

VPU AC II US 1 R 400/50

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Abb.ähnlich

- compact SPD to install in application by NFPA 79
- no additional overcurrent protection devices needed
- short circuit current rating (SCCR) up to 200 kA
- tested according to IEC/EN 61643-11 and UL 1449 4.Ed

General ordering data

| | |
|-------------------|--|
| Version | Surge voltage arrester, Low voltage, Surge protection, with remote contact, Single-phase |
| Order No. | 2730710000 |
| Type | VPU AC II US 1 R 400/50 |
| GTIN (EAN) | 4050118807394 |
| Qty. | 1 pc(s). |
| Replacement parts | 2730690000 2855300000 |

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Technical data
Dimensions and weights

| | | | |
|--------------------------|------------|-----------------------------|------------|
| Depth | 68 mm | Depth (inches) | 2.677 inch |
| Depth including DIN rail | 76 mm | Height | 111 mm |
| Height (inches) | 4.37 inch | Width | 18 mm |
| Width (inches) | 0.709 inch | Mounting dimension - height | 75 mm |
| Net weight | 146 g | | |

Temperatures

| | | | |
|-----------------------------|-----------------------|-----------------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -40 °C...85 °C |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 85 °C |
| Humidity | 5 - 95% rel. humidity | | |

Rated data UL

| | | | |
|---|------------|---|-------------|
| Ambient temperature (operational), max. | 85 °C | Rated Voltage U_N | 400 V |
| VPR (N-PE) | 1,500 V | MCOV (L-PE) | 480 V |
| SCCR | 200 kA | I_n | 20 kA |
| Category | SPD TYPE 1 | Connection cross-section AWG, min. | AWG 14 |
| Connection cross-section AWG, max. | AWG 6 | Ambient temperature (operational), min. | -40 °C |
| MODE | all modes | VPR (L-PE) | 1,500 V |
| Voltage type | AC | UL Energy Networks | Split-Phase |

Connection data, remote alert

| | | | |
|--|---------|--|----------------------|
| Connection type | PUSH IN | Cross-section for connected wire, solid core, max. | 1.5 mm ² |
| Cross-section for connected wire, solid core, max. (AWG) | AWG 10 | Cross-section for connected wire, solid core, min. | 0.14 mm ² |
| Cross-section for connected wire, solid core, min. (AWG) | AWG 10 | Stripping length | 12 mm |

General data

| | | | |
|--------------------|---------------------------------------|---------------------------|---|
| Colour | orange, black | Design | Installation housing, Insta IP 20 |
| Operating altitude | ≤ 4000 m | Optical function display | green = OK; red = arrester is defective - replace |
| Protection degree | IP20 in installed state | Rail | TS 35 |
| Segment | Power distribution | UL 94 flammability rating | V-0 |
| Version | Surge protection, with remote contact | | |

Insulation coordination acc. to EN 50178

| | | | |
|--------------------|---|------------------------|-----|
| Pollution severity | 2 | Surge voltage category | III |
|--------------------|---|------------------------|-----|

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Rated data IEC / EN

| | | | |
|--|--|---|---|
| Discharge current I_{max} (8/20 μ s) wire-PE | 50 kA | Discharge current I_n (8/20 μ s) wire-PE | 20 kA |
| Energy coordination (≤ 10 m) | Type II, Type III | Follow-on current extinguishing capability I_{fi} | Follow current need not be taken into account |
| Frequency range, max. | 60 Hz | Frequency range, min. | 50 Hz |
| Fuse | No Fuse necessary ≤ 315 A gG, 250 A gG @50 kA I_{sc} , 315 A gG @25 kA I_{sc} | Leakage current at U_n | 0.7 mA |
| Low voltage network | Single-phase | Max. continuous voltage, U_c (AC) | 480 V |
| Number of poles | 1 | Protection level U_p at I_N (L/N-PE) | ≤ 2.3 kV |
| Rated voltage (AC) | 400 V | Requirements category acc. to IEC 61643-11 | Type II |
| Requirements class, acc. to EN 61643-11 | T2 | Response time | ≤ 25 ns |
| SPD type | T2 | Short-circuit current rating I_{SCCR} | 50 kA |
| Signalling contact | 250 V 1A 1CO | Standards | IEC61643-11, EN61643-11, UL 1449, NFPA 79 |
| Temporary surge voltage (over-voltage) - TOV | 581 V | Voltage type | AC |

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. | 2 Nm | 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 connection cross section AWG, min. | AWG 14 |
| Wire connection cross section AWG, max. | AWG 6 | Wire cross-section, solid, min. | 2.5 mm ² |
| Wire cross-section, solid, max. | 35 mm ² | Wire connection cross section, finely stranded, min. | 4 mm ² |
| Wire connection cross section, finely stranded, max. | 35 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 2.5 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 35 mm ² | Connection cross-section, stranded, min. | 2.5 mm ² |
| Connection cross-section, stranded, max. | 35 mm ² | | |

Ratings IECEx/ATEX/cUL

| | |
|-------------------------|---------|
| Certificate no. (cULus) | E354261 |
|-------------------------|---------|

Guarantee

| | |
|---------------|---------|
| Time interval | 5 years |
|---------------|---------|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC000941 | ETIM 7.0 | EC000941 |
| ETIM 8.0 | EC000941 | ETIM 9.0 | 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 |
| ECLASS 12.0 | 27-17-90-90 | ECLASS 13.0 | 27179090 |

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Technical data

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E354261 |

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 |

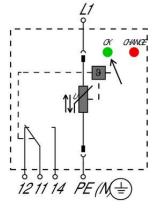
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Drawings

Electric symbol



Schematic circuit diagram