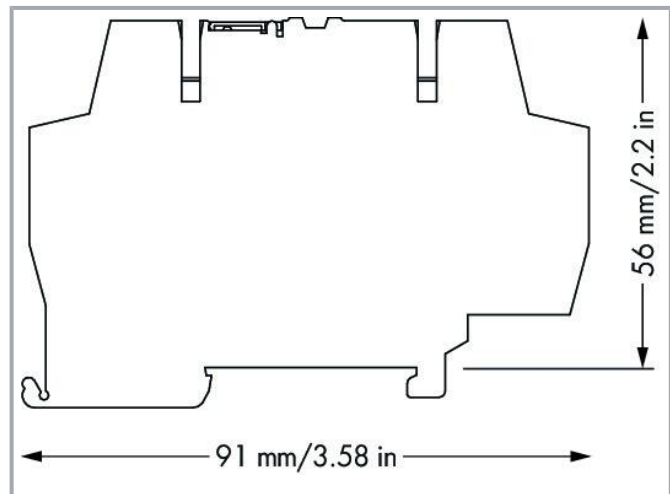
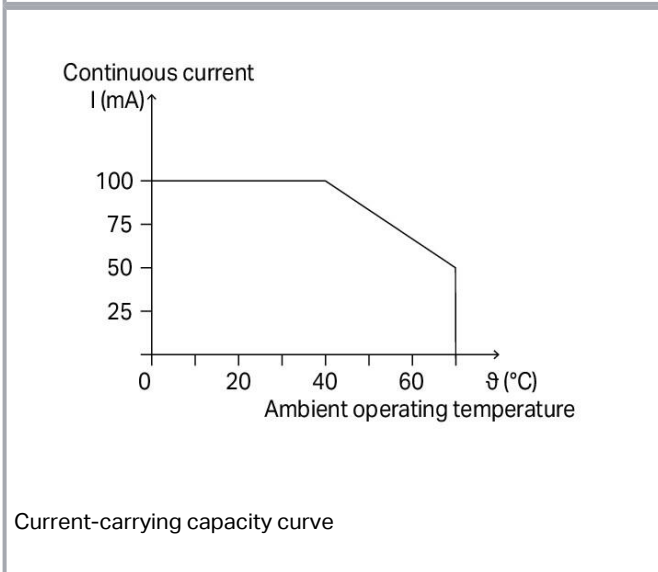
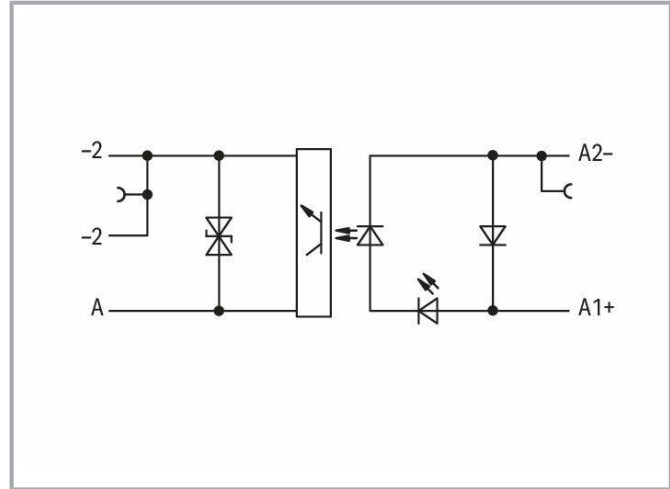
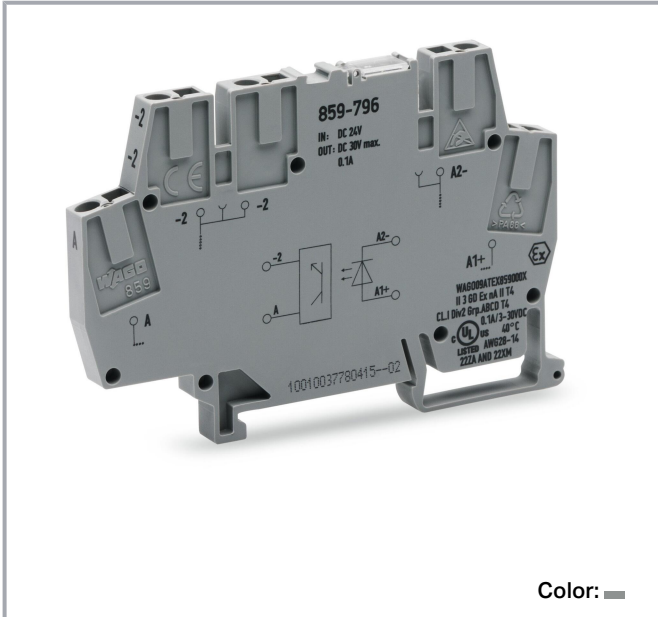


Data sheet | Item number: 859-796

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Railway; Frequency: 10 kHz; Module width: 6 mm; gray



www.wago.com/859-796



Data Notes

Note

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.



