

Appliance Inlet DC Filter, ECO Design, Front- or Rear Side Mounting



Screw-on mounting, front or back side
 PCB snap-in version
 MOLEX HCS-125 connector



Screw-on mounting, front or back side
 Quick connect terminals 6.3 x 0.8 mm
 AMP Universal MATE-N-LOK or MOLEX MLX



Snap-in mounting with wires (stranded)
 AMP Universal MATE-N-LOK or MOLEX MLX

See below:
[Approvals and Compliances](#)

Description

- Panel mount :
 Screw-on version from front or rear side, snap-in version from front side, PCB Version from rear side
- 2 Functions :
 Appliance Inlet , DC line filter in standard version
- Solder / quick connect / wires (stranded)

Characteristics

- Compact high-performance DC-filter
- Optimal shielding due to completely closed filter case, unpotted
- Applications:
 - Mission Critical Ethernet LAN Routers
 - High uptime Ethernet LAN Switches
 - Fiber Optic WAN Switches
 - Fiber Optic WAN Multiplexer

Other versions on request

- Snap-in for panel thickness >2mm to 3mm
- flexible wire with various lengths
- Quick connect terminals 4.8 x 0.8 mm
- Capacity CY 5.5 nF
- with long earth pin in connector

References

Last order date: 15.12.2021
 Alternative: version 5120 for AC applications

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

Technical Data

Ratings IEC	15A / 125VDC	Line Filter	DC Standard Version, UL 1283
Ratings UL/CSA	3 - 15A @ Ta 40 °C / 125VDC		Technical Details
Dielectric Strength	> 0.5kVDC between (VAC 1 min., DIN EN 50155) > 1.1kVDC between protective conductor and live parts Test voltage (2 sec)	MTBF	> 3'900'000h acc. to MIL-HB-217 F
Allowable Operation Temperature	-25 °C to 85 °C		
Climatic Category	25/085/21 acc. to IEC 60068-1		
Protection Class	Suitable for appliances with protection class I		
Terminal	Quick connect terminals 6.3 x 0.8 mm Wire leads AWG 18 (10-15A AWG 16), 150 mm		
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5Nm Snap-in: 0.8mm to 2 mm (all steps with one variant)		
Material: Housing	Themoplast / steel tin-plated, black / metallic, UL 94V-0		

Approvals and Compliances



Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals






The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: 5003

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	Certificate Number: 40020642
	UL Approvals	UL	UL File Number: E72928

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
	Designed according to	UL 1283	Electromagnetic interference filters
	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices






Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

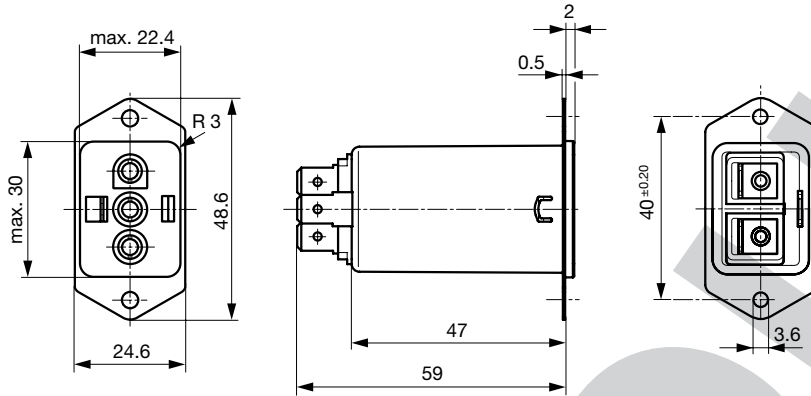
Compliances

The product complies with following Guide Lines

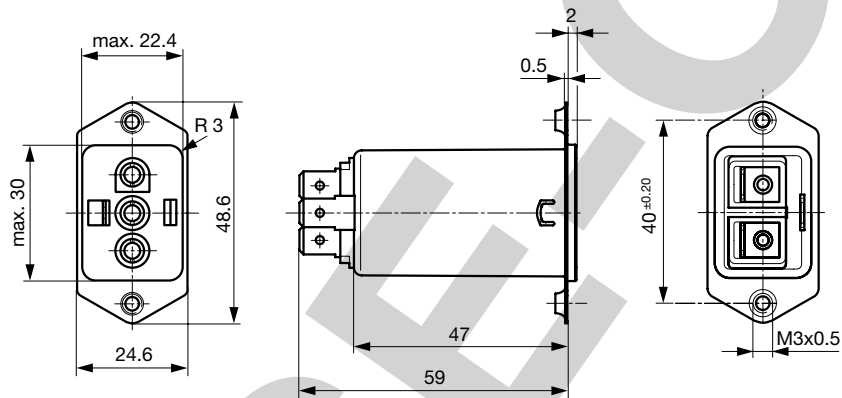
Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]

