VPU II 1 R LCF 280V/40KA

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

www.weidmueller.com

Type II/III surge protection U_c: 280 V
Suitable for 230/400 V mains systems

- Leakage current free, pluggable arrester
- Coded voltage level
- High energy absorption with short time to sparkover
- No follow current
- Installation in distribution board
- Thermal protection function
- Co-ordination with VPU Type I

General ordering data

Version	Surge voltage arrester, Low voltage, with remote contact, Single-phase
Order No.	1352750000
Type	VPU II 1 R LCF 280V/40KA
GTIN (EAN)	4050118157628
Qty.	1 pc(s).

Creation date March 23, 2021 5:56:29 PM CET

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Technical data

Dimensions and weights

Depth	69 mm	Depth (inches)	2.717 inch
Height	105 mm	Height (inches)	4.134 inch
Mounting dimension - height	75 mm	Net weight	148 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	UL 94 flammability rating	V-0
Version	with remote contact		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III

Rated data IEC / EN

Combined pulse U_{OC}	10 kV	Discharge current I_{max} (8/20µs) wire-PE	40 kA
Discharge current I_n (8/20µs) wire-PE	20 kA	Energy coordination (≤10 m)	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	Low voltage network	Single-phase
Max. continuous voltage, Uc (AC)	280 V	Number of poles	1
Protection level U_p at I_N (L/N-PE)	≤ 1.8 kV	Rated voltage (AC)	230 V
Requirements category acc. to IEC 61643-11	Type II, Type III	Requirements class, acc. to EN 61643-11	T2, T3
Response time	≤ 100 ns	Short-circuit current rating I_{SCCR}	25 kA
Signalling contact	250 V 1A 1CO	Standards	IEC61643-11, EN61643-11
Temporary surge voltage (over-voltage) - TOV	438 V	Voltage type	AC

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Connection data

Wire connection method	Screw connection	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.	1.5 mm²	Clamping range, max.	35 mm²
Wire cross-section, solid, min.	1.5 mm²	Wire cross-section, solid, max.	16 mm²
Wire connection cross section, finely stranded, min.	1.5 mm²	Wire connection cross section, finely stranded, max.	25 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	1.5 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	50 mm²
Connection cross-section, stranded, min.	1.5 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-pole surge voltage arrestor according to the requirements of Class II/ III acc. to IEC 61643-11, EN61643-11:2013. Consisting of V0 material, the arrestor serves as surge protection in applications acc. to IEC 61643-12. Surge protection is used in the TN, TT and IT mains system types in combination with several lightning protectors. The use of a high-performance varistor in combination with sparkover gaps satisfies the inspection requirements for Class II surge protection systems on the basis of the standards. The leakage current-free arrestor is installed in the vicinity of the power supply for the equipment that needs protection, in a commercially available installation/electrical distribution enclosure. The VPU II 1 R LCF 280 V/40 kA is earthed, in combination with three or four identical arrestors, between the outer conductors (L1, L2, L3 and / or the neutral conductor). Reference is also made here to the 3+1 circuit and the 3+0 / 4+0 circuits. 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 maximum discharge current (8/20 µs): 40 kA protection level < 1.8 kV combined pulse Uoc: 10 kV; 25 kA short-circuit strength with max. back-up fuse of 125 A gl telecommunication output: contact: 250 V/0.5 A 48 VDC/0.1 A Type: Weidmüller VPU II 1 R LCF 280 V/40 kA Order No. 1352750000 or equivalent	Short specification Class II arrester with In/ Imax: 20/40 kA suitable for 230/400 V mains systems. Protection level < 1.8 kV. With remote alert Type: Weidmüller VPU II 1 R LCF 280 V/12.5 kA Order no. 1352750000 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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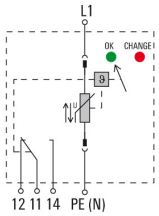
Drawings

Electric symbol



Schematic circuit diagram