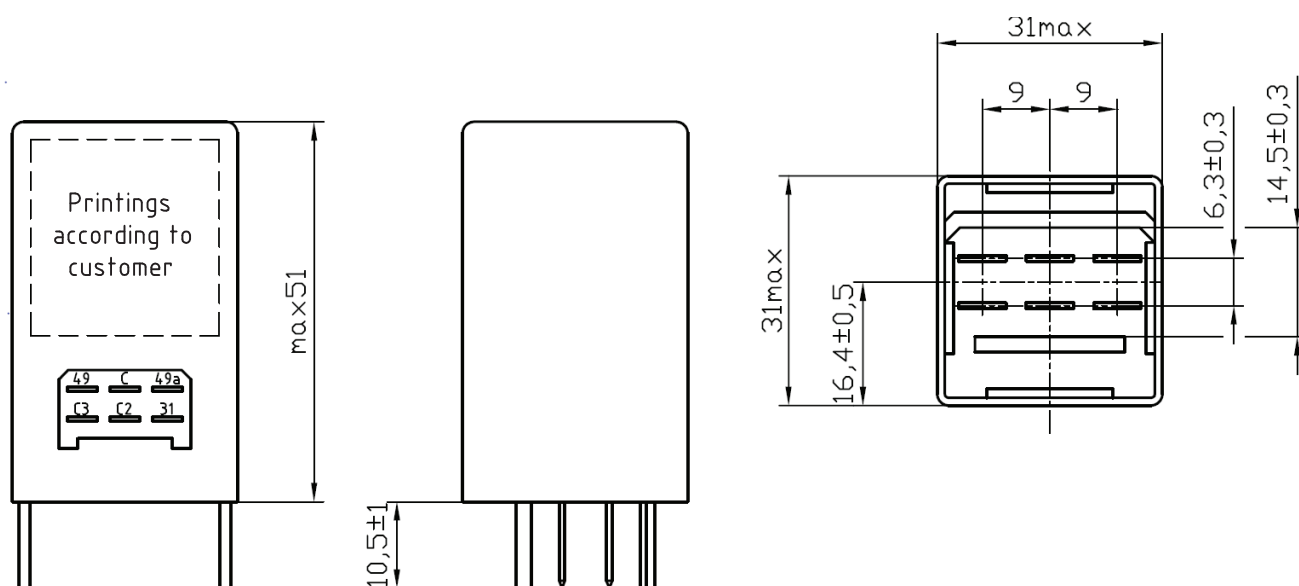


Order number: 41 9 0183

<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for commercial vehicle without resp. with up to 2 trailers, installation of additional front device is possible (single flasher unit)
<u>Functions:</u>	Direction indication (2+1+1)x21W resp. (2+1+1+1)x21W Warning flashing 8x21W resp. 10x21W Control 1,2...2W
<u>Control of functions:</u>	Failure of a flashing light (2+1+1)x21W: C3-Control remains dark Failure of a flashing light (2+1)x21W: C3- and C2-Controls remain dark Failure of a flashing light 2x21W: C3,C2 and C-Controls remain dark
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, terminal according to DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8 OH.
<u>Degree of protection:</u>	IP50 according to DIN 40050-9
<u>Frequency:</u>	90±30 flashes per minute for direction and warning flashing
<u>Duration of light pulse:</u>	30%...75%
<u>Operation Voltage:</u>	9 VDC...16 VDC
<u>Operation temperature:</u>	-40°C...+85°
<u>Electromagnetic compatibility:</u>	Interference immunity and emission according to 72/245/EWG und ISO 7637-1
<u>Durability:</u>	Direction indication 4 x 21W 200h 15s on 15s off Warning flashing 8 x 21W 50h permanent flashing
<u>Electrical connection:</u>	According to 41 9 0183 S Page 2
<u>Installation:</u>	On plug base

Connections for the single flasher unit



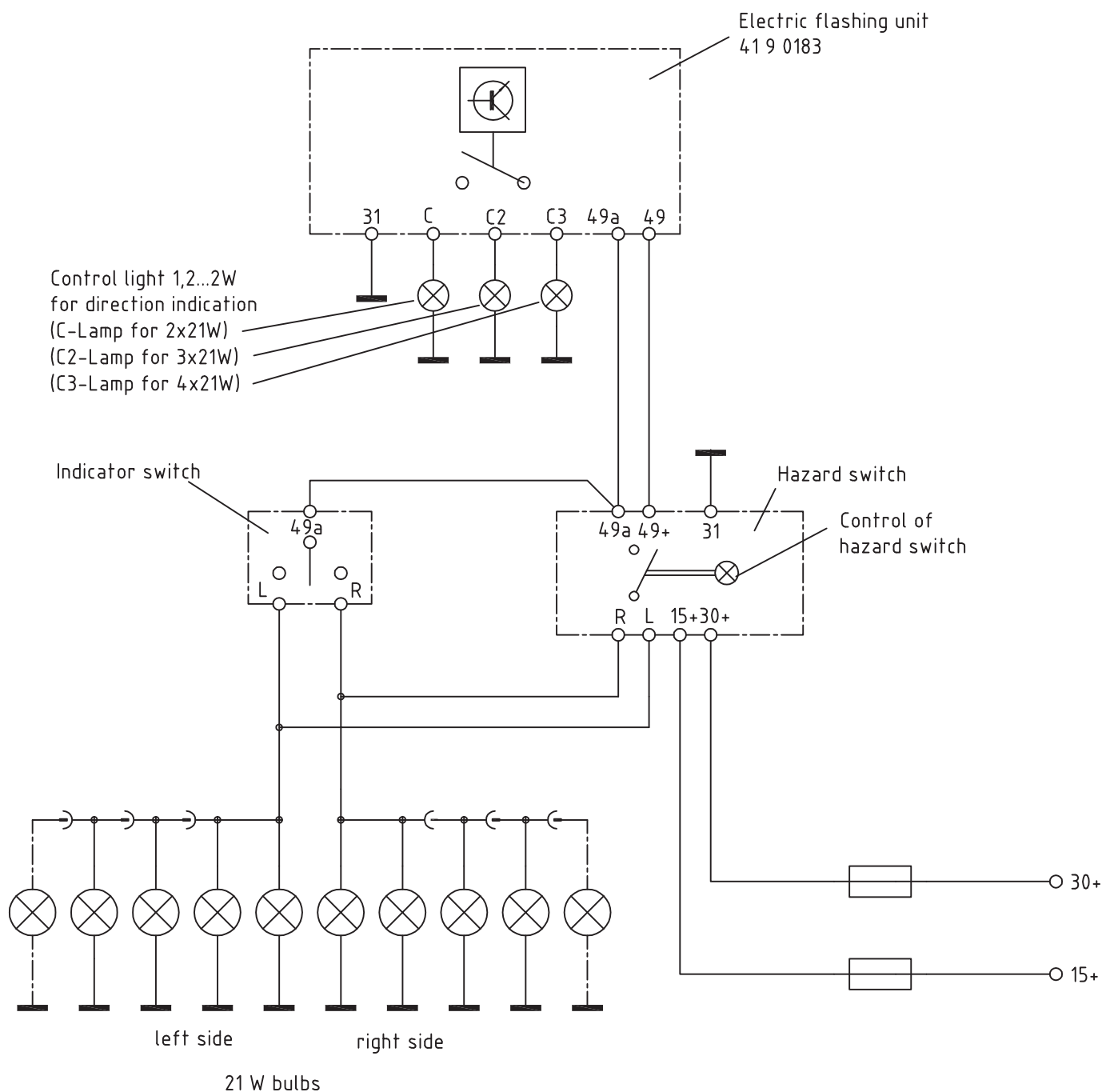


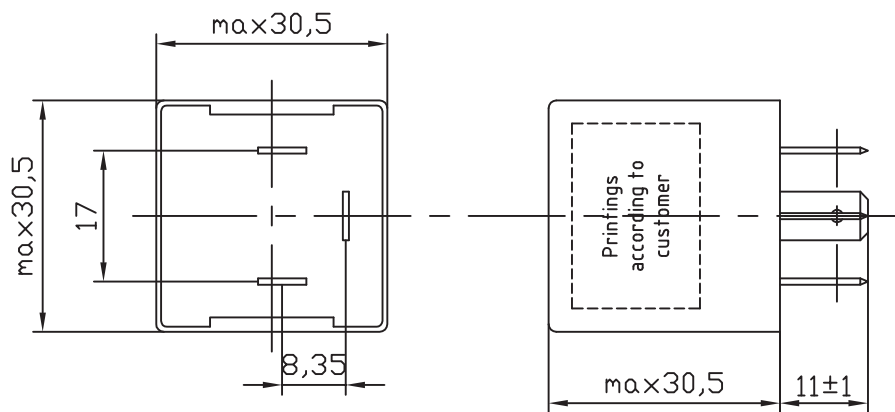
Dimensions in mm

Order number: 41 9 0184

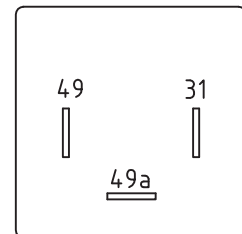
<u>Nominal voltage:</u>	12 VDC
<u>Application:</u>	Suitable for commercial vehicle without resp. with up to 2 trailers, installation of additional front device is possible (single flasher unit)
<u>Functions:</u>	Direction indication (2+1+1)x21W resp. (2+1+1+1)x21W Warning flashing 8x21W resp. 10x21W Control 1,2...2W
<u>Control of functions:</u>	Failure of a flashing light (2+1+1)x21W: C3-Control remains dark Failure of a flashing light (2+1)x21W: C3- and C2-Controls remain dark Failure of a flashing light 2x21W: C3,C2 and C-Controls remain dark
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according to ISO 7588-CA, terminal according to DIN EN ISO 8092-1 2,8x0,8 OH / 6,3x0,8 OH.
<u>Degree of protection:</u>	IP50 according to DIN 40050-9
<u>Frequency:</u>	90±30 flashes per minute for direction and warning flashing
<u>Duration of light pulse:</u>	30%...75%
<u>Operation Voltage:</u>	9 VDC...16 VDC
<u>Operation temperature:</u>	-40°C...+85°
<u>Electromagnetic compatibility:</u>	Interference immunity and emission according to 72/245/EWG und ISO 7637-1
<u>Durability:</u>	Direction indication 4 x 21W 200h 15s on 15s off Warning flashing 8 x 21W 50h permanent flashing
<u>Electrical connection:</u>	According to 41 9 0184 S Page 2
<u>Installation:</u>	On plug base

