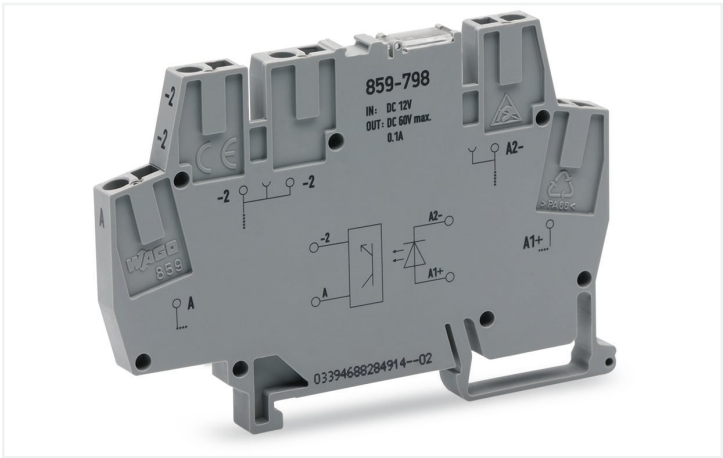


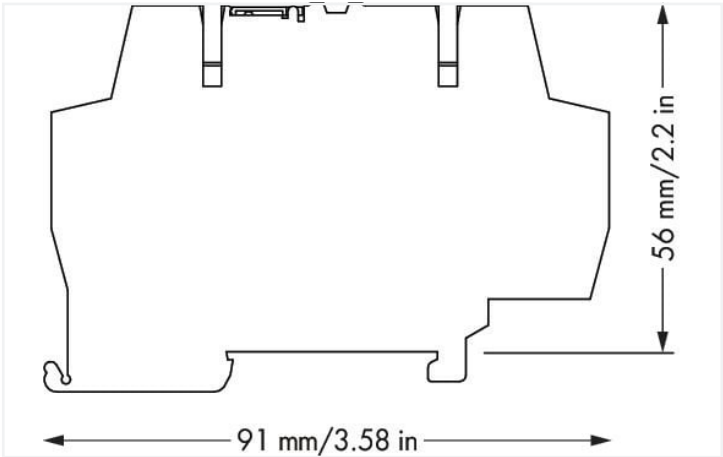
Data Sheet | Item Number: 859-798

Optocoupler module; Nominal input voltage: 12 VDC; Output voltage range: 9 ... 60 VDC; Limiting continuous current: 0.1 A; Railway; Red status indicator; Module width: 6 mm

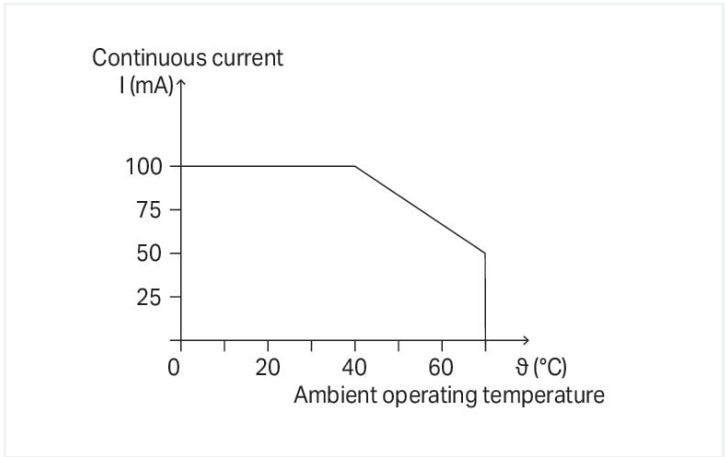
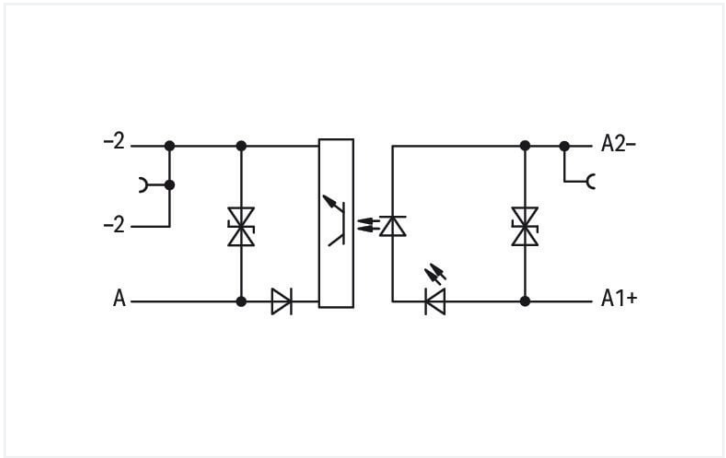
<https://www.wago.com/859-798>



