

**VPU I 3+1 R LCF 280V/25KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Type I/II lightning arrester for use upstream of the electrical meter**

- With 25 kA (10/350  $\mu$ 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
- Pluggable arrester

**General ordering data**

Version	Surge voltage arrester, Low voltage, with remote contact, Leakage-current-free, TN-C-S, TN-S, IT with N, IT without N, TT
Order No.	<a href="#">1351770000</a>
Type	VPU I 3+1 R LCF 280V/25KA
GTIN (EAN)	4050118158403
Qty.	1 pc(s).
Delivery status	<b>This article will no longer be available in the future.</b>
Available until	2024-03-31
Alternative product	<a href="#">2726770000</a>
Replacement parts	<a href="#">1351540000</a> <a href="#">1351940000</a> <a href="#">1402570000</a>

Creation date May 7, 2024 11:37:56 AM CEST

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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
Width	142.4 mm	Width (inches)	5.606 inch
Mounting dimension - height	75 mm	Net weight	1,272 g

## 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 mm <sup>2</sup>
Cross-section for connected wire, solid core, min.	0.14 mm <sup>2</sup>	Stripping length	8 mm

## General data

Colour	black, orange, blue	Design	Installation housing; 8 TE, Insta IP 20
Operating altitude	≤ 2000 m	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
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## Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE	100 kA
Discharge current $I_n$ (8/20 $\mu$ s) N-PE	100 kA
Energy coordination ( $\leq 10$ m)	Type I, Type II, Type III
Fuse	No Fuse necessary $\leq 250$ A gG, 250 A gL (if back up fuse > 250 A)
Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s) (L-PE)	25 kA
Low voltage network	TN-C-S, TN-S, IT with N, IT without N, TT
Max. continuous voltage, $U_c$ (AC)	280 V
Number of poles	4
Protection level $U_p$ at $I_N$ (N-PE)	$\leq 1.6$ kV
Rated voltage (AC)	230 V
Requirements class, acc. to EN 61643-11	T1, T2
Short-circuit current rating $I_{\text{SCCR}}$	25 kA
Standards	IEC61643-11, EN61643-11
Temporary surge voltage (over-voltage) - TOV	438 V

Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	100 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	25 kA
Follow-on current extinguishing capability $I_{fi}$	Not available due for technical reasons
Leakage current at $U_n$	1 $\mu$ A
Lightning test current, $I_{\text{imp}}$ (10/350 $\mu$ s) (N-PE)	100 kA
Mains voltage	230 V / 400 V
Max. continuous voltage, $U_c$ (N-PE)	260 V
Protection level $U_p$ at $I_N$ (L/N-PE)	$\leq 1.6$ kV
Rated load current $I_L$	125 A
Requirements category acc. to IEC 61643-11	Type I, Type II
Response time	$\leq 100$ ns
Signalling contact	250 V 1A 1CO
Suitable for	Count-in installation (leakage current free)
Voltage type	AC

## Connection data

Stripping length	15 mm
Stripping length, rated connection	15 mm
Tightening torque, max.	3 Nm
Clamping range, min.	4 mm <sup>2</sup>
Wire cross-section, solid, min.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm <sup>2</sup>
Connection cross-section, stranded, min.	2.5 mm <sup>2</sup>

Type of connection	Screw connection
Tightening torque, min.	2 Nm
Clamping range, rated connection	16 mm <sup>2</sup>
Clamping range, max.	35 mm <sup>2</sup>
Wire cross-section, solid, max.	16 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	25 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	50 mm <sup>2</sup>
Connection cross-section, stranded, max.	50 mm <sup>2</sup>

## Classifications

ETIM 6.0	EC000941
ETIM 8.0	EC000941
ECLASS 9.0	27-13-08-05
ECLASS 10.0	27-13-08-05
ECLASS 12.0	27-17-90-90

ETIM 7.0	EC000941
ETIM 9.0	EC000941
ECLASS 9.1	27-13-08-05
ECLASS 11.0	27-13-08-05
ECLASS 13.0	27-17-90-90

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## Tender specification sheets

Long specification	Multi-pin lightning arrester 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 arrester, 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 arrester 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 3+1 R LCF 280 V/25 kA is used in the TN-C and TN-C 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 < 1.6 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 3+1 R LCF 280 V/25 kA Order No. 1351770000 or equivalent	Short specification
		Class I arrester for LPL I with 25 kA suitable for 230/400 V TN-CS, TT mains systems. Protection level < 1.6 kV. With remote alert Type: Weidmüller VPU I 3+1 R LCF 280 V/25 kA Order no. 1351770000 or equivalent

## 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



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](#)

Brochures

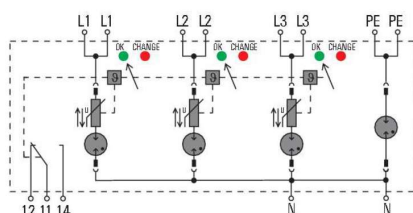
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# Drawings

## Electric symbol



Schematic circuit diagram