Connections for the single flasher unit





Connection assignment

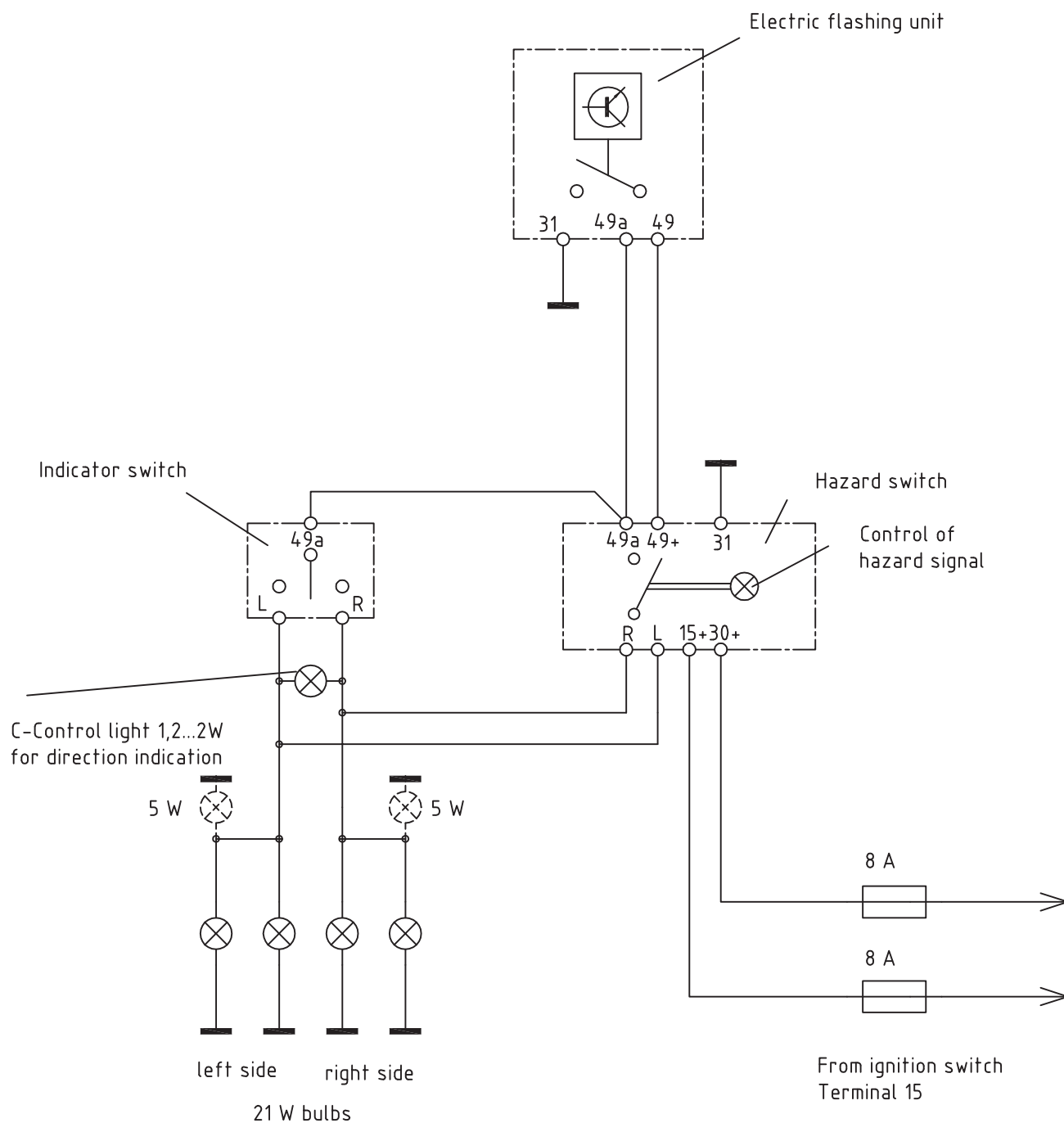


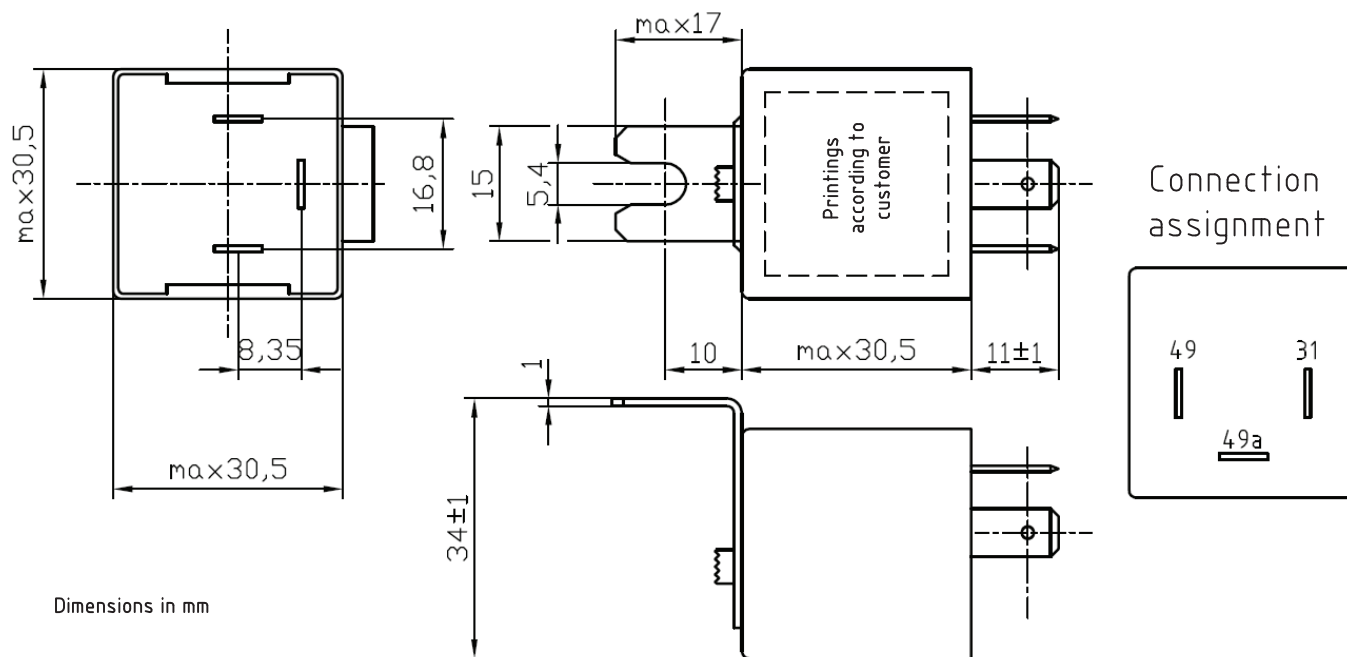
Dimensions in mm

Order number.: 41 9 0114

<u>Nominal voltage:</u>	24 VDC
<u>Usage:</u>	Suitable for passenger cars and commercial vehicles
<u>Functions:</u>	Direction indication 2 x 21 W Warning flashing 4 x 21 W
<u>Control funktion:</u>	Failure of a flashing light 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Protection degree:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operation voltage:</u>	21 VDC...28 VDC
<u>Electromagnetic compatibility:</u>	Immunity and emitted interference according to guideline 72/245/EWG
<u>Operation temperature:</u>	-40°C...+85°C
<u>Connection:</u>	According to 41 9 0114 S page 2
<u>Installation:</u>	Plug base resp. central electronics

