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Double-level modular terminal block with suppressor diode as surge protection between both levels, disconnect knife in the upper level, nominal voltage: 48 V DC, for mounting on NS 32 or NS 35/7.5, closed housing, terminal width: 6.2 mm, terminal height: 68 mm

The figure shows version TT-UKK5-M-24 DC

Your advantages

☑ Can be used in the signal circuits of electronic controllers



Key Commercial Data

Packing unit	1 pc
GTIN	4 017918 073237
GTIN	4017918073237
Weight per Piece (excluding packing)	25.590 g
Custom tariff number	85363010
Country of origin	Greece

Technical data

Dimensions

Height	80 mm
Width	6.2 mm
Depth	68 mm

Ambient conditions

Ambient temperature (operation)	-40 °C 85 °C
Degree of protection	IP20

General



Technical data

General

Housing material	PA
Flammability rating according to UL 94	V-2
Color	black
Standards for cearances and creepage distances	VDE 0110-1
Mounting type	DIN rail: 35 mm
Туре	Double-level terminal block with disconnect knife
Number of positions	1
Direction of action	Line-Line

Protective circuit

VDE requirement class C3 Nominal voltage U_N 48 V DC Maximum continuous voltage U_C 53 V DC 37 V AC Rated current 12 A (45 °C) Operating effective current I_C at U_C Sominal discharge current I_N (8/20) μ s (line-line) 70 A Max. discharge current I_{Nax} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{Nax} (8/20) μ s (line-line) 90 A Nominal pulse current I_{Nax} (8/20) μ s (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static S		
Nominal voltage U_N 48 V DC Maximum continuous voltage U_C 53 V DC 37 V AC Rated current 12 A (45 °C) Operating effective current I_C at U_C 55 μ A Nominal discharge current I_{total} (8/20) μ s (line-line) 90 A Total discharge current I_{total} (8/20) μ s maximum (line-line) 90 A Max. discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{max} (8/20) μ s maximum (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static \$80 V Residual voltage at I_n (line-line) \$\leq 111 V Response time I_n (line-line) \$\leq 111 V Response time I_n (line-line) \$\leq 1 \text{ ns} \$\leq 0.85 \text{ nF} Surge protection fault message} none	IEC test classification	C3
Maximum continuous voltage $U_{\mathbb{C}}$ 53 V DC Rated current 12 A (45 °C) Operating effective current $I_{\mathbb{C}}$ at $U_{\mathbb{C}}$ ≤ 5 μ A Nominal discharge current I_{total} (8/20) μ s (line-line) 90 A Total discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Max. discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{max} (8/20) μ s maximum (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static ≤ 80 V Residual voltage at I_{n} (line-line) ≤ 111 V Response time I_{n} (line-line) ≤ 1 ns Cut-off frequency I_{n} (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) ≤ 0.85 nF Surge protection fault message	VDE requirement class	C3
Rated current 12 A (45 °C) Operating effective current I_c at U_c $\leq 5 \mu A$ Nominal discharge current I_n (8/20) μ s (line-line) 90 A Total discharge current I_{lotal} (8/20) μ s Max. discharge current I_{lotal} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_n (10/1000) μ s (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static $\leq 80 V$ Residual voltage at I_n (line-line) $\leq 111 V$ Response time I_A (line-line) $\leq 1 ns$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 nF$ Surge protection fault message	Nominal voltage U _N	48 V DC
Rated current Operating effective current I_{c} at U_{c} Nominal discharge current I_{n} (8/20) μ s (line-line) 90 A Total discharge current I_{lotal} (8/20) μ s Max. discharge current I_{lotal} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{max} (8/20) μ s maximum (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static \leq 80 V Residual voltage at I_{n} (line-line) \leq 111 V Response time I_{n} (line-line) \leq 1 ns Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) \leq 0.85 nF Surge protection fault message	Maximum continuous voltage U _C	53 V DC
