

VPU ZPA S I 3+1 RA 300/12,5**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

Lightning arresters for 40 mm rail systems

- Simple and safe to use and install
- Complete and permanent status control
- Leakage current free surge protection
- Application-specific application classes with 7.5 kA and 12.5 kA discharge current

General ordering data

Version	Surge voltage arrester, Low voltage, Leakage-current-free, TN-C-S, TN-S, TT, IT with N
Order No.	2830920000
Type	VPU ZPA S I 3+1 RA 300/12,5
GTIN (EAN)	4064675390121
Qty.	1 pc(s).

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	101.6 mm	Depth (inches)	4 inch
Height	230.6 mm	Height (inches)	9.079 inch
Width	36 mm	Width (inches)	1.417 inch
Net weight	661 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...85 °C
Humidity	5...95 %, no condensation		

Connection data, remote alert

Connection type	Screw connection	Cross-section for connected wire, solid core, max.	1.5 mm ²
Cross-section for connected wire, solid core, min.	0.14 mm ²	Max. torque	0.4 Nm

General data

Number of poles	1	Protection degree	IP30, in combination with the cover, IP20
Colour	grey		

Rated data IEC / EN

Combined pulse U_{OC}	6 kV	Discharge current I_{max} (8/20 μ s) N-PE	100 kA
Discharge current I_{max} (8/20 μ s) wire-PE	40 kA	Discharge current I_n (8/20 μ s) N-PE	80 kA
Discharge current I_n (8/20 μ s) wire-PE	20 kA	Energy coordination (≤ 10 m)	Type I, Type II, Type III
Follow-on current extinguishing capability I_{fi}	Follow current need not be taken into account	Fuse	No Fuse necessary ≤ 160 A gG
Integrated back-up fuse	No	Leakage current at U_n	5 μ A
Lightning test current I_{imp} (10/350 μ s) (L-PE)	12.5 kA	Lightning test current, I_{imp} (10/350 μ s) (N-PE)	50 kA
Low voltage network	TN-C-S, TN-S, TT, IT with N	Mains voltage	230 V / 400 V
Max. continuous voltage, U_c (AC)	300 V	Max. continuous voltage, U_c (N-PE)	305 V
Number of poles	1	Protection level U_p at I_N (L/N-PE)	≤ 1.5 kV
Protection level U_p at I_N (N-PE)	≤ 1.5 kV	Rated voltage (AC)	240 V
Requirements category acc. to IEC 61643-11	Type I, Type II, Type III	Requirements class, acc. to EN 61643-11	T1, T2, T3
Response time	≤ 100 ns	SPD type	T1, T2, T3
Short-circuit current rating I_{SCCR}	25 kA	Signalling contact	1 CO 250 V AC. 1 A / 125 V DC. 30 mA
Standards	IEC 61643-11, EN 61643-11	Temporary surge voltage (over-voltage) - TOV	442 V
Voltage type	AC		

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Connection data

Stripping length	12 mm	Wire connection method	Screw connection
Type of connection	Clamped	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm ²	Clamping range, min.	4 mm ²
Clamping range, max.	35 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	16 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	25 mm ²	Connection cross-section, stranded, min.	16 mm ²
Connection cross-section, stranded, max.	35 mm ²		

Electrical data

Voltage type	AC
--------------	----

Guarantee

Time interval	5 years
---------------	---------

Classifications

ETIM 6.0	EC000941	ETIM 7.0	EC000941
ETIM 8.0	EC000941	ETIM 9.0	EC000941
ETIM 10.0	EC000941	ECLASS 9.0	27-13-08-05
ECLASS 9.1	27-13-08-05	ECLASS 10.0	27-13-08-05
ECLASS 11.0	27-13-08-05	ECLASS 12.0	27-17-90-90
ECLASS 13.0	27-17-90-90	ECLASS 14.0	27-17-90-90
ECLASS 15.0	27-17-90-90		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Important note

Product information	Only applicable to IT power systems where the earth on the distribution transformer is interconnected with the earth on the consumer side (RE=RA in Figure 44.A1 of IEC 60634-4-44:2018).
---------------------	---

Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319263/-T1z1mm-S800/
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format

Creation date May 11, 2025 10:23:56 PM CEST

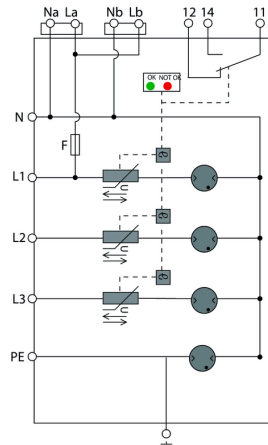
Catalogue status 26.04.2025 / We reserve the right to make technical changes.

