

ATCOMPACT Series

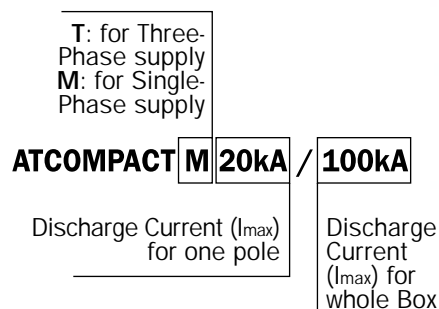
ATCOMPACT

Multi-pole power supply protection box

ATCOMPACT protection boxes are made of several kind of SPD aiming the protection of all lines out from single-phase SPD.

ATCOMPACT Surge Protective Devices are to be installed in parallel with the supply line, without altering at all its way of working under normal conditions. Combinations can be made for protection either in common mode (ground referred) or differential (between line/s and neutral).

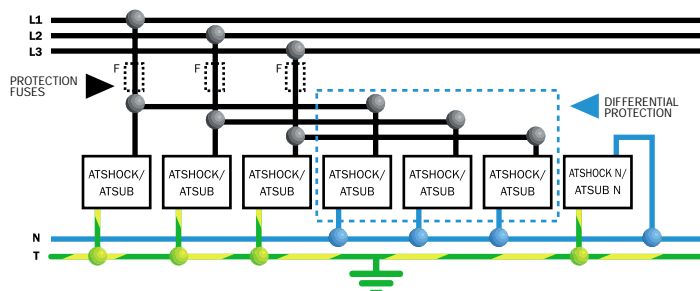
Furthermore, short-circuit fuses can be added in the same box. Compact box, easy to install and with the same advantages as Aplicaciones Tecnológicas S.A.'s SPDs give: robust, quick, reliable and tested according current standards (IEC61643-1, EN61643-11 and NF-C-61-0740) in official independent laboratories.



INSTALLATION

ATCOMPACT boxes are to be installed **in parallel** with the Low Voltage supply line, connected to line, neutral and ground. **Fuses or circuit breakers must be present** upstream. They will be disconnected during the installation for working security. If this protection does not exist, fuses must be installed in series with the box.

When this ATCOMPACT is installed as middle protection, other protectors must be separated by at least 10 meter cable or, if this is not possible, by decoupling inductors ATLINK, in order to achieve a **correct coordination** between them.



Earth connection is a must. Earthing in all the installation must be bonded either directly or by a spark gap and resistance should be lower than 10Ω . If the indications of this datasheet are not fulfilled during the use or installation of the SPDs, the protection assured by this device could be endangered.

ATCOMPACT SERIES

AT8117 ATCOMPACT M 20kA/60kA:

Protection for single-phase lines with ATSUB20 (L-T, N-T)

AT8122 ATCOMPACT T 20kA/100kA:

Protection for three-phase lines with ATSUB20 (3L-N, N-T)

AT8139 ATCOMPACT M 40kA/80kA:

Protection for single-phase lines with ATSUB40 (P-N, N-T)

AT8140 ATCOMPACT T 40kA/160kA:

Protection for three-phase lines with ATSUB40 (3L-N, N-T)

AT8119 ATCOMPACT M 60kA/100kA:

Protection for single-phase lines with ATSUB60 (L-N, N-T)

AT8120 ATCOMPACT T 60kA/220kA:

Protection for three-phase lines with ATSUB60 (3L-N, N-T)

AT8149 ATCOMPACT M 100kA/200kA:

Protection for single-phase lines with ATSHOCK (3L-N, N-T)

AT8150 ATCOMPACT T 100kA/400kA:

Protection for three-phase lines with ATSHOCK-N (L-N, N-T)

+DIF: Protection boxes containing not only protection in common mode but also in differential mode (line-neutral)

+F: Boxes including backup fuses

-N: Lines with no neutral



AT8117 - ATCOMPACT M 20kA/60kA:

