

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



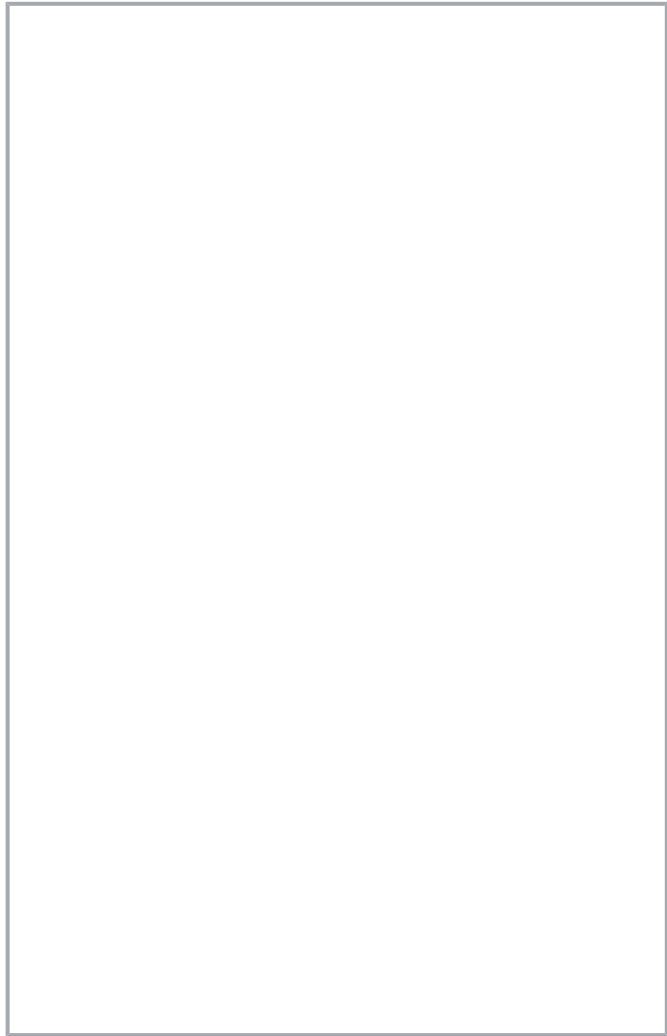
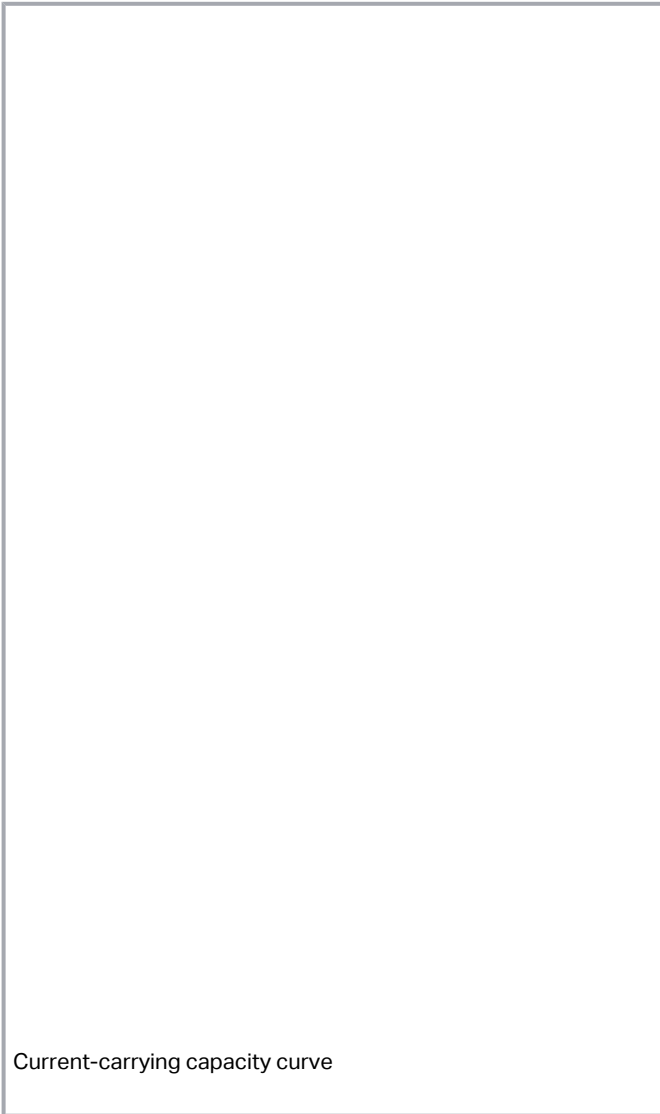
Color:



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

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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

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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
Voltage drop	\leq 1 VDC
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
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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)
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®
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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 EN 61000-6-3 EN 50121-3-2 EN 61373 UL 508
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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
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
SCIP notification number (Sweden)	cb822140-e5ed-4d93-938a-01c9e25b4b27

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Approvals / Certificates

General 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 Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

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

Marking accessories

Marking device	
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	www.wago.com/248-503

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type; white

Item no.: 248-506Mini-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**Ferrule**

Ferrule

Item no.: 216-223Ferrule; 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.: 210-720Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured www.wago.com/210-720**Jumpers**

Jumper

Item no.: 859-404/000-005Jumper; 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**

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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.: 859-405/000-006

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

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

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Hansastr. 27

32423 Minden

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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
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

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Item no.: 859-407 Jumper; for jumper slot; 7-way; insulated; light gray	www.wago.com/859-407
End plate	
Intermediate plate	
Item no.: 859-525 End and intermediate plate; 1 mm thick; gray	www.wago.com/859-525
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

Downloads

Documentation

Bid Text

859-796 docx - Datei	2019 年2月20 日	docx 15.7 kB	Download
859-796 X81 - Datei	2019 年2月19 日	xml 3.9 kB	Download

Instruction Leaflet

CCC Ex (Additional information) 859-***	2023 年4月26 日	pdf 135.9 kB	Download
Relay modules, Optocoupler modules	V 2.0.0 2022 年1月19 日	pdf 2.1 MB	Download

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 年8月18 日	pdf 2.2 MB	Download
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CAD/CAE-Data

CAD data

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

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WSCAD Universe 859-796	URL	Download
ZUKEN Portal 859-796	URL	Download
EPLAN Data Portal 859-796	URL	Download

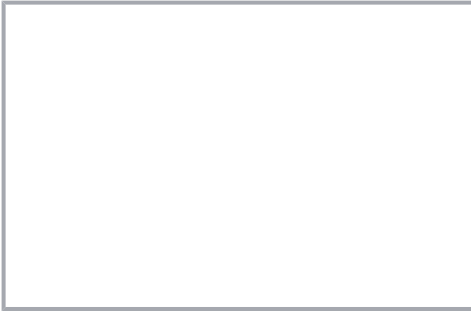
Environmental Product Compliance

Compliance Search

Environmental Product Compliance 859-796	URL	Download
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

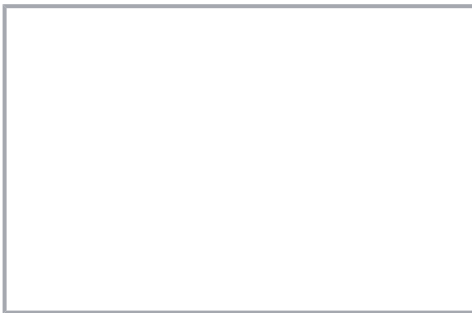
Commoning

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Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System

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