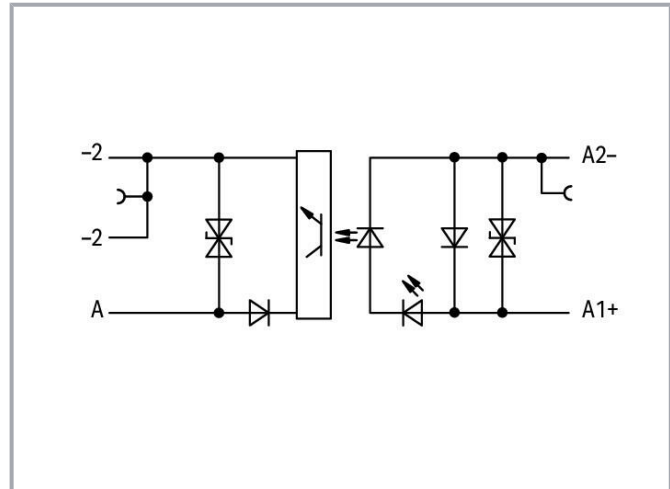


Data sheet | Item number: 859-793

Optocoupler module; Nominal input voltage: 5 VDC; Output voltage range: 3 ... 60 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Railway;
Module width: 6 mm; gray

www.wago.com/859-793

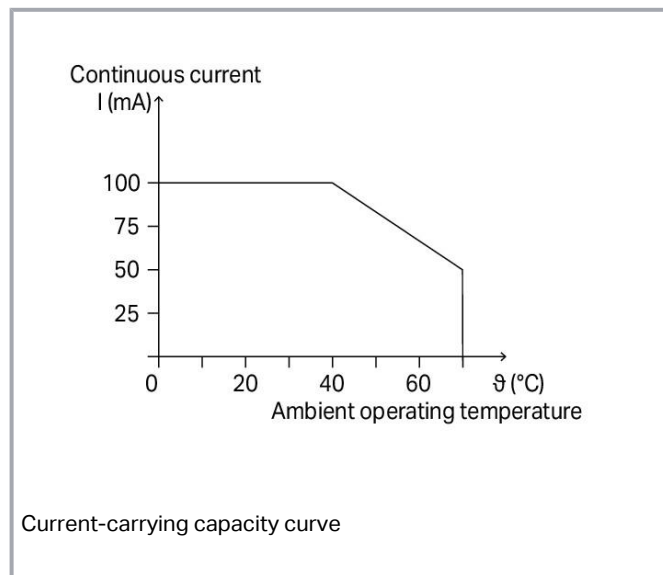


Color: —

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Data Notes

Note

Optocouplers and solid state relays are designed for use in signal processing networks, which are not supplied by the low-voltage power supply networks.

Technical data

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Control circuit

Nominal input voltage U_N	DC 5 V
Input voltage range (low level)	DC 0 ... 0.8 V
Input voltage range (high level)	DC 2 ... 6.25 V
Nominal input current at U_N	7.5 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	0.1 A
Output voltage range	DC 3 ... 60 V
Voltage drop at output (max.)	$\leq$ DC 2.5 V
Leakage current at rated voltage	$\leq$ 25 μ A
Turn-on time	$\leq$ 20 μ s
Turn-off time	$\leq$ 120 μ s
Switching frequency	$\leq$ 1.5 kHz

Signaling

Status indicator	Red LED
------------------	---------

Safety and protection

Rated voltage	300 V
Overvoltage category	II
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	2.5 kVrms
Insulation type (control/load circuit)	Basic insulation
Insulation type (adjacent devices)	Reinforced insulation (safe isolation)
Protection type	IP20
Note on protection type	in connected state or when using 859-525 end plate

Connection data

Connection technology	CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm ² / 28 ... 16 AWG

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Strip length	5 ... 6 mm / 0.2 ... 0.24 inch
--------------	--------------------------------

Physical data

Width	6 mm / 0.236 inch
Height	91 mm / 3.583 inch
Depth from upper-edge of DIN-rail	56 mm / 2.205 inch

Mechanical data

Mounting type	DIN-35 rail
Mounting position	Horizontal (standing/lying); vertical

Material data

Color	gray
Fire load	0.313 MJ
Weight	17.7 g

Environmental requirements

Ambient temperature (operation at U_N)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable per EN 61010-2-201	$\geq (T_{\text{surrounding air}} + 20 \text{ K})$
Relative humidity	5 ... 85 % (no condensation permissible)
Operating altitude (max.)	2000 m