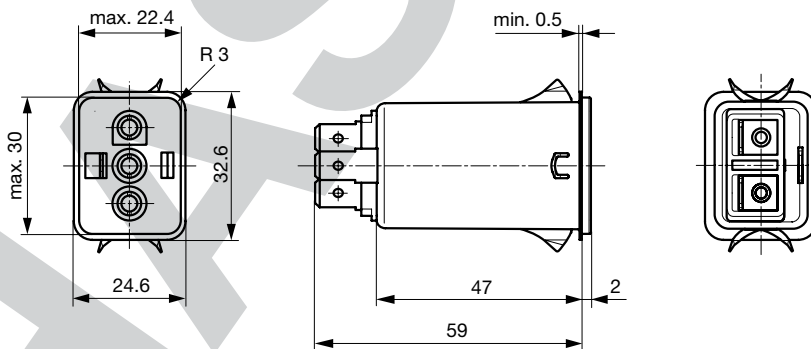
Front- or rear side mounting for screws with nuts or blind rivets, mating connector Molex HCS-125



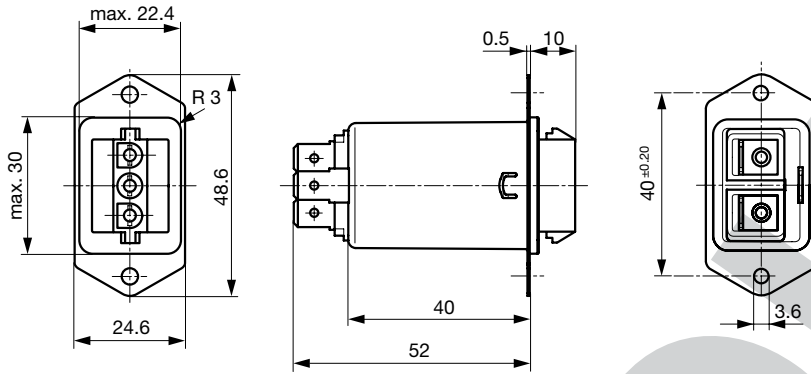
Rear side mounting with pre-formed, threaded holes for M3 screws, mating connector Molex HCS-125



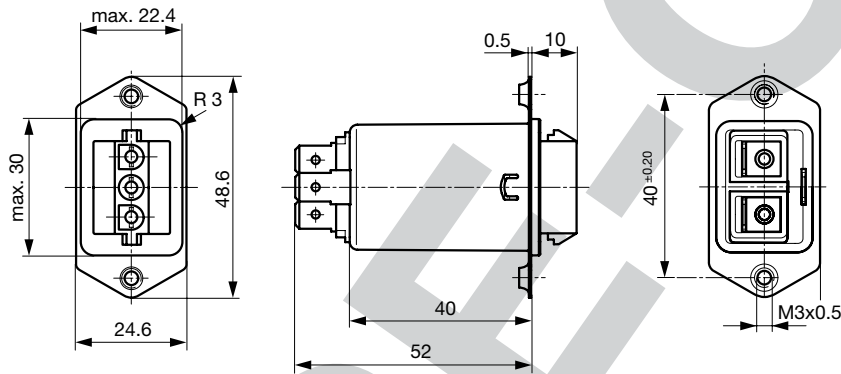
Snap-in mounting from front side, mating connector Molex HCS-125



