

Data sheet | Item number: 859-744

Optocoupler module; Nominal input voltage: 12 ... 48 VDC; Output voltage range: 10 ... 53 VDC; Limiting continuous current: 4 A; 2-wire connection; Module width: 6 mm; gray

www.wago.com/859-744



Color:

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

WAGO GmbH & Co. KG
Hansastra. 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!

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Control Circuit

Nominal input voltage U_N	DC 12 ... 48 V
Input voltage range (low level)	DC 0 ... 4 V
Input voltage range (high level)	DC 10 ... 53 V
Nominal input current at U_N	5 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	4 A
Peak output current	30 A
Output voltage range	DC 3 ... 53 V
Voltage drop at output (max.)	\leq DC 0.2 V
Voltage drop	\leq 0.2 VDC
Turn-on time	\leq 200 μ s
Turn-off time	\leq 420 μ s
Switching frequency	\leq 100 Hz

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 (to adjacent devices of different types)	Reinforced insulation (safe isolation)
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 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG

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

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	19.3 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 61373
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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

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

ETIM 7.0	EC001504
Recupel Type	
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143605458
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)	3c5ae91d-3dbd-47fe-ba95-831f3d0ae746
SCIP notification number (Belgium)	ee379b01-b66c-49de-8871-6c3ace50d6e7
SCIP notification number (Bulgaria)	5d98808b-3c3c-453a-9d5c-5dd2603e77c8
SCIP notification number (Czech Republic)	78d8ffd8-b8e3-4c75-923e-292ba881a9c3
SCIP notification number (Denmark)	ffd6563d-fd6e-4e02-b2d8-b11c5438db60
SCIP notification number (Finland)	f2c5bd8b-07d9-4d80-bbd3-01b6ff376fce
SCIP notification number (France)	9f84d13f-4e6f-4215-8b5d-adc883494d63
SCIP notification number (Germany)	90204e81-23c3-491d-bdfe-8bc653cfef2f
SCIP notification number (Hungary)	13b3e647-e5b2-4699-aaa3-7d7773feb5c8
SCIP notification number (Italy)	88a674a7-888f-442e-9f55-7d19bf03705c
SCIP notification number (Netherlands)	040bf4f5-5d5a-41e6-a48b-3d5c45b4fe2e
SCIP notification number (Poland)	c6ab1053-0506-4ff9-97a1-89685d5f8c35
SCIP notification number (Romania)	4deaca40-f499-4e29-a025-3ba7ab2f01db
SCIP notification number (Sweden)	10c93826-46fb-4fa6-86ca-a24b9fb4b9f5

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

Declarations of conformity and manufacturer's declarations

Certificate

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

Logo	Approval	Additional Approval Text	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

Optional accessories

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

Ferrule		
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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		
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Marking device	Item no.: 210-110 Fiber-tip pen	www.wago.com/210-110
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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	

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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

Item no.: 248-503

Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

Item no.: 248-506

Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

Item no.: 248-502

Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

End plate

Intermediate plate

Item no.: 859-525

End and intermediate plate; 1 mm thick; gray

www.wago.com/859-525**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**Jumpers**

Jumper

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

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

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

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

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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

Item no.: 859-407
Jumper; for jumper slot; 7-way; insulated; light gray www.wago.com/859-407

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

Downloads

Documentation

Bid Text

859-744 docx - Datei	2019 年2月20 日	docx 15.8 kB	Download
859-744 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

CAE data

WSCAD Universe 859-744	URL	Download
EPLAN Data Portal 859-744	URL	Download
ZUKEN Portal 859-744	URL	Download

CAD data

2D/3D Models 859-744	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 859-744	URL	Download
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Optocoupler module; Nominal input voltage: 12 ... 48 VDC; Output voltage range: 10 ... 53 VDC; Limiting continuous current: 4 A; 2-wire connection; 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!

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Marking via Mini-WSB Quick Marking System

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