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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surge protection with integrated status indicator and knife disconnection for a 2-wire floating signal circuit, e.g., 0(4) ... 20 mA current loop.

Why buy this product

- ☑ Space-saving installation due to the narrow overall width of 6.2 mm
- Signaling without additional auxiliary power, thanks to the mechanical status indicator
- Optional remote signaling module monitors up to 40 items, without additional wiring
- Signal circuits easily interrupted for maintenance work, thanks to vertical knife disconnection
- Safe behavior in the event of overload, thanks to the integrated disconnect device



Key Commercial Data

Packing unit	1 STK
GTIN	4 055626 134376
GTIN	4055626134376

Technical data

Dimensions

Height	105.8 mm
Width	6.2 mm +0.1 mm
Depth	83.5 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C 85 °C
Ambient temperature (storage/transport)	-40 °C 85 °C
Altitude	≤ 4000 m (amsl (above mean sea level))
Degree of protection	IP20

General



Technical data

General

Housing material	PBT
Flammability rating according to UL 94	V-0
Color	traffic grey A RAL 7042
Mounting type	DIN rail: TH 35 - 7.5 mm
Туре	DIN rail module, one-piece
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Protective circuit

EC test classification		
C3 D1 Nominal voltage U _N	IEC test classification	C1
D1		C2
Nominal voltage U _N 24 ∨ DC Maximum continuous voltage U _C 30 ∨ DC Rated current 600 mA (40 °C) Operating effective current I _C at U _C ≤ 5 μA Residual current I _{PE} ≤ 1 μA Nominal discharge current I _R (8/20) μs (line-line) 5 kA Nominal discharge current I _{RD} (10/350) μs (line-earth) 5 kA Pulse discharge current I _{RD} (10/350) μs (line-earth) 0.5 kA Pulse discharge current I _{RD} (10/350) μs (line-earth) 0.5 kA Total discharge current I _{RD} (10/350) μs (line-earth) 0.5 kA Voltage protection level U _S (line-line) ≤ 55 ∨ (C1 - 1 kV/500 A) ≤ 65 ∨ (C2 - 10 kV / 5 kA) ≤ 55 ∨ (C3 - 100 A) Voltage protection level U _S (line-earth) ≤ 750 ∨ (C1 - 1 kV/500 A) ≤ 750 ∨ (C2 - 10 kV / 5 kA) ≤ 750 ∨ (C3 - 25 A) ≤ 750 ∨ (C3 - 100 A) ≤ 750 ∨ (C3 - 100 A) Voltage protection level U _S static (line-line) ≤ 50 ∨ (C1 - 1 kV/500 A) ≤ 65 ∨ (C2 - 10 kV / 5 kA) ≤ 65 ∨ (C2 - 10 kV / 5 kA) < 750 ∨ (C1 - 1 kV/500 A)		C3
Maximum continuous voltage U_c Rated current 600 mA (40 °C) Operating effective current I_c at U_c $\leq 5 \mu A$ Residual current $I_p E$ $\leq 1 \mu A$ Nominal discharge current I_n (8/20) μ (line-line) $\leq 5 k A$ Nominal discharge current I_n (8/20) μ (line-earth) $\leq 5 k A$ Pulse discharge current I_{log} (10/350) μ (line-line) 0.5 $k A$ Pulse discharge current I_{log} (10/350) μ (line-earth) 7 total discharge current I_{logal} (8/20) μ (line-line) $\leq 55 V$ (C1 - 1 $k V / 500 A$) $\leq 65 V$ (C2 - 10 $k V / 5 k A$) Voltage protection level U_p (line-earth) $\leq 750 V$ (C3 - 25 A) $\leq 55 V$ (C1 - 1 $k V / 500 A$) Voltage protection level U_p (line-earth) $\leq 750 V$ (C3 - 10 $k V / 5 k A$) $\leq 750 V$ (C3 - 10 $k V / 5 k A$) $\leq 750 V$ (C3 - 10 $k V / 5 k A$) Voltage protection level U_p static (line-line) $\leq 65 V$ (C1 - 1 $k V / 500 A$) Voltage protection level U_p static (line-line) $\leq 750 V$ (C1 - 1 $k V / 500 A$) Voltage protection level U_p static (line-line) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C1 - 1 $k V / 500 A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$) $\leq 750 V$ (C2 - 10 $k V / 5 k A$)		D1