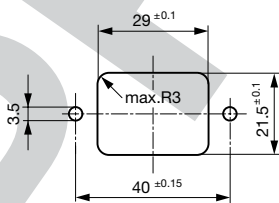
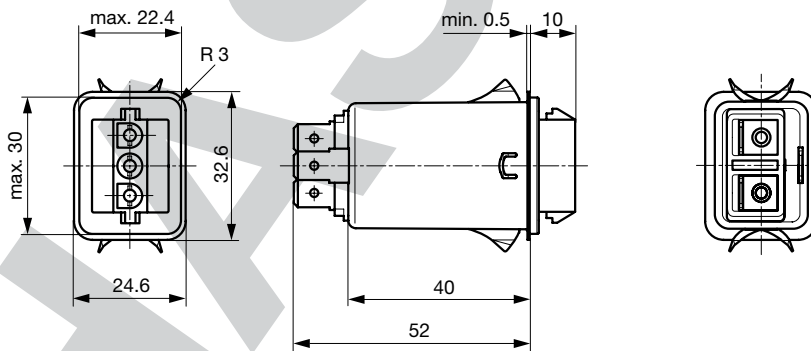
Front or rear side mounting for screws with nuts or blind rivets, mating connector AMP Universal MATE-N-LOK oder Molex MLX



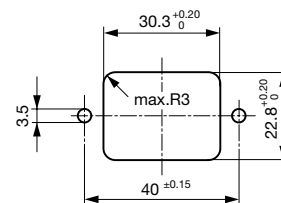
Rear side mounting with pre-formed, threaded holes for M3 screws, mating connector AMP Universal MATE-N-LOK oder Molex MLX



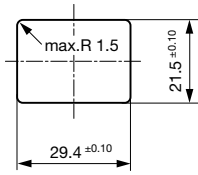
Snap-in mounting from front side, mating connector AMP Universal MATE-N-LOK oder Molex MLX



