

IEC Appliance Inlet C14 or C18 with Filter, Circuit Breaker TA45



Protection class I with shield



Protection class II without shield



See below:

Approvals and Compliances

Description

- Panel mount :
Screw-on mounting from front side
- 3 Functions :
Appliance Inlet protection class I or II , circuit breaker type TA45 2-pole , Line filter in standard and medical version
- Quick connect terminals 6.3 x 0.8 mm

Unique Selling Proposition

- Compact power entry module with circuit breaker
- High configurability
- Easy assembly with prewired modules
- Protection class I or II

Characteristics

- All single elements are already wired
- Unwired versions available on request
- Circuit Breaker non-illuminated or illuminated
- For applications according IEC/UL 62368-1 we recommend variants with bleed resistor
Suitable for use in medical equipment according to IEC/UL 60601-1

References

Alternative: version without line filter [6145](#)

We recommend for new applications [DF12](#)

Weblinks

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

Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50Hz
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 250 VAC; 60Hz
Leakage Current	standard < 0.5 mA (250 V / 60 Hz) medical < 5 µA (250 V / 60 Hz)
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)
Allowable Operation Temperature	-10 °C to 55 °C
Climatic Category	10/055/21 acc. to IEC 60068-1
IP-Protection	from front side IP40 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Terminal	Quick connect terminals 6.3 x 0.8 mm
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm
Material: Housing	Thermoplastic, black, UL 94V-0

Appliance inlet/-outlet	C14 or C18 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I or II
Circuit Breakers	Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235 2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage- or remote trip release Short circuit capacity Icn: at In < 3A/240VAC : 10 x In at In ≥ 3A/240VAC : 300A
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 100'000h acc. to MIL-HB-217 F

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: 5145

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	Certificate Number: 40035745
	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 60939	Passive filters for suppressing electromagnetic interference
	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
	Designed according to	CSA C22.2 no. 8	Electromagnetic interference (EMI) filters

Application standards

Application standards where the product can be used

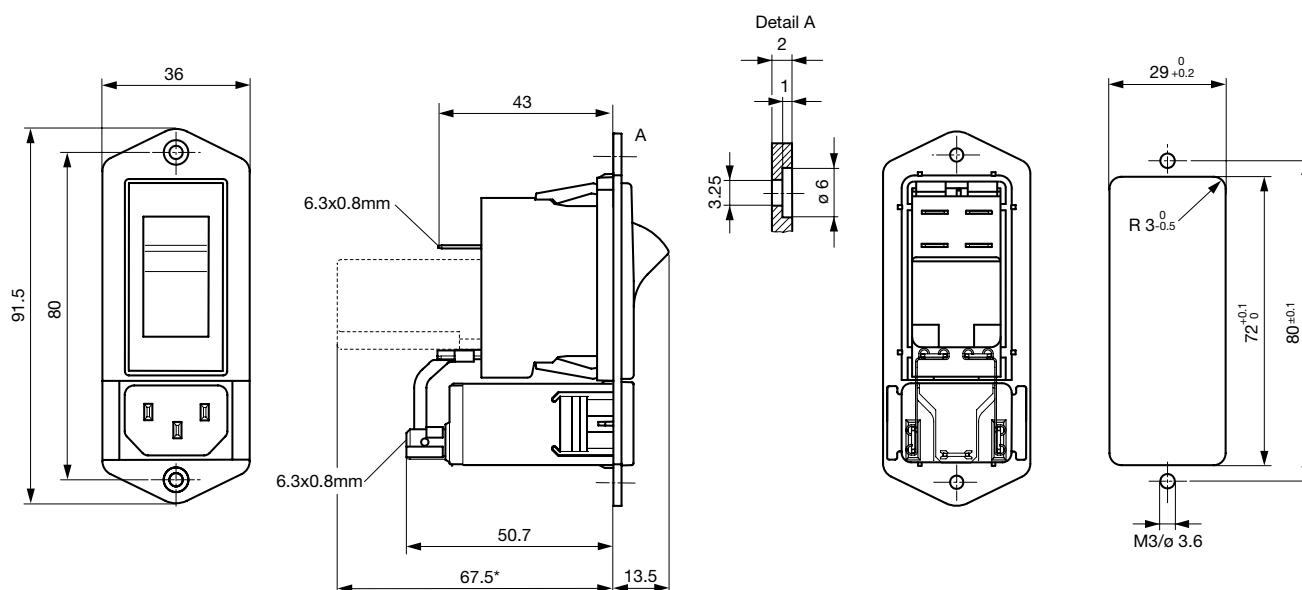
Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.
	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

