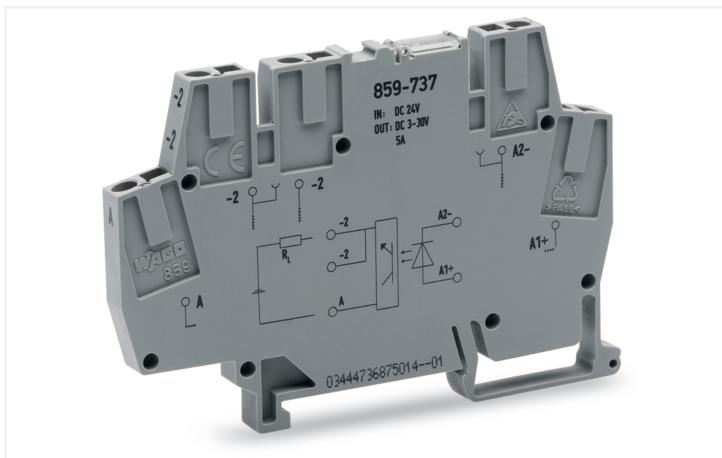


Data Sheet | Item Number: 859-737

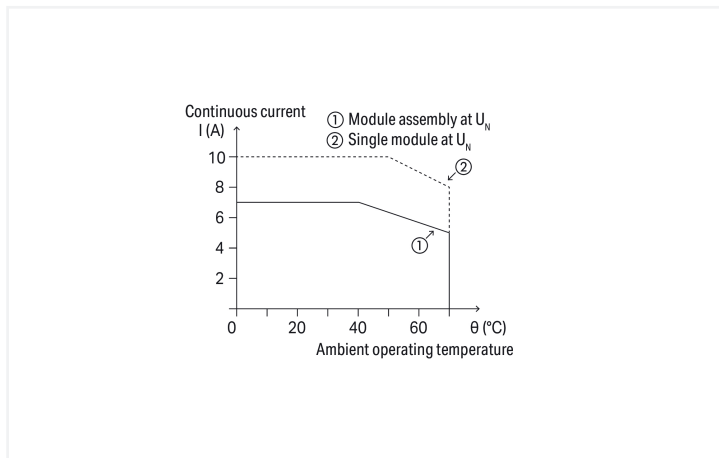
Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 5 A; 2-wire connection; Frequency: 3 kHz; Red status indicator; Module width: 6 mm; gray



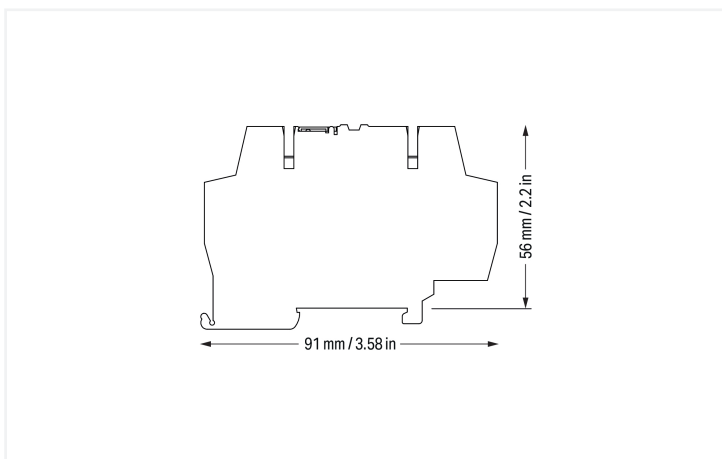
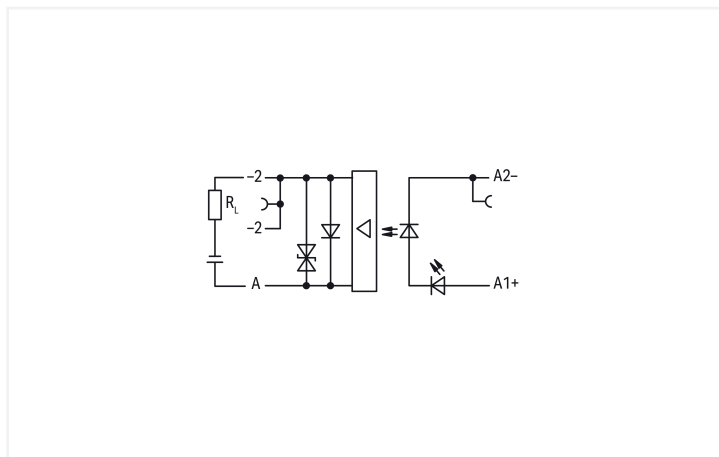
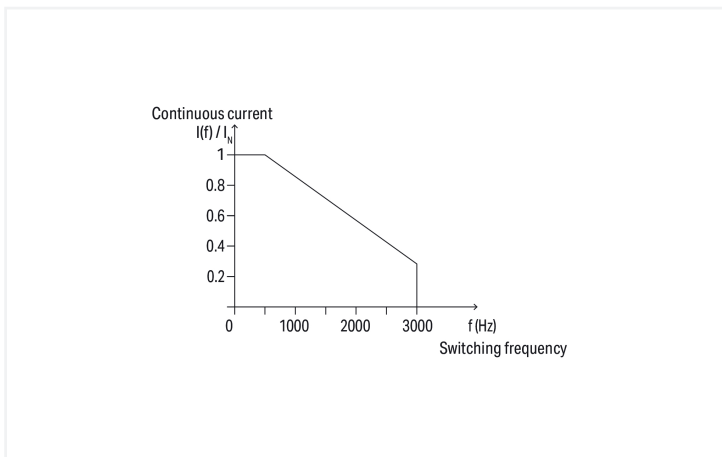
<https://www.wago.com/859-737>



