

DATASHEET

Mains power protection

MMP C+CN Series - 1 phase

Type 2 (Class II / Class C) protector

$I_{max} = 40 \text{ kA} / 40 \text{ kA } 8/20 \mu\text{s}$ (MOV / MOV or MOV / GDT)



Features & benefits

- The varistor based design eliminates the high follow current (I_f) associated with spark gap based surge protection
- The MMP C Series utilises replaceable protection modules
- A red indicator shows when the protector requires replacement (see technical data for replacement module part no.)
- 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 (change-over) contact version

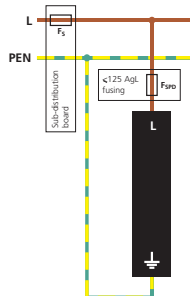
Application

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

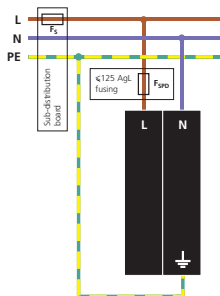
Installation

Should be installed in a sub-distribution panel or as close as possible to the equipment to be protected. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

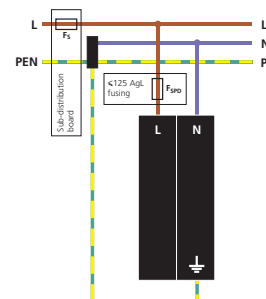
The diagrams below illustrate how to wire the appropriate MMP protector according to your chosen electrical system.



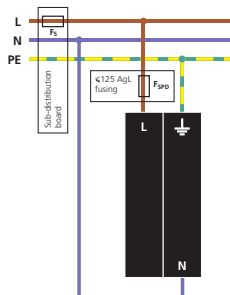
TN-C



TN-S



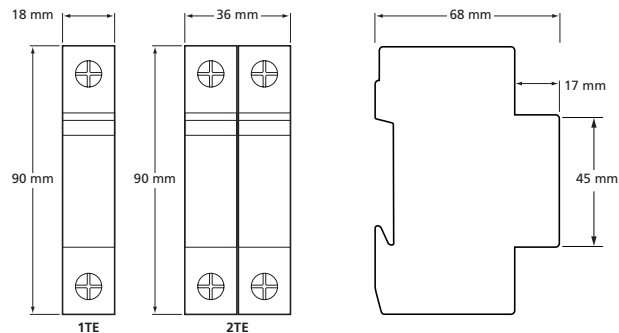
TN-C-S



TT

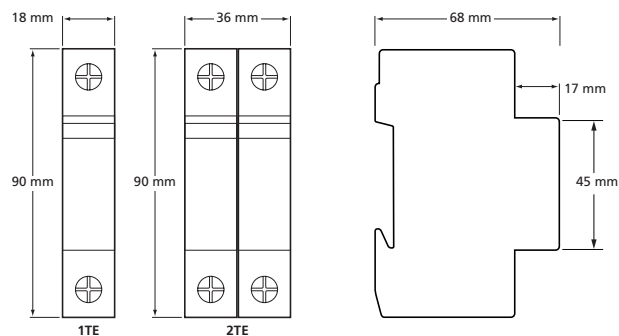
MMP C+CN Series - Technical Specification

Electrical specification	MMP C75/1	MMP C75/2	MMP C75/1+1T
Installation	TN-C	TN-S / TN-C-S	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	65-85 V _{RMS}	65-85 V _{RMS}	65-85 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	75 Vac / 100 Vdc	75 Vac / 100 Vdc	75 Vac / 100 Vdc (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C75/1	MMP C75/2	MMP C75/1+1T
SPD part no. with signal contact	MMP C75/1/S	MMP C75/2/S	MMP C75/1+1T/S
Replacement module part no.	MMP C75	MMP C75	MMP C75 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN75/1	MMP CN75/2	MMP CN75/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN75/1/S	MMP CN75/2/S	MMP CN75/1+1T/S
Transient specification	MMP C75/1	MMP C75/2	MMP C75/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 800 V	< 800 V	< 800 V
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C75/1	MMP C75/2	MMP C75/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	120 g	240 g	230 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE) 90 mm x 68 mm x 36 mm (2TE) 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 C+CN Series - Technical Specification

