

DATASHEET

Mains power protection

MMP 2BA Series - 1 phase

Type 1 (Class I / Class B) protector

I_{max} = 80kA / 80 kA 8/20 μ s (MOV / GDT)

I_{imp} = 12.5 kA / 50 kA 10/350 μ s (MOV / GDT)



Features & benefits

- The varistor based design eliminates the high follow current (I_f) associated with spark gap based surge protection
- Two red indicators show when each protector requires replacement
- If only one indicator is displayed then there is still limited protection offered by the unit
- This indication can also trigger a remote signal contact to interface with a building management system. Please use '/S' after the part no. to order the remote indication (normally-open) contact version

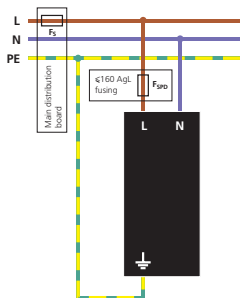
Application

Use on single phase mains supplies and power distribution systems for protection against partial direct or indirect lightning strikes.

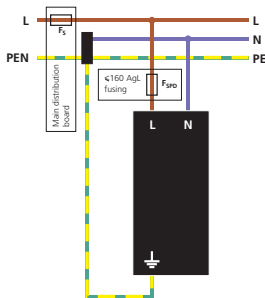
Installation

The 2BA Series should be installed in a main distribution panel. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

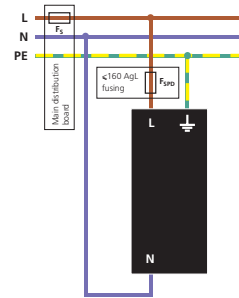
The diagrams below illustrate how to wire the appropriate MMP protector according to your chosen electrical system.



TN-S



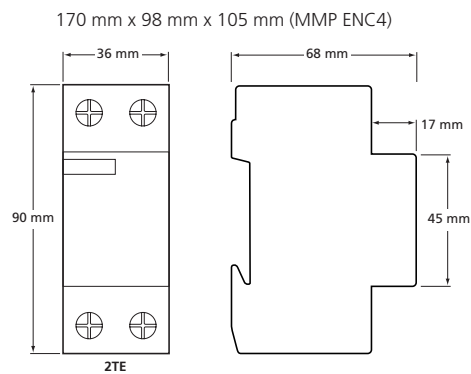
TN-C-S



TT

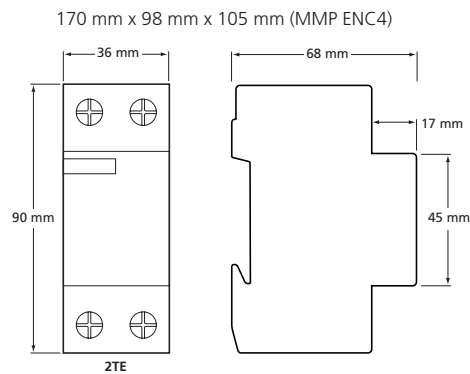
MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B150A/2	MMP 2B150A/2/TT	MMP 2B150A/1+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	110-130 V _{RMS}	110-130 V _{RMS}	110-130 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	150 Vac / 200 Vdc	150 Vac / 200 Vdc	150 Vac / 200 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B150A/2	MMP 2B150A/2/TT	MMP 2B150A/1+1T
SPD part no. with signal contact	MMP 2B150A/2/S	MMP 2B150A/2/TT/S	MMP 2B150A/1+1T/S
Transient specification	MMP 2B150A/2	MMP 2B150A/2/TT	MMP 2B150A/1+1T
Arrester classification ¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 1.0 kV	< 1.0 kV	< 1.0 kV (L-N)
at I_{imp} (10/350 μ s)	< 0.6 kV	< 0.6 kV	< 0.6 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B150A/2	MMP 2B150A/2/TT	MMP 2B150A/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	560 g	560 g	520 g
Dimensions to DIN 43880	90 mm x 68 mm x 36 mm (2TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight

MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B275A/2	MMP 2B275A/2/TT	MMP 2B275A/1+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	275 Vac / 350 Vdc	275 Vac / 350 Vdc	275 Vac / 350 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B275A/2	MMP 2B275A/2/TT	MMP 2B275A/1+1T
SPD part no. with signal contact	MMP 2B275A/2/S	MMP 2B275A/2/TT/S	MMP 2B275A/1+1T/S
Transient specification	MMP 2B275A/2	MMP 2B275A/2/TT	MMP 2B275A/1+1T
Arrester classification¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 1.8 kV	< 1.8 kV	< 1.8 kV (L-N)
at I_{imp} (10/350 μ s)	< 1.1 kV	< 1.1 kV	< 1.1 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B275A/2	MMP 2B275A/2/TT	MMP 2B275A/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	620 g	620 g	580 g
Dimensions to DIN 43880	90 mm x 68 mm x 36 mm (2TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight

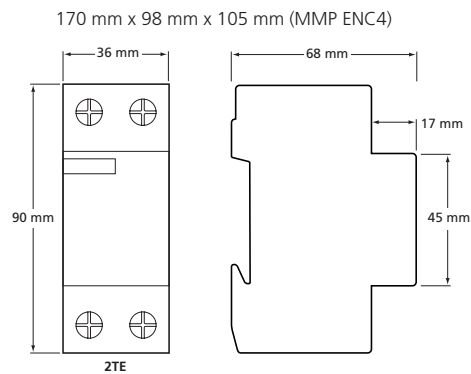
MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B385A/2	MMP 2B385A/2/TT	MMP 2B385A/1+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	385 Vac / 505 Vdc	385 Vac / 505 Vdc	385 Vac / 505 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B385A/2	MMP 2B385A/2/TT	MMP 2B385A/1+1T
SPD part no. with signal contact	MMP 2B385A/2/S	MMP 2B385A/2/TT/S	MMP 2B385A/1+1T/S
Transient specification	MMP 2B385A/2	MMP 2B385A/2/TT	MMP 2B385A/1+1T
Arrester classification ¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 2.2 kV	< 2.2 kV	< 2.2 kV (L-N)
at I_{imp} (10/350 μ s)	< 2.1 kV	< 2.1 kV	< 2.1 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B385A/2	MMP 2B385A/2/TT	MMP 2B385A/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	660 g	660 g	620 g
Dimensions to DIN 43880	90 mm x 68 mm x 36 mm (2TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643

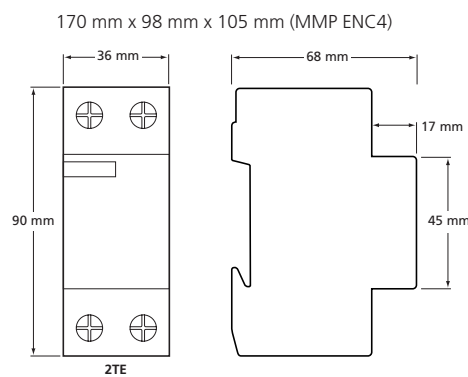
² Values stated are per pole

³ Remote signal contact adds 5 g to weight



MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B440A/2	MMP 2B440A/2/TT	MMP 2B440A/1+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	440 Vac / 580 Vdc	440 Vac / 580 Vdc	440 Vac / 580 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B440A/2	MMP 2B440A/2/TT	MMP 2B440A/1+1T
SPD part no. with signal contact	MMP 2B440A/2/S	MMP 2B440A/2/TT/S	MMP 2B440A/1+1T/S
Transient specification	MMP 2B440A/2	MMP 2B440A/2/TT	MMP 2B440A/1+1T
Arrester classification ¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 2.4 kV	< 2.4 kV	< 2.4 kV (L-N)
at I_{imp} (10/350 μ s)	< 2.3 kV	< 2.3 kV	< 2.3 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B440A/2	MMP 2B440A/2/TT	MMP 2B440A/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	600 g	600 g	560 g
Dimensions to DIN 43880	90 mm x 68 mm x 36 mm (2TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight

DATASHEET

Mains power protection

MMP 2BA Series - 3 Phase

Type 1 (Class I / Class B) protector

$I_{max} = 80 \text{ kA} / 80 \text{ kA } 8/20 \mu\text{s (MOV / GDT)}$

$I_{imp} = 12.5 \text{ kA} / 50 \text{ kA } 10/350 \mu\text{s (MOV / GDT)}$



Features & benefits

- The varistor based design eliminates the high follow current (I_f) associated with spark gap based surge protection
- Two red indicators show when each protector requires replacement
- If only one indicator is displayed then there is still limited protection offered by the unit
- This indication can also trigger a remote signal contact to interface with a building management system. Please use 'S' after the part no. to order the remote indication (normally-open) contact version

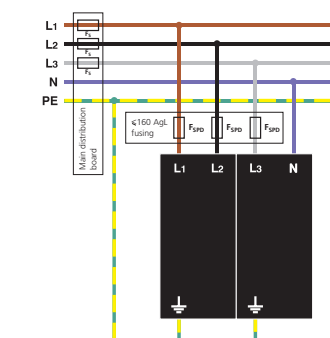
Application

Use on three phase mains supplies and power distribution systems for protection against partial direct or indirect lightning strikes.