Connections for the single circuit flasher 2(4)x21W+0...5(0...10)W

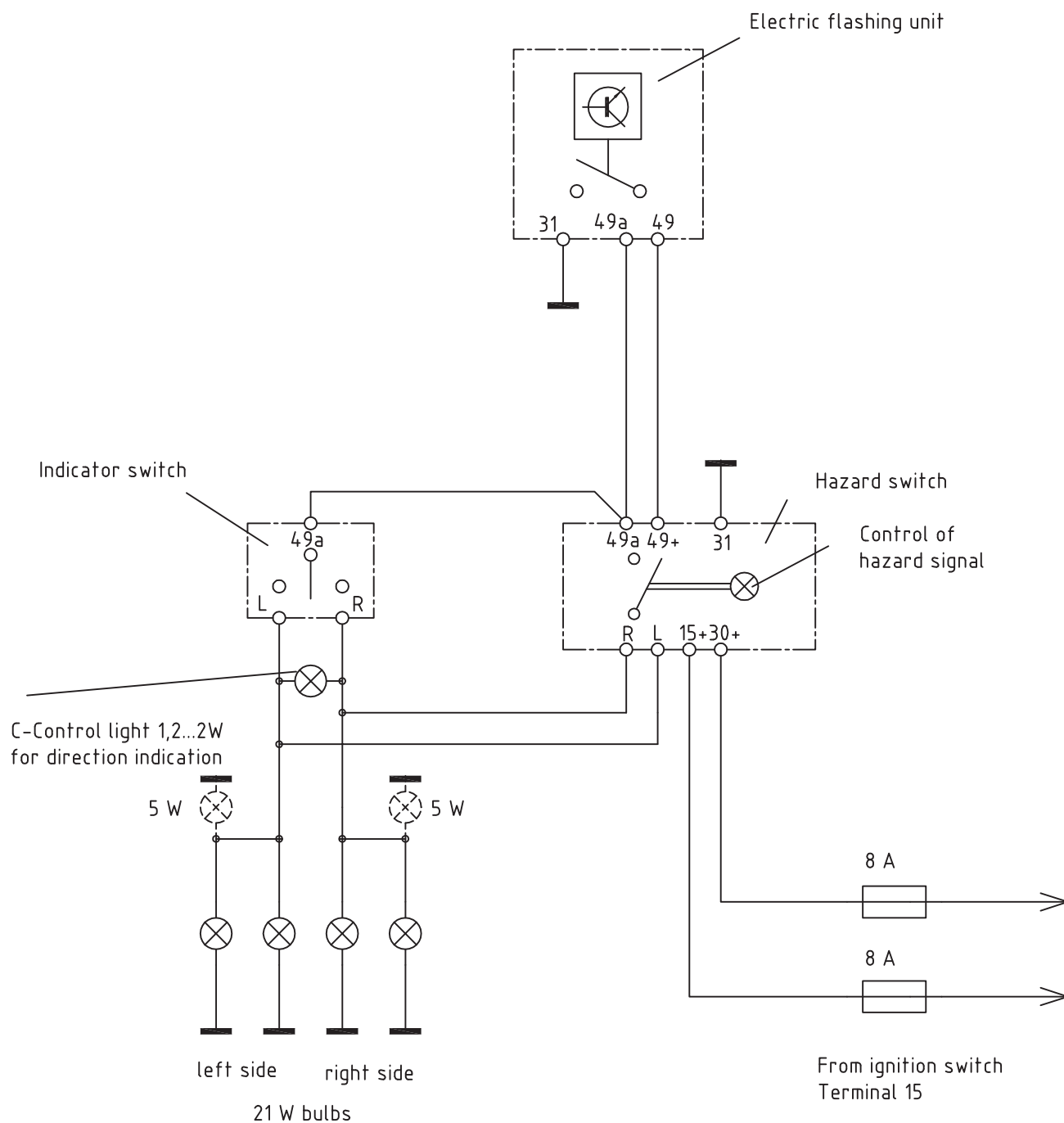


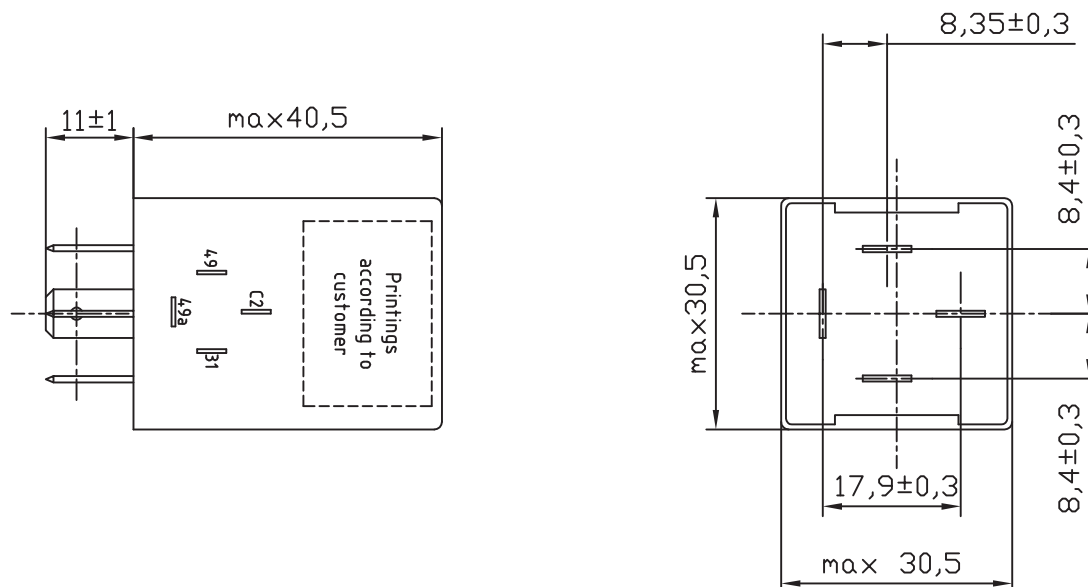


Order number.: 41 9 0115

<u>Nominal voltage:</u>	24 VDC
<u>Usage:</u>	Suitable for passenger cars and commercial vehicles
<u>Functions:</u>	Direction indication 2 x 21 W Warning flashing 4 x 21 W
<u>Control funktion:</u>	Failure of a flashing light 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Protection degree:</u>	IP 00 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...75%
<u>Operation voltage:</u>	21 VDC...28 VDC
<u>Electromagnetic compatibility:</u>	Immunity and emitted interference according to guideline 72/245/EWG
<u>Operation temperature:</u>	-40°C...+85°C
<u>Connection:</u>	According to 41 9 0115 S page 2
<u>Installation:</u>	Plug base resp. central electronics

