

Data sheet

DF11 Power entry module

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1 General Description

General

The power entry module type **DF11** meets IEC / EN 60950.

The power entry module is internally completely wired.

It consists of the following parts :

Appliance inlet

For a pin temperature of max. 70° C.

The appliance inlet meets the following standards :

- IEC / EN 60320-1 / C14

- UL 60320-1

- CSA 22.2 no. 60320-1

- CQC GB/T 15287

Protection class I (L / N / PE) or protection class II (L / N) according to IEC 61140.

Circuit breaker

Circuit breaker for equipment **TA45** meets the following standards :

- IEC / EN 60934

- UL 1077

- CSA C22.2 no. 235

(detail information see catalogue "Circuit Breakers for Equipment")

Variants : 2-pole, with 1-pole thermal overload protection

2-pole, with 2-pole thermal overload protection

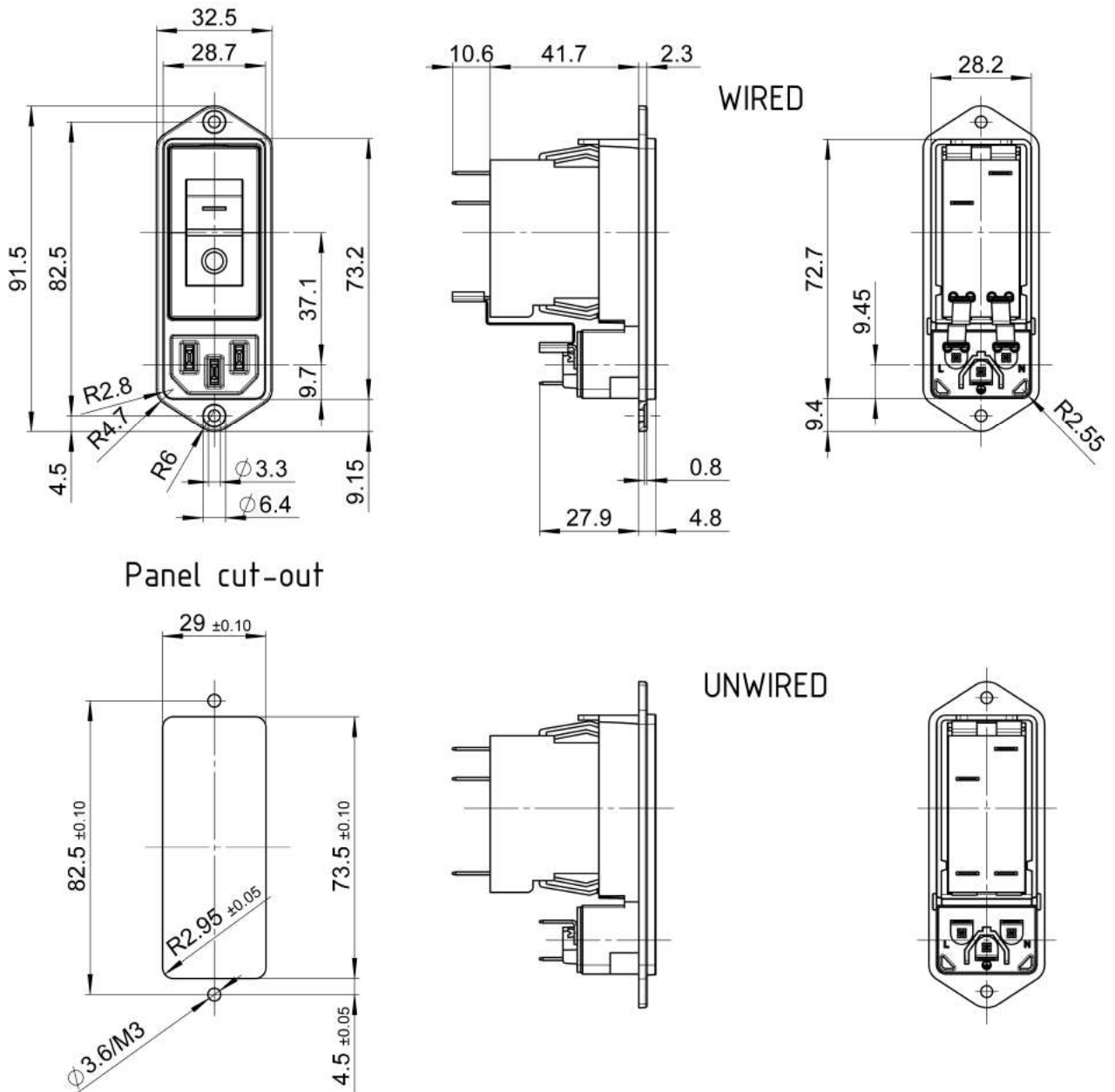
Available options : Undervoltage release