Compact assembly for Single-Phase power supply line protection

ATCOMPACT M 20kA/60kA

AT8117

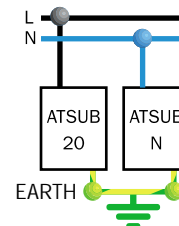
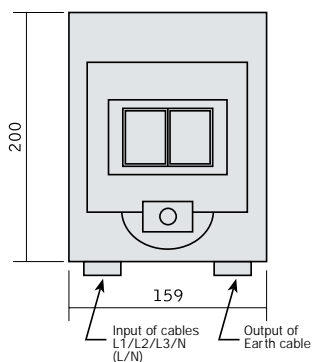
Reference		AT8117
Protection categories according to RBT2002:		I, II, III, IV
Nominal voltage:	U_n	220V _{AC} (L-N), 50Hz
Maximum continuous operating voltage:	U_c	255V _{AC} (L-N), 50Hz
Nominal discharge current (8/20 μ s wave):	I_n	10kA / 30kA
Maximum discharge current (8/20 μ s wave):	I_{max}	20kA / 60kA
Protection level at I_n , 8/20 μ s wave:	$U_p(I_n)$	1200V
Protection level for 1,2/50 μ s wave:	U_p	700V
Protection level at 5kA; 8/20 μ s wave:		900V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 50kA (for maximum fuse)
Dimensions:		200 x 159 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum section 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector



AT8122 - ATCOMPACT T 20kA/100kA:
Compact assembly for three-phase power supply line protection

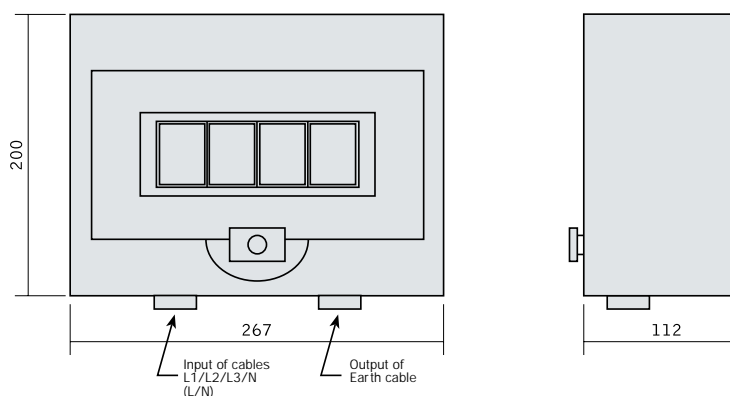
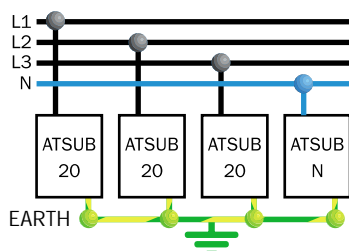
		ATCOMPACT T 20kA/100kA
		AT8122
Reference		I, II, III, IV
Protection categories according to RBT2002:		I, II, III, IV
Nominal voltage:	U_n	380V _{AC} (L-L), 50Hz
Maximum continuous operating voltage:	U_c	440V _{AC} (L-L), 50Hz
Nominal discharge current (8/20μs wave):	I_n	10kA / 50kA
Maximum discharge current (8/20μs wave):	I_{max}	20kA / 100kA
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	1200V
Protection level for 1,2/50μs wave:	U_p	700V
Protection level at 5kA; 8/20μs wave:		900V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 100kA (for maximum fuse)
Dimensions:		200 x 267 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum section 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector





AT8139 - ATCOMPACT M 40kA/80kA:

Compact assembly for single-phase power line protection

ATCOMPACT M 40kA/80kA

AT8139

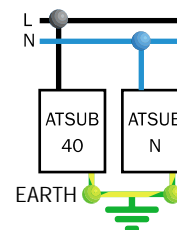
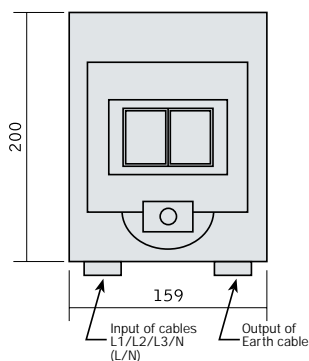
Reference		AT8139
Protection categories according to RBT2002:		I, II, III, IV
Nominal voltage:	U_n	220V _{AC} (L-N), 50Hz
Maximum continuous operating voltage:	U_c	255V _{AC} (L-N), 50Hz
Nominal discharge current (8/20μs wave):	I_n	20kA / 40kA
Maximum discharge current (8/20μs wave):	I_{max}	40kA / 80kA
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	1400V
Protection level for 1,2/50μs wave:	U_p	700V
Protection level at 5kA; 8/20μs wave:		1000V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 50kA (for maximum fuse)
Dimensions:		200 x 159 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum section 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector



