

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

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



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
Order No.	2830920000
Type	VPU ZPA S I 3+1 RA 300/12,5
GTIN (EAN)	4064675390121
Qty.	1 items

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	236 mm	Depth (inches)	9.2913 inch
Height	236 mm	Height (inches)	9.2913 inch
Width	36 mm	Width (inches)	1.4173 inch
Net weight	661 g		

Temperatures

Storage temperature	-40 °C...85 °C	Ambient temperature	...85 °C
Operating temperature	-40 °C...85 °C	Humidity	5 - 95% rel. humidity

Environmental Product Compliance

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

Connection data, remote alert

Cross-section for connected wire, solid core, min.	0.25 mm ²	Connection type	PUSH IN
Cross-section for connected wire, solid core, max.	1.5 mm ²	Max. torque	0.4 Nm

General data

Optical function display	green = OK; red = arrester is defective - replace	Segment	Power distribution
Version	Leakage-current-free	Colour	grey
Protection degree	IP20	Mounting rail	Busbar
auxiliary contact	Yes	Operating altitude	≤ 4000 m

Rated data IEC / EN

Number of poles	4	Combined pulse UOC	6 kV
Leakage current at Un	5 µA	Signalling contact	250 V 1A 1CO
Rated voltage (AC)	240 V	Voltage type	AC
Fuse protection	No Fuse necessary ≤160 A gG	Response time / fallback time	≤ 100 ns
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Lightning test current limp (10/350 µs) (L-PE)	12.5 kA	Lightning test current, limp (10/350 µs) (N-PE)	50 kA
Requirements class, acc. to EN 61643-11	T1, T2, T3	Requirements category acc. to IEC 61643-11	Type I, Type II, Type III
Max. continuous voltage, Uc (N-PE)	305 V	Mains voltage	230 V / 400 V
Discharge current I _{max} (8/20µs) N-PE	100 kA	Discharge current I _n (8/20µs) N-PE	80 kA
Energy coordination (≤10 m)	Type I, Type II, Type III	SPD type	T1, T2, T3
Protection level Up at IN (L/N-PE)	≤ 1.5 kV	Short-circuit current rating ISCCR	25 kA
Integrated back-up fuse	No	PE conductor current IPE	5 µA

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Connection data

Stripping length	18 mm	Wire connection method	Screw connection
Type of connection	Screw connection	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	Wire cross-section, solid, min.	16 mm ²
Wire cross-section, solid, max.	35 mm ²	Wire connection cross section, finely stranded, max.	25 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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General data

Number of poles	4	Protection degree	IP20
Colour	grey		

Guarantee

Time interval	5 years
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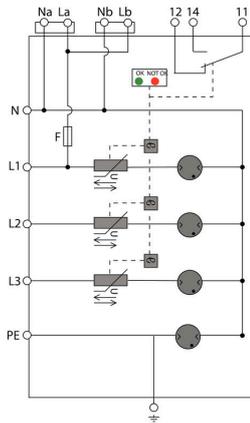
Important note

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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Classifications

ETIM 8.0	EC001457	ETIM 9.0	EC001457
ETIM 10.0	EC001457	ECLASS 14.0	27-17-12-04
ECLASS 15.0	27-17-12-04		

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 ST		

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 V, KB PUR US	
GTIN (EAN)	4064675329732	2X1.5 GY XX 6KV, 0.8 m	
Qty.	10 ST		

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-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 ST		

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Accessories

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 ST		

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-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 ST		

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 ST		

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Visualization and Communication cable



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General ordering data

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 ST		

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-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 ST		
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 ST		
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 ST		
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 ST		

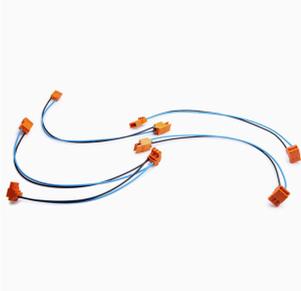
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Accessories

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-00.33-VC180 VPE10	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 ST	
Type	CH-SMR-00.80-VC180 VPE10	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 ST	
Type	CH-SMR-00.33-CG90 VPE10	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 ST	
Type	CH-SMR-00.80-CG90 VPE10	Version
Order No.	2924780080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795600	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 ST	
Type	CH-SMR-00.33-ECS180 VPE...	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 ST	
Type	CH-SMR-00.80-ECS180 VPE...	Version
Order No.	2924850080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795730	mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
Qty.	10 ST	
Type	CH-SMR-00.33-ECB180 VPE...	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 ST	
Type	CH-SMR-00.80-ECB180 VPE...	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 ST	
Type	CH-SMR-00.33-ECB90 VPE10	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 ST	
Type	CH-SMR-00.60-ECB90 VPE10	Version
Order No.	2924890060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and
GTIN (EAN)	4099986795686	mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
Qty.	10 ST	

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Type	CH-SMR-00.80-ECB90 VPE10	Version
Order No.	2924890080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
GTIN (EAN)	4099986795693	
Qty.	10 ST	
Type	CH-SMR-00.95-ECB90 VPE10	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 ST	
Type	CH-SMR-01.20-ECB90 VPE10	Version
Order No.	2924890120	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 1.2 m
GTIN (EAN)	4099986795716	
Qty.	10 ST	
Type	CH-SMR-00.33-VCC180 VPE...	Version
Order No.	2924970033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75,
GTIN (EAN)	4099986795624	
Qty.	10 ST	
Type	CH-SMR-00.33-YCC90 VPE10	Version
Order No.	2924960033	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75,
GTIN (EAN)	4099986795617	
Qty.	10 ST	
Type	CH-SMR-00.60-OVP180 VPE...	Version
Order No.	2924810060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
GTIN (EAN)	4099986993440	
Qty.	10 ST	
Type	CH-SMR-00.80-OVP180 VPE...	Version
Order No.	2924810080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
GTIN (EAN)	4099986993457	
Qty.	10 ST	
Type	CH-SMR-01.15-OVP180 VPE...	Version
Order No.	2924810115	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 1.15 m
GTIN (EAN)	4099986993464	
Qty.	10 ST	
Type	CH-SMR-00.60-OVP90 VPE10	Version
Order No.	2924820060	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.6 m
GTIN (EAN)	4099986993471	
Qty.	10 ST	
Type	CH-SMR-00.80-OVP90 VPE10	Version
Order No.	2924820080	Smart Metering Cable Assemblies, 6 kV, IP30, in plugged and mounted condition, 300 V, Li9YH 1 x 0,75, 0.8 m
GTIN (EAN)	4099986993488	
Qty.	10 ST	
Type	CH-SMR-01.15-OVP90 VPE10	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 ST	

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Accessories

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 ST		

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 thickness (A): 1 mm	
GTIN (EAN)	4050118897050		
Qty.	1 ST		

Accessories



General ordering data

Type	V-ZPA FUSE HOLDER E	Version	
Order No.	3038720000		
GTIN (EAN)	4099987006422		
Qty.	1 ST		

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Accessories

Type	V-ZPA TERMINAL	Version
Order No.	2904470000	
GTIN (EAN)	4099986010352	
Qty.	1 ST	