Color: ■ gray



Current-carrying capacity curve



Notes

| | |
|------|--|
| Note | Optocouplers and solid state relays are designed for use in signal processing networks that are not supplied directly by the low-voltage power supply network. |
|------|--|

Technical data

Control circuit

| | |
|----------------------------------|---------------|
| Nominal input voltage U_N | 24 VDC |
| Input voltage range (low level) | 0 ... 9 VDC |
| Input voltage range (high level) | 15 ... 66 VDC |
| Nominal input current at U_N | 4 mA |
| Input current range | 2 ... 7 mA |

Load circuit

| | |
|----------------------------------|-------------------|
| Circuit type | 2-wire connection |
| Limiting continuous current | 10 A |
| Peak output current | 50 A |
| Nominal output voltage | 24 VDC |
| Output voltage range | 3 ... 30 VDC |
| Voltage drop | $\leq 0,25$ VDC |
| Leakage current at rated voltage | ≤ 5 μ A |
| Turn-on time | ≤ 40 μ s |
| Turn-off time | ≤ 70 μ s |
| Rise time (t_{10-90}) | 18 μ s |
| Drop-out time (t_{90-10}) | 13 μ s |
| Switching frequency | ≤ 3 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 (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 | 0.2 ... 2.5 mm ² / 24 ... 14 AWG |
| Fine-stranded conductor | 0.14 ... 2.5 mm ² / 26 ... 14 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.14 ... 1.5 mm ² / 26 ... 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

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Insulation material (main housing) | Polyamide (PA66) |
| Material group | I |
| Flammability class per UL94 | V0 |
| Fire load | 0.283 MJ |
| Weight | 19.7 g |

Environmental requirements

| | |
|---|--|
| Ambient temperature (operation at U_N) | -40 ... +70 °C |
| Ambient temperature (storage) | -40 ... +85 °C |
| Processing temperature | -25 ... +50 °C |
| Temperature range of connection cable | $\geq (T_{\text{ambient}} + 20 \text{ K})$ |
| 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 |
|--------------------------|--|

Commercial data

| | |
|-----------------------|--------------------------|
| Product Group | 6 (INTERFACE ELECTRONIC) |
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143605328 |
| Customs tariff number | 85365005000 |

Product Classification


| | |
|-------------|----------------------|
| UNSPSC | 39121521 |
| eCl@ss 10.0 | 27-26-15-03 |
| eCl@ss 9.0 | 27-26-15-03 |
| ETIM 9.0 | EC001504 |
| ETIM 10.0 | EC001504 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

| | |
|---|--|
| CAS-No. | 1303-86-2 7439-92-1 79-94-7 |
| REACH Candidate List Substance | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 7(c)-I |
| SCIP notification number (Austria) | 9a7fc626-9466-4097-bccc-d0061e85242c |
| SCIP notification number (Belgium) | 8d3b39a2-e984-4c6e-911c-4f4b5bc6c914 |
| SCIP notification number (Bulgaria) | f98a02fc-be56-4703-b975-0734b9917cc7 |
| SCIP notification number (Czech Republic) | c813336d-3fe5-4e2f-8040-5b35c862642b |
| SCIP notification number (Denmark) | cfbab42c-baa0-42e4-9c12-52cabe7d8715 |
| SCIP notification number (Finland) | 9534f08c-a758-406f-94b0-34d9b78b36bc |
| SCIP notification number (France) | 438dbd41-68dd-48bc-b5a3-096fcaa6eed8 |
| SCIP notification number (Germany) | f2cb3156-167b-4c4d-adc9-cc8fe631edfa |
| SCIP notification number (Hungary) | 3cb68cfc-8159-427e-bdc5-bbb243576637 |
| SCIP notification number (Italy) | 5d8dc082-ff4e-4179-8406-92bdee159053 |
| SCIP notification number (Netherlands) | d7f90666-ae3a-4c0e-8f17-9e57bc890693 |
| SCIP notification number (Poland) | 92e9e438-d002-4f60-aa50-dd05f0f5d528 |
| SCIP notification number (Romania) | 17ff95e8-9d34-4a4e-9321-18f0c6483e04 |
| SCIP notification number (Sweden) | 7cda85a0-194b-4391-a77a-b7a4f73ac9b9 |