Rated current $ 600 \text{ mA } (40 ^{\circ}\text{C}) $ Operating effective current $ 1_{\text{C}}$ at $ 1_{\text{C}} $ Residual current $ 1_{\text{PE}} $ Nominal discharge current $ 1_{\text{R}} $ Nominal disc	Nominal voltage U _N	24 V DC
Operating effective current I_{c} at U_{C} \leq 5 μA Residual current I_{PE} \leq 1 μA Nominal discharge current I_{n} (8/20) μs (line-line) 5 kA Nominal discharge current I_{nop} (10/350) μs (line-lene) 0.5 kA Pulse discharge current I_{loga} (10/350) μs (line-earth) 0.5 kA Total discharge current I_{loga} (8/20) μs 10 kA Voltage protection level U_{p} (line-line) \leq 55 V (C1 - 1 kV/500 A) \leq 55 V (C2 - 10 kV / 5 kA) \leq 55 V (C3 - 25 A) \leq 55 V (C3 - 100 A) \leq 55 V (C3 - 100 A) Voltage protection level U_{p} (line-earth) \leq 750 V (C1 - 1 kV/500 A) \leq 750 V (C2 - 10 kV / 5 kA) \leq 750 V (C3 - 25 A) \leq 750 V (C3 - 100 A) \leq 750 V (C3 - 100 A) Voltage protection level U_{p} static (line-line) \leq 55 V (C2 - 10 kV / 5 kA) \leq 750 V (C3 - 100 A) \leq 750 V (C3 - 100 A) Voltage protection level U_{p} static (line-line) \leq 55 V (C2 - 10 kV / 5 kA) \leq 55 V (C2 - 10 kV / 5 kA) \leq 55 V (C2 - 10 kV / 5 kA) \leq 750 V (C1 - 1 kV/500 A) \leq 55 V (C2 - 10 kV / 5 kA) \leq 750 V (C2 - 10 kV / 5 kA) \leq 750 V (C1 - 1 kV/500 A) \leq 750 V (C2 - 10 kV / 5 kA) \leq 750 V (C2 - 10 kV / 5 kA)<	Maximum continuous voltage U _C	30 V DC
Residual current I_{PE} $\leq 1 \mu A$ Nominal discharge current $I_{I_{I}}$ (8/20) μ s (line-line) $5 kA$ Nominal discharge current $I_{I_{I_{I}}}$ (8/20) μ s (line-earth) $5 kA$ Pulse discharge current $I_{I_{I_{I_{I_{I_{I_{I_{I_{I_{I_{I_{I_{I$	Rated current	600 mA (40 °C)
Nominal discharge current I_n (8/20) µs (line-line) 5 kA Nominal discharge current I_n (8/20) µs (line-earth) 5 kA Pulse discharge current I_{lmp} (10/350) µs (line-earth) 0.5 kA Pulse discharge current I_{lmp} (10/350) µs (line-earth) 0.5 kA Total discharge current I_{lmp} (10/350) µs (line-earth) 0.5 kA Voltage protection level U_p (line-line) $\leq 55 \text{ V (C1 - 1 kV/500 A)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 50 \text{ V (C3 - 25 A)}$ $\leq 50 \text{ V (C3 - 25 A)}$ $\leq 750 \text{ V (C1 - 1 kV/500 A)}$ $\leq 750 \text{ V (C1 - 1 kV/500 A)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C3 - 25 A)}$ $\leq 750 \text{ V (C3 - 100 A)}$ Voltage protection level U_p static (line-line) $\leq 50 \text{ V (C1 - 1 kV/500 A)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ Voltage protection level U_p static (line-airth) $\leq 750 \text{ V (C3 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C3 - 10 kV / 5 kA)}$ Voltage protection level U_p static (line-earth) $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ Response time t_n (line-line) $\leq 1 \text{ ns}$ Response time t_n (line-airth) $\leq 100 \text{ ns}$ Input attenuation aE, sym. typ. 0.3 dB ($\leq 250 \text{ kHz} / 150 \Omega$) Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 940 kHz Capacity (line-line)	Operating effective current I _C at U _C	≤ 5 µA