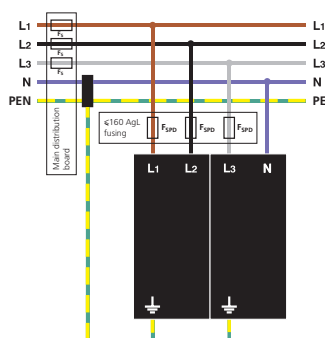
Installation

The 2BA Series should be installed in a main distribution panel. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

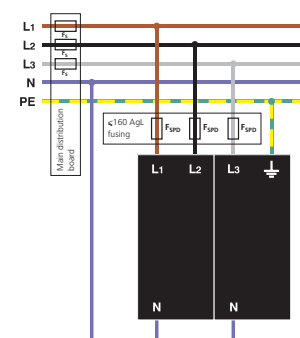
The diagrams below illustrate how to wire the appropriate MMP protector according to your chosen electrical system.



TN-S



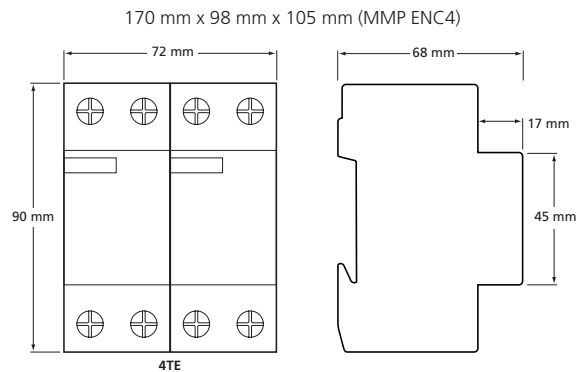
TN-C-S



TT

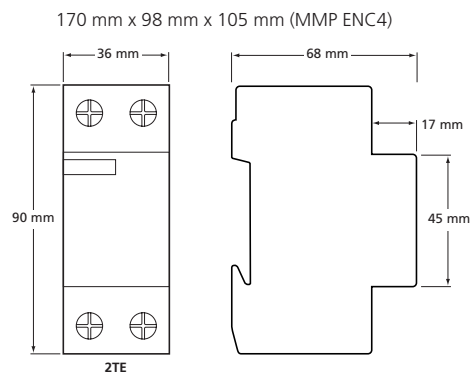
MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B150A/4	MMP 2B150A/4/TT	MMP 2B150A/3+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	110-130 V _{RMS}	110-130 V _{RMS}	110-130 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	150 Vac / 200 Vdc	150 Vac / 200 Vdc	150 Vac / 200 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B150A/4	MMP 2B150A/4/TT	MMP 2B150A/3+1T
SPD part no. with signal contact	MMP 2B150A/4/S	MMP 2B150A/4/TT/S	MMP 2B150A/3+1T/S
Transient specification	MMP 2B150A/4	MMP 2B150A/4/TT	MMP 2B150A/3+1T
Arrester classification¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 1.0 kV	< 1.0 kV	< 1.0 kV (L-N)
at I_{imp} (10/350 μ s)	< 0.6 kV	< 0.6 kV	< 0.6 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B150A/4	MMP 2B150A/4/TT	MMP 2B150A/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	1120 g	1120 g	1080 g
Dimensions to DIN 43880	90 mm x 68 mm x 72 mm (4TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight

MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B275A/4	MMP 2B275A/4/TT	MMP 2B275A/3+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	275 Vac / 350 Vdc	275 Vac / 350 Vdc	275 Vac / 350 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B275A/4	MMP 2B275A/4/TT	MMP 2B275A/3+1T
SPD part no. with signal contact	MMP 2B275A/4/S	MMP 2B275A/4/TT/S	MMP 2B275A/3+1T/S
Transient specification	MMP 2B275A/4	MMP 2B275A/4/TT	MMP 2B275A/3+1T
Arrester classification ¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 1.8 kV	< 1.8 kV	< 1.8 kV (L-N)
at I_{imp} (10/350 μ s)	< 1.1 kV	< 1.1 kV	< 1.1 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B275A/4	MMP 2B275A/4/TT	MMP 2B275A/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	1240 g	1240 g	1200 g
Dimensions to DIN 43880	90 mm x 68 mm x 72 mm (4TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight

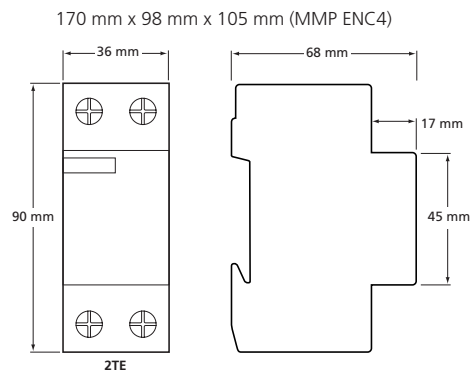
MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B385A/4	MMP 2B385A/4/TT	MMP 2B385A/3+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	385 Vac / 505 Vdc	385 Vac / 505 Vdc	385 Vac / 505 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B385A/4	MMP 2B385A/4/TT	MMP 2B385A/3+1T
SPD part no. with signal contact	MMP 2B385A/4/S	MMP 2B385A/4/TT/S	MMP 2B385A/3+1T/S
Transient specification	MMP 2B385A/4	MMP 2B385A/4/TT	MMP 2B385A/3+1T
Arrester classification ¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 2.2 kV	< 2.2 kV	< 2.2 kV (L-N)
at I_{imp} (10/350 μ s)	< 2.1 kV	< 2.1 kV	< 2.1 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B385A/4	MMP 2B385A/4/TT	MMP 2B385A/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	1320 g	1320 g	1280 g
Dimensions to DIN 43880	90 mm x 68 mm x 72 mm (4TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643

² Values stated are per pole

³ Remote signal contact adds 5 g to weight



MMP 2BA Series - Technical Specification

Electrical specification	MMP 2B440A/4	MMP 2B440A/4/TT	MMP 2B440A/3+1T
Installation	TN-S / TN-C-S	TT	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	220-240 V _{RMS}	220-240 V _{RMS}	220-240 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	440 Vac / 580 Vdc	440 Vac / 580 Vdc	440 Vac / 580 Vdc (255 Vac N-PE)
Maximum back up fuse	160 AgL	160 AgL	160 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A	250 V _{RMS} / 0.5 A
Part numbers			
SPD part no.	MMP 2B440A/4	MMP 2B440A/4/TT	MMP 2B440A/3+1T
SPD part no. with signal contact	MMP 2B440A/4/S	MMP 2B440A/4/TT/S	MMP 2B440A/3+1T/S
Transient specification	MMP 2B440A/4	MMP 2B440A/4/TT	MMP 2B440A/3+1T
Arrester classification¹			
EN	1 (I + 2)	1 (I + 2)	1 (I + 2)
IEC	I (I + II)	I (I + II)	I (I + II)
E DIN VDE 0675	B (B + C)	B (B + C)	B (B + C)
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 2.4 kV	< 2.4 kV	< 2.4 kV (L-N)
at I_{imp} (10/350 μ s)	< 2.3 kV	< 2.3 kV	< 2.3 kV (L-N)
at 1.2/50 μ s	-	-	< 1.5 kV (N-PE)
Nominal discharge current I_n (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Maximum discharge current			
I_{max} (8/20 μ s)	80 kA	80 kA	80 kA / 80 kA (L-N / N-PE)
I_{imp} (10/350 μ s)	12.5 kA	12.5 kA	12.5 kA / 50 kA (L-N / N-PE)
Mechanical specification	MMP 2B440A/4	MMP 2B440A/4/TT	MMP 2B440A/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 4.5 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35 mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	1200 g	1200 g	1160 g
Dimensions to DIN 43880	90 mm x 68 mm x 72 mm (4TE) Units with the remote signal contact terminals (removable) are 100 mm high		
Enclosure dimensions for up to /4 versions (4TE)	170 mm x 98 mm x 105 mm (MMP ENC4)		

¹ Tested to BS EN/IEC-61643² Values stated are per pole³ Remote signal contact adds 5 g to weight