Electrical specification	MMP C150/1	MMP C150/2	MMP C150/1+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C150/1	MMP C150/2	MMP C150/1+1T
SPD part no. with signal contact	MMP C150/1/S	MMP C150/2/S	MMP C150/1+1T/S
Replacement module part no.	MMP C150	MMP C150	MMP C150 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN150/1	MMP CN150/2	MMP CN150/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN150/1/S	MMP CN150/2/S	MMP CN150/1+1T/S
Transient specification	MMP C150/1	MMP C150/2	MMP C150/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 1.25 kV	< 1.25 kV	< 1.25 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C150/1	MMP C150/2	MMP C150/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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		
Weight³	125 g	250 g	240 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE) 90 mm x 68 mm x 36 mm (2TE) 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

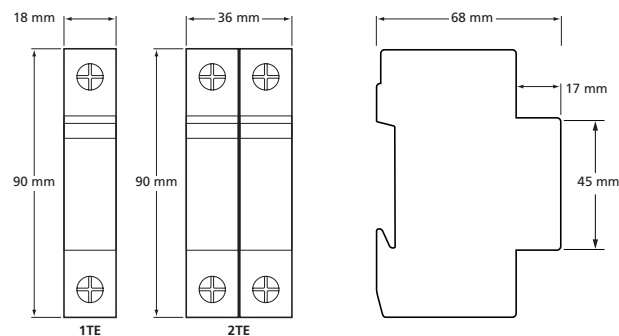
MMP C+CN Series - Technical Specification

Electrical specification	MMP C275/1	MMP C275/2	MMP C275/1+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C275/1	MMP C275/2	MMP C275/1+1T
SPD part no. with signal contact	MMP C275/1/S	MMP C275/2/S	MMP C275/1+1T/S
Replacement module part no.	MMP C275	MMP C275	MMP C275 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN275/1	MMP CN275/2	MMP CN275/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN275/1/S	MMP CN275/2/S	MMP CN275/1+1T/S
Transient specification	MMP C275/1	MMP C275/2	MMP C275/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 1.5 kV	< 1.5 kV	< 1.5 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C275/1	MMP C275/2	MMP C275/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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		
Weight³	130 g	260 g	250 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE)	90 mm x 68 mm x 36 mm (2TE)	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

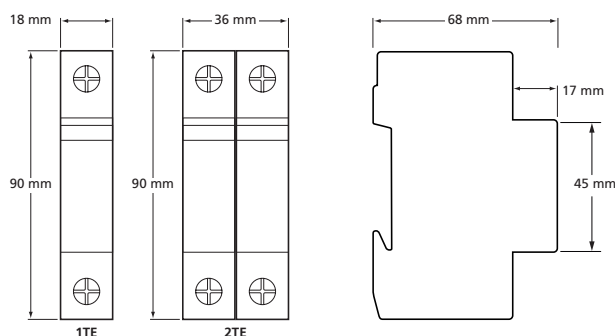
² Values stated are per pole

³ Remote signal contact adds 5 g to weight



MMP C+CN Series - Technical Specification

Electrical specification	MMP C385/1	MMP C385/2	MMP C385/1+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C385/1	MMP C385/2	MMP C385/1+1T
SPD part no. with signal contact	MMP C385/1/S	MMP C385/2/S	MMP C385/1+1T/S
Replacement module part no.	MMP C385	MMP C385	MMP C385 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN385/1	MMP CN385/2	MMP CN385/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN385/1/S	MMP CN385/2/S	MMP CN385/1+1T/S
Transient specification	MMP C385/1	MMP C385/2	MMP C385/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	c	c	c
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 1.75 kV	< 1.75 kV	< 1.75 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C385/1	MMP C385/2	MMP C385/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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		
Weight³	135 g	270 g	260 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE) 90 mm x 68 mm x 36 mm (2TE) 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

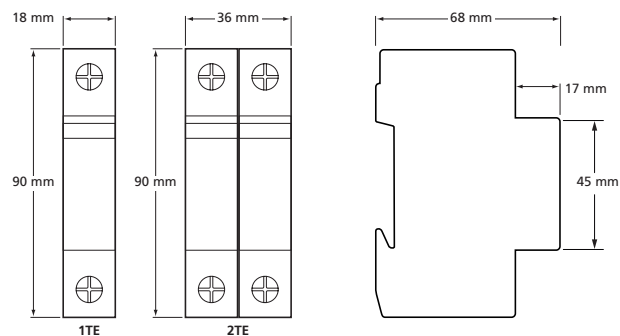
MMP C+CN Series - Technical Specification

