

# EO-AB/UT/LED/20 - Socket

0804509

<https://www.phoenixcontact.com/us/products/0804509>

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Socket, with light indicator, Typ: AB 20A, connection method: Screw connection, color: gray, nom. voltage: 125 V AC (60 Hz), nominal current: 20 A, for mounting on a DIN rail in the service interface or direct mounting, standards/specifications: UL 508, IEC 60884-1, Country marking: USA, Canada

## Commercial data

Item number	0804509
Packing unit	5 pc
Minimum order quantity	5 pc
Sales key	BE76
Product key	BE7613
GTIN	4055626396477
Weight per piece (including packing)	82.07 g
Weight per piece (excluding packing)	82.07 g
Customs tariff number	85366990
Country of origin	PL

## Technical data

### Notes

#### General

Note	The nominal current does not apply for fuse versions. In this case, the current is determined by the fuse.
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### Product properties

Product type	Socket
Country ID	USA
	Canada

### Electrical properties

Maximum power dissipation for nominal condition	1.8 W
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### Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	8 mm
Internal cylindrical gage	A3
	B3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Nominal current	20 A
Nominal voltage	125 V AC (60 Hz)

### Signaling

Status display	yes
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### Dimensions

Width	45 mm
Height	75 mm
Depth	58.9 mm
Depth on NS 35/7,5	60 mm
Depth on NS 35/15	67.5 mm
Hole diameter	4.4 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material	PA
Contact material	CuZn38
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

## Connector

Type of plug	Typ: AB 20A
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## Environmental and real-life conditions

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-5 °C ... 40 °C (according to IEC 60884-1, average value over a period of 24 hours not above +35°C)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)

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Permissible humidity (storage/transport)	30 % ... 70 %
Resistance against air humidity	95 % ... 48 h

## Standards and regulations

### Standards

Standards/regulations	UL 508
	IEC 60884-1

## Mounting

Mounting type	for mounting on a DIN rail in the service interface or direct mounting
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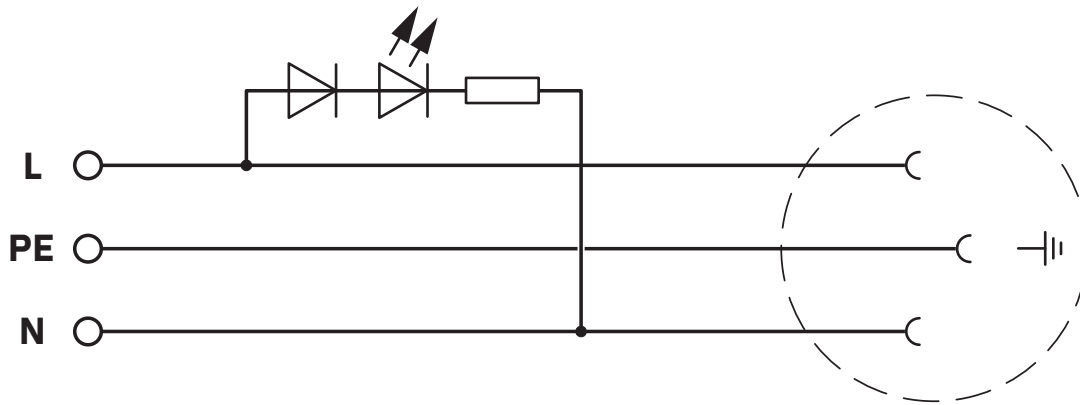
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## Drawings

Circuit diagram



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## Approvals

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 <b>UL Listed</b> Approval ID: E238705				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	125 V	20 A	-	-

 <b>EAC-RoHS</b> Approval ID: RU D-DE.HB49.B.00025	
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 <b>EAC</b> Approval ID: KZ7500651131219505	
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## Classifications

### ECLASS

ECLASS-13.0	27142305
ECLASS-15.0	27142305

### ETIM

ETIM 10.0	EC001663
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	56a32314-2065-462b-89a9-417ec1fb4256

### EF3.1 Climate Change

CO2e kg	0.66 kg CO2e
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