Panel cutout for front side mounting

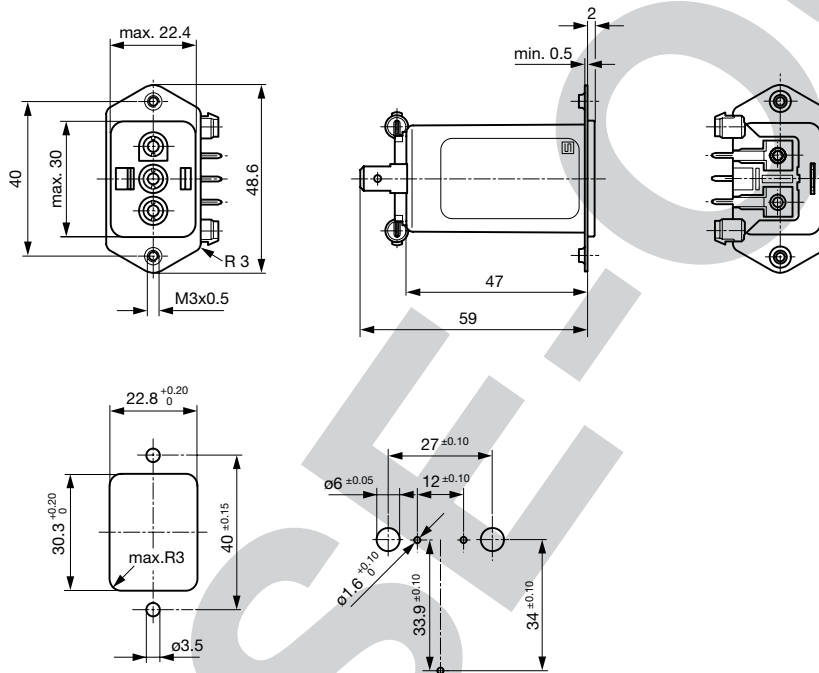


Panel cutout for rear side mounting

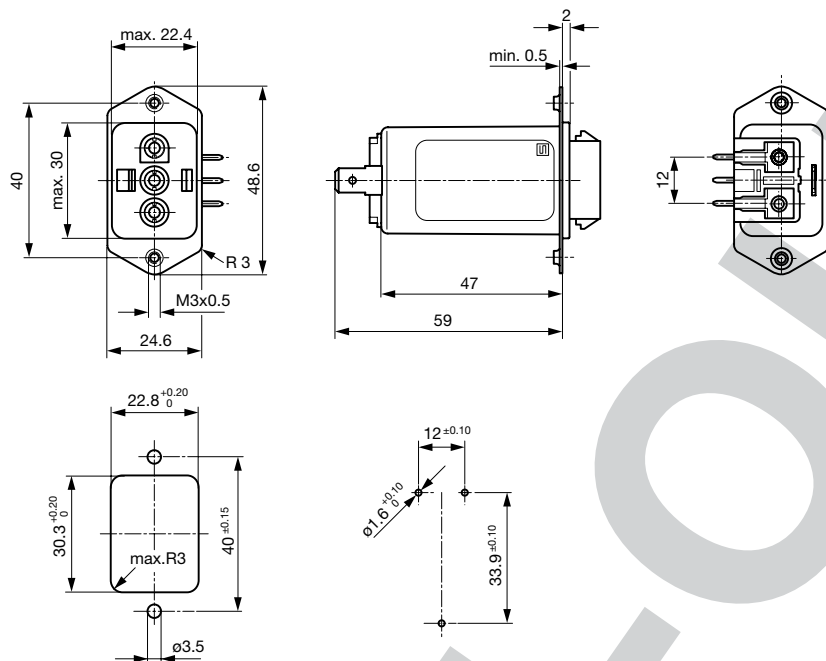


Panel cutout for snap-in mounting

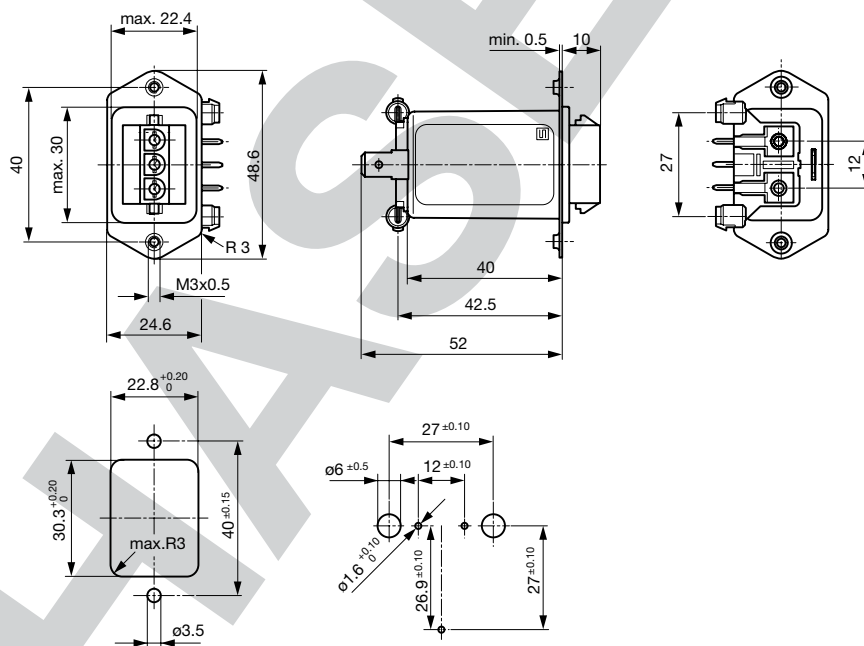
PCB snap-in rear-side mounting with pre-formed threaded holes for M3 screws, mating connector Molex HCS-125



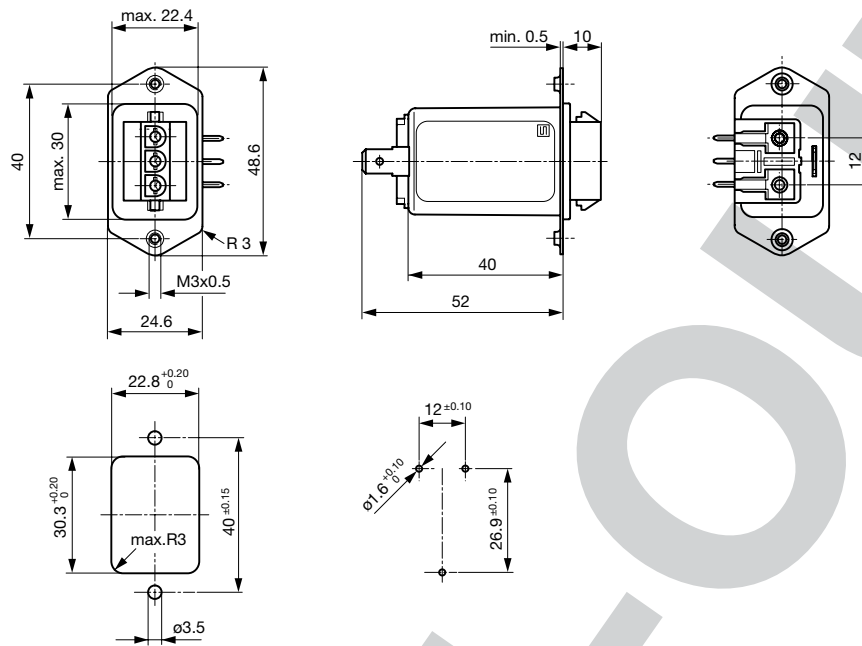
PCB rear-side mounting with pre-formed threaded holes for M3 screws, mating connector Molex HCS-125