Connections for the single circuit flasher 2(4)x21W+0...5(0...10)W

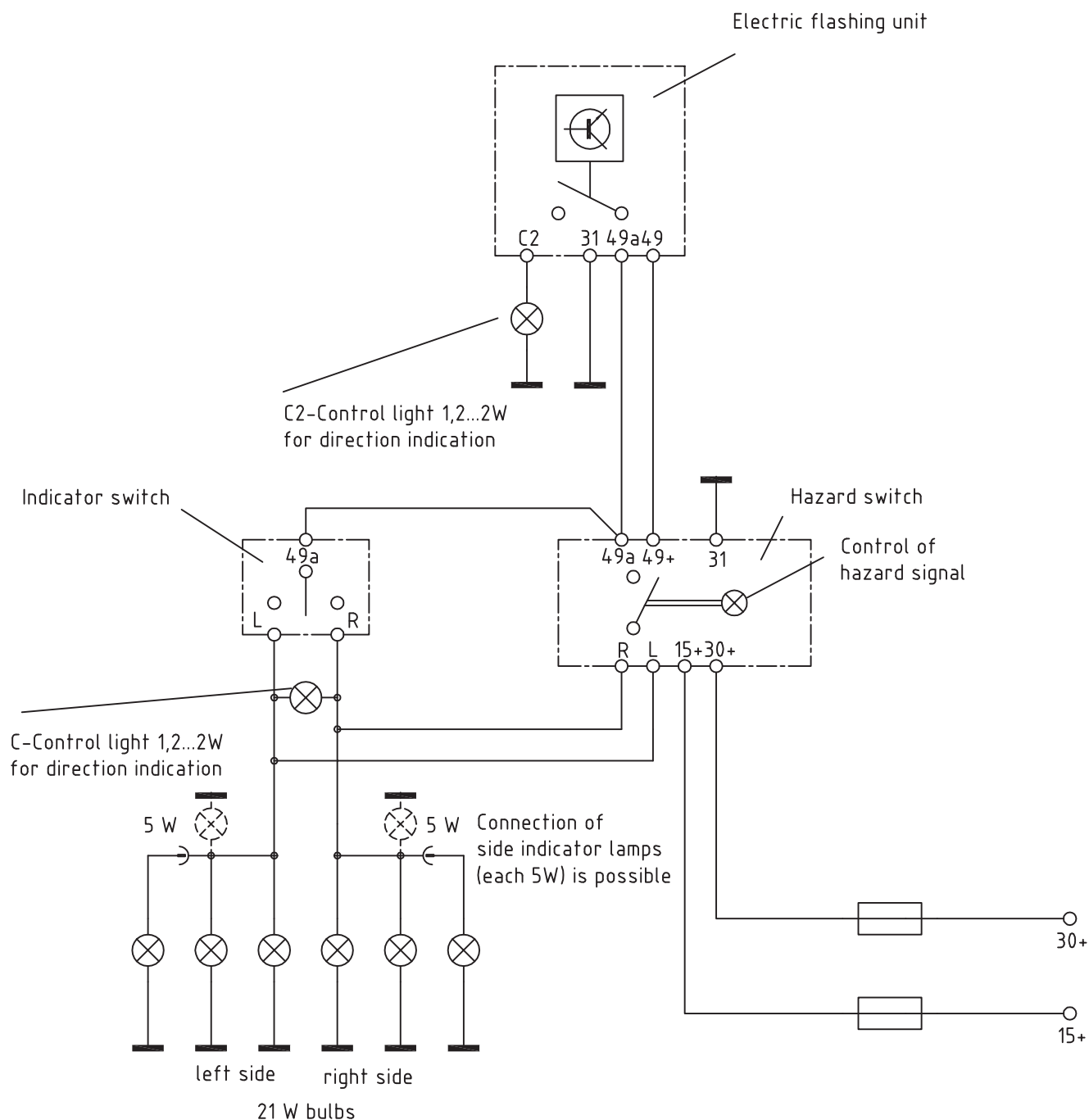


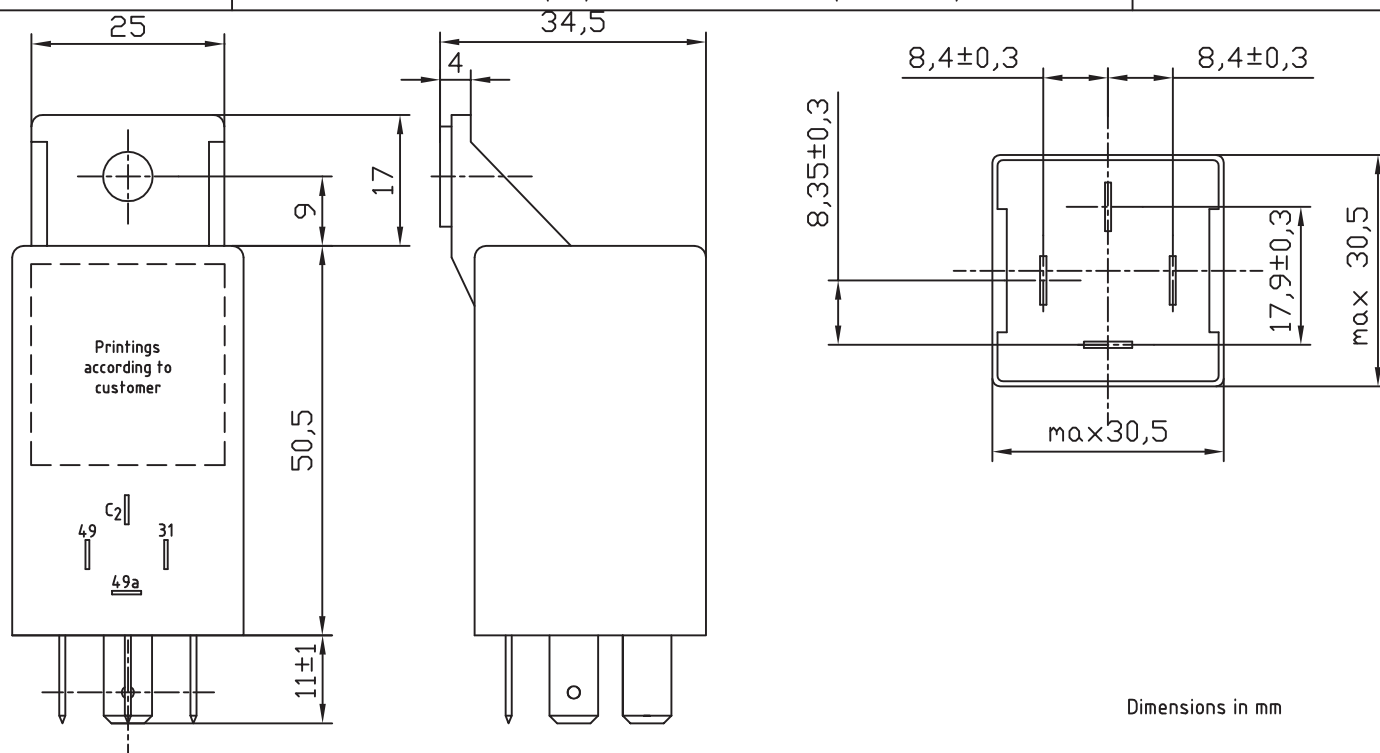


Order number: 41 9 0116

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with or without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control C2 1,2...2W
<u>Control function:</u>	Control for passenger car or commercial vehicle with resp. without trailer: Frequency increase >100% Control for passenger car / commercial vehicle with trailer Failure of a flashing light 21W: C-Control remains dark Failure of two flashing lights 21W: Frequency increase >100% The control output C2 is short-circuit proof.
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Protection degree:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±15 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...55%
<u>Operation voltage:</u>	21 VDC...30 VDC
<u>Electromagnetic compatibility:</u>	Immunity and emitted interference according to guideline 72/245/EWG and ISO 7637-2
<u>Operation temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0116 S page 2
<u>Installation:</u>	Plug base resp. central electronics

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

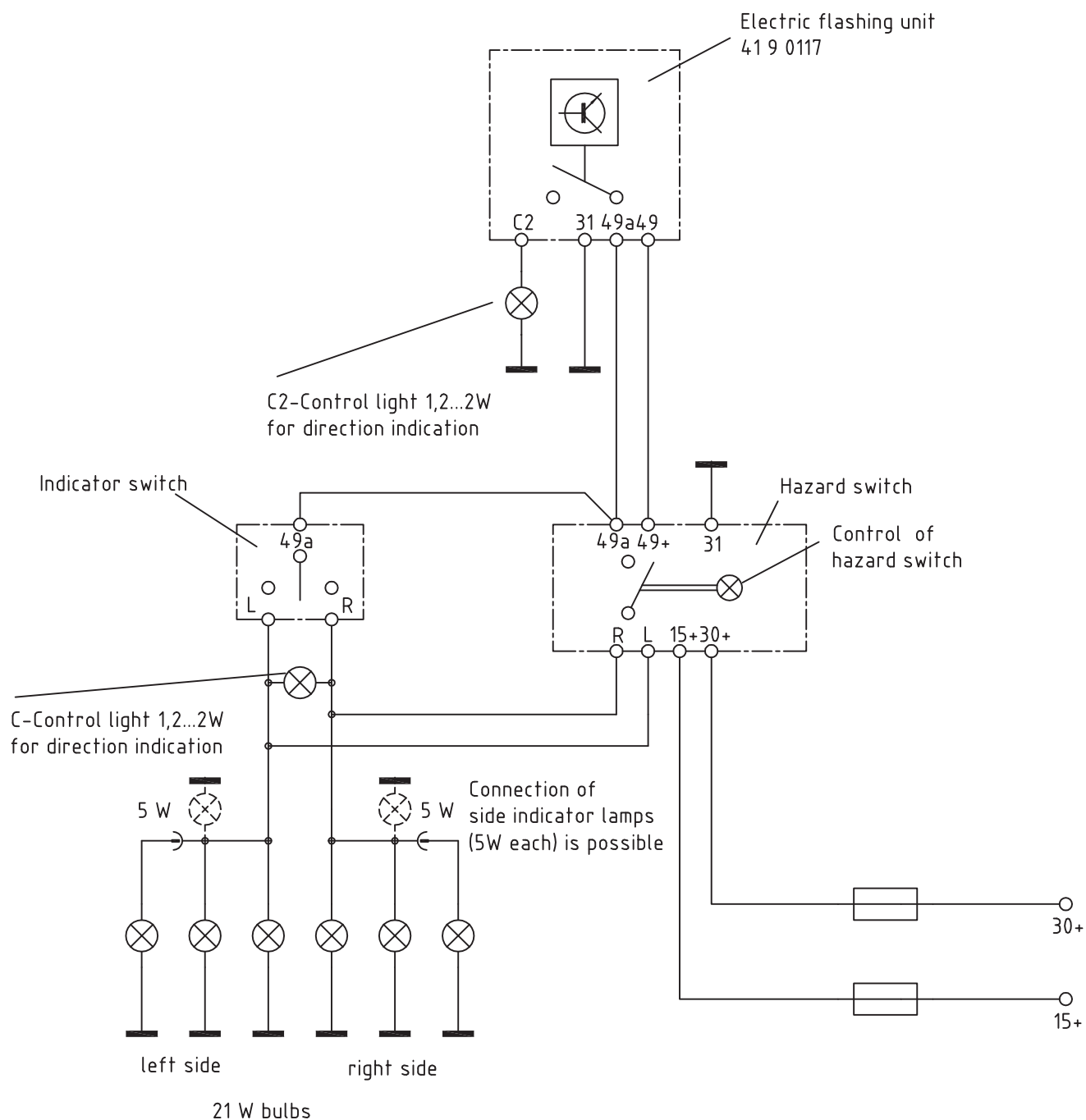


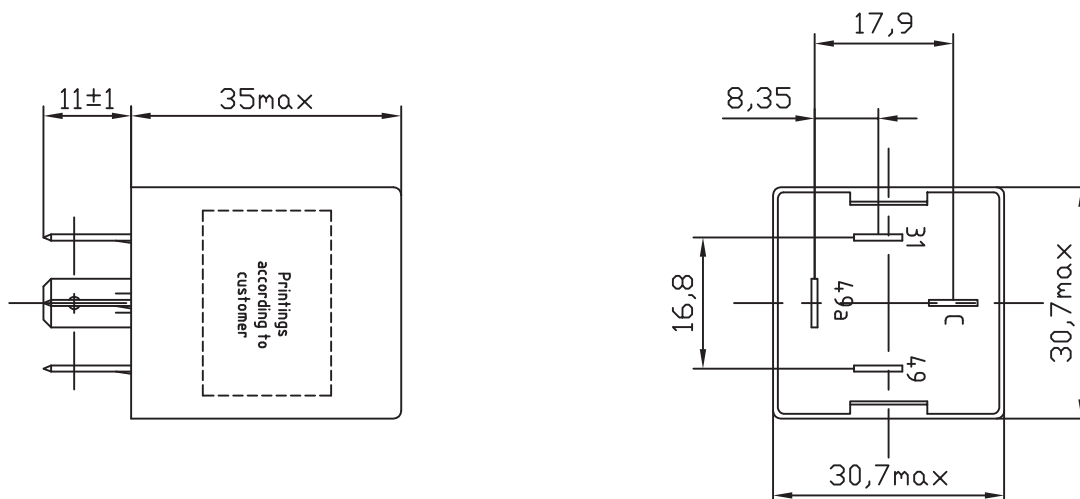


Order number: 41 9 0117

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with or without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control 1,2...2W
<u>Control of functions:</u>	Control of vehicle without trailer: Failure of a flashing light 21W: Frequency increase >100% Control of vehicle with trailer: Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100% Control output C2 is short-circuit-proof.
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 40 DIN 40 050-9
<u>Frequency:</u>	90±15 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...55%
<u>Operating voltage:</u>	21 VDC...30 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to 72/245/EWG and ISO 7637-2
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to page 2
<u>Installation:</u>	On plug base resp. central electronics