Electrical specification	MMP C440/1	MMP C440/2	MMP C440/1+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C440/1	MMP C440/2	MMP C440/1+1T
SPD part no. with signal contact	MMP C440/1/S	MMP C440/2/S	MMP C440/1+1T/S
Replacement module part no.	MMP C440	MMP C440	MMP C440 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN440/1	MMP CN440/2	MMP CN440/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN440/1/S	MMP CN440/2/S	MMP CN440/1+1T/S
Transient specification	MMP C440/1	MMP C440/2	MMP C440/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	c	c	c
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 2.3 kV	< 2.3 kV	< 2.3 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C440/1	MMP C440/2	MMP C440/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	140 g	280 g	270 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE)	90 mm x 68 mm x 36 mm (2TE)	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

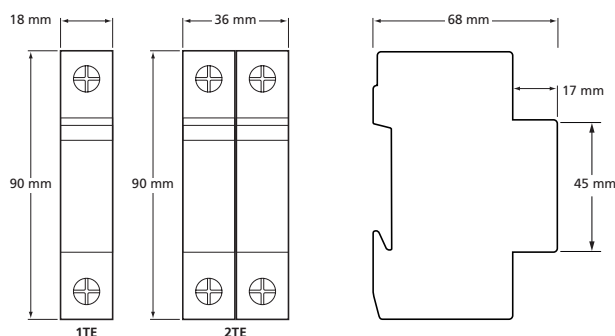
² Values stated are per pole

³ Remote signal contact adds 5 g to weight



MMP C+CN Series - Technical Specification

Electrical specification	MMP C690/1	MMP C690/2	MMP C690/1+1T
Installation	TN-C	TN-S / TN-C-S	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	500-600 V _{RMS}	500-600 V _{RMS}	500-600 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	690 Vac / 900 Vdc	690 Vac / 900 Vdc	690 Vac / 900 Vdc (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C690/1	MMP C690/2	MMP C690/1+1T
SPD part no. with signal contact	MMP C690/1/S	MMP C690/2/S	MMP C690/1+1T/S
Replacement module part no.	MMP C690	MMP C690	MMP C690 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN690/1	MMP CN690/2	MMP CN690/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN690/1/S	MMP CN690/2/S	MMP CN690/1+1T/S
Transient specification	MMP C690/1	MMP C690/2	MMP C690/1+1T
Arrester classification¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	c	c	c
Let-through voltage (U_p)²			
at I_n (8/20 μ s)	< 3.4 kV	< 3.4 kV	< 3.4 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C690/1	MMP C690/2	MMP C690/1+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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		
Weight³	145 g	290 g	280 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE) 90 mm x 68 mm x 36 mm (2TE) 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 C+CN Series - 3 phase

Type 2 (Class II / Class C) protector

$I_{max} = 40 \text{ kA} / 40 \text{ kA } 8/20 \mu\text{s}$ (MOV / MOV or MOV / GDT)



Features & benefits

- The varistor based design eliminates the high follow current (I_f) associated with spark gap based surge protection
- The MMP C Series utilises replaceable protection modules
- A red indicator shows when the protector requires replacement (see technical data for replacement module part no.)
- 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 (change-over) contact version

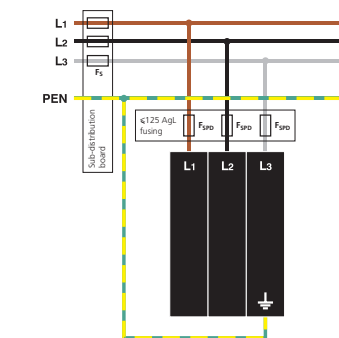
Application

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

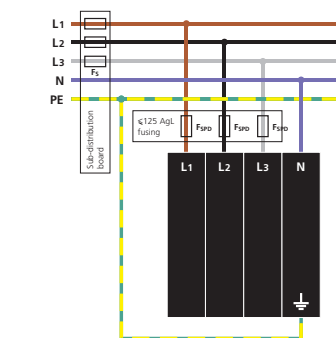
Installation

Should be installed in a sub-distribution panel or as close as possible to the equipment to be protected. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

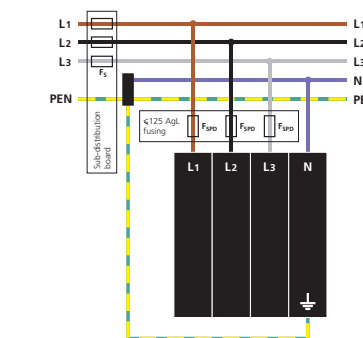
The diagrams below illustrate how to wire the appropriate MMP protector according to your chosen electrical system.