Remote trip release

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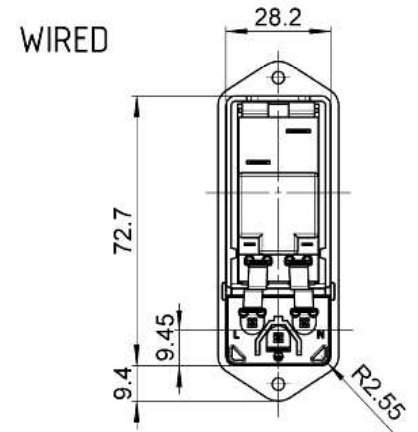
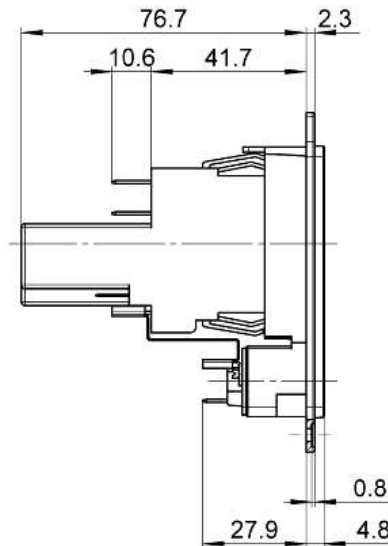
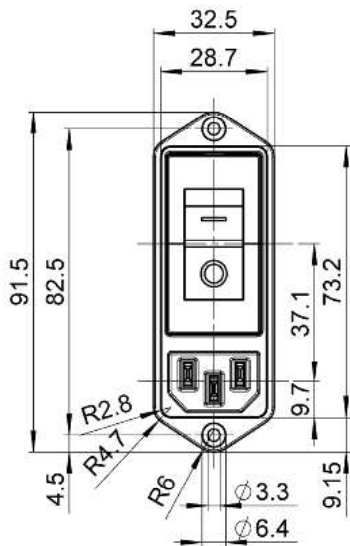
2 Dimensions

Screw Version : TA45 basic type

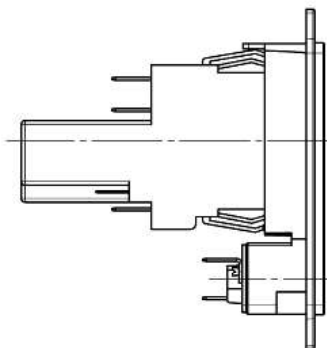
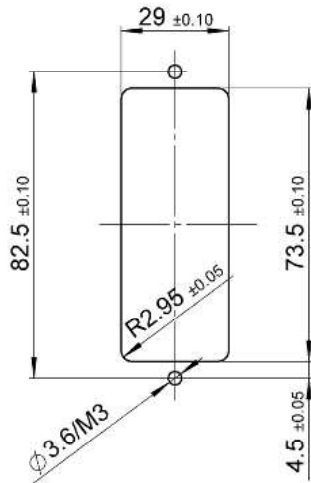


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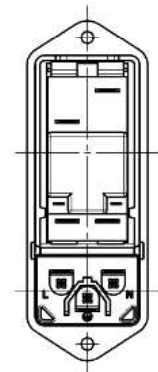
Screw Version : TA45 with undervoltage release