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.
	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.
	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

Dimension [mm]



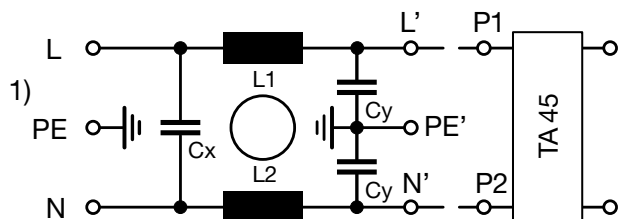
* --- Version TA45 with undervoltage release

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
1	Standard version	2 x 11	47	2.2	-
2	Standard version	2 x 4	47	2.2	-
3	Standard version	2 x 2.5	47	2.2	-
4	Standard version	2 x 1.6	47	2.2	-
6	Standard version	2 x 0.7	47	2.2	-
8	Standard version	2 x 0.6	47	2.2	-
10	Standard version	2 x 0.4	47	2.2	-
15	Standard version	2 x 0.1	47	2.2	-
1	Medical Version (M5)	2 x 11	47	-	1
2	Medical Version (M5)	2 x 4	47	-	1
6	Medical Version (M5)	2 x 0.7	47	-	1
8	Medical Version (M5)	2 x 0.6	47	-	1
10	Medical Version (M5)	2 x 0.4	47	-	1
15	Medical Version (M5)	2 x 0.1	47	-	1

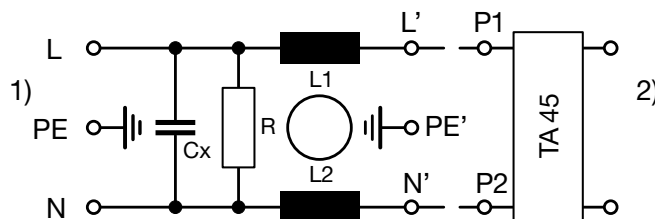
Diagrams

Standard version



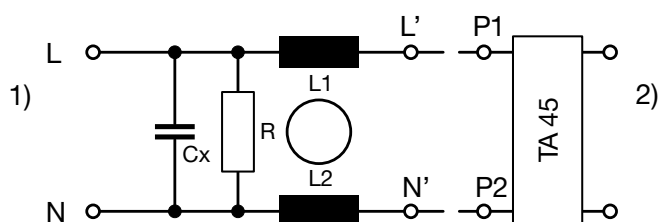
1) Line
2) Load

Medical Version (M5)



1) Line
2) Load

Medical filter (M5) protection class II



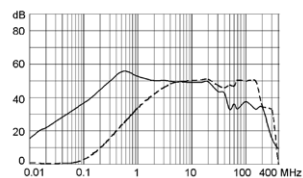
1) Line
2) Load

Attenuation Loss

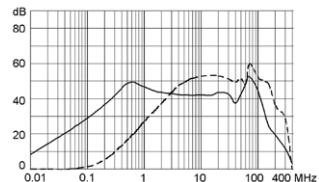
- - - 50Ω differential mode ____ 50Ω common mode

Standard version

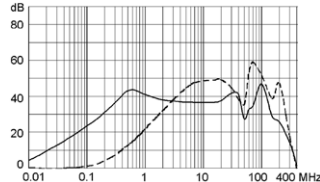
1 A



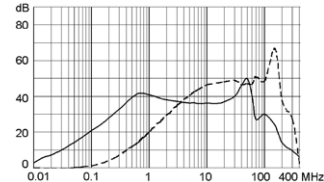
2 A



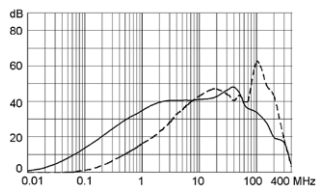
3 A



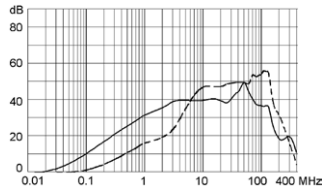
4 A



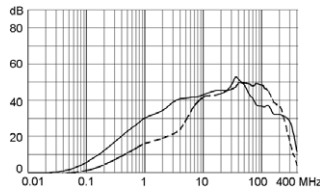
6 A



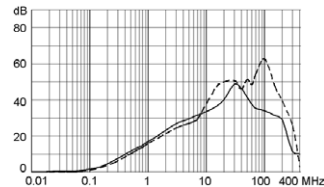
8 A



10 A

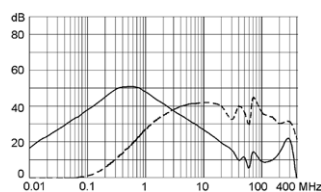


15 A

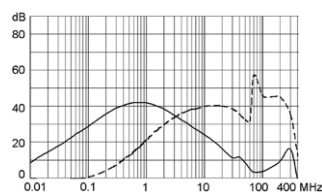


Medical version (M5)