VPU ZPA S I 3+1 RA 300/12,5**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Drawings****Electric symbol**

Circuit diagram

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Visualization and Communication cable



Base counter, gateway, control box and overvoltage protection device are connected with pre-assembled cable sets as point-to-point or Y-assembly. Weidmüller offers the right connection solutions for this, conforming to FNN and DIN-VDE 0603 standards. Pre-assembled power cables with 6kV overvoltage protection round up the portfolio.

General ordering data

Type	CH-SMC-00.80-VC180	Version
Order No.	2775880080	Smart Metering Cable Assemblies, 6 kV, Pin, IP20, 600 V, KB PUR US
GTIN (EAN)	4064675329909	2X1.5 GY XX 6KV, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMC-00.60-OVP180	Version
Order No.	2853620060	Smart Metering Cable Assemblies, 6 kV, Pin, Socket connector, Pin
GTIN (EAN)	4099986979079	connector, IP20, 600 V, KB PUR US 2X1.5 GY XX 6KV, 0.6 m
Qty.	10 pc(s).	
Type	CH-SMC-00.80-OVP180	Version
Order No.	2853620080	Smart Metering Cable Assemblies, 6 kV, Pin, Socket connector, IP20,
GTIN (EAN)	4064675477549	600 V, KB PUR US 2X1.5 GY XX 6KV, 0.33 m
Qty.	10 pc(s).	

Accessories



General ordering data

Type	V-ZPA TERMINAL
Order No.	2904470000
GTIN (EAN)	4099986010352
Qty.	1 pc(s).
Type	V-ZPA FUSE HOLDER E
Order No.	3038720000
GTIN (EAN)	4099987006422
Qty.	1 pc(s).

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

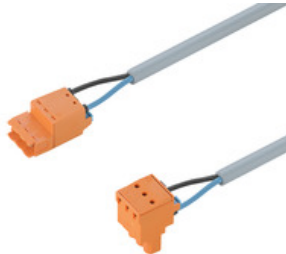
D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Counter and Gateway cable

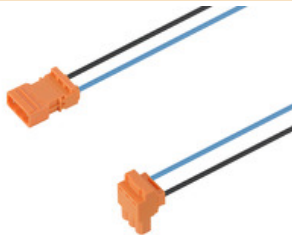


Base counter, gateway, control box and overvoltage protection device are connected with pre-assembled cable sets as point-to-point or Y-assembly. Weidmüller offers the right connection solutions for this, conforming to FNN and DIN-VDE 0603 standards. Pre-assembled power cables with 6kV overvoltage protection round up the portfolio.

General ordering data

Type	CH-SMC-00.80-CG90	Version
Order No.	2775910080	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4064675329732	V, KB PUR US 2X1.5 GY XX 6KV, 0.8 m
Qty.	10 pc(s).	

Cables



Base counter, gateway, control box and overvoltage protection device are connected with pre-assembled cable sets as point-to-point or Y-assembly. Weidmüller offers the right connection solutions for this, conforming to FNN and DIN-VDE 0603 standards. Pre-assembled power cables with 6kV overvoltage protection round up the portfolio.

General ordering data

Type	CH-SMR-00.80-CG90	Version
Order No.	2924780080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
GTIN (EAN)	4099986795600	
Qty.	10 pc(s).	
Type	CH-SMR-01.15-OVP90	Version
Order No.	2924820115	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 1.15 m
GTIN (EAN)	4099986993495	
Qty.	10 pc(s).	
Type	CH-SMR-00.60-ECB90	Version
Order No.	2924890060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
GTIN (EAN)	4099986795686	
Qty.	10 pc(s).	
Type	CH-SMR-00.95-ECB90	Version
Order No.	2924890095	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.95 m
GTIN (EAN)	4099986795709	
Qty.	10 pc(s).	
Type	CH-SMR-00.80-ECS180	Version
Order No.	2924850080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
GTIN (EAN)	4099986795730	
Qty.	10 pc(s).	