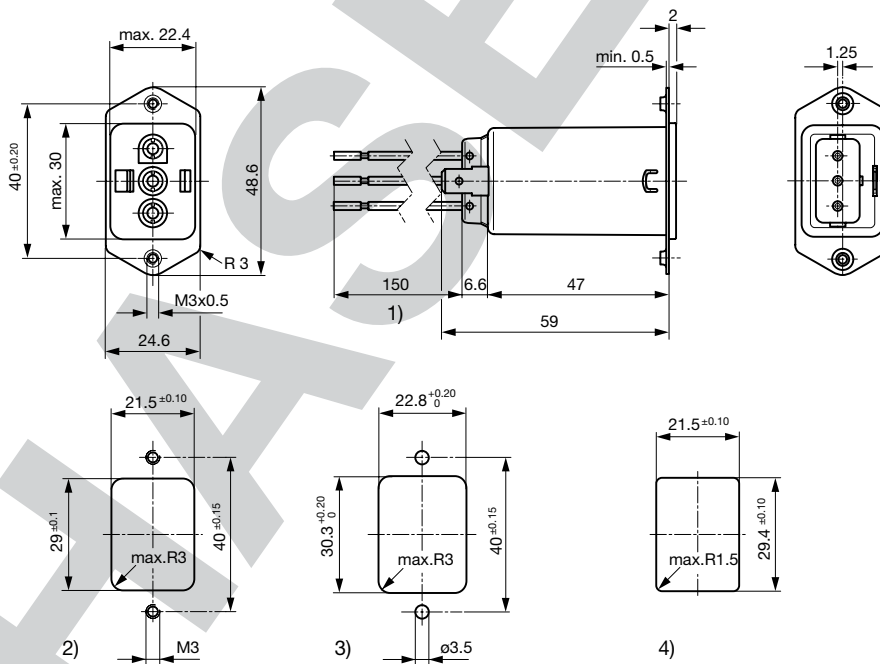
PCB snap-in rear-side mounting with pre-formed threaded holes for M3 screws, mating connector AMP Universal MATE-N-LOK or MOLEX MLX



PCB rear-side mounting with pre-formed threaded holes for M3 screws, mating connector AMP Universal MATE-N-LOK or Molex MLX



Screw and snap-in mounting with flexible wire, mating connector Molex HCS-125 or AMP Universal MATE-N-LOK



- 1) Flexible wire, standard length 150 mm or special length on request
- 2) Panel cut-out screw-on version, front-side mounting
- 3) Panel cut-out, screw-on version, back-side mounting
- 4) Panel cut-out snap-in version, front-side mounting

Plug Molex HCS-125



Molex HCS-125
 Housing: Molex no. 03-12-1036
 Female terminal (3 needed per housing): Molex no. 18-12-1222

Plug AMP / Molex MLX



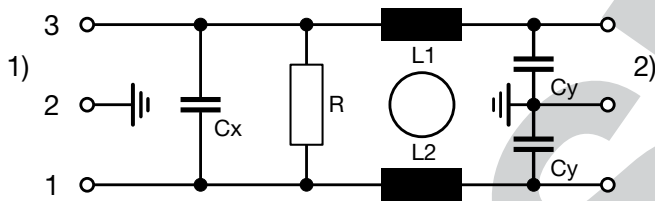
AMP Universal MATE-N-LOK
 Housing: AMP no. 1-480700-0
 Female terminal (3 needed per housing): AMP no. 926901-1
 Molex MLXHousing: Molex no. 50-84-1030
 Female terminal (3 needed per housing): Molex no. 02-08-1002

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
3	DC Standard Version	2 x 4	100	4.7	1
6	DC Standard Version	2 x 0.8	100	4.7	1
10	DC Standard Version	2 x 0.4	100	4.7	1
15	DC Standard Version	2 x 0.1	100	4.7	1

