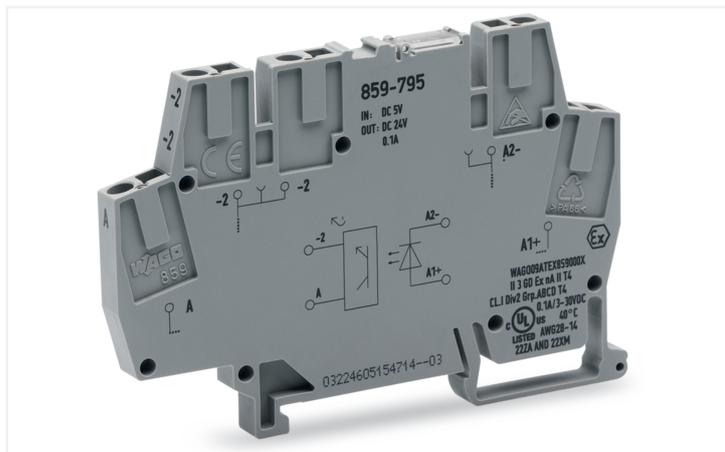


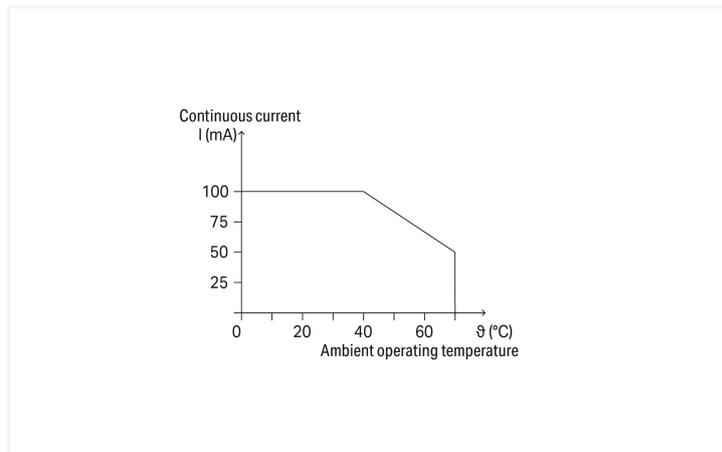
## Data Sheet | Item Number: 859-795

Optocoupler module; Nominal input voltage: 5 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Railway; Frequency: 10 kHz; Red status indicator; Module width: 6 mm; gray

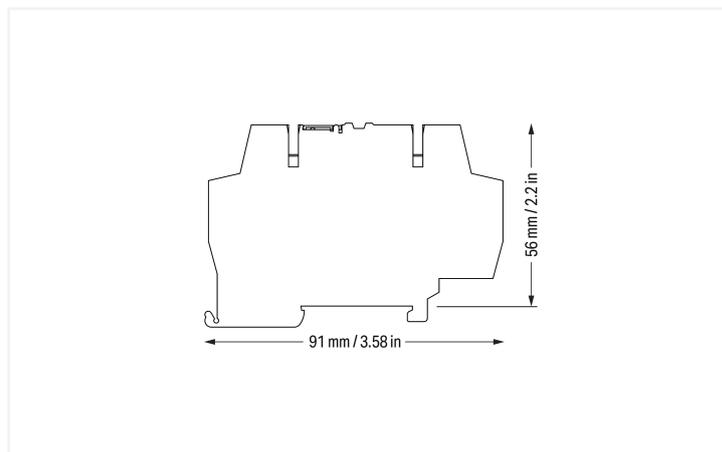
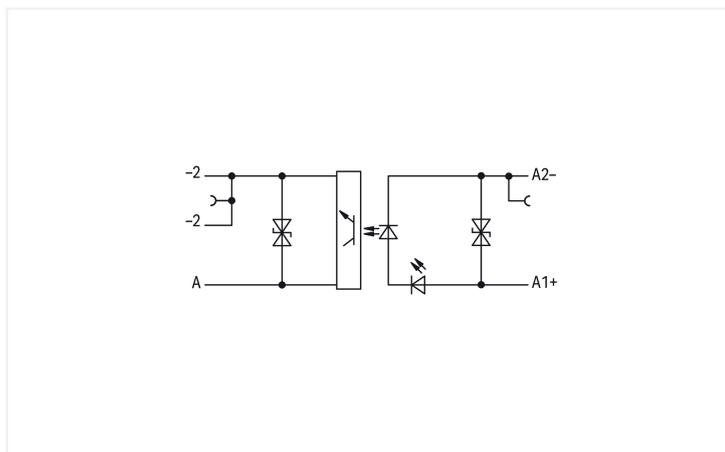
<https://www.wago.com/859-795>



