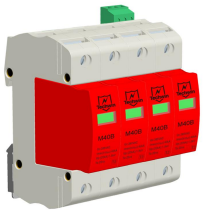
Type 2 /Class C lightning protection device with TUV certificate (M40B)
MOV/MOV+GDT Technology

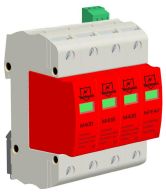
M40B1

M40B2



M40B4

M40B1+N



M40B3+N

Description:

M40 series power supply system AC module are mainly appicable to power distribution system for class C / type 2 protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transist operation and resonance(less than 100 μs) over voltage.

Feature:

DIN rail mounting
Plug connectors for quick and easy connection or rewiring
40kA maximum surge current
Thermal disconnect device
Status indicators visually verify protection level
Surge protection device with N-PE residual current spark gap as 3+1 circuit
Remote alarm function
High quality products with **TUV, CE, IEC61643-11** certificates

Application

Type 2 Class C Surge Protective Device for AC Power System.
A. Power distribution box(cabinet)
B. AC cabinet, cabinet air conditioner,
C. PV inverter, Solar inverter, inverter charger, inverter cabinet
D. Switching mode power supply（SMPS Box, SMPS cabinet），
high-frequency switching mode power supply,UPS system
E. Data center, IDC power system, Column head cabinet
F. Charging station/charging point
Sensitive electronic equipment
pulse width modulation(PWM box)
Automatic control panels, motor control panels
IT,TT,TN-C,TN-S,TN-C-S and other power supply system.

Technical parameters

Model	M40B1	M40B2	M40B1+N	M40B4	M40B3+N
Lighning proection zone(LPZ)	1-2				
Standards Compliance	IEC61643-11, EN60950				
Classification	Class II /Type 2				
Frequency of the supply main	50/60Hz				
Nominal working voltage Un	220V			220/380V	
Max continuous operating voltage Uc	385V				
Nominal discharge current (8/20μs) In	20KA				
Max discharge current Imax (8/20μs) Imax	40KA				
Temporary overvoltage (TOV) Utov	LV(tT=5s): 442 V (L-PE); 337 V (L-N) LV(tT=120min): 337 V (L-PE); 442 V (L-N) HV(tT=200ms）: 1455 V (L-PE); 1200 V (N-PE)				
Short-circuit current Rating Isccr	25KA				
Protection level (8/20μs) Up	≤1500V				
Response time tA (L-N/N-PE)	25ns/100ns				
Leakage current at voltage Uc	≤1mA				
Protection model	L-PE	L/N-PE	L-N, N-PE	L1/L2/L3,N-PE	L1/L2/L3-N,N-PE
Dimension	90 (H)×18(W)×65(L)mm	90 (H)×36(W)×65(L)mm		90 (H)×72(W)×65(L)mm	
Mounting	DIN rail Mounting 35mm				
IP code	IP20				
Working conditions	Temperature: -40 to 80℃, Relative humidity: ≤95％				

Similar models reference

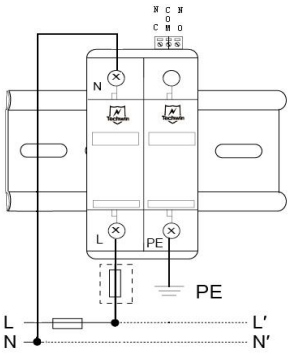
Model	M60B1	M60B2	M60B1+N	M60B4	M60B3+N
Lighning proection zone(LPZ)	1-2				
Standards Compliance	IEC61643-11, EN60950				
Classification	Class II /Type 2				
Nominal working voltage Un	220V			220/380V	
Max continuous operating voltage Uc	385V				
Nominal discharge current (8/20μs) In	20KA				
Max discharge current Imax (8/20μs) Imax	60KA				
Temporary overvoltage (TOV) Utov	LV(tT=5s): 442 V (L-PE); 337 V (L-N) LV(tT=120min): 337 V (L-PE); 442 V (L-N) HV(tT=200ms）: 1455 V (L-PE); 1200 V (N-PE)				
Protection level 8/20μs Up	1800V				
Response time tA (L-N/N-PE)	25ns/100ns				
Protection model	L-PE	L/N-PE	L-N, N-PE	L1/L2/L3,N-PE	L1/L2/L3-N,N-PE
Dimension	90 (H)×18(W)×65(L)mm	90 (H)×36(W)×65(L)mm		90 (H)×72(W)×65(L)mm	
Mounting	DIN rail Mounting 35mm				
IP code	IP20				
Working conditions	Temperature: -40 to 80℃, Relative humidity: ≤95％				