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W





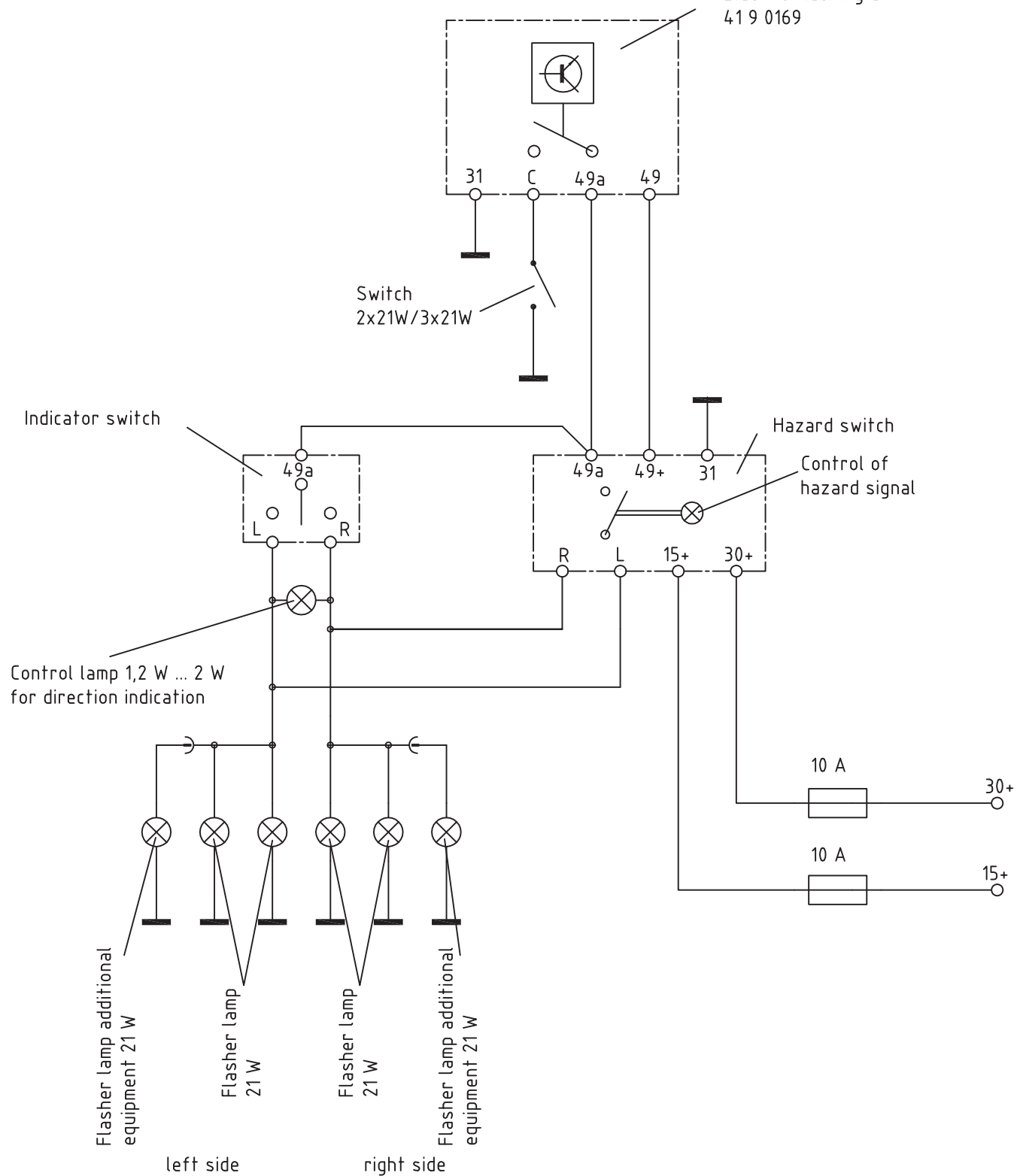
Dimensions in mm

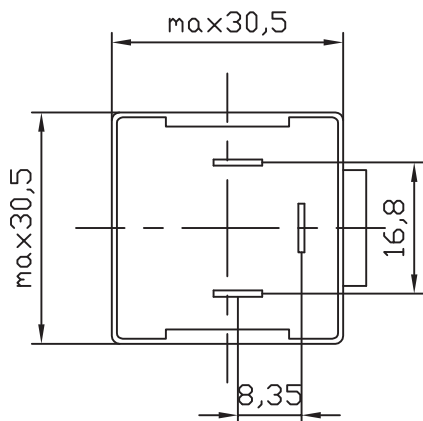
Order number: 41 9 0127

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	For use on commercial vehicle without or with trailer.
<u>Functions:</u>	The flasher is built up of one flasher system 2x21W and one flasher system 3x21W. The alternation from 2x21W to 3x21W effected by temporary connection of input C with ground. The interruption of the supply voltage (pin 49) resets to 2x21W
<u>Flashing output:</u>	Direction indication 2x21W+2W or 3x21W+2W Warning flashing 4x21W or 6x21W
<u>Control of functions:</u>	In case of failure of a flasher lamp the flasher blinks with a higher frequency.
<u>Compliance:</u>	Plastic housing with terminals in accordance with ISO 7588, Terminals in accordance with ISO 8092-1, size 6,3x0,8 OH
<u>Frequency:</u>	90 ± 30 flashes per minute
<u>Duration of light pulse:</u>	40%...75%
<u>Operating voltage:</u>	21 VDC...28 VDC
<u>Overvoltage protection:</u>	26V (5min)
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 75/322/EWG
<u>Water splash protection:</u>	Housing IP 53 in accordance with DIN 40 050-9

