

VPU AC I 3+1 R 275/25 LCF MB

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Type I/II lightning arrester for use upstream of the electrical meter

- With 25 kA (10/350 μ s) suitable for protective zones I, II, III and IV (LPL I/II/III/IV)
- With remote monitoring function, one changeover contact
- Tested according to IEC 61643-11 for type I and II surge protection

General ordering data

Version	Surge voltage arrester, Low voltage, Surge protection, Leakage-current-free, with remote contact, TN-C-S, TN-S, TT, IT with N, IT without N
Order No.	2638070000
Type	VPU AC I 3+1 R 275/25 LCF MB
GTIN (EAN)	4050118679496
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	71 mm	Depth (inches)	2.7953 inch
Height	99 mm	Height (inches)	3.8976 inch
Width	144 mm	Width (inches)	5.6693 inch
Mounting dimension - height	76 mm	Net weight	982 g

Temperatures

Storage temperature	-40 °C...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.	0.14 mm ²	Stripping length	8 mm
Connection type	Screw connection: pluggable	Cross-section for connected wire, solid core, max.	1.5 mm ²
Max. torque	0.25 Nm		

General data

Optical function display	green = OK; red = arrester is defective - replace	Segment	Power distribution
Version	Surge protection, Leakage-current-free, with remote contact	Design	Installation housing; 8 TE, Insta IP 20
UL 94 flammability rating	V-0	Colour	grey
Protection degree	IP20 in installed state	Mounting rail	TS 35
Operating altitude	≤ 2000 m		

Insulation coordination acc. to EN 50178

Surge voltage category	II	Pollution severity	2
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Rated data IEC / EN

Number of poles	4	Leakage current at Un	1 µA
Signalling contact	250 V 1A 1CO	Rated voltage (AC)	230 V
Low voltage network	TN-C-S, TN-S, TT, IT with N, IT without N	Protection level Up at IN (N-PE)	≤ 1.5 kV
Voltage type	AC	Temporary surge voltage (over-voltage) - 438 V TOV	

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Response time / fallback time	≤ 25 ns	Frequency range, max.	60 Hz
Frequency range, min.	50 Hz	Standards	IEC 61643-11, EN 61643-11
Lightning test current limp (10/350 μs) (L-PE)	25 kA	Lightning test current, limp (10/350 μs) (N-PE)	100 kA
Requirements class, acc. to EN 61643-11	T1, T2	Requirements category acc. to IEC 61643-11	Type I, Type II
Max. continuous voltage, U _c (AC)	275 V	Max. continuous voltage, U _c (N-PE)	255 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	100 kA	Energy coordination (≤10 m)	Type I, Type II, Type III
Rated load current I _L	100 A	Discharge current I _n (8/20μs) wire-PE	25 kA
Discharge current I _{max} (8/20μs) wire-PE	100 kA	SPD type	T1, T2
Protection level Up at IN (L/N-PE)	≤ 1.5 kV	Short-circuit current rating ISCCR	50 kA
Follow-on current extinguishing capability I _{fi}	Not available due for technical reasons	Integrated back-up fuse	No
PE conductor current I _{PE}	1 μA		

Connection data

Stripping length	18 mm	Wire connection method	Screw connection
Type of connection	Screw connection	Stripping length, rated connection	18 mm
Tightening torque, min.	3 Nm	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm ²	Clamping range, min.	1.5 mm ²
Clamping range, max.	35 mm ²	Wire cross-section, solid, min.	1.5 mm ²
Wire cross-section, solid, max.	35 mm ²	Wire connection cross section, finely stranded, min.	1.5 mm ²
Wire connection cross section, finely stranded, max.	25 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	1.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 mm ²	Connection cross-section, stranded, min.	1.5 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 in installed state
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

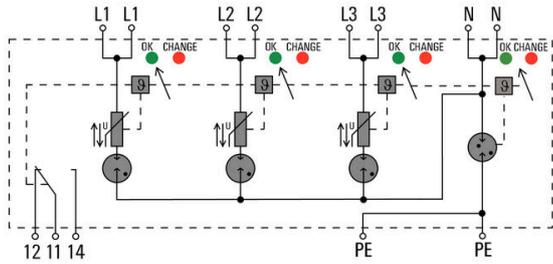
ETIM 8.0	EC001457	ETIM 9.0	EC001457
ETIM 10.0	EC001457	ECLASS 14.0	27-17-12-04
ECLASS 15.0	27-17-12-04		

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Drawings

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Principle circuit diagram

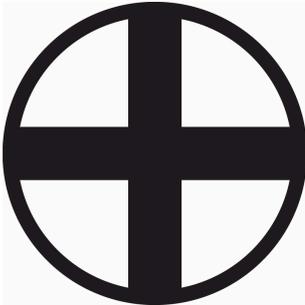
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Accessories

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		

VPU Series



Extensive accessories round off the product range

General ordering data

Type	PLUG VPU AC	Version	
Order No.	2855300000		
GTIN (EAN)	4064675533283		
Qty.	10 ST		