Nominal discharge current I _m (8/20) μs (line-earth) 5 kA Pulse discharge current I _{mp} (10/350) μs (line-earth) 0.5 kA Pulse discharge current I _{mp} (10/350) μs (line-earth) 0.5 kA Total discharge current I _{mp} (10/350) μs (line-earth) 10 kA Voltage protection level U _p (line-line) ≤ 55 V (C1 - 1 kV/500 A) ≤ 55 V (C2 - 10 kV / 5 kA) ≤ 50 V (C3 - 25 A) ≤ 55 V (C3 - 100 A) ≤ 750 V (C1 - 1 kV/500 A) Voltage protection level U _p (line-earth) ≤ 750 V (C2 - 10 kV / 5 kA) ≤ 750 V (C2 - 10 kV / 5 kA) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 100 A) Voltage protection level U _p static (line-line) ≤ 50 V (C1 - 1 kV/500 A) ≤ 65 V (C2 - 10 kV / 5 kA) ≤ 65 V (C2 - 10 kV / 5 kA) Voltage protection level U _p static (line-earth) ≤ 750 V (C1 - 1 kV/500 A) ≤ 750 V (C2 - 10 kV / 5 kA) ≤ 750 V (C2 - 10 kV / 5 kA) Response time t _k (line-line) ≤ 1 ns Response time t _k (line-earth) ≤ 100 ns Input attenuation aE, sym. typ. 9.0 at B(≤ 250 kHz / 150 Ω) Cut-off frequency fg (3 dB), sym. in 150 Ohm system	Residual current I _{PE}	≤ 1 µA
Pulse discharge current I _{Imp} (10/350) μs (line-line) 0.5 kA Pulse discharge current I _{Imp} (10/350) μs (line-earth) 0.5 kA Total discharge current I _{Imp} (8/20) μs 10 kA Voltage protection level U _p (line-line) ≤ 55 V (C1 - 1 kV/500 A) ≤ 65 V (C2 - 10 kV / 5 kA) ≤ 50 V (C3 - 25 A) ≤ 55 V (C3 - 100 A) ≤ 750 V (C1 - 1 kV/500 A) Voltage protection level U _p (line-earth) ≤ 750 V (C2 - 10 kV / 5 kA) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 25 A) ≤ 750 V (C3 - 100 A) ≤ 750 V (C3 - 100 A) Voltage protection level U _p static (line-line) ≤ 50 V (C1 - 1 kV/500 A) ≤ 65 V (C2 - 10 kV / 5 kA) ≤ 65 V (C2 - 10 kV / 5 kA) Voltage protection level U _p static (line-earth) ≤ 750 V (C1 - 1 kV/500 A) ≤ 750 V (C2 - 10 kV / 5 kA) ≤ 750 V (C2 - 10 kV / 5 kA) Response time t _h (line-line) ≤ 1 ns Response time t _h (line-earth) ≤ 100 ns Input attenuation aE, sym. typ. 0.3 dB (≤ 250 kHz / 150 Ω) Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 940 kHz Capacity (line-line) typ. 2.2 nF	Nominal discharge current I _n (8/20) µs (line-line)	5 kA
Pulse discharge current I_{lmp} (10/350) µs (line-earth) 0.5 kA Total discharge current I_{lotal} (8/20) µs 10 kA Voltage protection level Up (line-line) $\leq 55 \text{ V (C1 - 1 kV/500 A)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 50 \text{ V (C3 - 25 A)}$ $\leq 55 \text{ V (C3 - 100 A)}$ Voltage protection level Up (line-earth) $\leq 750 \text{ V (C1 - 1 kV/500 A)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 750 \text{ V (C3 - 25 A)}$ $\leq 750 \text{ V (C3 - 25 A)}$ $\leq 750 \text{ V (C3 - 25 A)}$ $\leq 750 \text{ V (C3 - 100 A)}$ Voltage protection level Up static (line-line) $\leq 50 \text{ V (C1 - 1 kV/500 A)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ $\leq 65 \text{ V (C2 - 10 kV / 5 kA)}$ Voltage protection level Up static (line-earth) $\leq 50 \text{ V (C1 - 1 kV/500 A)}$ $\leq 750 \text{ V (C1 - 1 kV/500 A)}$ $\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$ Response time t_A (line-line) $\leq 1 \text{ ns}$ Response time t_A (line-line) $\leq 1 \text{ ns}$ Response time t_A (line-earth) $\leq 100 \text{ ns}$ Input attenuation aE, sym. typ. 0.3 dB ($\leq 250 \text{ kHz} / 150 \Omega$) Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 940 kHz Capacity (line-line) typ. 2.2 nF	Nominal discharge current I _n (8/20) μs (line-earth)	5 kA
$ \begin{array}{c} \text{Total discharge current I_{total} (8/20) μs} & 10 \text{ kA} \\ \text{Voltage protection level U_p (line-line)} & \leq 55 \text{ V (C1-1 kV/500 A)} \\ & \leq 65 \text{ V (C2-10 kV/5 kA)} \\ & \leq 55 \text{ V (C3-25 A)} \\ & \leq 55 \text{ V (C3-25 A)} \\ & \leq 55 \text{ V (C3-100 A)} \\ \text{Voltage protection level U_p (line-earth)} & \leq 750 \text{ V (C1-1 kV/500 A)} \\ & \leq 750 \text{ V (C2-10 kV/5 kA)} \\ & \leq 700 \text{ V (C3-25 A)} \\ & \leq 750 \text{ V (C3-100 A)} \\ \text{Voltage protection level U_p static (line-line)} & \leq 55 \text{ V (C1-1 kV/500 A)} \\ & \leq 55 \text{ V (C1-1 kV/500 A)} \\ & \leq 55 \text{ V (C1-1 kV/500 A)} \\ & \leq 55 \text{ V (C1-1 kV/500 A)} \\ & \leq 65 \text{ V (C2-10 kV/5 kA)} \\ \text{Voltage protection level U_p static (line-earth)} & \leq 750 \text{ V (C1-1 kV/500 A)} \\ & \leq 750 \text{ V (C2-10 kV/5 kA)} \\ & \leq 750 \text{ V (C2-10 kV/5 kA)} \\ & \leq 750 \text{ V (C2-10 kV/5 kA)} \\ & \leq 1 \text{ ns} \\ & \text{Response time t_A (line-earth)} & \leq 100 \text{ ns} \\ & \text{Input attenuation aE, sym.} & \text{typ. 0.3 dB } (\leq 250 \text{ kHz} \text{ / 150 } \Omega) \\ & \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} & \text{typ. 940 kHz} \\ & \text{Capacity (line-line)} & \text{typ. 2.2 nF} \\ \end{array}$	Pulse discharge current I _{imp} (10/350) μs (line-line)	0.5 kA
$ \begin{array}{lll} \mbox{Voltage protection level U_p (line-line)} & \leq 55 \mbox{V} (C1 - 1 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 65 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 50 \mbox{V} (C3 - 25 \mbox{ A}) \\ & \leq 55 \mbox{V} (C3 - 100 \mbox{ A}) \\ & \leq 750 \mbox{V} (C1 - 1 \mbox{ kV}/500 \mbox{ A}) \\ & \leq 750 \mbox{V} (C1 - 1 \mbox{ kV}/500 \mbox{ A}) \\ & \leq 750 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 700 \mbox{V} (C3 - 25 \mbox{ A}) \\ & \leq 750 \mbox{V} (C3 - 25 \mbox{ A}) \\ & \leq 750 \mbox{V} (C3 - 100 \mbox{ A}) \\ & \leq 65 \mbox{V} (C1 - 1 \mbox{ kV}/500 \mbox{ A}) \\ & \leq 65 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 65 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 750 \mbox{V} (C1 - 1 \mbox{ kV}/500 \mbox{ A}) \\ & \leq 750 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 750 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 750 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 750 \mbox{V} (C2 - 10 \mbox{ kV}/5 \mbox{ kA}) \\ & \leq 1 \mbox{ns} \\ & \leq 1 \mbox{ns} \\ & \leq 100 \mbox{ ns} \\ & \text{Response time t_A (line-earth)} \\ & \leq 100 \mbox{ ns} \\ & \text{Input attenuation aE, sym.} \\ & \text{Lyp. 0.3 dB } (\leq 250 \mbox{ kHz} / 150 \Omega) \\ & \text{Cut-off frequency fg (3 \mbox{ dB), sym. in 150 \mbox{ Ohm system}} \\ & \text{Lyp. 940 \mbox{ kHz}} \\ & \text{Capacity (line-line)} \\ & \text{Lyp. 2.2 nF} \\ \end{array}$	Pulse discharge current I _{imp} (10/350) μs (line-earth)	0.5 kA