Panel cut-out

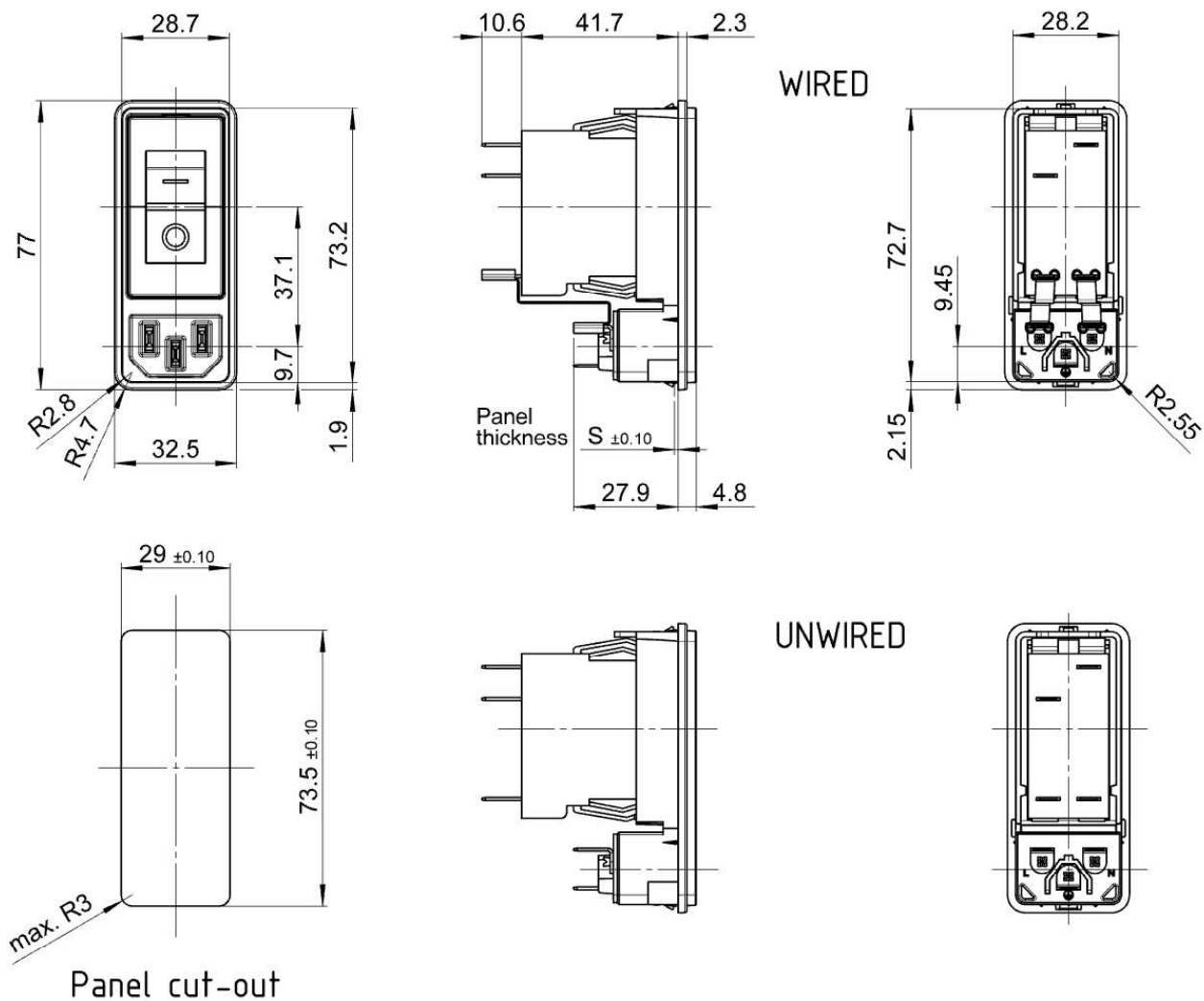


UNWIRED



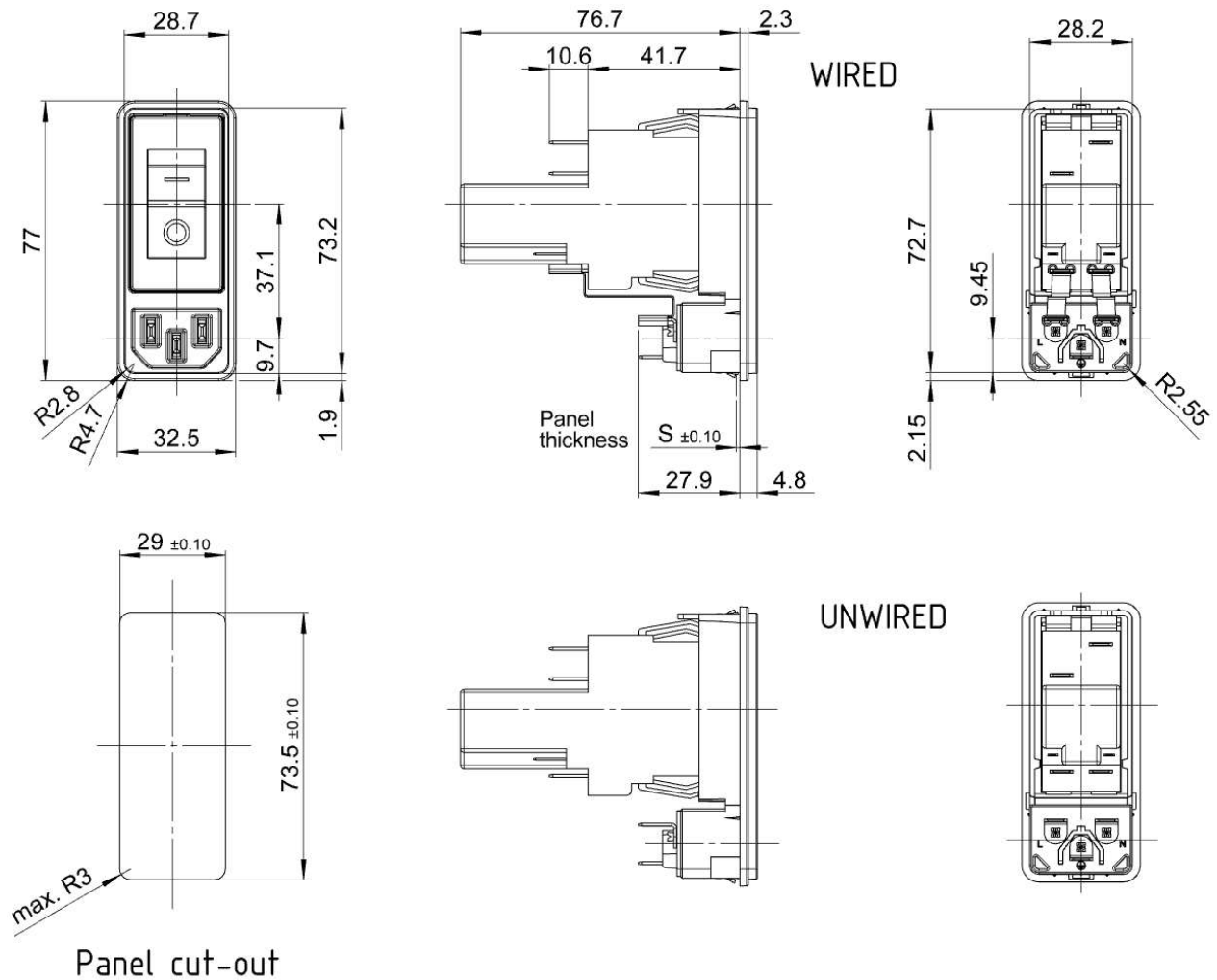
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Snap-in Version : TA45 basic type



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Snap-in Version : TA45 with undervoltage release



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3 Electrical Data

3.1 General

Rated voltage U_n	250 V AC 50 / 60 Hz	
Rated current I_n	10 A	according to IEC / EN
	15 A	according to UL, CSA
Insulation resistance (500 V DC ; 1 min.)	$> 10^3 \text{ M}\Omega$	between live parts of different potentials.
	$> 10^3 \text{ M}\Omega$	between protective conductor PE and live parts.
Dielectric strength (50 Hz ; 1 min.)	$> 2.5 \text{ kV}$	between live parts of different potentials.
	$> 3 \text{ kV}$	between protective conductor PE and live parts.
Impulse withstand voltage $\hat{U}_{1,2/50}$	$> 4 \text{ kV}$	between live parts of different potentials
	$> 6 \text{ kV}$	between protective conductor PE and live parts.
Overtoltage category	I - III	according to IEC 60664-1
Clearence and creepage distances	$> 3 \text{ mm}$	between live parts of different potentials.
	$> 4 \text{ mm}$	between protective conductor PE and live parts.
	$> 8 \text{ mm}$	between live parts and metal mounting-plate with max.10 mm thickness. (for protection class II)
Pollution degree	1 - 3	according to IEC 60664-1
Protection class (Protection against electric shock)	Suitable for appliances of protection class I and II, acc. to IEC 61140 respectively acc. to VDE 0106 / part 1	