Standards and specifications

Standards/Specifications	EN 61010-2-201 EN 61000-6-2 EN 61000-6-3 EN 50121-3-2 EN 61373 UL 508
--------------------------	--

Commercial data

Product Group	6 (Interface Electronics)
PU (SPU)	10 Stück
Packaging type	box

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Country of origin VKOrg Germany	DE
GTIN	4055143606271
Customs tariff number VKOrg Germany	85365005000

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
 Ex nA IIC T4 Gc	CCCEX CQST/CNEx	CNCA-C23-01	2021312304000982 (Ex nA IIC T4 Gc)
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Optional accessories

Tool

Operating tool		
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-720

End plate

Intermediate plate		
	Item no.: 859-525 End and intermediate plate; 1 mm thick; gray	www.wago.com/859-525

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Ferrule

Ferrule		
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-322

Marking accessories

Marking devices		
	Item no.: 210-110 Fiber-tip pen	www.wago.com/210-110
Marker		
	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-145
	Item no.: 248-501 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/248-501
	Item no.: 248-504 Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white	www.wago.com/248-504
	Item no.: 248-503 Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white	www.wago.com/248-503
	Item no.: 248-506 Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white	www.wago.com/248-506
	Item no.: 248-502 Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	www.wago.com/248-502

Testing and measuring

Testing accessories		
	Item no.: 859-500 WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm uninsulated; Test lead for soldering up to 0,5mm ²	www.wago.com/859-500

Jumpers

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
 Hansastr. 27
 32423 Minden
 Phone: +49571 887-0 | Fax: +49571 887-169
 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Jumper

Item no.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray	www.wago.com/859-408
Item no.: 859-404/000-005 Jumper; for jumper slot; 4-way; insulated; red	www.wago.com/859-404/000-005
Item no.: 859-404/000-006 Jumper; for jumper slot; 4-way; insulated; blue	www.wago.com/859-404/000-006
Item no.: 859-405/000-005 Jumper; for jumper slot; 5-way; insulated; red	www.wago.com/859-405/000-005
Item no.: 859-405/000-029 Jumper; for jumper slot; 5-way; insulated; yellow	www.wago.com/859-405/000-029
Item no.: 859-405 Jumper; for jumper slot; 5-way; insulated; light gray	www.wago.com/859-405
Item no.: 859-404/000-029 Jumper; for jumper slot; 4-way; insulated; yellow	www.wago.com/859-404/000-029
Item no.: 859-406 Jumper; for jumper slot; 6-way; insulated; light gray	www.wago.com/859-406
Item no.: 859-405/000-006 Jumper; for jumper slot; 5-way; insulated; blue	www.wago.com/859-405/000-006
Item no.: 859-406/000-005 Jumper; for jumper slot; 6-way; insulated; red	www.wago.com/859-406/000-005
Item no.: 859-409/000-029 Jumper; for jumper slot; 9-way; insulated; yellow	www.wago.com/859-409/000-029
Item no.: 859-410/000-005 Jumper; for jumper slot; 10-way; insulated; red	www.wago.com/859-410/000-005
Item no.: 859-410/000-029 Jumper; for jumper slot; 10-way; insulated; yellow	www.wago.com/859-410/000-029
Item no.: 859-410 Jumper; for jumper slot; 10-way; insulated; light gray	www.wago.com/859-410