$ \leq 65 \ V \ (C2 - 10 \ kV / 5 \ kA) $ $ \leq 50 \ V \ (C3 - 25 \ A) $ $ \leq 55 \ V \ (C3 - 100 \ A) $ $ Voltage protection level U_p (line-earth) \leq 750 \ V \ (C1 - 1 \ kV / 500 \ A) \leq 750 \ V \ (C2 - 10 \ kV / 5 \ kA) \leq 700 \ V \ (C3 - 25 \ A) \leq 750 \ V \ (C3 - 25 \ A) \leq 750 \ V \ (C3 - 100 \ A) Voltage protection level U_p static (line-line) \leq 50 \ V \ (C1 - 1 \ kV / 500 \ A) \leq 65 \ V \ (C2 - 10 \ kV / 5 \ kA) Voltage protection level U_p static (line-earth) \leq 750 \ V \ (C1 - 1 \ kV / 500 \ A) \leq 750 \ V \ (C1 - 1 \ kV / 500 \ A) \leq 750 \ V \ (C2 - 10 \ kV / 5 \ kA) \leq 750 \ V \ (C2 - 10 \ kV / 5 \ kA) \leq 750 \ V \ (C2 - 10 \ kV / 5 \ kA) \leq 1 \ ns \leq 100 \ ns Input \ attenuation \ aE, \ sym. typ. \ 0.3 \ dB \ (\leq 250 \ kHz \ / \ 150 \ \Omega) Cut-off \ frequency \ fg \ (3 \ dB), \ sym. \ in \ 150 \ Ohm \ system typ. \ 9.40 \ kHz Capacity \ (line-line) typ. \ 2.2 \ nF $	Total discharge current I _{total} (8/20) μs	10 kA
$ \leq 50 \text{ V } (\text{C3} - 25 \text{ A}) $ $ \leq 55 \text{ V } (\text{C3} - 100 \text{ A}) $ $ \forall \text{Voltage protection level U}_{p} \text{ (line-earth)} $ $ \leq 750 \text{ V } (\text{C1} - 1 \text{ kV/500 A}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV } / 5 \text{ kA}) $ $ \leq 700 \text{ V } (\text{C3} - 25 \text{ A}) $ $ \leq 750 \text{ V } (\text{C3} - 100 \text{ A}) $ $ \forall \text{Voltage protection level U}_{p} \text{ static (line-line)} $ $ \leq 50 \text{ V } (\text{C1} - 1 \text{ kV/500 A}) $ $ \leq 65 \text{ V } (\text{C2} - 10 \text{ kV } / 5 \text{ kA}) $ $ \forall \text{Voltage protection level U}_{p} \text{ static (line-earth)} $ $ \leq 750 \text{ V } (\text{C1} - 1 \text{ kV/500 A}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV } / 5 \text{ kA}) $ $ \forall \text{Response time t}_{A} \text{ (line-line)} $ $ \leq 1 \text{ ns} $ $ \text{Response time t}_{A} \text{ (line-earth)} $ $ \leq 100 \text{ ns} $ $ \text{Input attenuation aE, sym.} $ $ \forall \text{typ. 0.3 dB } (\leq 250 \text{ kHz} / 150 \Omega) $ $ \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} $ $ \text{typ. 940 kHz} $ $ \text{Capacity (line-line)} $	Voltage protection level U _p (line-line)	≤ 55 V (C1 - 1 kV/500 A)
$ \leq 55 \text{ V (C3 - 100 \text{ A})} $ $ \leq 750 \text{ V (C1 - 1 \text{ kV/500 A})} $ $ \leq 750 \text{ V (C2 - 10 \text{ kV / 5 kA})} $ $ \leq 750 \text{ V (C2 - 10 \text{ kV / 5 kA})} $ $ \leq 700 \text{ V (C3 - 25 \text{ A})} $ $ \leq 750 \text{ V (C3 - 100 \text{ A})} $ $ \leq 100 V (C$		≤ 65 V (C2 - 10 kV / 5 kA)