3.2 Appliance inlet

Dimensions according to IEC / EN 60320-1	C 14 for protection class I (L / N / PE) or C 18 for protection class II (L / N)
Pin temperature	max. 70° C

3.3 Circuit breaker for equipment

TA45 2-pole, rocker actuated

Effect of ambient temperature

The unit is calibrated for an ambient temperature of + 23° C. To determine the rated current for lower or higher ambient temperature, use a correction factor from the table below :

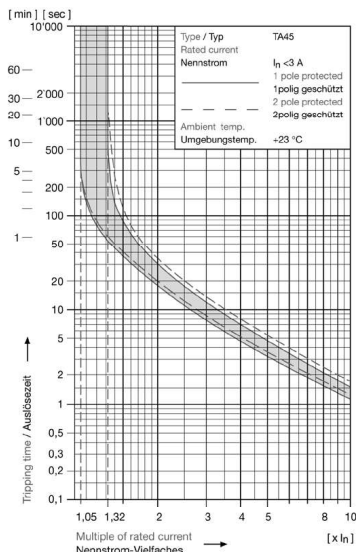
Example :

Rated current at + 23° C	5.0 A
Ambient temperature	+ 40° C
Correction factor	1.08
Chosen rated current at + 40° C	5.5 A

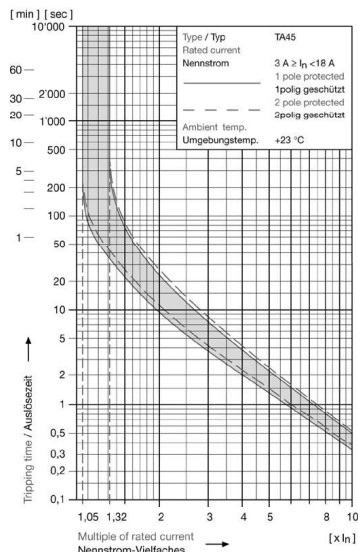
Ambient temperature (°C)	Correction factor
- 10	0.89
- 5	0.91
0	0.92
+ 23	1.00
+ 30	1.03
+ 40	1.08
+ 55	1.16

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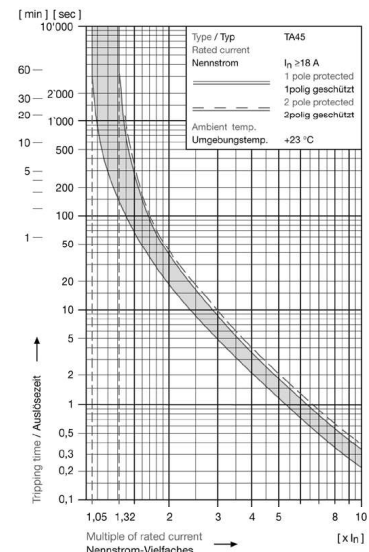
Tripping characteristic



multiple of rated current (xI_n)



multiple of rated current (xI_n)



multiple of rated current (xI_n)

Technical data of the CBE

Short circuit capacity I_{cn} (3 cycles)

240 V AC with $I_n < 3 \text{ A}$	10 I_n
240 V AC with $I_n = 3 \text{ A}$	300 A

Endurance (240 V AC)

at I_n	50'000 cycles
at $6x I_n$	40 cycles

Under voltage release, technical data

Max. operating voltage 1.1 U_e

Rated operating voltage U_e	5 V	12 V	24 V	48 V	120 V	240 V
Current consumption ($\pm 10\%$)	10.5 mA	16.5 mA	17 mA	3.2 mA	3.7 mA	3.1 mA

reset level	$< 0.85 U_e$
trip level	$> 0.2 U_e$
Trip delay	20 ms50 ms

Contact opening width 3 mm

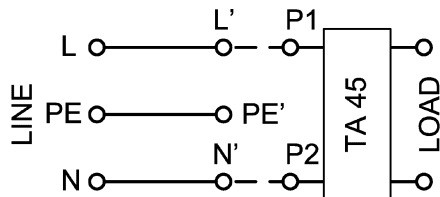
Standards IEC / EN 60934 / UL 1077 / CSA 22.2 no. 235

Materials	- Case :	PA66	UL94 V-0
	- Carrier :	UP	UL94 V-0
	- Rocker :	PC	UL94 HB
	- Live parts :	Copper alloy	

Approvals	- UL File-no. :	E71572
	- CSA File-no. :	LR37712
	- VDE File-no. :	40019880

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3.4 Diagram



4 Mechanical Data

4.1 Mounting

Screw-on mounting from the frontside or inside of the housing, or snap-in mounting from the frontside of the housing.

