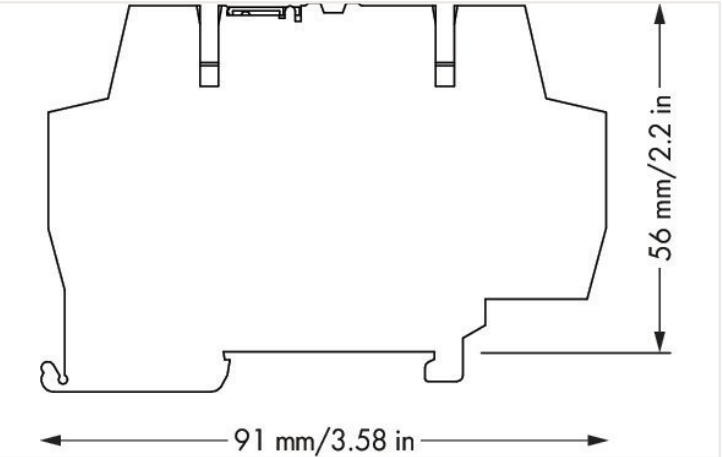
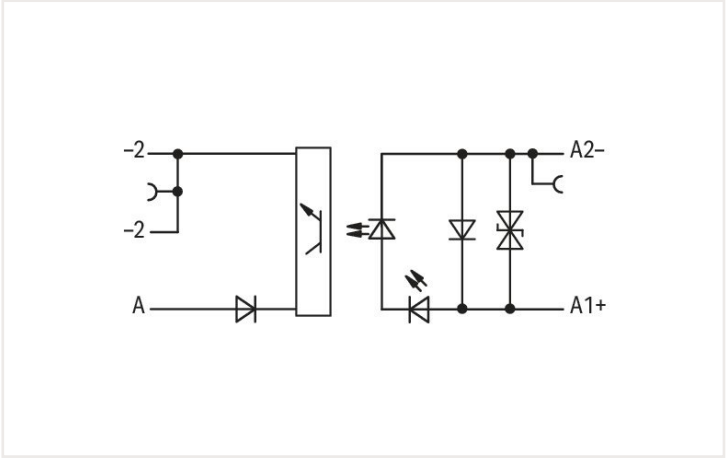
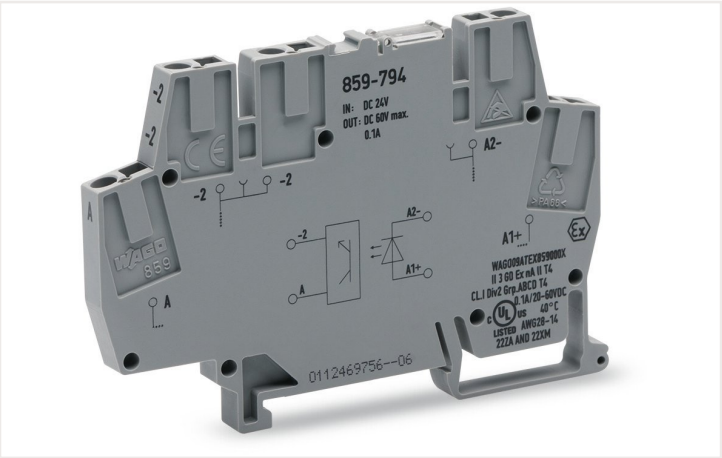


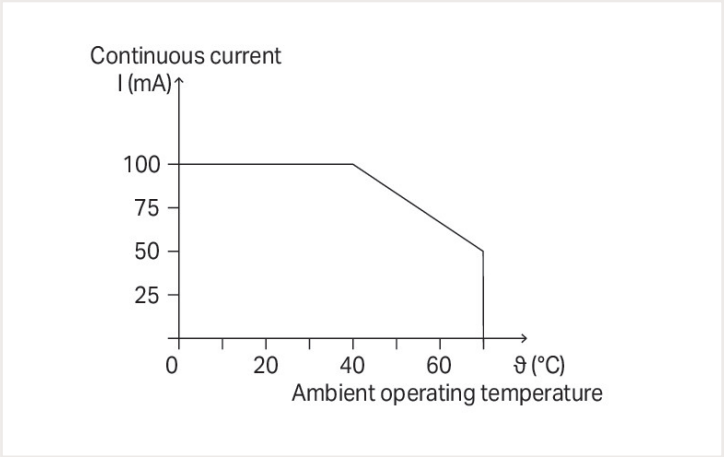
Data sheet | Item number: 859-794
Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 9 ... 60 VDC; Limiting continuous current: 0.1 A; Railway; Module width: 6 mm; gray



<https://www.wago.com/859-794>



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 24 V	Circuit type	2-wire connection
Input voltage range (low level)	DC 0 ... 5 V	Limiting continuous current	0.1 A
Input voltage range (high level)	DC 16 ... 30 V	Output voltage range	DC 9 ... 60 V
Nominal input current at U_N	4.2 mA	Voltage drop	≤ 2 VDC
		Leakage current at rated voltage	$\leq 25 \mu\text{A}$
		Turn-on time	$\leq 20 \mu\text{s}$
		Turn-off time	$\leq 120 \mu\text{s}$
		Switching frequency	$\leq 1.5 \text{ kHz}$

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 (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	0.313 MJ
Weight	17.7 g

Environmental requirements

Ambient temperature (operation at U_N)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	$\geq (T_{\text{surrounding air}} + 20 \text{ K})$
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 50121-3-2 EN 61373 UL 508

Commercial data	
Product Group	6 (Interface Electronics)
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 Stück
Packaging type	Box
Country of origin VKOrg Germany	CN
GTIN	4066966278989
Customs tariff number VKOrg Germany	85365005000

Approvals and certificates		
General approvals		Approvals for hazardous areas
		
Approval	Standard	Certificate name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19
UL UL International Nether- lands B.V. (ORDINARY LO- CATIONS)	UL 508	E175199 Sec.4
Approval	Standard	Certificate name
CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	ANSI/ISA 12.12.01	E198726

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 859-794	



Documentation				
Bid Text			Instruction Leaflet	
859-794	19.02.2019	xml 3.86 KB	Relay modules, Opto-coupler modules	V 2.0.0 19.01.2022 pdf 2066.27 KB
859-794	20.02.2019	docx 15.42 KB		

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 859-794	EPLAN Data Portal 859-794
	WSCAD Universe 859-794
	ZUKEN Portal 859-794

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



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



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 0,5mm²

1.1.6 Tool

1.1.6.1 Operating tool

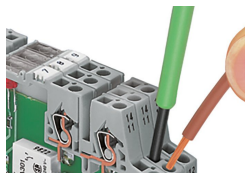


Item no.: 210-720

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