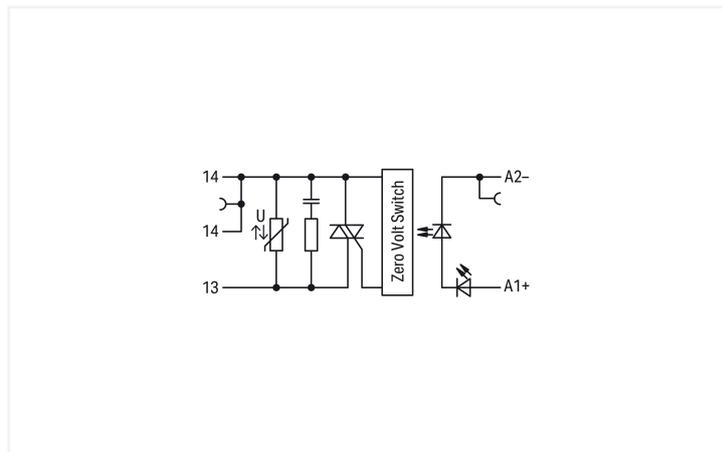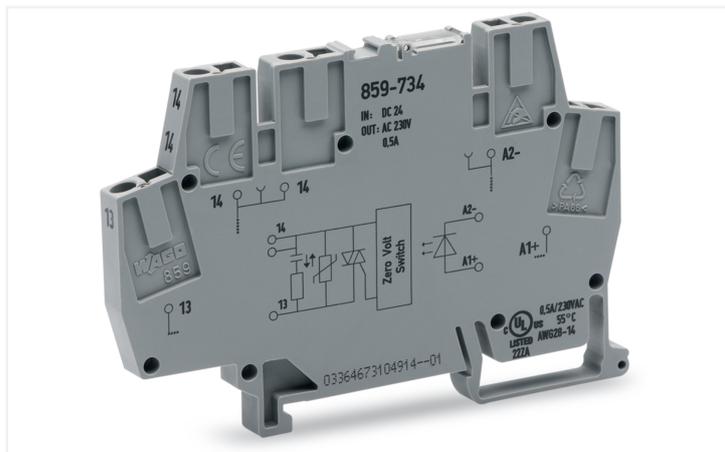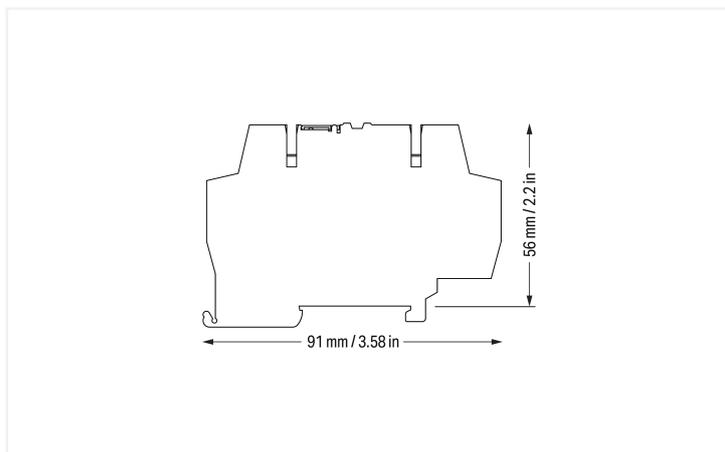# Data Sheet | Item Number: 859-734

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range 12 ... 260VAC; Limiting continuous current: 1 A; 2-wire connection; zero-cross switching; Red status indicator; Module width: 6 mm; light gray

https://www.wago.com/859-734

Color: ■ light gray

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	16 ... 30 VDC
Input voltage range (low level)	0 ... 5 VDC
Input voltage range (high level)	19 ... 28.8 VDC
Nominal input current at U_N	7 mA
Input current range	2 ... 9 mA

Load circuit

Circuit type	2-wire connection Zero-voltage switching
Limiting continuous current	1 A
Peak output current	30 A
Nominal output voltage	230 VAC
Output voltage range	12 ... 260 VAC (50 ... 60 Hz)
Voltage drop	≤ 1.2 VAC
Leakage current at rated voltage	≤ 1 mA
Switching current (min.)	10 mA
Turn-on time	≤ 10 ms

Load circuit

Turn-off time	≤ 10 ms
Switching frequency	50 Hz / 60 Hz

Signaling

Status indicator	Red LED

Safety and protection

Rated Voltage	300 V
Type of circuits	Mains circuits
Overvoltage category	III
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	3.5 kVrms
Insulation type (control/load circuit)	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	0.2 … 2.5 mm² / 24 … 14 AWG
Fine-stranded conductor	0.14 … 2.5 mm² / 26 … 14 AWG
Fine-stranded conductor; with insulated ferrule	0.14 … 1.5 mm² / 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	light gray
Insulation material (main housing)	Polyamide (PA66)
Material group	I
Flammability class per UL94	V0
Fire load	0.313 MJ
Weight	20.2 g

Environmental requirements

Ambient temperature (operation at U_N)	-40 … +70 ℃
Ambient temperature UL (operation at U_N)	-40 … +40 ℃
Ambient temperature (storage)	-40 … +85 ℃
Processing temperature	-25 … +50 ℃
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
	UL 508

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966181890
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.	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	6(c)
	7(a)
	7(c)-I
	7(c)-II
SCIP notification number (Austria)	2d0aafc9-69f4-4dfe-91a6-5392066639a2
SCIP notification number (Belgium)	d2e3bbb4-8e0e-4856-b782-f2d27110ca67
SCIP notification number (Bulgaria)	1aeddf05-e4bb-42a6-8024-b74fc8dbce10
SCIP notification number (Czech Republic)	039f9c15-9145-41d3-98f7-686100879009
SCIP notification number (Denmark)	883bc000-50ee-4c40-8874-7868869e1042
SCIP notification number (Finland)	563d3714-75c9-4f52-acdf-6f2546010694
SCIP notification number (France)	db3f26aa-b414-4b7a-8fb8-849f2571e5c8
SCIP notification number (Germany)	c022c058-8013-4a80-a4c2-6f63c4150232
SCIP notification number (Hungary)	1612fe70-16f0-45c4-a93a-9465f512100c
SCIP notification number (Italy)	3cce7617-5d8f-49a6-87be-01cd8af4c5b4
SCIP notification number (Netherlands)	3ec2c466-ec96-4aa7-bfa1-9ba2139958f0
SCIP notification number (Poland)	dfe413ee-e39f-4ca9-b4d3-d0190017b7ea
SCIP notification number (Romania)	a01ee6cb-183d-4fef-a557-c4b4b1b89467
SCIP notification number (Sweden)	19b6011e-cc4a-4fb0-8127-219ad4ff43b4

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
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	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 859-734	↓

Documentation

Bid Text

859-734	19.02.2019	xml 3.83 KB	↓
859-734	20.02.2019	docx 15.46 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 859-734	↓

CAE data

EPLAN Data Portal 859-734	↓
WSCAD Universe 859-734	↓
ZUKEN Portal 859-734	↓

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

1.1.3.1 Jumper

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
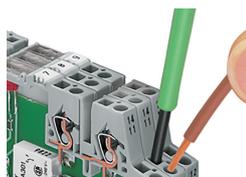
1.1.6 Tool

1.1.6.1 Operating tool

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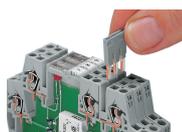Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

Conductor termination

Commoning

Easy commoning using adjacent jumpers

Marking

Marking via Mini-WSB Quick Marking System

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at:: www.wago.com