Approvals / Certificates

General approvals **Declarations of conformity and manufacturer's declarations**



| Approval | Standard | Certificate Name |
|----------------------------|----------------|------------------|
| EAC GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |

| Approval | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

Compliance Search

| | |
|--|-------------------|
| Environmental Product Compliance 859-737 | ↓ |
|--|-------------------|

Documentation

Bid Text

| | | | |
|---------|------------|------------------|-------------------|
| 859-737 | 19.02.2019 | xml 3.79 KB | ↓ |
| 859-737 | 20.02.2019 | docx 15.34 KB | ↓ |

Instruction Leaflet

| | | | |
|------------------------------------|-----------------------|-------------------|-------------------|
| Relay modules, Optocoupler modules | V 2.0.0 19.01.2022 | pdf 2066.27 KB | ↓ |
|------------------------------------|-----------------------|-------------------|-------------------|

CAD/CAE-Data

CAD data

2D/3D Models 859-737



CAE data

EPLAN Data Portal
859-737



WSCAD Universe
859-737



ZUKEN Portal 859-737



1 Compatible Products

1.1 Optional Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 859-525

End and intermediate plate; 1 mm thick; gray

1.1.1.2 Intermediate plate



Item No.: 859-525

End and intermediate plate; 1 mm thick; gray

1.1.2 Ferrule

1.1.2.1 Ferrule



Item No.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-221

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-222

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-223

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-224

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

1.1.3 Jumper

1.1.3.1 Jumper



Item No.: 859-410/000-006

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



Item No.: 859-410

Jumper; for jumper slot; 10-way; insulated; light gray



Item No.: 859-410/000-005

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



Item No.: 859-410/000-029

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



Item No.: 859-402/000-006

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



Item No.: 859-402

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



Item No.: 859-402/000-005

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



Item No.: 859-402/000-029

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

1.1.3.1 Jumper



Item No.: 859-403/000-006
Jumper; for jumper slot; 3-way; insulated; blue

Item No.: 859-403
Jumper; for jumper slot; 3-way; insulated; light gray

Item No.: 859-403/000-005
Jumper; for jumper slot; 3-way; insulated; red

Item No.: 859-403/000-029
Jumper; for jumper slot; 3-way; insulated; yellow



Item No.: 859-404/000-006
Jumper; for jumper slot; 4-way; insulated; blue

Item No.: 859-404
Jumper; for jumper slot; 4-way; insulated; light gray

Item No.: 859-404/000-005
Jumper; for jumper slot; 4-way; insulated; red

Item No.: 859-404/000-029
Jumper; for jumper slot; 4-way; insulated; yellow



Item No.: 859-405/000-006
Jumper; for jumper slot; 5-way; insulated; blue

Item No.: 859-405
Jumper; for jumper slot; 5-way; insulated; light gray

Item No.: 859-405/000-005
Jumper; for jumper slot; 5-way; insulated; red

Item No.: 859-405/000-029
Jumper; for jumper slot; 5-way; insulated; yellow



Item No.: 859-406/000-006
Jumper; for jumper slot; 6-way; insulated; blue

Item No.: 859-406
Jumper; for jumper slot; 6-way; insulated; light gray

Item No.: 859-406/000-005
Jumper; for jumper slot; 6-way; insulated; red

Item No.: 859-406/000-029
Jumper; for jumper slot; 6-way; insulated; yellow



Item No.: 859-407/000-006
Jumper; for jumper slot; 7-way; insulated; blue

Item No.: 859-407
Jumper; for jumper slot; 7-way; insulated; light gray

Item No.: 859-407/000-005
Jumper; for jumper slot; 7-way; insulated; red

Item No.: 859-407/000-029
Jumper; for jumper slot; 7-way; insulated; yellow



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

Item No.: 859-408
Jumper; for jumper slot; 8-way; insulated; light gray

Item No.: 859-408/000-005
Jumper; for jumper slot; 8-way; insulated; red

Item No.: 859-408/000-029
Jumper; for jumper slot; 8-way; insulated; yellow



Item No.: 859-409/000-006
Jumper; for jumper slot; 9-way; insulated; blue

Item No.: 859-409
Jumper; for jumper slot; 9-way; insulated; light gray

Item No.: 859-409/000-005
Jumper; for jumper slot; 9-way; insulated; red

Item No.: 859-409/000-029
Jumper; for jumper slot; 9-way; insulated; yellow

1.1.4 Marking

1.1.4.1 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

Item No.: 248-502
Mini-WSB marking card; as card; MARKED; 1 ... 10 (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.: 248-504
Mini-WSB marking card; as card; MARKED; 21 ... 30 (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.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

1.1.4.2 Marking device



Item No.: 210-110
Fiber-tip pen

1.1.5 Test and measurement

1.1.5.1 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

1.1.6 Tool

1.1.6.1 Operating tool

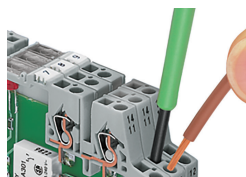


Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a
partially insulated shaft; multicoloured

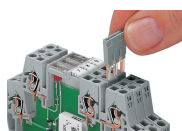
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System