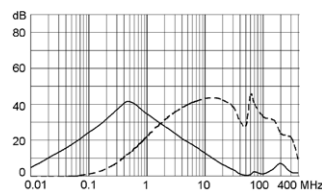
1 A



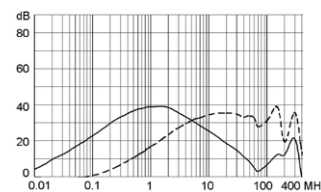
2 A



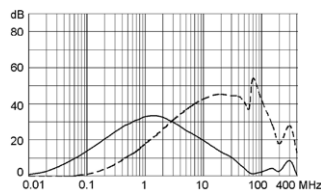
3 A



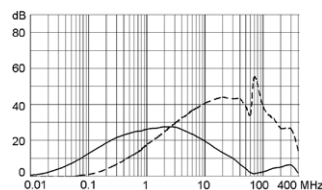
4 A



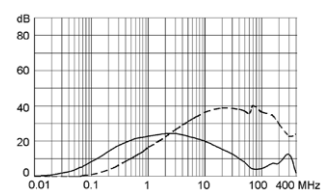
6 A



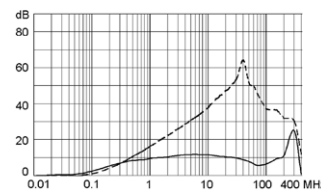
8 A



10 A



15 A



Effect of ambient temperature

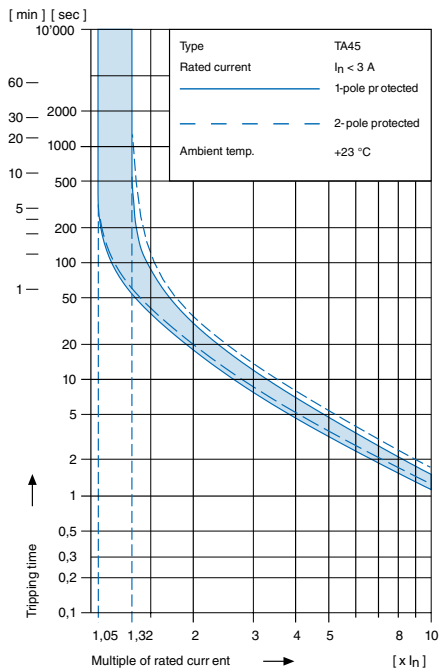
The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

Ambient Temperature [°C]	Correction factor
-10	0.89
-5	0.91
0	0.92
+23	1.00
+30	1.03
+40	1.08
+55	1.16

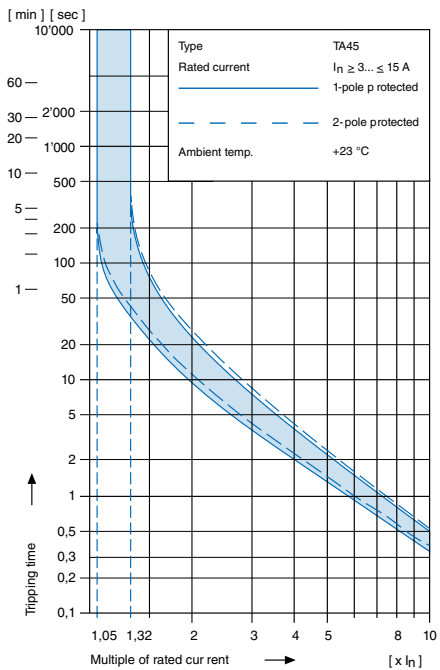
Example: Rated current = 5 A, Environmental temperature = 40 °C, --> Correction factor = 1.08, Resulting current = 5.5 A --> Rount to next higher rated current: 6 A