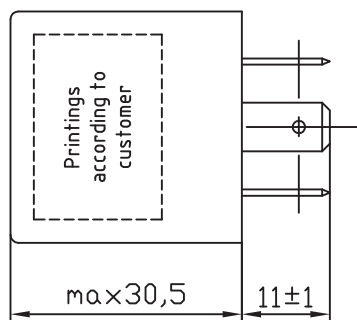
Connection for the flasher

Electric flashing unit
41 9 0169





Dimensions in mm



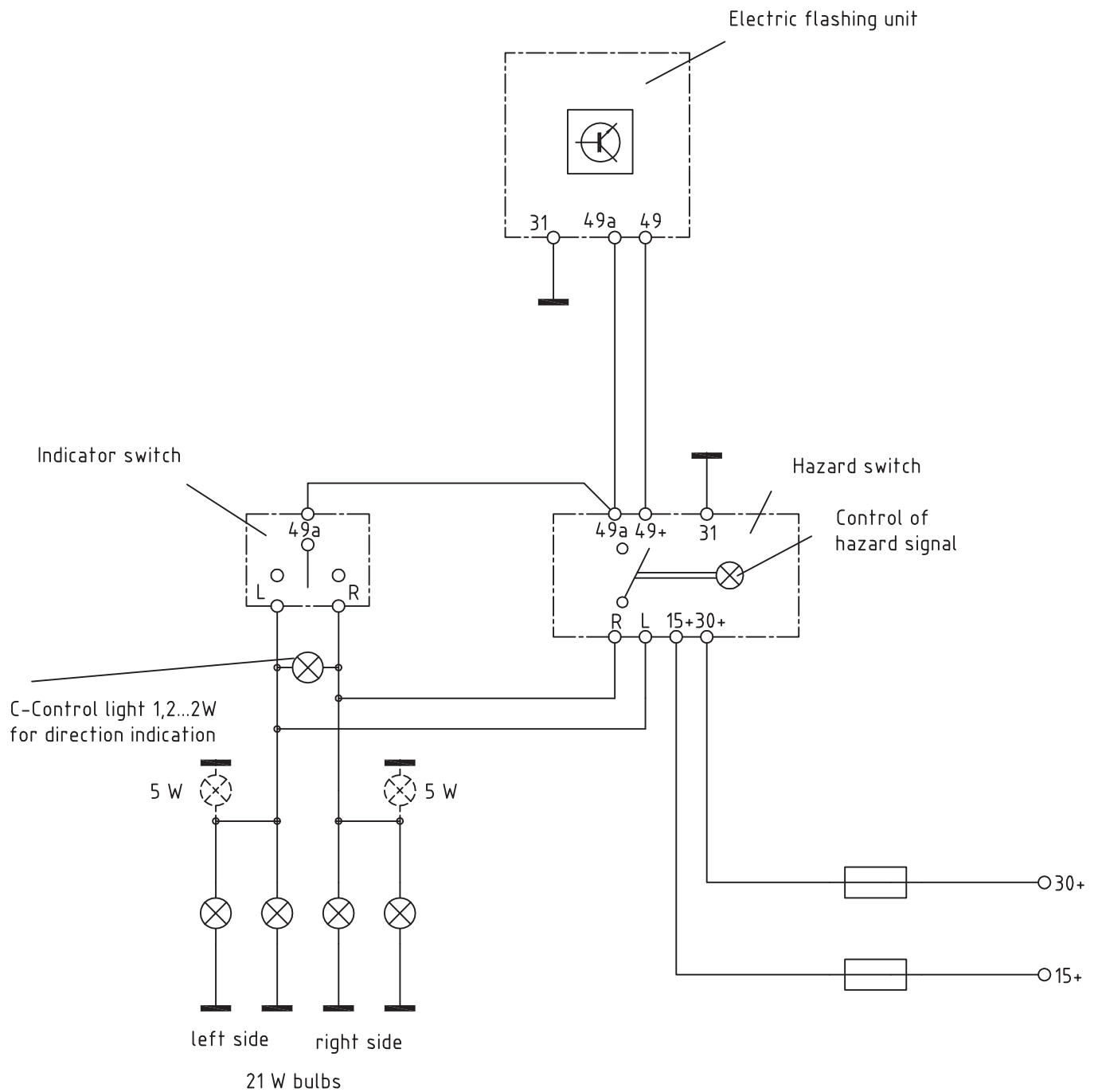
Connection
assignment

49   31
49a

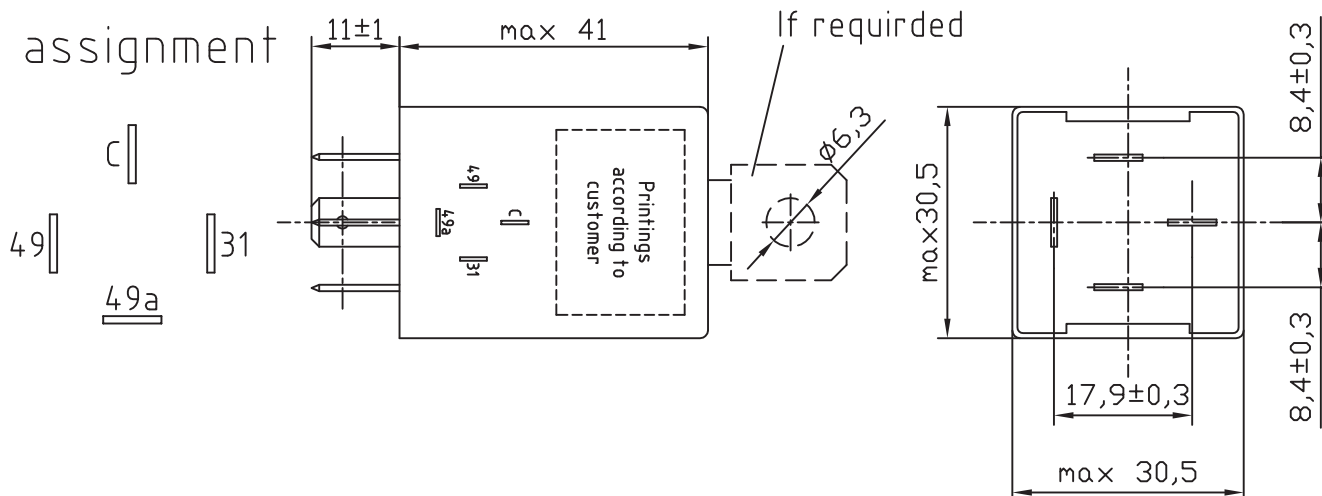
Order number: 41 9 0147

<u>Nominal Voltage:</u>	24 VDC
<u>Usage:</u>	Suitable for passenger cars and commercial vehicles
<u>Connection Values:</u>	Direction indication 2 x 21 W + (0...5)W Warning flashing 4 x 21 W + (0...10)W
<u>Control function:</u>	Failure of a flashing light 21W:Frequency Increase >100%
<u>Compliance:</u>	Plastic housing with fixation bracket ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse :</u>	40%...75%
<u>Operation voltage:</u>	18 VDC...32 VDC
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emission according to guideline SAE J 113 and 72/245/EWG
<u>Operation temperature:</u>	-40°C...+85°C
<u>Lifespan:</u>	Minimum 2000h (T=23°C,U=24VDC,P=4x21W+10W)
<u>Connection :</u>	According to 41 9 0147 S Page 2
<u>Installation:</u>	Plug base resp. central electronics