$ \begin{array}{lll} \mbox{Voltage protection level U_p (line-earth)} & \leq 750 \mbox{ V (C1 - 1 kV/500 A)} \\ & \leq 750 \mbox{ V (C2 - 10 kV / 5 kA)} \\ & \leq 700 \mbox{ V (C3 - 25 A)} \\ & \leq 750 \mbox{ V (C3 - 100 A)} \\ & & \leq 750 \mbox{ V (C3 - 100 A)} \\ & & \leq 50 \mbox{ V (C1 - 1 kV/500 A)} \\ & & \leq 65 \mbox{ V (C2 - 10 kV / 5 kA)} \\ & & & \\ \mbox{Voltage protection level U_p static (line-earth)} & \leq 750 \mbox{ V (C1 - 1 kV/500 A)} \\ & & \leq 750 \mbox{ V (C2 - 10 kV / 5 kA)} \\ & & & \\ \mbox{Response time t_A (line-line)} & & \leq 1 \mbox{ ns} \\ & & & \\ \mbox{Response time t_A (line-earth)} & & \leq 100 \mbox{ ns} \\ & & & \\ \mbox{Input attenuation aE, sym.} & & \\ \mbox{ typ. 0.3 dB } (\leq 250 \mbox{ kHz / 150 }\Omega) \\ & & \\ \mbox{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} & & \\ \mbox{ typ. 940 kHz} \\ \mbox{ Capacity (line-line)} & & \\ \mbox{ typ. 2.2 nF} \\ \end{array}$		≤ 50 V (C3 - 25 A)
$ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV} / 5 \text{ kA}) $ $ \leq 700 \text{ V } (\text{C3} - 25 \text{ A}) $ $ \leq 750 \text{ V } (\text{C3} - 100 \text{ A}) $ $ \text{Voltage protection level U}_{p} \text{ static (line-line)} \qquad \leq 50 \text{ V } (\text{C1} - 1 \text{ kV} / 500 \text{ A}) $ $ \leq 65 \text{ V } (\text{C2} - 10 \text{ kV} / 5 \text{ kA}) $ $ \text{Voltage protection level U}_{p} \text{ static (line-earth)} \qquad \leq 750 \text{ V } (\text{C1} - 1 \text{ kV} / 500 \text{ A}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV} / 5 \text{ kA}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV} / 5 \text{ kA}) $ $ \text{Response time t}_{A} \text{ (line-line)} \qquad \leq 1 \text{ ns} $ $ \text{Response time t}_{A} \text{ (line-earth)} \qquad \leq 100 \text{ ns} $ $ \text{Input attenuation aE, sym.} \qquad \text{typ. 0.3 dB } (\leq 250 \text{ kHz} / 150 \Omega) $ $ \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} \qquad \text{typ. 940 kHz} $ $ \text{Capacity (line-line)} \qquad \text{typ. 2.2 nF} $		≤ 55 V (C3 - 100 A)
$ \leq 700 \text{ V } (\text{C3} - 25 \text{ A}) $ $ \leq 750 \text{ V } (\text{C3} - 100 \text{ A}) $ $ \text{Voltage protection level U}_{p} \text{ static (line-line)} \qquad \leq 50 \text{ V } (\text{C1} - 1 \text{ kV/500 A}) $ $ \leq 65 \text{ V } (\text{C2} - 10 \text{ kV / 5 kA}) $ $ \text{Voltage protection level U}_{p} \text{ static (line-earth)} \qquad \leq 750 \text{ V } (\text{C1} - 1 \text{ kV/500 A}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV / 5 kA}) $ $ \leq 750 \text{ V } (\text{C2} - 10 \text{ kV / 5 kA}) $ $ \text{Response time t}_{A} \text{ (line-line)} \qquad \leq 1 \text{ ns} $ $ \text{Response time t}_{A} \text{ (line-earth)} \qquad \leq 100 \text{ ns} $ $ \text{Input attenuation aE, sym.} \qquad \text{typ. 0.3 dB } (\leq 250 \text{ kHz / 150 } \Omega) $ $ \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} \qquad \text{typ. 940 kHz} $ $ \text{Capacity (line-line)} \qquad \text{typ. 2.2 nF} $	Voltage protection level U _p (line-earth)	≤ 750 V (C1 - 1 kV/500 A)