This mounting-system has the advantage of a simple and sure mounting.

4.2 Terminals

Appliance inlet	L / N and PE QC terminal 6.3x0.8 mm acc. to IEC 61210 Connection Inlet to CBE (wired)	nickel-plated (Ni) nickel-plated (Ni)
Circuit breaker TA45	QC terminal 6.3x0.8 mm acc. to IEC 61210 External release terminals 2.8x0.8 mm	non-plated tin-plated

4.3 Packing and weight

Original packing	20 pcs. TA45 basic type 16 pcs. TA45 with undervoltage release				
		TA45 basic type		TA45 with under-voltage release	
		wired	unwired	wired	unwired
Net weight gr. per 1 pcs.	Screw mounting	55	53	72	70
	Snap-in mounting	54	52	71	69

5 Materials

Thermoplastic	<u>Socket</u>
Type	PBT ;
Flame classe UL94	V-0 / 0.71 mm
Comparative tracking index CTI	3
Temp.-index RTI, electr.	120° C
Index oxygen LOI	30 %
UL File-no.	E207780

Live parts Copper alloy, protected against corrosion.

Wired connection L / N see sheet no. 0881.0106

Circuit breaker TA45 see under 3.3

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6 Environmental Condition

6.1 Temperatures

Operating temperature	- 25° C up to + 70° C for Appliance inlet - 10° C up to + 55° C for TA45
Ambiente temperature	- 25° C up to + 25° C, but occasionally reaching + 35° C for Appliance inlet
Storage temperature	- 40° C up to + 85° C for Appliance inlet no specification available for TA45
Climatic category according to IEC 60068-1	25 / 085 / 21 for Appliance inlet 10 / 055 / 21 for TA45

6.2 Vibration and shock resistance

Resistance to vibration according to IEC 60068-2-6	Test Fc ; Frequency range 10 - 500 Hz, cross-over frequency 60 Hz < 60 Hz constant amplitude of 0.75 mm > 60 Hz constant acceleration of 10 g
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6.3 Degree of protection

Degree of protection	IP40 according to IEC 60529 Front face of Power entry module.
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7 Approvals

Country	Certification Body	Type	Mark	File-no.
Europe	VDE	ENEC Mark		40011305
U.S.A. / Canada	UL	Certification / Recognition		E96454
China	CCC	Certification		2020180204013620

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8 Configuration Code

DF11 - XXXXXXXXXX - XXX - X X X - X X X

0 = standard

9 = V-Lock

Colour

0 = black

1 = grey2)

2 = white2)

Mounting

0 = Screw mounting

1 = Snap-in mounting s = 1.0 mm2)

2 = Snap-in mounting s = 1.5 mm

3 = Snap-in mounting s = 2.0 mm

4 = Snap-in mounting s = 2.5 mm

5 = Snap-in mounting s = 3.0 mm2)

Terminal PE

0 = without terminal (PCII)2)

1 = QC 6.3x0.8

2 = Solder2)

9 = Filter terminal (Earth bar)6)

Terminal N

1 = QC 6.3x0.8, without Connection to TA45

2 = Solder, without Connection to TA452)

3 = Connection to TA45 non insulated

4 = Connection to TA45 insulated2)

9 = Filter terminals6)

Terminal L

1 = QC 6.3x0.8, without Connection to TA45

2 = Solder, without Connection to TA452)

3 = Connection to TA45 non insulated

4 = Connection to TA45 insulated2)

9 = Filter terminals6)

Configuration Code TA45 see data sheet

with CBE = ABTWF100C0-000 (example)

without CBE = 0000000000-000

2) Only on request – no approvals available

6) Not for sale

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