Connection Plan for Flasher Unit 2(4)x21W+0...5(0...10)W

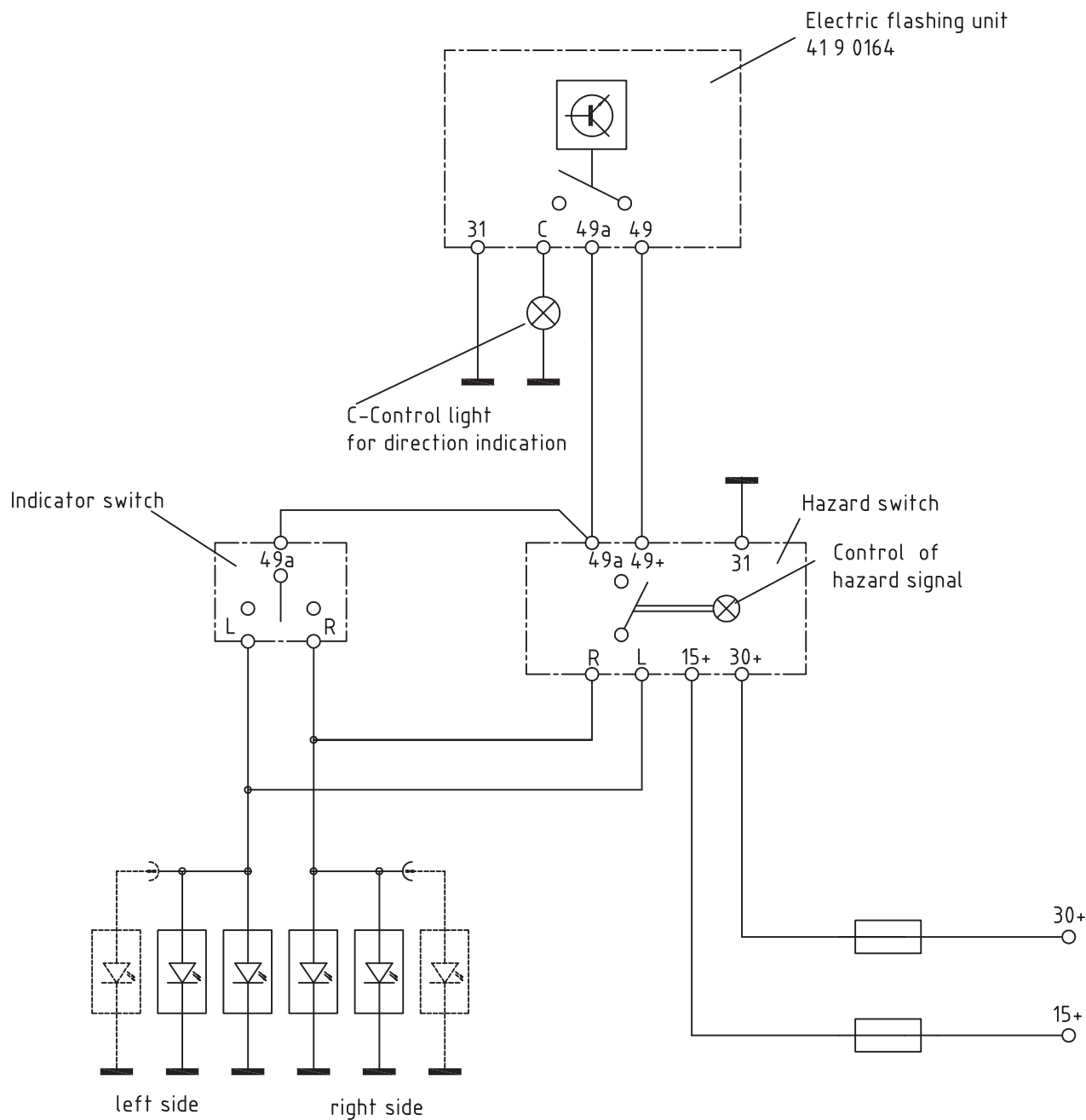


Connection assignment



Order number: 41 9 0164

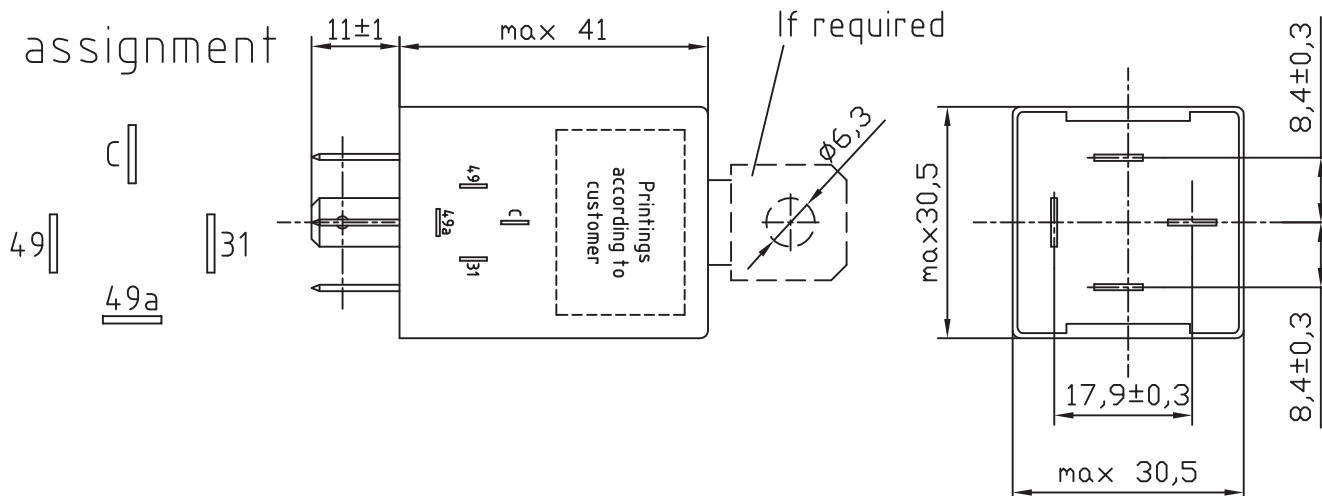
<u>Nominal voltage:</u>	24V
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with or without trailer
<u>Functions:</u>	Direction indication: (2+1) x 21W or LED- Lights, bulbs and LED- Lights freely combinable Warning flashing: 6x21W or LED- Lights Control: max 3W
<u>Control of functions:</u>	Passenger car or commercial vehicle without trailer: Failure of a flashing light or LED: Frequency increase =100% Passenger car or commercial vehicle with trailer: Failure of a flashing light or LED: C-Control remains dark Failure of two flashing lights or LEDs: Frequency increase =100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 53 DIN 40050-9
<u>Frequency :</u>	90 ± 30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40...75%
<u>Operating voltage:</u>	18VDC...32VDC
<u>Function voltage:</u>	20VDC...28VDC
<u>Overvoltage protection:</u>	80V
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 72/245/EWG, ISO 7637-2DIS 2000
<u>Operating temperature:</u>	-40...+85°C
<u>Electrcal connection:</u>	According to 41 9 0164 S Page 2
<u>Installation:</u>	On socket



Choice between 21W bulbs or LED-Lights, freely combinable

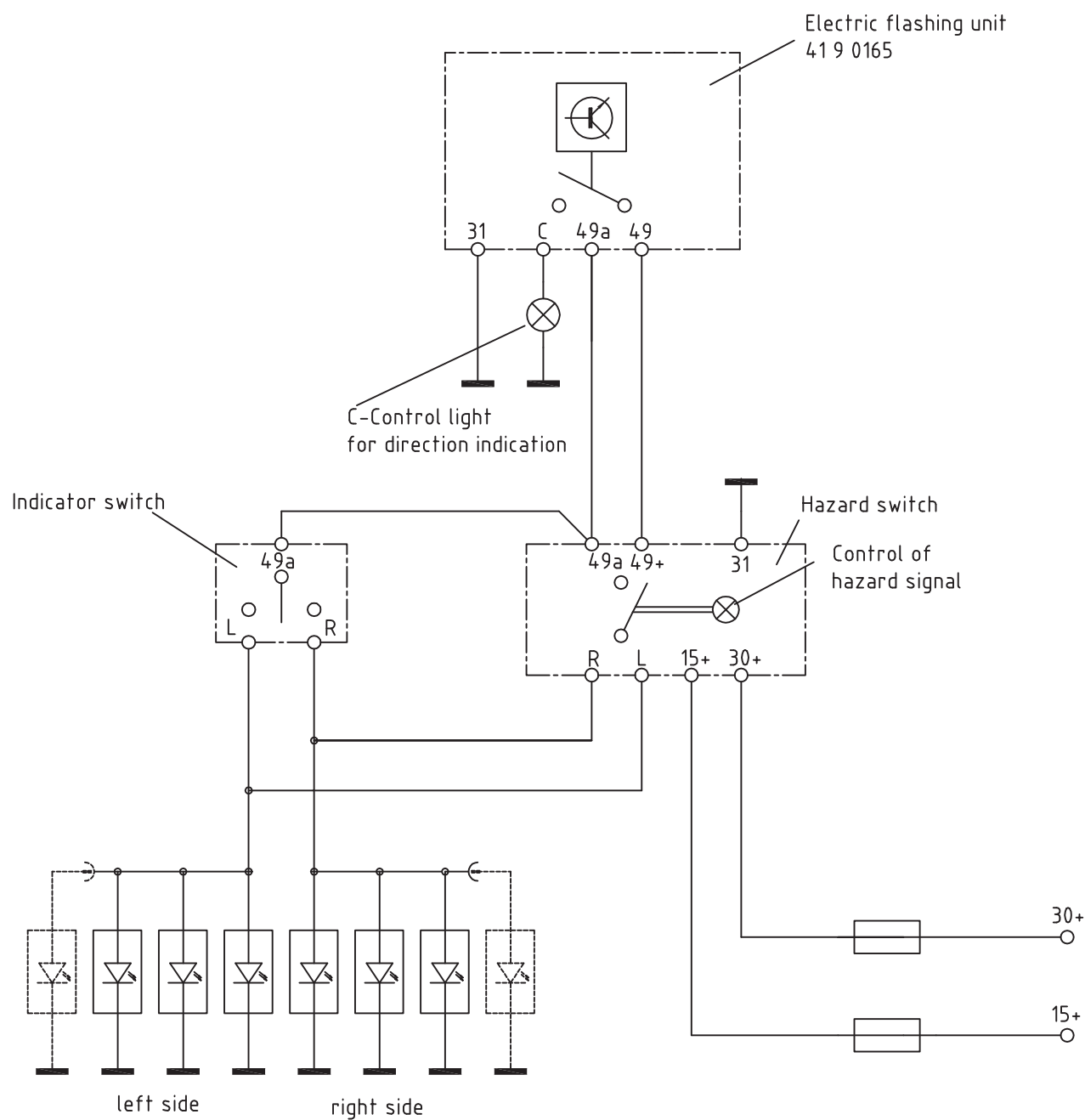
Operating voltage: 18V ... 32 Volt

Function voltage: 20V ... 28 Volt



Order number: 419 0165

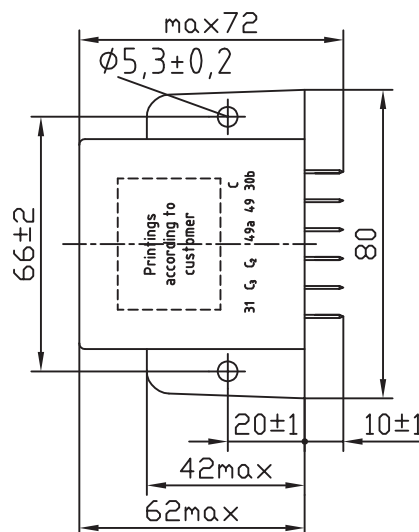
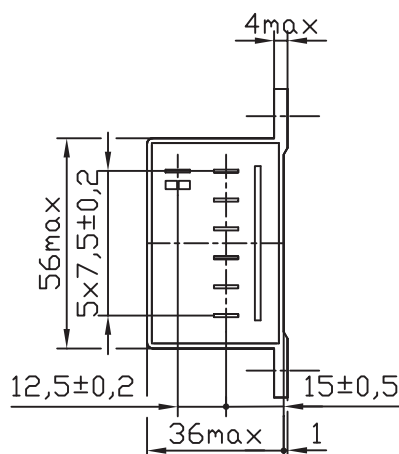
<u>Nominal voltage:</u>	24V
<u>Application:</u>	Suitable for passenger cars and commercial vehicles with or without trailer
<u>Functions:</u>	Direction indication: (3+1) x 21W or LED- Lights, bulbs and LED- Lights freely combinable Warning flashing: 8x21W or LED- Lights Control: max 3W
<u>Control of functions:</u>	Passenger car or commercial vehicle without trailer: Failure of a flashing light or LED: Frequency increase >100% Passenger car or commercial vehicle with trailer: Failure of a flashing light or LED: C-Control remains dark Failure of two flashing lights or LEDs: Frequency increase =100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	IP 53 DIN 40050-9
<u>Frequency :</u>	90 ± 30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40...75%
<u>Operating voltage:</u>	18VDC...32VDC
<u>Function voltage:</u>	20VDC...28VDC
<u>Overvoltage protection:</u>	80V
<u>Electromagnetic compatibility:</u>	Interference immunity and interference emissions according to 72/245/EWG, ISO 7637-2DIS 2000
<u>Operating temperature:</u>	-40...+85°C
<u>Electrcal connection:</u>	According to 41 9 0165 S Page 2
<u>Installation:</u>	On socket