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Type	CH-SMR-00.33-YCC90	Version
Order No.	2924960033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795617	mounted condition, 300 V, Li9YH 1 x 0,75,
Qty.	10 pc(s).	
Type	CH-SMR-00.33-CG90	Version
Order No.	2924780033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795594	mounted condition, 300 V, Li9YH 1 x 0,75, 0.33 m
Qty.	10 pc(s).	
Type	CH-SMR-00.33-VCC180	Version
Order No.	2924970033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795624	mounted condition, 300 V, Li9YH 1 x 0,75,
Qty.	10 pc(s).	
Type	CH-SMR-00.80-VC180	Version
Order No.	2924830080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795587	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMR-00.33-ECB90	Version
Order No.	2924890033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795679	mounted condition, 300 V, Li9YH 1 x 0,75, 0.33 m
Qty.	10 pc(s).	
Type	CH-SMR-00.60-OVP180	Version
Order No.	2924810060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986993440	mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
Qty.	10 pc(s).	
Type	CH-SMR-01.15-OVP180	Version
Order No.	2924810115	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986993464	mounted condition, 300 V, Li9YH 1 x 0,75, 1.15 m
Qty.	10 pc(s).	
Type	CH-SMR-01.20-ECB90	Version
Order No.	2924890120	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795716	mounted condition, 300 V, Li9YH 1 x 0,75, 1.2 m
Qty.	10 pc(s).	
Type	CH-SMR-00.80-ECB180	Version
Order No.	2924870080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795662	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMR-00.60-OVP90	Version
Order No.	2924820060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986993471	mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
Qty.	10 pc(s).	
Type	CH-SMR-00.33-ECS180	Version
Order No.	2924850033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795723	mounted condition, 300 V, Li9YH 1 x 0,75, 0.33 m
Qty.	10 pc(s).	
Type	CH-SMR-00.33-ECB180	Version
Order No.	2924870033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795655	mounted condition, 300 V, Li9YH 1 x 0,75, 0.33 m
Qty.	10 pc(s).	
Type	CH-SMR-00.33-VC180	Version
Order No.	2924830033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795570	mounted condition, 300 V, Li9YH 1 x 0,75, 0.33 m
Qty.	10 pc(s).	

Creation date May 11, 2025 10:23:56 PM CEST

Catalogue status 26.04.2025 / We reserve the right to make technical changes.

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Type	CH-SMR-00.80-OVP90	Version
Order No.	2924820080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986993488	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMR-00.80-ECB90	Version
Order No.	2924890080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795693	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMR-00.80-OVP180	Version
Order No.	2924810080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986993457	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 pc(s).	

Crosshead screwdriver Phillips



VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

Type	SDIK PH1 X 80	Version
Order No.	2749890000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	

Extension cable for Smart Meter



Base counter, gateway, control box and overvoltage protection device are connected with pre-assembled cable sets as point-to-point or Y-assembly. Weidmüller offers the right connection solutions for this, conforming to FNN and DIN-VDE 0603 standards. Pre-assembled power cables with 6kV overvoltage protection round up the portfolio.

General ordering data

Type	CH-SMC-01.15-ECB180	Version
Order No.	2784110115	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4099986979208	V, KB PUR US 2X1.5 GY XX 6KV, 1.15 m
Qty.	10 pc(s).	
Type	CH-SMC-01.20-ECB90	Version
Order No.	2817650120	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4064675323082	V, KB PUR US 2X1.5 GY XX 6KV, 1.2 m
Qty.	10 pc(s).	

Creation date May 11, 2025 10:23:56 PM CEST

VPU ZPA S I 3+1 RA 300/12,5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

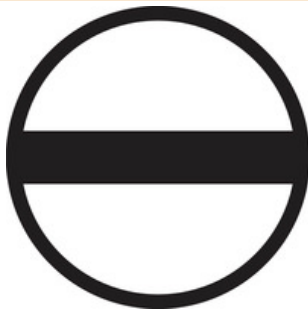
Germany

www.weidmueller.com

Accessories

Type	CH-SMC-00.95-ECB90	Version
Order No.	2817650095	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4064675323075	V, KB PUR US 2X1.5 GY XX 6KV, 0.95 m
Qty.	10 pc(s).	
Type	CH-SMC-00.60-ECB180	Version
Order No.	2784110060	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4099986979093	V, KB PUR US 2X1.5 GY XX 6KV, 0.6 m
Qty.	10 pc(s).	
Type	CH-SMC-00.60-ECB90	Version
Order No.	2817650060	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4064675323051	V, KB PUR US 2X1.5 GY XX 6KV, 0.6 m
Qty.	10 pc(s).	
Type	CH-SMC-00.80-ECB90	Version
Order No.	2817650080	Smart Metering Cable Assemblies, 6 kV, Socket connector, IP20, 600
GTIN (EAN)	4064675323068	V, KB PUR US 2X1.5 GY XX 6KV, 0.8 m
Qty.	10 pc(s).	
Type	CH-SMC-00.80-ECS180	Version
Order No.	2784120080	Smart Metering Cable Assemblies, 6 kV, Pin, IP20, 600 V, KB PUR US
GTIN (EAN)	4064675329718	2X1.5 GY XX 6KV, 0.8 m
Qty.	10 pc(s).	

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 1.0X5.5X125	Version
Order No.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	