VPU I 1 R LCF 280V/12,5KA

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

www.weidmueller.com

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

- No-leakage-current version suitable for use upstream of the electrical meter
- Suitable for protection classes III and IV (LPLIII/IV)
- Can also be used as Type II surge protection
- Tested according to IEC 61643-11 for Type I and II surge protection
- Pluggable arrester

General ordering data

Version	Surge voltage arrester, Low voltage, with remote contact, Leakage-current-free, Single-phase
Order No.	1352080000
Type	VPU I 1 R LCF 280V/12,5KA
GTIN (EAN)	4050118158151
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	69 mm	Depth (inches)	2.717 inch
Height	106 mm	Height (inches)	4.173 inch
Mounting dimension - height	75 mm	Net weight	189 g
Width	17.8 mm	Width (inches)	0.701 inch

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-40 °C...70 °C
Humidity	5 - 95% rel. humidity		

Connection data, remote alert

Connection type	PUSH IN	Cross-section for connected wire, solid core, max.	1.5 mm²
Cross-section for connected wire, solid core, min.	0.14 mm²	Stripping length	8 mm

General data

Colour	black, orange	Design	Installation housing; 1TE, Insta IP 20
Optical function display	green = OK; red = arrester is defective - replace	Protection degree	IP20
Rail	TS 35	Segment	Power distribution
Suitable for	Count-in installation (leakage current free)	UL 94 flammability rating	V-0
Version	with remote contact, Leakage-current-free		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	IV

Rated data IEC / EN

Discharge current I_{max} (8/20µs) wire-PE	50 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}	Not available due for technical reasons
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Fuse	125 A gL > (if back up fuse > 125 A), No Fuse neccessary ≤125 A gG	Leakage current at U_n	1 µA
Lightning test current I_{imp} (10/350 µs) (L-PE)	12.5 kA	Low voltage network	Single-phase
Mains voltage	240 V	Max. continuous voltage, Uc (AC)	280 V
Number of poles	1	Protection level U_p at I_N (L/N-PE)	≤ 1.45 kV
Rated voltage (AC)	230 V	Requirements category acc. to IEC 61643-11	Type I, Type II
Requirements class, acc. to EN 61643-11	T1, T2	Response time	≤ 100 ns
Short-circuit current rating I_{SCCR}	25 kA	Signalling contact	250 V 1A 1CO
Standards	IEC61643-11, EN61643-11	Suitable for	Count-in installation (leakage current free)
Temporary surge voltage (over-voltage) - TOV	438 V	Voltage type	AC

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Connection data

Type of connection	Screw connection	Stripping length, rated connection	15 mm
Tightening torque, min.	2 Nm	Tightening torque, max.	3 Nm
Clamping range, rated connection	16 mm²	Clamping range, min.	4 mm²
Clamping range, max.	35 mm²	Wire cross-section, solid, min.	2.5 mm²
Wire cross-section, solid, max.	16 mm²	Wire connection cross section, finely stranded, min.	2.5 mm²
Wire connection cross section, finely stranded, max.	25 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	50 mm²	Connection cross-section, stranded, min.	2.5 mm²
Connection cross-section, stranded, max.	50 mm²		

Classifications

ETIM 6.0	EC000941	ETIM 7.0	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

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Tender specification sheets

Long specification	Single-pin lightning arrestor according to the requirements of Class I in accordance with IEC 61643-11, EN61643-11:2013. On interface transition from 0 to 1 (in accordance with IEC 1312-1), the arrestor, made from V0 material, serves as lightning protection providing equipotential bonding and is used in applications in accordance with IEC 61643-12. The use of a non-blow-out sparkover gap, in combination with a high-power varistor, satisfies the inspection requirements for Class I surge protection systems in accordance with the VDEW (Association of German Power Stations) directive. The arrestor is installed in the vicinity of the power supply for the equipment that needs protection, in a standard installation/electrical distribution enclosure. The VPU I 1 R LCF 280 V/12.5 kA is used in the single-phase TN-C and TN-CS mains network. With thermal separation device on the varistor. If protection is no longer available, the colour in the display window changes from green to red. The functional state is also displayed by a voltage-free signalling contact (changeover). Rated voltage: 230 VAC lightning test current (10/350 µs): 25 kA protection level with lightning test current < 1.45 kV 25 kA short-circuit withstand rating with max. back-up fuse of 250 A gl telecommunication output: contact: 250 V/0.5 A 48 VDC/0.1 A Type: Weidmüller VPU I 1 R LCF 280 V/12.5 kA Order No. 1352080000 or equivalent	Short specification Class I arrester for LPL III/ IV with 12.5 kA suitable for 230 V for single-phase mains systems. Protection level < 1.45 kV. With remote alert Type: Weidmüller VPU I 1R LCF 280 V/12.5 kA Order no. 1352080000 or equivalent

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Technical data

Approvals

Approvals	
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	EAC VPU SERIES CE PAPER Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet

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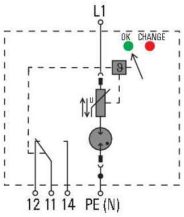
Drawings

Electric symbol



Schematic circuit diagram