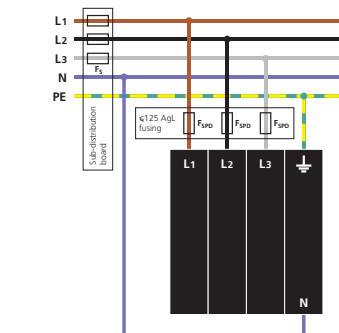
TN-C



TN-S



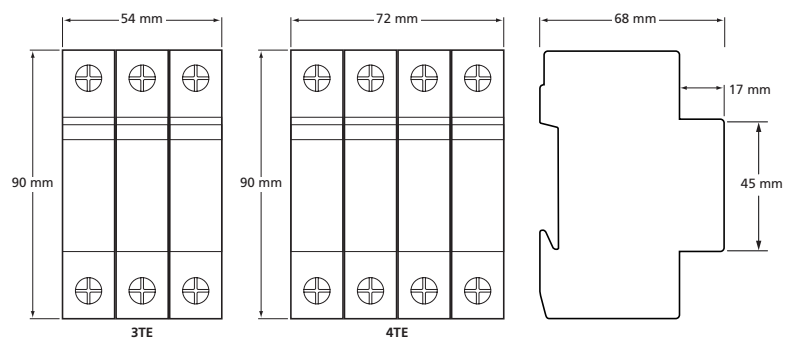
TN-C-S



TT

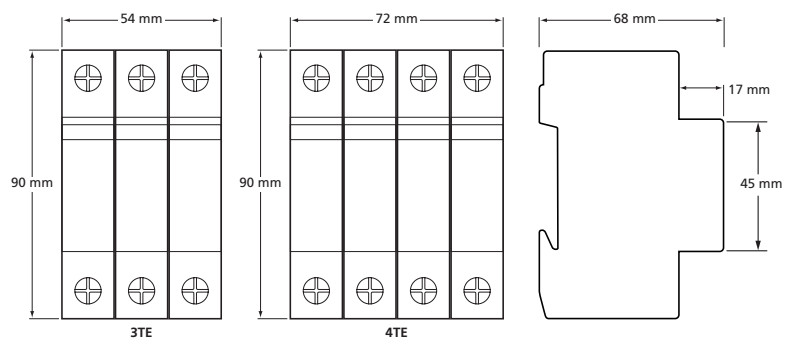
MMP C+CN Series - Technical Specification

Electrical specification	MMP C75/3	MMP C75/4	MMP C75/3+1T
Installation	TN-C	TN-S / TN-C-S	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	65-85 V _{RMS}	65-85 V _{RMS}	65-85 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	75 Vac / 100 Vdc	75 Vac / 100 Vdc	75 Vac / 100 Vdc (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C75/3	MMP C75/4	MMP C75/3+1T
SPD part no. with signal contact	MMP C75/3/S	MMP C75/4/S	MMP C75/3+1T/S
Replacement module part no.	MMP C75	MMP C75	MMP C75 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN75/3	MMP CN75/4	MMP CN75/3+1T
Non-replaceable SPD part no. with signal contact	MMP CN75/3/S	MMP CN75/4/S	MMP CN75/3+1T/S
Transient specification	MMP C75/3	MMP C75/4	MMP C75/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 800 V	< 800 V	< 800 V
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C75/3	MMP C75/4	MMP C75/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	360 g	480 g	470 g
Dimensions to DIN 43880	90 mm x 68 mm x 54 mm (3TE)	90 mm x 68 mm x 72 mm (4TE)	90 mm x 68 mm x 72 mm (4TE)
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