Diagrams

5003



1) Line
 2) Load

Attenuation Loss

--- 50Ω differential mode ____ 50Ω common mode

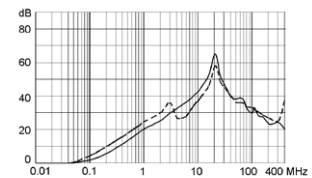
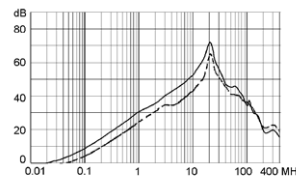
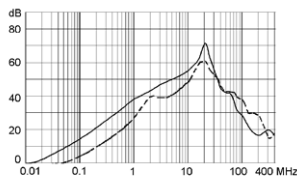
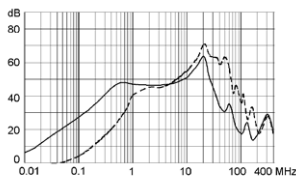
Standard version

3 A

6 A

10 A

15 A



All Variants

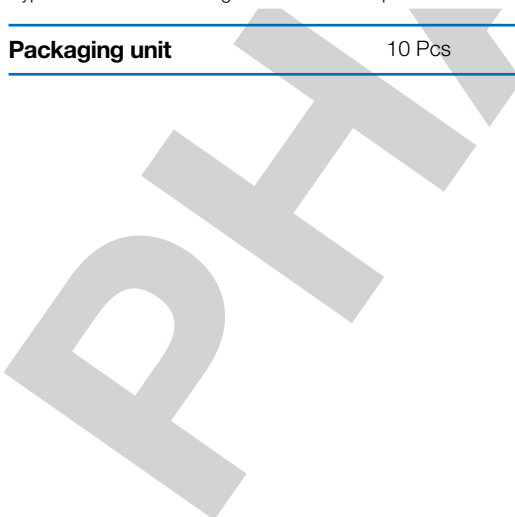
Rated Current [A]	Mounting	Mounting side	Terminal	Mating Connector	Order Number
3	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0121.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.015B.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.016B.1
3	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0111.1
6	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0231.1

Rated Current [A]	Mounting	Mounting side	Terminal	Mating Connector	Order Number
6	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0221.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.025B.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.026B.1
6	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0211.1
6	Screw-on/Rivet	Front-/Rear-Side	Solder terminal	Molex HCS-125	5003.0213.1
10	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0321.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.035B.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.036B.1
10	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0311.1
10	Screw-on/Rivet	Front-/Rear-Side	Flexible wire and Earth pin 6.3 x 0.8	Molex HCS-125	5003.0316.1
15	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0421.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.045B.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.046B.1
15	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0411.1
3	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1131.1
3	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1121.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.115B.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.116B.1
3	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1111.1
6	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1221.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.125B.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.126B.1
6	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1211.1
10	Snap-in	Front Side	Flexible wire and Earth pin 6.3 x 0.8	AMP / Molex MLX	5003.1336.1
10	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1321.1
10	Screw	Rear Side	Solder terminal	AMP / Molex MLX	5003.1323.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.135B.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.136B.1
10	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1311.1
15	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1431.1
15	Snap-in 2 - 3 mm	Front Side	Flexible wire and Earth solder terminal	AMP / Molex MLX	5003.1448.1
15	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1421.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.145B.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.146B.1
15	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1411.1

Availability for all products can be searched real-time:<https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

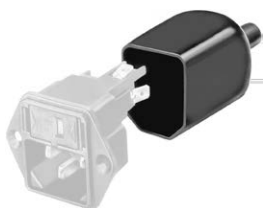
Type for screw on mounting from rear side has pre-threaded holes for M3 screws

Packaging unit 10 Pcs



Accessories

Description



Assorted Covers
 Rear Cover

	0859.0048
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RC320
 Rear Cover for Power Entry Module



Cord retaining kits
 Cord retaining strain relief

Flat head, E	4700.0005
Flat head, G	4700.0007

PHASE

Mouser Electronics

Authorized Distributor

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[5003.1211.1](#) [5003.1221.1](#) [5003.1421.1](#) [5003.0311.1](#) [5003.0121.1](#) [5003.1321.1](#) [5003.0211.1](#) [5003.0411.1](#)
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[5003.146B.1](#)