Color: ■ gray



Dimensions in mm



Current-carrying capacity curve

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		Load circuit	
Nominal input voltage U _N	DC 12 V	Circuit type	2-wire connection
Input voltage range (low level)	DC 0 ... 4.8 V	Limiting continuous current	0.1 A
Input voltage range (high level)	DC 8.4 ... 15 V	Output voltage range	DC 9 ... 60 V
Nominal input current at U _N	4 mA	Voltage drop	≤ 2 VDC
		Turn-on time	≤ 20 μs
		Turn-off time	≤ 120 μs
		Switching frequency	≤ 1.5 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	0.08 ... 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	17.5 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 50121-3-2 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
ETIM 7.0	EC001504
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143606431
Customs tariff number	85365005000

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1 75980-60-8 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I
SCIP notification number (Austria)	493cedbf-c866-493b-9dd7-6aae82413ff2
SCIP notification number (Belgium)	6903c7d5-76da-4c34-b819-d6ee9d08a7b1
SCIP notification number (Bulgaria)	f1fc584a-2799-4bc3-b2a6-ae8bd3e60344
SCIP notification number (Czech Republic)	b786dccf-3a18-4c17-b892-f1632c497e6f
SCIP notification number (Denmark)	400b44ee-8c14-4b64-b178-6981dfe65888
SCIP notification number (Finland)	988574e8-d43e-4f3a-a781-e0491dd86733
SCIP notification number (France)	cc5ec0e9-b4a1-4527-b26a-8922b4055812
SCIP notification number (Germany)	0ed8166e-824e-4288-b7ea-038f4113f4af
SCIP notification number (Hungary)	1280df2f-43b4-4541-a56d-7ba2c64d71f6
SCIP notification number (Italy)	08344cd9-9f24-4559-a993-d37db0382869
SCIP notification number (Netherlands)	de8c2f8d-db18-4bfd-9231-4471b012daa0
SCIP notification number (Poland)	528f8968-e6df-4ecb-8b75-e6b265246b45
SCIP notification number (Romania)	6991471e-de4c-4b2d-a185-4bf38bae3c84
SCIP notification number (Sweden)	2efa87bf-f693-42fc-afc0-0a29562a9824



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 859-798



Documentation

Bid Text
859-798
19.02.2019
xml 3.86 KB
↓
859-798
20.02.2019
docx 15.40 KB
↓

Instruction Leaflet
Relay modules, Opto- coupler modules
V 2.0.0 19.01.2022
pdf 2066.27 KB
↓

CAD/CAE-Data

CAD data
2D/3D Models 859-798



CAE data
EPLAN Data Portal 859-798
↓
WSCAD Universe 859-798
↓
ZUKEN Portal 859-798
↓

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



[Item No.: 216-124](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated

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



[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



1.1.3.1 Jumper



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

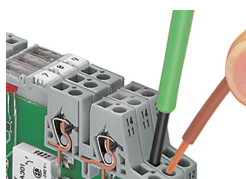
1.1.6.1 Operating tool



Item No.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured
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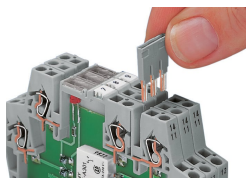
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System