Operating effective current I_C at U_C $\leq 5 \mu A$ Nominal discharge current I_n (8/20) μ s (line-line) 90 A Total discharge current I_{lotal} (8/20) μ s 90 A Max. discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current Ian (10/1000) μ s (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static $\leq 80 V$ Residual voltage at I_n (line-line) $\leq 111 V$ Response time I_n (line-line) $\leq 1 ns$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 nF$ Surge protection fault message none		37 V AC
Nominal discharge current I_n (8/20) μ s (line-line) 90 A Total discharge current I_{total} (8/20) μ s 90 A Max. discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current I_{max} (8/20) μ s maximum (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static \leq 80 V Residual voltage at I_n (line-line) \leq 111 V Response time I_n (line-line) \leq 1 ns Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) \leq 0.85 nF Surge protection fault message none	Rated current	12 A (45 °C)
Total discharge current I_{total} (8/20) μ s 90 A Max. discharge current I_{max} (8/20) μ s maximum (line-line) 90 A Nominal pulse current Ian (10/1000) μ s (line-line) 17.7 A Output voltage limitation at 1 kV/ μ s (line-line) static $\leq 80 \text{ V}$ Residual voltage at I_n (line-line) $\leq 111 \text{ V}$ Response time I_n (line-line) $\leq 1 \text{ ns}$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 \text{ nF}$ Surge protection fault message none	Operating effective current I _C at U _C	≤ 5 μA
Max. discharge current I_{max} (8/20) μs maximum (line-line)90 ANominal pulse current lan (10/1000) μs (line-line)17.7 AOutput voltage limitation at 1 kV/μs (line-line) static≤ 80 VResidual voltage at I_n (line-line)≤ 111 VResponse time t_A (line-line)≤ 1 nsCut-off frequency fg (3 dB), sym. in 150 Ohm systemtyp. 3.8 MHzCapacity (line-line)≤ 0.85 nFSurge protection fault messagenone	Nominal discharge current I _n (8/20) µs (line-line)	90 A
Nominal pulse current Ian (10/1000) µs (line-line) 17.7 A Output voltage limitation at 1 kV/µs (line-line) static ≤ 80 V Residual voltage at I _n (line-line) ≤ 111 V Response time t _A (line-line) ≤ 1 ns Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) ≤ 0.85 nF Surge protection fault message none	Total discharge current I _{total} (8/20) μs	90 A
Output voltage limitation at 1 kV/µs (line-line) static $\leq 80 \text{ V}$ Residual voltage at I _n (line-line) $\leq 111 \text{ V}$ Response time t _A (line-line) $\leq 1 \text{ ns}$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 \text{ nF}$ Surge protection fault message none	Max. discharge current I _{max} (8/20) μs maximum (line-line)	90 A
Residual voltage at I_n (line-line) $\leq 111 \text{ V}$ Response time I_A (line-line) $\leq 1 \text{ ns}$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 \text{ nF}$ Surge protection fault message none	Nominal pulse current lan (10/1000) µs (line-line)	17.7 A
Response time t_A (line-line) $\leq 1 \text{ ns}$ Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) $\leq 0.85 \text{ nF}$ Surge protection fault message none	Output voltage limitation at 1 kV/µs (line-line) static	≤ 80 V
Cut-off frequency fg (3 dB), sym. in 150 Ohm system typ. 3.8 MHz Capacity (line-line) ≤ 0.85 nF Surge protection fault message none	Residual voltage at I _n (line-line)	≤ 111 V
Capacity (line-line) ≤ 0.85 nF Surge protection fault message none	Response time t _A (line-line)	≤ 1 ns
Surge protection fault message none	Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 3.8 MHz
	Capacity (line-line)	≤ 0.85 nF
Impulse durability (line-line) C3 - 10 A	Surge protection fault message	none
	Impulse durability (line-line)	C3 - 10 A

Connection data

Connection method	Screw connection
Connection method IN	Screw terminal blocks
Connection method OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section solid	0.2 mm² 4 mm²



Technical data

Connection data

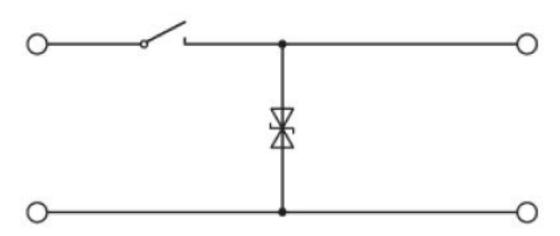
Conductor cross section AWG	24 12

Standards and Regulations

Standards/regulations	IEC 61643-21
Standards/specifications	IEC 61643-21 2000
	DIN EN 61643-21 2002

Drawings

Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807
eCI@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943



Classifications

ETIM

ETIM 4.0	EC000943
ETIM 5.0	EC000943
ETIM 6.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

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