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 $U_N$	5 VDC
Input voltage range (low level)	0 ... 0.8 VDC
Input voltage range (high level)	2 ... 6.25 VDC
Nominal input current at $U_N$	17 mA

#### Load circuit

Circuit type	2-wire connection
Limiting continuous current	0.1 A
Nominal output voltage	24 VDC
Output voltage range	3 ... 30 VDC
Voltage drop	$\leq 1$ VDC
Leakage current at rated voltage	$\leq 25$ $\mu$ A
Turn-on time	$\leq 10$ $\mu$ s
Turn-off time	$\leq 50$ $\mu$ 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

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Material group	I
Flammability class per UL94	V0
Fire load	0.313 MJ
Weight	18.2 g

### Environmental requirements

Ambient temperature (operation at U <sub>N</sub> )	-40 ... +70 °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 61000-6-3 EN 61000-6-4 EN 50121-3-2 EN 61373 UL 508
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### Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143606462
Customs tariff number	85365005000

### Product Classification

UNSPSC	39121524
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.	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)
SCIP notification number (Austria)	904d968e-97bd-40c6-9217-6816dc0a06fc
SCIP notification number (Belgium)	f224f726-d3de-43d1-8751-0262fe1f1da8
SCIP notification number (Bulgaria)	245eebd3-2d2c-44b9-8497-b649c2f257b0
SCIP notification number (Czech Republic)	7229742d-30af-45f8-8ff2-81e36f7ef016
SCIP notification number (Denmark)	1e849c3d-9e3a-4aa8-98de-86a109fef4c9
SCIP notification number (Finland)	c39a539e-762b-4582-b6df-daa32cc18d6e
SCIP notification number (France)	9a650c43-036a-48f1-92a9-80a3b36459c2
SCIP notification number (Germany)	b4d46a2a-331b-46fb-aa14-4846babf272b
SCIP notification number (Hungary)	5427c49a-d945-4040-8246-379666f8d6fa
SCIP notification number (Italy)	ac868591-758e-4caf-b717-d329a5537e42
SCIP notification number (Netherlands)	6c0d1e19-a6b9-4c72-9b57-b9b13dc72966
SCIP notification number (Poland)	5a2fc672-97ab-4edb-ae1f-896a18aae16a
SCIP notification number (Romania)	322ef2c9-0eea-4142-8157-274cb493ed95
SCIP notification number (Sweden)	8988cf29-708d-4e6e-ba22-c0d21927bc4c

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

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

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

**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
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 859-795	<a href="#">↓</a>
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**Documentation**

Bid Text			
859-795	19.02.2019	xml 3.86 KB	<a href="#">↓</a>
859-795	20.02.2019	docx 15.41 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	CAE data
2D/3D Models 859-795 	EPLAN Data Portal 859-795 
	WSCAD Universe 859-795 
	ZUKEN Portal 859-795 

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; 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 0,5mm<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

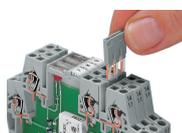
### Installation Notes

#### Conductor termination



Conductor termination

#### Commoning



Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System