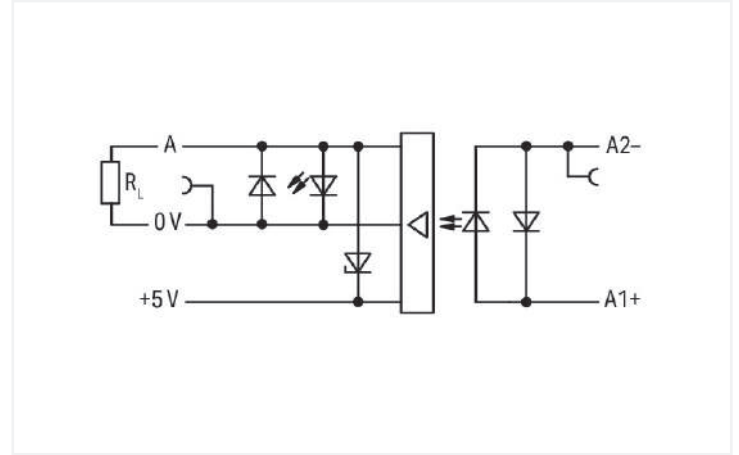
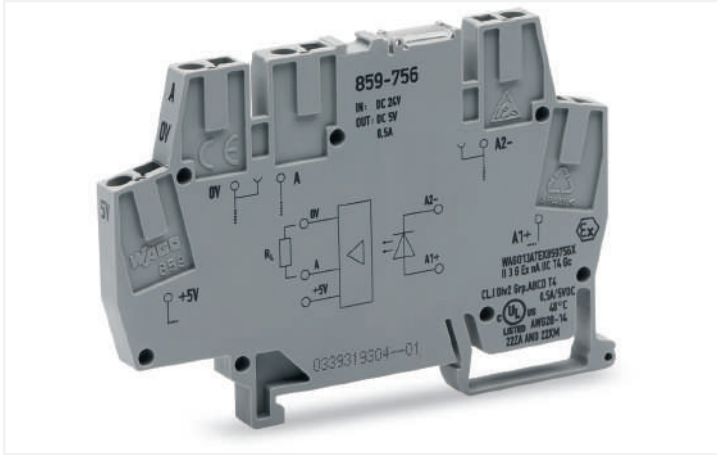


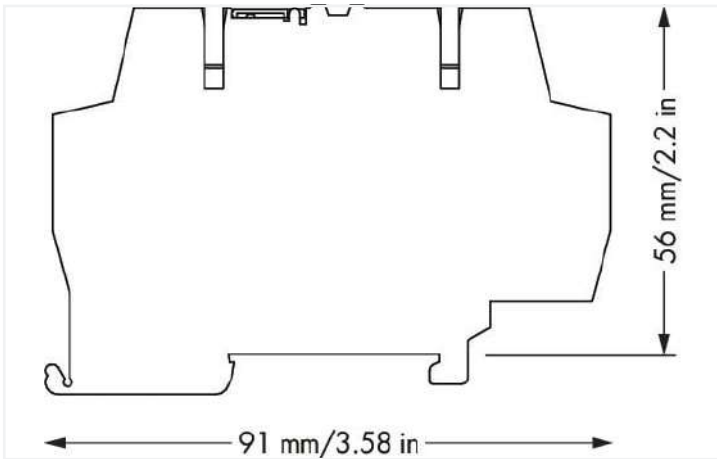
## Data Sheet | Item Number: 859-756

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 4 ... 6 VDC; Limiting continuous current: 0.5 A; Frequency: 10 kHz; Module width: 6 mm; gray

<https://www.wago.com/859-756>



Color: ■ gray



Dimensions in mm

### 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 24 V
Input voltage range (low level)	DC 0 ... 5 V
Input voltage range (high level)	DC 18 ... 30 V
Nominal input current at $U_N$	11 mA

#### Load circuit

Circuit type	3-wire connection High-side switching
Limiting continuous current	0.5 A
Nominal output voltage	DC 5 V
Output voltage range	DC 4 ... 6.25 V
Voltage drop	$\leq 1.2$ VDC
Leakage current at rated voltage	$\leq 10$ $\mu$ A
Output closed-circuit current (without load) max.	4.5 mA
Turn-on time	$\leq 15$ $\mu$ s
Turn-off time	$\leq 30$ $\mu$ 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 (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 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm <sup>2</sup> / 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	18.7 g

### Environmental requirements

Ambient temperature (operation at U <sub>N</sub> )	-25 ... +40 °C
Ambient temperature UL (operation at U <sub>N</sub> )	-25 ... +40 °C
Ambient temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ (T <sub>ambient</sub> + 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 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)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143605489
Customs tariff number	85365005000

### Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	572f2da1-0f9b-4b4f-bc34-e7ad5ccfc750
SCIP notification number (Belgium)	ccff11c5-8e4d-4199-8b7e-f2d74107265b
SCIP notification number (Bulgaria)	b5a4cd68-4027-4ec9-a0f0-a9aef5f71fa3
SCIP notification number (Czech Republic)	809f0483-d08d-46e7-b56c-73126d2c2303
SCIP notification number (Denmark)	c28ff0d9-a509-4edf-b1e0-fcddc1605738
SCIP notification number (Finland)	1f54fb6b-cee0-4862-bef5-8333a0526169
SCIP notification number (France)	cd628484-1553-4350-82f1-1c3290c09231
SCIP notification number (Germany)	f78cef72-cb9d-4f2e-b65c-9f74fb4a0bfa
SCIP notification number (Hungary)	40f8bfd9-bcc6-457a-a88d-9963966985cc
SCIP notification number (Italy)	6c8b3563-fabb-442e-a9fe-9426edcd1727
SCIP notification number (Netherlands)	f3f5d8f2-41d0-439c-86d6-14453c972dbc
SCIP notification number (Poland)	4213acbd-72d3-41a8-be9e-4e602bed0f3a
SCIP notification number (Romania)	ebf0b57c-0cff-4973-9d74-d91d3810ea9c
SCIP notification number (Sweden)	1b1a0a29-76d9-4e4a-ba70-4f456d564073

### Approvals / Certificates

General approvals



Approval	Standard	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

Approvals for hazardous areas

Approval	Standard	Certificate Name
CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec IIC T4 Gc)
UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX007X_ec

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 859-756 <a href="#">↓</a>

Documentation

Bid Text			
859-756	19.02.2019	xml 3.82 KB	<a href="#">↓</a>
859-756	20.02.2019	docx 15.53 KB	<a href="#">↓</a>

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 132.68 KB	<a href="#">↓</a>
Relay modules, Optocoupler modules	V 2.0.0 19.01.2022	pdf 2066.27 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data
2D/3D Models 859-756 <a href="#">↓</a>

CAE data
EPLAN Data Portal 859-756 <a href="#">↓</a>
WSCAD Universe 859-756 <a href="#">↓</a>
ZUKEN Portal 859-756 <a href="#">↓</a>

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 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-222**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-223**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-224**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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



**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; signal yellow

### 1.1.3.1 Jumper



**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 devices



**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 0,5mm<sup>2</sup>

### 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

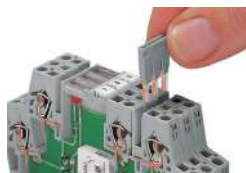
## Installation Notes

### Conductor termination



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

### Marking



Marking via Mini-WSB Quick Marking System