Choice between 21W bulbs or LED-Lights, freely combinable

Operating voltage: 18V ... 32 Volt

Function voltage: 20V ... 28 Volt

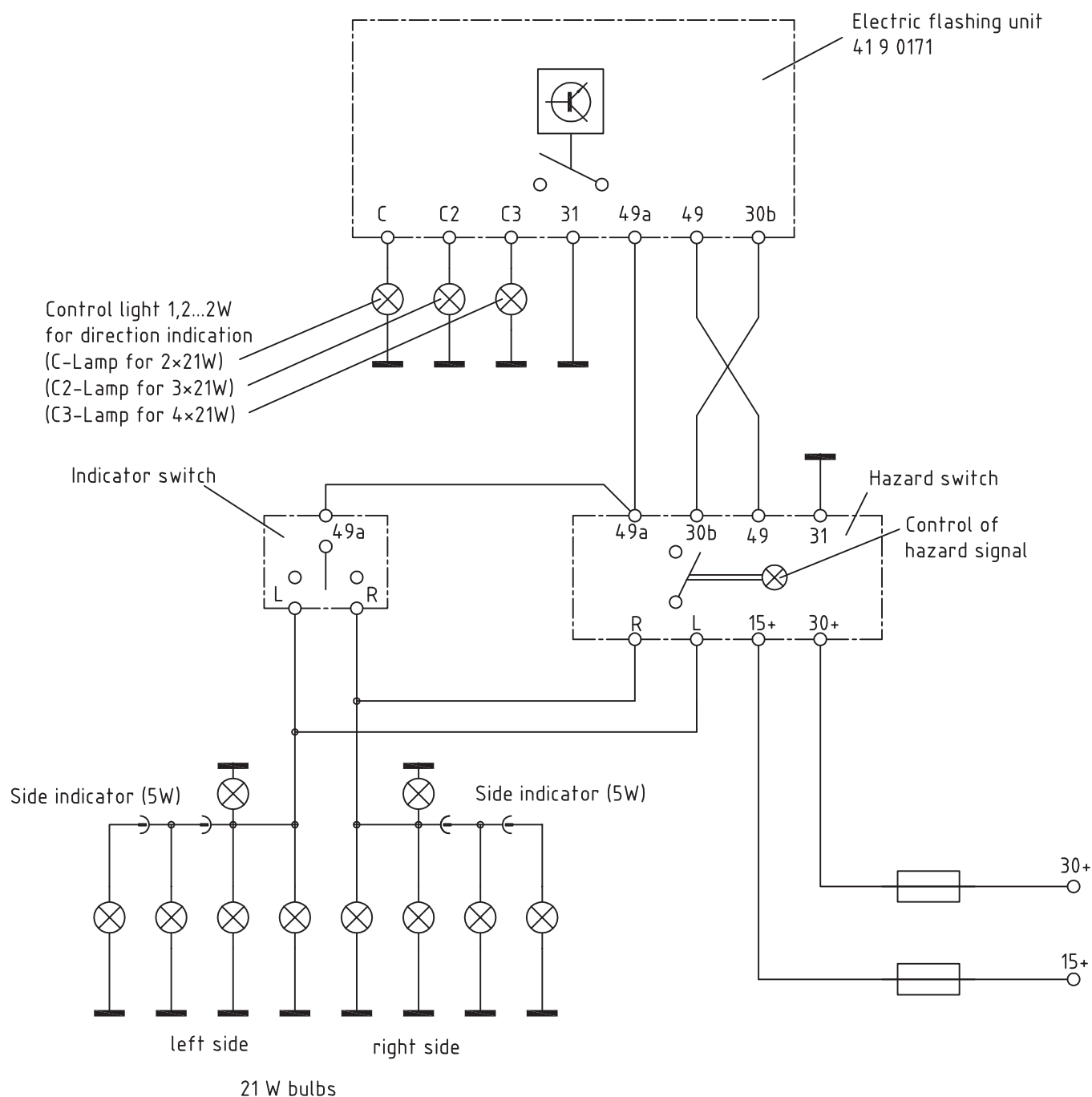


Dimensions in mm

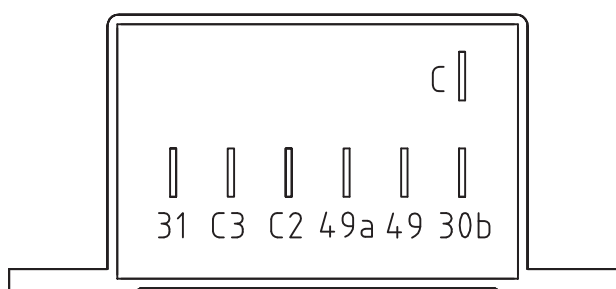
Order number: 41 9 0171

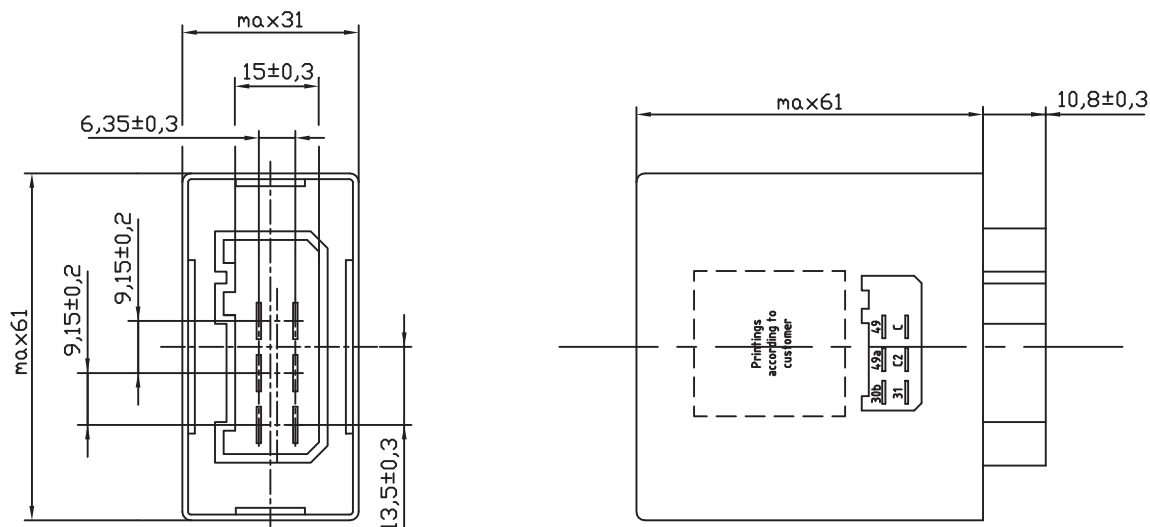
<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Suitable for commercial vehicles without or up to two trailers (single circuit flasher)
<u>Functions:</u>	Direction indication (2+1+1)x21W+5W or (3+1)x21W+5W Warning flashing 8x21W+10W Control 1,2...2W
<u>Control of functions:</u>	Failure of a flashing light (2+1+1)x21W or (3+1)x21W: C3-Control remains dark Failure of a flashing light (2+1)x21W or 3x21W: C3- and C2-Controls remain dark Failure of a flashing light 2x21W: C3, C2 and C-Control lights remain dark No control while warning flashing
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation brackets according to ISO 7588-CA, Terminals according to DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Degree of protection:</u>	Plug connections IP 20, housing IP 33 (connections downwards), IP 40 DIN 40 050-9
<u>Frequency:</u>	90±30 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	30%...75%
<u>Operating voltage:</u>	21,6 VDC...30 VDC
<u>Electromagnetic compatibility:</u>	According to 72/245/EWG standard
<u>Operating temperature:</u>	-40°C...+85°C
<u>Electrical connection:</u>	According to 41 9 0171 S Page 2
<u>Installation:</u>	Mounting vertically, terminals downwards, vibration level max 5g

Connections for the single circuit flasher (2+1+1)x21W+5W bzw. (3+1)x21W+5W



Connection
assignment





Dimensions in mm

Order number: 41 9 0174

<u>Nominal voltage:</u>	24 VDC
<u>Application:</u>	Fully electronic flasher Suitable for trucks with or without trailer
<u>Functions:</u>	Direction indication (2+1)x21W+(0...5)W Warning flashing 6x21W+(0...10)W Control 1,2...2W
<u>Control of functions:</u>	Control for passenger car or commercial vehicle without trailer Failure of a flashing light 21W: Frequency increase >100% Control for passenger car or commercial vehicle with resp. without trailer Failure of a flashing light 21W: C2-Control remains dark Failure of two flashing lights 21W: Frequency increase >100%
<u>Compliance:</u>	The device complies with the ISO 4082 standard, plastic housing with fixation bracket according DIN EN ISO 8092-1 6,3x0,8 OH.
<u>Protection degree:</u>	IP 43 DIN 40 050-9
<u>Frequency:</u>	90±15 flashes per minute for direction indication and warning flashing
<u>Duration of light pulse:</u>	40%...55%
<u>Operation voltage:</u>	20 VDC...30 VDC
<u>Electromagnetic compatibility:</u>	Immunity and emitted interference according to guideline 72/245/EWG and VOLVO-EMV-Spezifikation TDJD20000225
<u>Operation temperature:</u>	-40°C...+85°C
<u>Connection:</u>	According to page 2
<u>Installation:</u>	Plug base resp. central electronics

Connections for the single circuit flasher 2+1(6)x21W+0...5(0...10)W

