Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919

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Type 2/3 surge protection, consisting of protective plug and base element with screw connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage: 230 V AC/DC

Your advantages

- Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- Your preferred connection technology can be selected as both screw connection and Push-in connection are available
- Optimal additional protection of the industrial power supply for a longer service life and increased availability of the system
- 5-year warranty on your QUINT 4 power supply when installed together with PLT-SEC, see document in the download area

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 257457
GTIN	4055626257457
Weight per Piece (excluding packing)	96.000 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	93.4 mm
Width	17.7 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

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Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (operating voltage remote contact ≤ 250 V)
	≤ 6000 m (operating voltage remote contact ≤ 150 V)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (5 ... 500 Hz / 2.5 h / X, Y, Z)

General

EN type	T2 / T3
IEC power supply system	TT
	TN-S
Number of ports	One
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
	traffic grey A RAL 7042
Housing material	PA 6.6-FR 20 % GF
	PA 6.6-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	240 V AC (TN-S)
	240 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	264 V AC
Rated load current I_L	26 A (at 30 °C)
Residual current I_{PE}	≤ 5 µA
Nominal discharge current I_n (8/20) µs	5 kA
Standby power consumption P_C	≤ 26.4 mVA (at U_{REF})
	≤ 26.4 mVA (at U_C)

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Protective circuit

Reference test voltage U_{REF}	264 V AC
Max. discharge current I_{max} (8/20) µs	10 kA
Combination wave U_{OC}	6 kV
Voltage protection level U_p (L-N)	≤ 1.25 kV (at U_{OC})
	≤ 1.4 kV (at I_n)
Voltage protection level U_p (L-PE)	≤ 1.4 kV
Voltage protection level U_p (N-PE)	≤ 1.4 kV
TOV behavior at U_T (L-N)	400 V AC (5 s / withstand mode)
	457 V AC (120 min / safe failure mode)
TOV behavior at U_T (L-PE)	457 V AC (5 s / withstand mode)
	457 V AC (120 min / withstand mode)
	1464 V AC (200 ms / safe failure mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / safe failure mode)
Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Short-circuit current rating I_{SCCR}	10 kA AC
Max. backup fuse with branch wiring	32 A (gG / B / C)
Maximum backup fuse for through wiring	25 A (gG / B / C)

Additional technical data

Short-circuit current rating I_{SCCR}	0.25 kA DC (Without additional backup fuse in the DC branch wiring)
	5 kA DC (for 20 A gG / B backup fuse)
Maximum continuous voltage U_C	275 V AC
	240 V DC
Residual voltage U_{res} (L-N)	≤ 1.15 kV (at 2 kA)
	≤ 1.25 kV (at 3 kA)
	≤ 1.1 kV (at U_{OC} = 4 kV)
Residual voltage U_{res} (L-PE)	≤ 1.1 kV (at 2 kA)
	≤ 1.1 kV (at 3 kA)
	≤ 1.2 kV (at U_{OC} = 4 kV)
Residual voltage U_{res} (N-PE)	≤ 1.1 kV (at 2 kA)
	≤ 1.1 kV (at 3 kA)
	≤ 1.2 kV (at U_{OC} = 4 kV)
Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE
IEC test classification (in accordance with IEC 61643-21)	D1

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Additional technical data

Impulse durability (line-line)	D1 - 500 A
Impulse durability (line-earth)	D1 - 500 A
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

Indicator/remote signaling

Switching function	Changeover contact
Operating voltage	250 V AC
	125 V DC (200 mA DC)
Operating current	0.5 A AC
	0.5 A DC (75 V DC)
Connection method	Screw connection
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	30 ... 12
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	10 mm

Connection data

Connection method	Screw connection
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
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	10 mm

UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV	264 V AC
	240 V DC
Nominal voltage	240 V DC
Rated load current I_L	20 A
Mode of protection	L-N
	L-G
	N-G
	(DC+) - (DC-)
	(DC+) - G

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UL specifications

	(DC-) - G
Power distribution system	Single phase
	DC
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	1150 V
Measured limiting voltage MLV (L-G)	1180 V
Measured limiting voltage MLV (N-G)	1180 V
Nominal discharge current I_n	5 kA

UL indicator/remote signaling

Operating voltage	250 V AC (0.5 A)
	12 V DC (4 A)
	24 V DC (2 A)
	48 V DC (1 A)
Tightening torque	5 lb_f-in. ... 7 lb_f-in.
Conductor cross section AWG	30 ... 12

UL connection data

Conductor cross section AWG	16 ... 12
Tightening torque	4.4 lb_f-in.

Standards and Regulations

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”