$ \leq 750 \text{ V (C3 - 100 \text{ A})} $ $ \vee \text{Oltage protection level U}_{p} \text{ static (line-line)} \qquad \leq 50 \text{ V (C1 - 1 kV/500 A)} $ $ \leq 65 \text{ V (C2 - 10 kV / 5 kA)} $ $ \vee \text{Oltage protection level U}_{p} \text{ static (line-earth)} \qquad \leq 750 \text{ V (C1 - 1 kV/500 A)} $ $ \leq 750 \text{ V (C2 - 10 kV / 5 kA)} $ $ \times \text{Response time t}_{A} \text{ (line-line)} \qquad \leq 1 \text{ ns} $ $ \times \text{Response time t}_{A} \text{ (line-earth)} \qquad \leq 100 \text{ ns} $ $ \times \text{Input attenuation aE, sym.} \qquad \text{typ. 0.3 dB } (\leq 250 \text{ kHz / 150 } \Omega) $ $ \times \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} \qquad \text{typ. 940 kHz} $ $ \times \text{Capacity (line-line)} \qquad \text{typ. 2.2 nF} $		≤ 750 V (C2 - 10 kV / 5 kA)
		≤ 700 V (C3 - 25 A)
$ \leq 65 \text{ V (C2 - 10 kV / 5 kA)} $ $ \leq 750 \text{ V (C1 - 1 kV / 500 A)} $ $ \leq 750 \text{ V (C2 - 10 kV / 5 kA)} $ $ \leq 750 \text{ V (C2 - 10 kV / 5 kA)} $ $ \leq 86 \text{ Exponse time t}_{A} \text{ (line-line)} $ $ \leq 1 \text{ ns} $ $ \leq 100 \text{ ns} $ $ \text{Input attenuation aE, sym.} $ $ \text{typ. 0.3 dB } (\leq 250 \text{ kHz / 150 } \Omega) $ $ \text{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} $ $ \text{typ. 940 kHz} $ $ \text{Capacity (line-line)} $ $ \text{typ. 2.2 nF} $		≤ 750 V (C3 - 100 A)
	Voltage protection level Up static (line-line)	≤ 50 V (C1 - 1 kV/500 A)
$ \leq 750 \text{ V (C2 - 10 kV / 5 kA)} $ Response time t_A (line-line) $ \leq 1 \text{ ns} $ Response time t_A (line-earth) $ \leq 100 \text{ ns} $ Input attenuation aE, sym. $ \text{typ. 0.3 dB } (\leq 250 \text{ kHz / 150 } \Omega) $ Cut-off frequency fg (3 dB), sym. in 150 Ohm system $ \text{typ. 940 kHz} $ Capacity (line-line) $ \text{typ. 2.2 nF} $		≤ 65 V (C2 - 10 kV / 5 kA)
$ \begin{array}{lll} \mbox{Response time t_A (line-line)} & \leq 1 \ \mbox{ns} \\ \mbox{Response time t_A (line-earth)} & \leq 100 \ \mbox{ns} \\ \mbox{Input attenuation aE, sym.} & typ. \ 0.3 \ \mbox{dB } (\leq 250 \ \mbox{kHz} \ / \ 150 \ \Omega) \\ \mbox{Cut-off frequency fg (3 \ dB), sym. in 150 \ Ohm system} & typ. \ 940 \ \mbox{kHz} \\ \mbox{Capacity (line-line)} & typ. \ 2.2 \ \mbox{nF} \\ \end{array} $	Voltage protection level U _p static (line-earth)	≤ 750 V (C1 - 1 kV/500 A)
$ \begin{array}{lll} \mbox{Response time t_A (line-earth)} & \leq 100 \ \mbox{ns} \\ \mbox{Input attenuation aE, sym.} & \mbox{typ. 0.3 dB } (\leq 250 \ \mbox{kHz} \ / \ 150 \ \Omega) \\ \mbox{Cut-off frequency fg (3 dB), sym. in 150 Ohm system} & \mbox{typ. 940 kHz} \\ \mbox{Capacity (line-line)} & \mbox{typ. 2.2 nF} \end{array} $		≤ 750 V (C2 - 10 kV / 5 kA)
Input attenuation aE, sym.typ. 0.3 dB ($\leq 250 \text{ kHz} / 150 \Omega$)Cut-off frequency fg (3 dB), sym. in 150 Ohm systemtyp. 940 kHz Capacity (line-line)typ. 2.2 nF	Response time t _A (line-line)	≤ 1 ns
Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 940 kHz Capacity (line-line) typ. 2.2 nF	Response time t _A (line-earth)	≤ 100 ns
Capacity (line-line) typ. 2.2 nF	Input attenuation aE, sym.	typ. 0.3 dB (≤ 250 kHz / 150 Ω)
	Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 940 kHz
Resistance in series 1.65.0 ±20.%	Capacity (line-line)	typ. 2.2 nF
1.00 1/2 1/20 70	Resistance in series	1.65 Ω ±20 %