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

**Item no.: 859-410/000-006**

Jumper; for jumper slot; 10-way; insulated; blue

www.wago.com/859-410/000-006**Item no.: 859-403/000-005**

Jumper; for jumper slot; 3-way; insulated; red

www.wago.com/859-403/000-005**Item no.: 859-402/000-029**

Jumper; for jumper slot; 2-way; insulated; yellow

www.wago.com/859-402/000-029**Item no.: 859-403/000-029**

Jumper; for jumper slot; 3-way; insulated; yellow

www.wago.com/859-403/000-029**Item no.: 859-403/000-006**

Jumper; for jumper slot; 3-way; insulated; blue

www.wago.com/859-403/000-006**Item no.: 859-408/000-005**

Jumper; for jumper slot; 8-way; insulated; red

www.wago.com/859-408/000-005**Item no.: 859-408/000-029**

Jumper; for jumper slot; 8-way; insulated; yellow

www.wago.com/859-408/000-029**Item no.: 859-409**

Jumper; for jumper slot; 9-way; insulated; light gray

www.wago.com/859-409**Item no.: 859-408/000-006**

Jumper; for jumper slot; 8-way; insulated; blue

www.wago.com/859-408/000-006**Item no.: 859-403**

Jumper; for jumper slot; 3-way; insulated; light gray

www.wago.com/859-403**Item no.: 859-409/000-005**

Jumper; for jumper slot; 9-way; insulated; red

www.wago.com/859-409/000-005**Item no.: 859-404**

Jumper; for jumper slot; 4-way; insulated; light gray

www.wago.com/859-404**Item no.: 859-409/000-006**

Jumper; for jumper slot; 9-way; insulated; blue

www.wago.com/859-409/000-006**Item no.: 859-402/000-006**

Jumper; for jumper slot; 2-way; insulated; blue

www.wago.com/859-402/000-006**Item no.: 859-402**

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/859-402**Item no.: 859-402/000-005**

Jumper; for jumper slot; 2-way; insulated; red

www.wago.com/859-402/000-005**Item no.: 859-406/000-006**

Jumper; for jumper slot; 6-way; insulated; blue

www.wago.com/859-406/000-006**Item no.: 859-406/000-029**

Jumper; for jumper slot; 6-way; insulated; signal yellow

www.wago.com/859-406/000-029**Item no.: 859-407/000-006**

Jumper; for jumper slot; 7-way; insulated; blue

www.wago.com/859-407/000-006**Item no.: 859-407/000-005**

Jumper; for jumper slot; 7-way; insulated; red

www.wago.com/859-407/000-005**Item no.: 859-407/000-029**

Jumper; for jumper slot; 7-way; insulated; yellow

www.wago.com/859-407/000-029**Item no.: 859-407**

Jumper; for jumper slot; 7-way; insulated; light gray

www.wago.com/859-407

Downloads

Documentation

Bid Text

Item no.	Date	File type	Size	Action
859-793	2019 Feb 20	docx	15.6 kB	Download

docx - Datei

859-793	2019 Feb 19	xml	4.0 kB	Download
---------	-------------	-----	--------	----------

X81 - Datei

Instruction Leaflet

Relay modules, Optocoupler modules	V 2.0.0 2022 Jan 19	pdf	2.1 MB	Download
------------------------------------	------------------------	-----	--------	----------

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf	265.8 kB	Download
--	---------	-----	----------	----------

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

CAD/CAE-Data

CAD data

2D/3D Models 859-793	URL	Download
----------------------	-----	----------

CAE data

EPLAN Data Portal 859-793	URL	Download
---------------------------	-----	----------

WSCAD Universe 859-793	URL	Download
------------------------	-----	----------

ZUKEN Portal 859-793	URL	Download
----------------------	-----	----------

Environmental Product Compliance

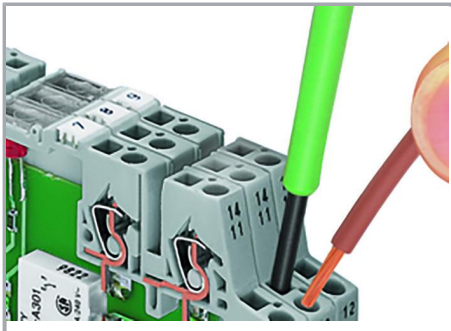
Compliance Search

Environmental Product Compliance 859-793	URL	Download
--	-----	----------

Optocoupler module; Nominal input voltage: 5 VDC; Output voltage range: 3 ... 60 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Railway; Module width: 6 mm; gray

Installation Notes

Conductor termination



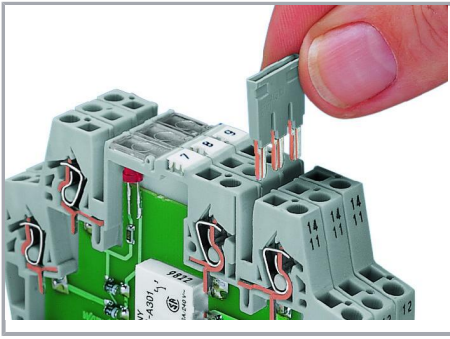
Conductor termination

Commoning

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.