Data sheet | Item number: 859-739
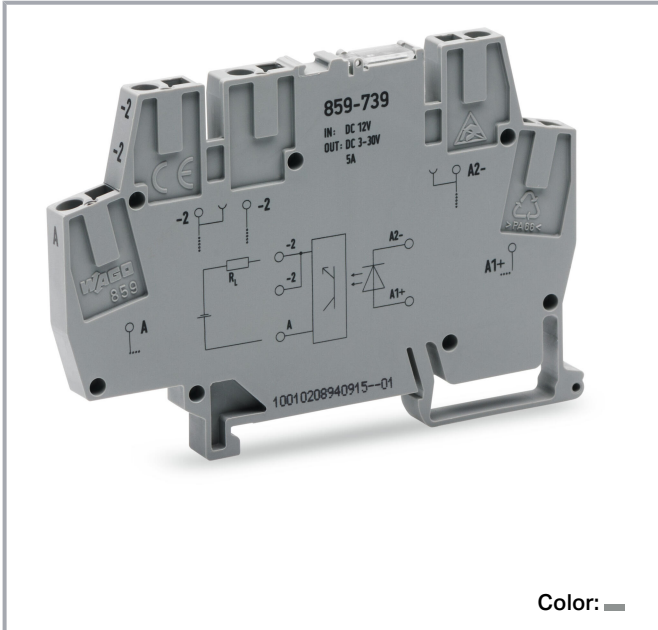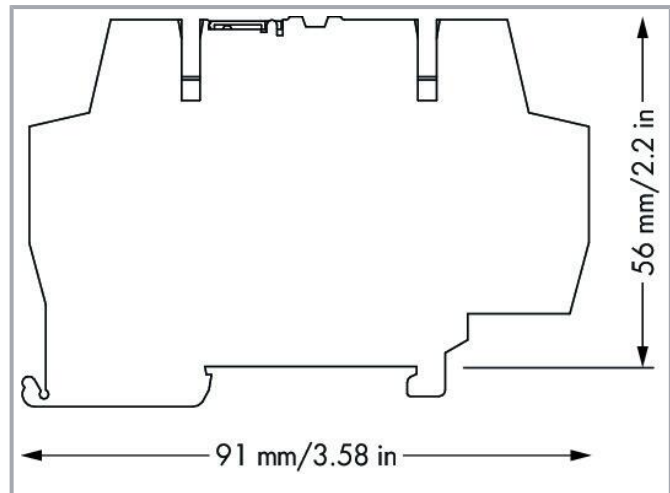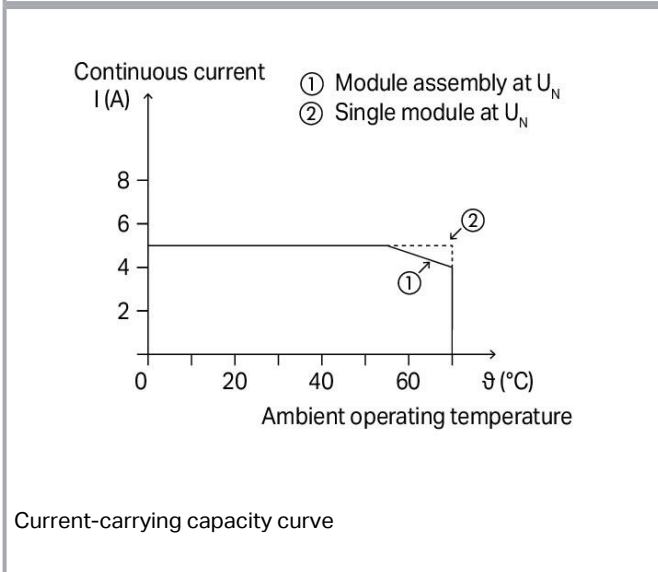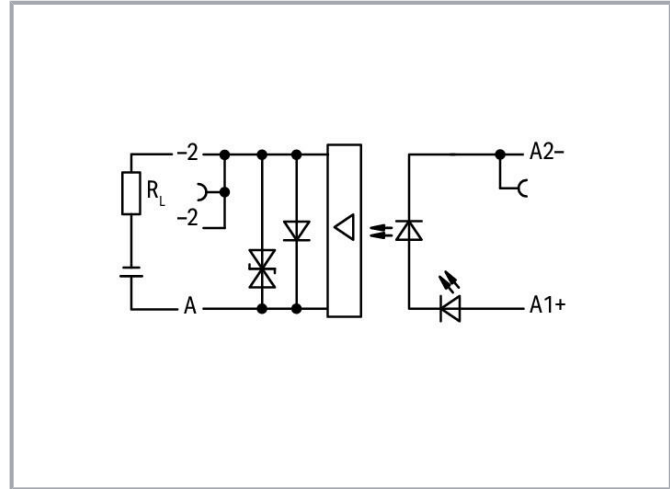
Optocoupler module; Nominal input voltage: 12 VDC; Output voltage range: 3 … 30 VDC; Limiting continuous current: 5 A; 2-wire connection; Red status indicator; Module width: 6 mm; gray

www.wago.com/859-739

Color: ▭

Current-carrying capacity curve

Continuous current I (A)

① Module assembly at U_N
② Single module at U_N

Ambient operating temperature ϑ (°C)

