

VPU ZPA S I 3+1 RA 300/7,5**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.	2830980000
Type	VPU ZPA S I 3+1 RA 300/7,5
GTIN (EAN)	4064675390183
Qty.	1 pc(s).

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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	4	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} (8/20µs) N-PE	100 kA
Discharge current I_{max} (8/20µs) wire-PE	40 kA	Discharge current I_n (8/20µs) N-PE	80 kA
Discharge current I_n (8/20µs) 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 µA
Lightning test current I_{imp} (10/350 µs) (L-PE)	7.5 kA	Lightning test current, I_{imp} (10/350 µs) (N-PE)	30 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	4	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	250 V 1A 1CO
Standards	IEC 61643-11, EN 61643-11	Temporary surge voltage (over-voltage) - TOV	442 V
Voltage type	AC		

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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
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Guarantee

Time interval	5 years
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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).
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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

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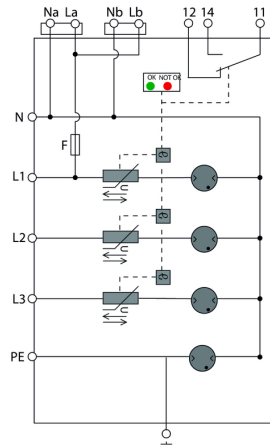
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Drawings

Electric symbol



Circuit diagram

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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).

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Accessories

Counter and Gateway cable

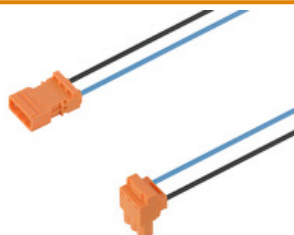


Base counter, gateway, control box and overvoltage protection device are connected with pre-assembled cable sets as point-to-point or Y-assembly. Weidmüller offers the right connection solutions for this, conforming to FNN and DIN-VDE 0603 standards. Pre-assembled power cables with 6kV overvoltage protection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

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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).	

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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).	

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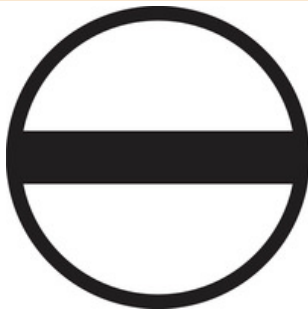
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Accessories

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).	