Technical data

Protective circuit

Surge protection fault message	optical
Max. required back-up fuse	630 mA (FF)
Impulse durability (line-line)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
Impulse durability (line-earth)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 500 A
Pulse reset time (line-line)	≤ 700 ms
Pulse reset time (line-earth)	≤ 1500 ms

Additional technical data

Many total displayers assessed (0/20) vis	20 kA (1v)
Max. total discharge current I _{total max} (8/20) μs	20 kA (1x)

Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm 0.6 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section solid	0.2 mm² 4 mm²
Conductor cross section AWG	24 12

Standards and Regulations

Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

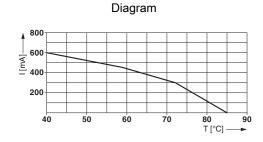
Environmental Product Compliance

REACh SVHC	Lead 7439-92-1

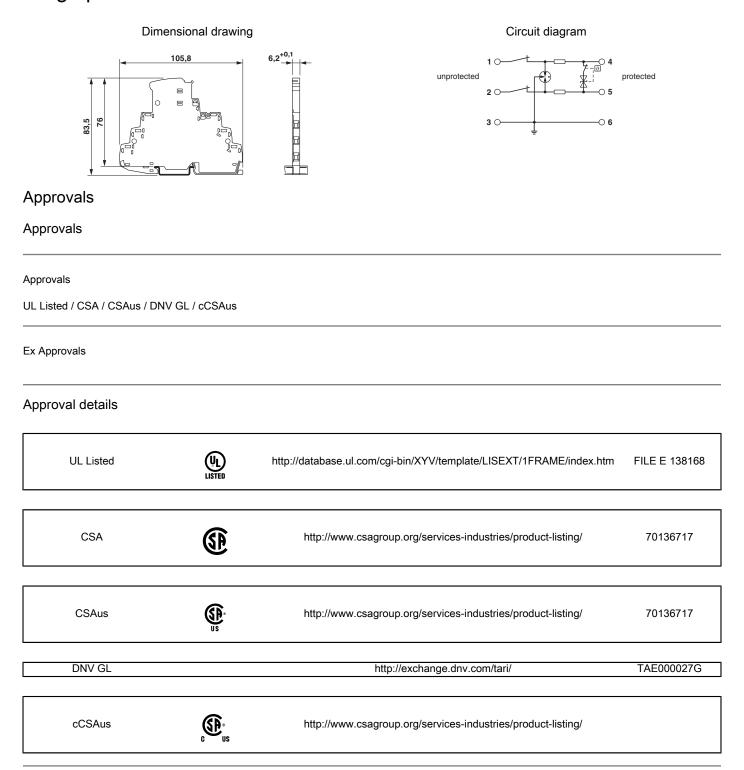
Drawings

Pictogram











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