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

Control Circuit

Nominal input voltage U_N	DC 24 V
Input voltage range (low level)	DC 0 ... 5 V
Input voltage range (high level)	DC 16.8 ... 30 V
Nominal input current at U_N	10 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	0.1 A
Nominal output voltage	DC 24 V
Output voltage range	DC 3 ... 30 V
Voltage drop at output (max.)	\leq DC 1 V
Leakage current at rated voltage	\leq 25 μ A
Turn-on time	\leq 10 μ s
Turn-off time	\leq 50 μ s
Switching frequency	\leq 10 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)
Insulation type (between adjacent devices of the same type)	Reinforced insulation (safe isolation)

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



Insulation type (to adjacent devices of different types)	Basic insulation
Protection type	IP20; 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
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches

Physical data

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

Mechanical data

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

Material Data

Color	gray
Fire load	0.338 MJ
Weight	18 g

Environmental requirements

Ambient temperature (operation at U _N)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ (T _{ambient} + 20 K)
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

Standards and specifications

Standards/specifications	EN 61010-2-201 EN 61000-6-2
--------------------------	--------------------------------

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.



EN 61000-6-3
 EN 50121-3-2
 EN 61373
 UL 508

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-26-15-03
eCl@ss 9.0	27-26-15-03
ETIM 8.0	EC001504
ETIM 7.0	EC001504
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143606479
Customs tariff number	85365005000

Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	9951d363-e99a-4033-93e0-af4e9bdbe1b7
SCIP notification number (Belgium)	674d3247-f450-49e0-bda6-e7e731c4af74
SCIP notification number (Bulgaria)	bef9a2d1-7bb8-45ab-9fbf-967ce512246f
SCIP notification number (Czech Republic)	a72fa796-d647-4688-80c6-fade3a82ee13
SCIP notification number (Denmark)	66f0e4a4-6393-40d1-9ea3-557ad7c806e1
SCIP notification number (Finland)	90b586cb-7dd5-426d-aa20-c4f36d08958e
SCIP notification number (France)	e729d87d-b986-4875-be2c-da636908e864
SCIP notification number (Germany)	62f516e1-1fab-42bb-a240-da60e160f73f
SCIP notification number (Hungary)	d7e8983e-967c-40f5-b6d6-325d21aed843
SCIP notification number (Italy)	c56bb9ae-d883-4aad-a7d9-36d113811964
SCIP notification number (Netherlands)	0ae35fb0-23de-4059-8a4a-c85375185dbb
SCIP notification number (Poland)	b0ad811c-58df-46f0-a656-f344c07f37cc
SCIP notification number (Romania)	f1d5b252-e9be-4225-ab1a-7b237560f7a6

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.

SCIP notification number (Sweden)


cb822140-e5ed-4d93-938a-01c9e25b4b27

Approvals / Certificates




General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec IIC T4 Gc)
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec IIC T4 Gc)
	UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX007X_ec
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Optional accessories

Testing and measuring

Testing accessories

Item no.: 859-500

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.



WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm uninsulated; Test lead for soldering up to 0,5mm² www.wago.com/859-500

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

End plate

Intermediate plate



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

Jumpers

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

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.: 859-405/000-005
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



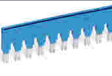
Item no.: 859-410/000-029
Jumper; for jumper slot; 10-way; insulated; yellow

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



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



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

	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 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

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



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

Ferrule

Ferrule



Item no.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

www.wago.com/216-223



Item no.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

www.wago.com/216-222



Item no.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

www.wago.com/216-221



Item no.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

www.wago.com/216-224



Item no.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-321



Item no.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-322

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

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



Downloads Documentation

Bid Text

859-796 docx - Datei	2019 Feb 20	docx 15.7 kB	Download
-------------------------	-------------	-----------------	----------

859-796 X81 - Datei	2019 Feb 19	xml 3.9 kB	Download
------------------------	-------------	---------------	----------

Instruction Leaflet

CCC Ex (Additional information) 859-***	2023 Apr 26	pdf 135.9 kB	Download
--	-------------	-----------------	----------

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

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
---	------------------------	---------------	----------

CAD/CAE-Data

CAD data

2D/3D Models 859-796	URL	Download
----------------------	-----	----------

CAE data

WSCAD Universe 859-796	URL	Download
------------------------	-----	----------

ZUKEN Portal 859-796	URL	Download
----------------------	-----	----------

EPLAN Data Portal 859-796	URL	Download
---------------------------	-----	----------

Environmental Product Compliance

Compliance Search

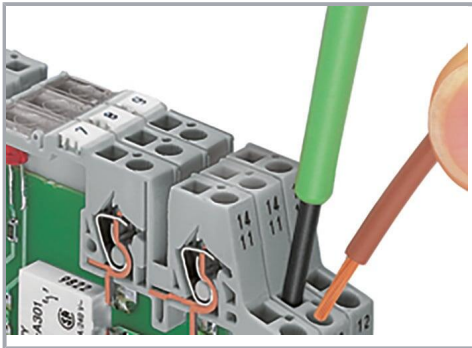
Environmental Product Compliance 859-796	URL	Download
--	-----	----------

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

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Railway; Frequency: 10 kHz; Module width: 6 mm; gray

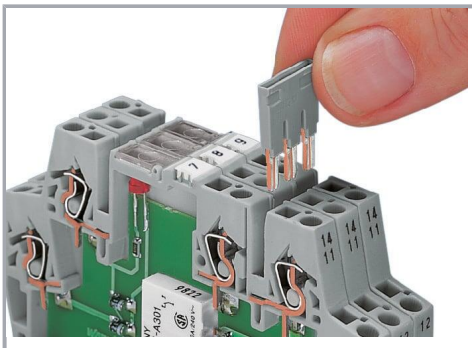
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking

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



Marking via Mini-WSB Quick Marking System

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