56 mm/2.2 in

91 mm/3.58 in

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

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

Control Circuit

Nominal input voltage U_N	DC 12 V
Input voltage range (low level)	DC 0 … 5 V
Input voltage range (high level)	DC 9.6 … 14.4 V
Nominal input current at U_N	4 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	5 A
Peak output current	25 A
Nominal output voltage	DC 24 V
Output voltage range	DC 3 … 30 V
Voltage drop at output (max.)	≤ DC 0.2 V
Turn-on time	≤ 200 µs
Turn-off time	≤ 450 µs
Switching frequency	≤ 100 Hz

Signaling

Status indicator	Red LED

Safety and protection

Rated voltage	300 V
Overvoltage category	II
Pollution degree	2

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

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®
Solid conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor; with insulated ferrule	0.08 … 1.5 mm² / 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	19.1 g

Environmental requirements

Ambient temperature (operation at U_N)	-25 … +70 °C
Ambient temperature (storage)	-40 … +70 °C
Processing temperature	-25 … +50 °C
Temperature range of connection cable	$\geq (T_{ambient} + 20\ K)$
Relative humidity	5 … 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

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

Standards and specifications

Standards/specifications	EN 61010-2-201
	EN 61000-6-2
	EN 61000-6-3
	EN 61373

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	DE
GTIN	4055143605397
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)	39f3c423-b615-4841-aff8-23d7c9121c24
SCIP notification number (Belgium)	6f4c2975-49a1-4639-be29-e53752b95fb0
SCIP notification number (Bulgaria)	bb74e391-e8c3-4041-9aeb-959a7ac3cd27
SCIP notification number (Czech Republic)	4280c7fd-438b-4b0e-965d-ee6e17b3fd3a
SCIP notification number (Denmark)	fc47b11f-b287-4a4b-a461-8c2927756c55
SCIP notification number (Finland)	c2e510f2-c813-4187-91e1-69dffe2f9819
SCIP notification number (France)	756fd24a-889f-46bd-a7d2-1f1c1d26ec5c
SCIP notification number (Germany)	463e7149-00b3-4bab-b38c-2732020c99c8
SCIP notification number (Hungary)	055de816-2613-4c2b-b7c7-6ec3393ec24a
SCIP notification number (Italy)	50028556-3f23-470b-9feb-62fd7ace9062
SCIP notification number (Netherlands)	e3075e2c-132f-42d2-bc9c-b0af024674bf

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

SCIP notification number (Poland)	312f46b2-60be-49c0-952c-8e69790d4d26
SCIP notification number (Romania)	82e9b537-d7a1-4cd1-bc8f-e449d081aae3
SCIP notification number (Sweden)	0e39ea5b-cf32-4042-8008-9e402cba1a55

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

Optional accessories

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

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 0,5mm²	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

Subject to changes. Please also observe the further product documentation!
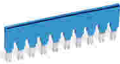
	Item no.: 248-504	www.wago.com/248-504
	Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white	
	Item no.: 248-503	www.wago.com/248-503
	Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white	
	Item no.: 248-506	www.wago.com/248-506
	Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white	
	Item no.: 248-502	www.wago.com/248-502
	Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	

Jumpers

Jumper

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

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

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

Item no.: 859-408/000-006
Jumper; for jumper slot; 8-way; insulated; blue

www.wago.com/859-408
/000-006

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

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

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

Ferrule

Ferrule

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

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

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

	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

Downloads
Documentation

Bid Text

859-739 docx - Datei	2019 Feb 20	docx 15.7 kB	Download
859-739 X81 - Datei	2019 Feb 19	xml 3.9 kB	Download

Instruction Leaflet

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 859-739	URL	Download

CAE data

ZUKEN Portal 859-739	URL	Download

EPLAN Data Portal 859-739

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

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Phone: +49571 887-0 | Fax: +49571 887-169
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We are always happy to take your call at +49 (571) 887-44222.

	URL	Download
WSCAD Universe 859-739	URL	Download

Environmental Product Compliance
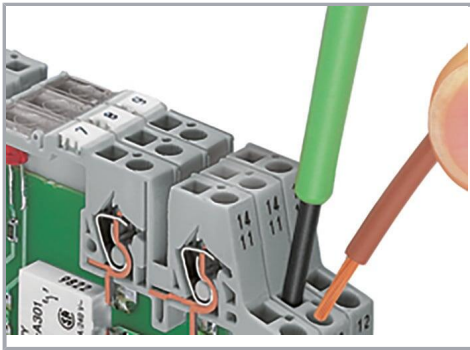
Compliance Search

	URL	Download
Environmental Product Compliance 859-739	URL	Download

Optocoupler module; Nominal input voltage: 12 VDC; Output voltage range: 3 … 30
VDC; Limiting continuous current: 5 A; 2-wire connection; Red status indicator;
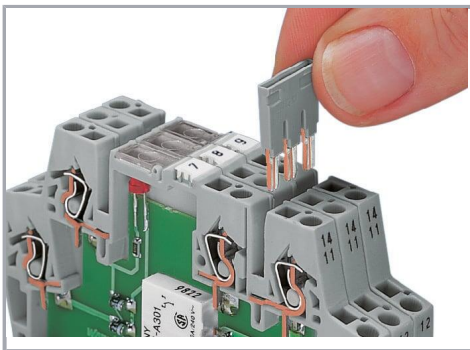Module width: 6 mm; gray

Installation Notes

Conductor termination

Conductor termination

Commoning

Easy commoning using adjacent jumpers

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

Do you have any questions about our products?

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

Marking

Marking via Mini-WSB Quick Marking System

Do you have any questions about our products?

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