Time-Current-Curves

Tripping Characteristics $I_n < 3\text{ A}$



Tripping Characteristics $I_n \geq 3 \dots \leq 15\text{ A}$



Configuration code TA45

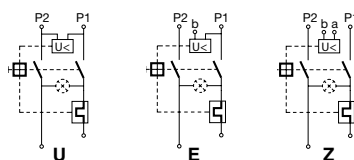
Type	Configuration code TA45				
5145	ABTWF150C0	000	111	10	00



- Circuit Breaker of Equipment
 - 2-pole, rocker actuated
 - Quick connect terminal
- Other types on request

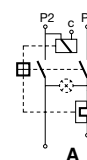
Without release: code C0

Undervoltage release



•	•	•
•	•	•
•	•	•

Remote trip release



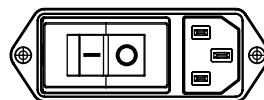
Code	Rated voltage U_n
2	240 V AC
3	230 V AC
4	120 V AC

Rated current circuit breaker of equipment

I_n	Code	I_n	Code	I_n	Code	I_n	Code
0,1	J01	1,3	J13	2,8	J28	10,0	100
0,2	J02	1,4	J14	3,0	030	11,0	110
0,3	J03	1,5	J15	3,5	035	12,0	120
0,4	J04	1,6	J16	4,0	040	13,0	130
0,5	J05	1,7	J17	4,5	045	14,0	140
0,6	J06	1,8	J18	5,0	050	15,0	150
0,7	J07	1,9	J19	6,0	060	20,0	200
0,8	J08	2,0	J20	6,5	065		
0,9	J09	2,1	J21	7,0	070		
1,0	J10	2,2	J22	7,5	075		
1,1	J11	2,3	J23	8,0	080		
1,2	J12	2,5	J25	9,0	090		

Rocker legend

Surface	Illustration	Colour of print	Position of the rocker legend e.g F
F embossed	— O		
H printed	ON OFF	white	
K printed	ON OFF	black	
L printed	— O	white	
M printed	— O	black	
P printed	I O	white	
R printed	I O	black	

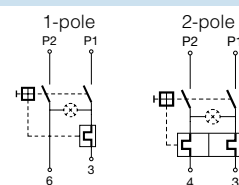


Colours

Switch front	Rocker
W black	white
B black	black
6 black	— orange transp.

Diagram

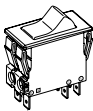
Thermal overload protection



Without illumination	ABT	ABD
With illumination	220...240 V 110...120 V	A12 A14 A32 A34

Configuration code TA45

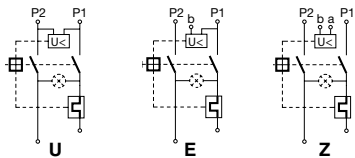
Type	Configuration code TA45				
5145	ABTWF150C0	000	111	10	00



- Circuit Breaker of Equipment
- 2-pole, rocker actuated
- Quick connect terminal
- Other types on request

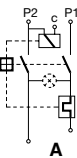
Without release: code C0

Undervoltage release



•	•	•
•	•	•
•	•	•

Remote trip release



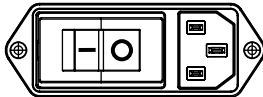
Code	Rated voltage U _n
2	240 V AC
3	230 V AC
4	120 V AC

Rated current circuit breaker of equipment

I _n	Code	I _n	Code	I _n	Code	I _n	Code
0,1	J01	1,3	J13	2,8	J28	10,0	100
0,2	J02	1,4	J14	3,0	030	11,0	110
0,3	J03	1,5	J15	3,5	035	12,0	120
0,4	J04	1,6	J16	4,0	040	13,0	130
0,5	J05	1,7	J17	4,5	045	14,0	140
0,6	J06	1,8	J18	5,0	050	15,0	150
0,7	J07	1,9	J19	6,0	060	20,0	200
0,8	J08	2,0	J20	6,5	065		
0,9	J09	2,1	J21	7,0	070		
1,0	J10	2,2	J22	7,5	075		
1,1	J11	2,3	J23	8,0	080		
1,2	J12	2,5	J25	9,0	090		

Rocker legend

Surface	Illustration	Colour of print	Position of the rocker legend e.g F
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K printed	ON OFF	black	
L printed	— O	white	
M printed	— O	black	
P printed	I O	white	
R printed	I O	black	



Colours

Switch front	Rocker
W black	white
B black	black
6 black	— orange transp.