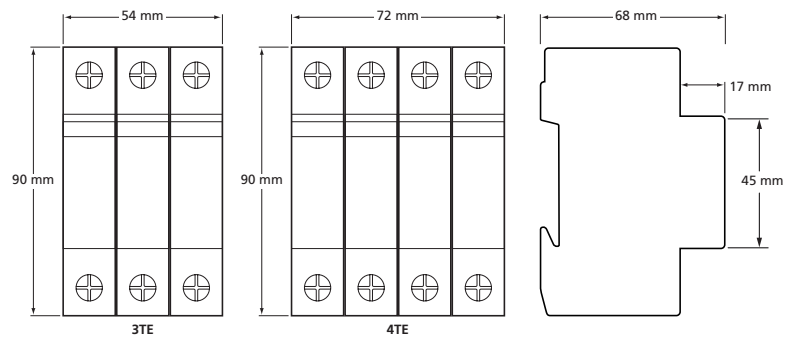
MMP C+CN Series - Technical Specification

Electrical specification	MMP C150/3	MMP C150/4	MMP C150/3+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C150/3	MMP C150/4	MMP C150/3+1T
SPD part no. with signal contact	MMP C150/3/S	MMP C150/4/S	MMP C150/3+1T/S
Replacement module part no.	MMP C150	MMP C150	MMP C150 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN150/3	MMP CN150/4	MMP CN150/3+1T
Non-replaceable SPD part no. with signal contact	MMP CN150/3/S	MMP CN150/4/S	MMP CN150/3+1T/S
Transient specification	MMP C150/3	MMP C150/4	MMP C150/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 1.25 kV	< 1.25 kV	< 1.25 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C150/3	MMP C150/4	MMP C150/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	375 g	500 g	490 g
Dimensions to DIN 43880	90 mm x 68 mm x 54 mm (3TE) 90 mm x 68 mm x 72 mm (4TE) 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

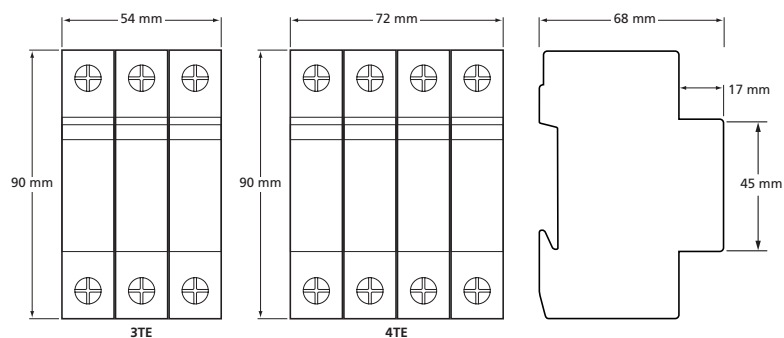
MMP C+CN Series - Technical Specification

Electrical specification	MMP C275/3	MMP C275/4	MMP C275/3+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C275/3	MMP C275/4	MMP C275/3+1T
SPD part no. with signal contact	MMP C275/3/S	MMP C275/4/S	MMP C275/3+1T/S
Replacement module part no.	MMP C275	MMP C275	MMP C275 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN275/3	MMP CN275/4	MMP CN275/3+1T
Non-replaceable SPD part no. with signal contact	MMP CN275/3/S	MMP CN275/4/S	MMP CN275/3+1T/S
Transient specification	MMP C275/3	MMP C275/4	MMP C275/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 1.5 kV	< 1.5 kV	< 1.5 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C275/3	MMP C275/4	MMP C275/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	390 g	520 g	510 g
Dimensions to DIN 43880	90 mm x 68 mm x 54 mm (3TE)	90 mm x 68 mm x 72 mm (4TE)	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

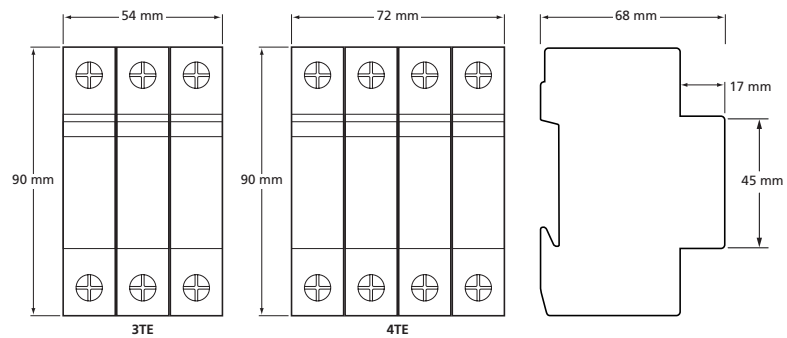
MMP C+CN Series - Technical Specification