Model	M80B1	M80B2	M80B1+N	M80B4	M80B3+N
Lighning proection zone(LPZ)	1-2				
Standards Compliance	IEC61643-11, EN60950				
Classification	Class II /Type 2				
Nominal working voltage Un	220V			220/380V	
Max continuous operating voltage Uc	385V				

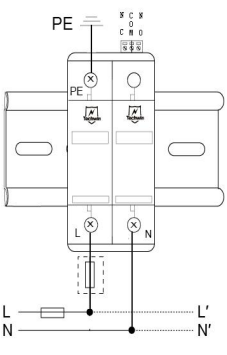
Nominal discharge current (8/20μs) In	40KA				
Max discharge current Imax (8/20μs) Imax	80KA				
Temporary overvoltage (TOV) Utov	LV(tT=5s): 442 V (L-PE); 337 V (L-N) LV(tT=120min): 337 V (L-PE); 442 V (L-N) HV(tT=200ms）: 1455 V (L-PE); 1200 V (N-PE)				
Protection level 8/20μs Up	2000V				
Response time tA (L-N/N-PE)	25ns/100ns				
Protection model	L-PE	L/N-PE	L-N, N-PE	L1/L2/L3,N-PE	L1/L2/L3-N,N-PE
Dimension	90	90 (H)×36(W)×65(L)mm		90 (H)×72(W)×65(L)mm	
Mounting	DIN rail Mounting 35mm				
IP code	IP20				
Working conditions	Temperature: -40 to 80℃, Relative humidity: ≤95％				
Model	**M20B1**	**M20B2**	**M20B1+N**	**M20B4**	**M20B3+N**
Lighning proection zone(LPZ)	1-2				
Standards Compliance	IEC61643-11, EN60950				
Classification	Class II /Type 2				
Nominal working voltage Un	220V			220/380V	
Max continuous operating voltage Uc	385V				
Nominal discharge current (8/20μs) In	10KA				
Max discharge current Imax (8/20μs) Imax	20KA				
Temporary overvoltage (TOV) Utov	LV(tT=5s): 442 V (L-PE); 337 V (L-N) LV(tT=120min): 337 V (L-PE); 442 V (L-N) HV(tT=200ms）: 1455 V (L-PE); 1200 V (N-PE)				
Protection level 8/20μs Up	1300V				
Response time tA (L-N/N-PE)	25ns/100ns				
Protection model	L-PE	L/N-PE	L-N, N-PE	L1/L2/L3,N-PE	L1/L2/L3-N,N-PE
Dimension	90	90 (H)×72(W)×65(L)mm		90 (H)×144(W)×65(L)mm	
Mounting	DIN rail Mounting 35mm				
IP code	IP20				
Working conditions	Temperature: -40 to 80℃, Relative humidity: ≤95％				

Uc option: A: 420v B: 385V C: 320V D: 275V E: 160V F: 110V G: 85V

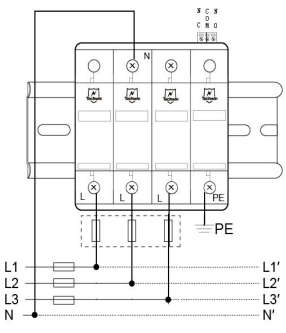
Wiring diagram



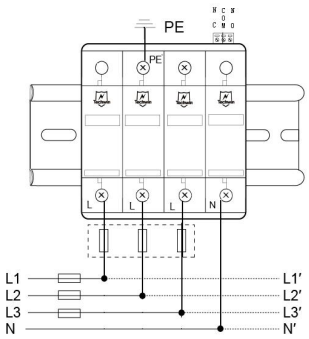
B1+N



B2



B3+N



B4