Diagram

Thermal overload protection	1-pole	2-pole
Without illumination	ABT	ABD
With illumination	220...240 V 110...120 V	A12 A14
		A32 A34

Configuration code (Order example)

Type	Configuration code TA45				
5145-ABTWF150C0	- 000 -	111	- 10 -	00	
					Optional Variants 00 standard 21 V-Lock notch
					Terminal PE 0 without (PCII) 1 QC 6.3x0.8
					Terminal L and N 1 QC 6.3x0.8, without connection to TA45 3 Connection to TA45 non insulated
					Metal Shield Filter 0 with metal shield (PCI) 1 without metal shield (PCI and PCII)
					Type of mains filter / capacitor / bleed resistor 1 standard X2,Y2 without 1) 3 medical M5 X2 with
					Rated current 2) 1 1A 2 2A 3 3A 4 4A 5 6A 6 8A 7 10A 8 15A

1) Not in conjunction with PC II

2) The rated current of the line-filter must not be exceeded in the end application.

Configuration code (Order example)

Type	Configuration code TA45				
5145-ABTWF150C0	- 000	- 111	- 10	- 00	

- Optional Variants
- 00 standard
- 21 V-Lock notch
- Terminal PE
- 0 without (PCII)
- 1 QC 6.3x0.8
- Terminal L and N
- 1 QC 6.3x0.8, without connection to TA45
- 3 Connection to TA45 non insulated
- Metal Shield Filter
- 0 with metal shield (PCI)
- 1 without metal shield (PCI and PCII)
- Type of mains filter / capacitor / bleed resistor
- 1 standard X2,Y2 without 1)
- 3 medical M5 X2 with
- Rated current 2)
- 1 1A
- 2 2A
- 3 3A
- 4 4A
- 5 6A
- 6 8A
- 7 10A
- 8 15A

1) Not in conjunction with PC II

2) The rated current of the line-filter must not be exceeded in the end application.

Packaging unit 20 Pcs

Accessories

Description	
	Assorted Covers
	Rear Cover
0859.0074	
	RC320 Rear Cover for Power Entry Module

Mating Outlets/Connectors

Category / Description	
	Appliance Outlet Overview complete
	4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with protection class I
	4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder/Quick Connect Terminal, 10 A, Suitable for appliances with protection class I
	IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal
	Connector Overview complete
	4782 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13
	4785 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13
	4300-06 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13
	4781 Mounting: Power Cord, Cable, Connector: IEC C15
	4784 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C15
...	

Mating Outlets/Connectors shuttered

	Power Cord Overview complete
	VAC17KS, V-Lock cord retaining, diverse m, Connector IEC C17, diverse, black / grey / white
VAC17KS	

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

[5-ABTWF150C0-811](#) [5-ABTWF150C0-831](#) [5-ABTWF050C0-531](#) [5-ABTWF050C0-511](#) [5-ABDWF150C0-811](#) [5-ABDWF150C0-831](#) [5-ABDWF050C0-511](#) [5-ABDWF050C0-531](#) [5-ABDWF100C0-711](#) [5145.3000.830](#) [5145.0012.511](#)
[5145.0012.711](#) [5145.0022.711](#) [5145.0031.830](#) [5145.0040.211](#) [5145.0423.611](#) [5145.0470.730](#) [5145.0470.731](#)
[5145.0470.831.01](#) [5145.0551.511](#) [5145.0562.411](#) [5145.0646.611](#) [5145.0764.831](#) [5145.0861.830](#) [5145.0879.310](#)
[5145.0880.110](#) [5145.0881.111](#) [5145.0882.211](#) [5145.0885.810](#) [5145.0885.831.01](#) [5145.0890.831](#) [5145.0893.711](#)
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[5145.2810.511](#) [5145.2841.111](#) [5145.2844.411](#) [5145.2851.811](#) [5145.2857.511](#) [5145.2858.230](#) [5145.2882.811](#)
[5145.2956.111](#) [5145.3000.811](#) [5145.3303.831](#) [5145.3417.811](#) [5145.3583.510](#) [5145.0031.811](#) [5145.0031.831](#)
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[5145.0991.510](#) [5145.1477.711](#) [5145.2217.711](#) [5145.ABDWF100C0.811](#) [5145.0470.831](#) [5145.0022.731](#)
[5145.0429.611](#) [5145.2090.211](#) [5145.3768.711](#) [5145.0646.631](#) [5145.0470.811](#) [5145.0991.611.01](#) [5145.0885.835.21](#)
[5145.0022.611](#) [5145.0646.610](#) [5145.2858.231](#)