Electrical specification	MMP C385/3	MMP C385/4	MMP C385/3+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C385/3	MMP C385/4	MMP C385/3+1T
SPD part no. with signal contact	MMP C385/3/S	MMP C385/4/S	MMP C385/3+1T/S
Replacement module part no.	MMP C385	MMP C385	MMP C385 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN385/3	MMP CN385/4	MMP CN385/3+1T
Non-replaceable SPD part no. with signal contact	MMP CN385/3/S	MMP CN385/4/S	MMP CN385/3+1T/S
Transient specification	MMP C385/3	MMP C385/4	MMP C385/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 1.75 kV	< 1.75 kV	< 1.75 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C385/3	MMP C385/4	MMP C385/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	405 g	540 g	530 g
Dimensions to DIN 43880	90 mm x 68 mm x 54 mm (3TE)	90 mm x 68 mm x 72 mm (4TE)	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 C+CN Series - Technical Specification

Electrical specification	MMP C440/3	MMP C440/4	MMP C440/3+1T
Installation	TN-C	TN-S / TN-C-S	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 (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C440/1	MMP C440/2	MMP C440/1+1T
SPD part no. with signal contact	MMP C440/1/S	MMP C440/2/S	MMP C440/1+1T/S
Replacement module part no.	MMP C440	MMP C440	MMP C440 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN440/1	MMP CN440/2	MMP CN440/1+1T
Non-replaceable SPD part no. with signal contact	MMP CN440/1/S	MMP CN440/2/S	MMP CN440/1+1T/S
Transient specification	MMP C440/3	MMP C440/4	MMP C440/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 2.3 kV	< 2.3 kV	< 2.3 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C440/3	MMP C440/4	MMP C440/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 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	420 g	560 g	550 g
Dimensions to DIN 43880	90 mm x 68 mm x 18 mm (1TE)	90 mm x 68 mm x 36 mm (2TE)	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 C+CN Series - Technical Specification

Electrical specification	MMP C690/3	MMP C690/4	MMP C690/3+1T
Installation	TN-C	TN-S / TN-C-S	TT
SPD protective element	MOV / MOV	MOV / MOV	MOV / GDT
Nominal voltage (U_n)	500-600 V _{RMS}	500-600 V _{RMS}	500-600 V _{RMS}
Nominal frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Maximum continuous operating voltage (U_c)	690 Vac / 900 Vdc	690 Vac / 900 Vdc	690 Vac / 900 Vdc (MOV) 255 Vac (GDT)
Maximum back up fuse	125 AgL	125 AgL	125 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 C690/3	MMP C690/4	MMP C690/3+1T
SPD part no. with signal contact	MMP C690/3/S	MMP C690/4/S	MMP C690/3+1T/S
Replacement module part no.	MMP C690	MMP C690	MMP C690 (L-N) MMP CT255 (N-PE)
Non-replaceable SPD part no.	MMP CN690/3	MMP CN690/4	MMP CN690/3+1T
Non-replaceable SPD part no. with signal contact	MMP CN690/3/S	MMP CN690/4/S	MMP CN690/3+1T/S
Transient specification	MMP C690/3	MMP C690/4	MMP C690/3+1T
Arrester classification ¹			
EN	2	2	2
IEC	II	II	II
E DIN VDE 0675	C	C	C
Let-through voltage (U_p) ²			
at I_n (8/20 μ s)	< 3.4 kV	< 3.4 kV	< 3.4 kV
at 1.2/50 μ s (N-PE)	-	-	< 2.0 kV
Nominal discharge current I_n (8/20 μ s)	20 kA	20 kA	20 kA / 20 kA (L-N / N-PE)
Maximum discharge current I_{max} (8/20 μ s)	40 kA	40 kA	40 kA / 40 kA (L-N / N-PE)
Mechanical specification	MMP C690/3	MMP C690/4	MMP C690/3+1T
Temperature range	-40 to +80 °C		
Connection type			
for power	35 mm ² solid conductor, 25 mm ² stranded conductor - maximum torque 3.0 Nm		
for signal (remote contact)	1.5 mm ² conductor (/S option) - maximum torque 0.25 Nm		
Mounting	Indoor, 35mm top hat DIN rail		
Degree of protection	IP20		
Case material	Thermoplastic, UL 94 V-0		
Weight ³	435 g	580 g	570 g
Dimensions to DIN 43880	90 mm x 68 mm x 54 mm (3TE)	90 mm x 68 mm x 72 mm (4TE)	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