AT8140 - ATCOMPACT T 40kA/160kA:
Compact assembly for three-phase power
line protection

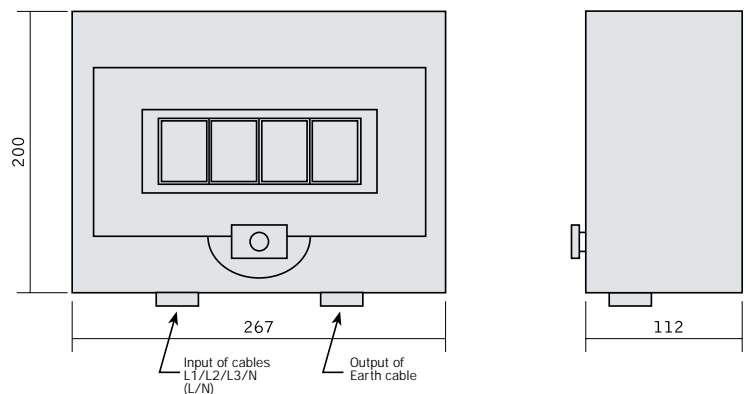
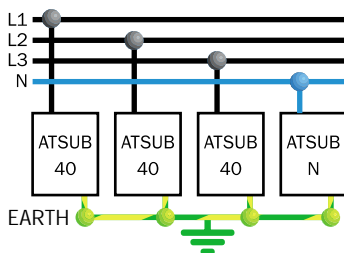
		ATCOMPACT T 40kA/160kA
		AT8140
Reference		AT8140
Protection categories according to RBT2002:		I, II, III, IV
Nominal voltage:	U_n	380V _{AC} (L-N), 50Hz
Maximum continuous operating voltage:	U_c	440V _{AC} (L-N), 50Hz
Nominal discharge current (8/20 μ s wave):	I_n	20kA / 80kA
Maximum discharge current (8/20 μ s wave):	I_{max}	40kA / 160kA
Protection level at I_n , 8/20 μ s wave:	$U_p(I_n)$	1400V
Protection level for 1,2/50 μ s wave:	U_p	700V
Protection level at 5kA; 8/20 μ s wave:		1000V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 100kA (for maximum fuse)
Dimensions:		200 x 267 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum section 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector





AT8119 - ATCOMPACT M 60kA/100kA:
Compact assembly for single-phase power
line protection

ATCOMPACT M 60kA/100kA

AT8119

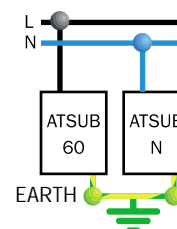
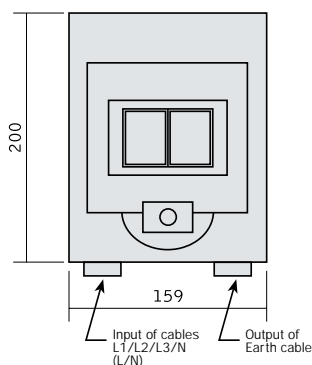
Reference	AT8119	
Protection categories according to RBT2002:	II, III, IV	
Nominal voltage:	U_n	220V _{AC} (L-N), 50Hz
Maximum continuous operating voltage:	U_c	255V _{AC} (L-N), 50Hz
Nominal discharge current (8/20μs wave):	I_n	30kA / 50kA
Maximum discharge current (8/20μs wave):	I_{max}	60kA / 100kA
Impulse current (10/350μs wave):	I_{imp}	15kA / 30kA
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	1600V
Protection level for 1,2/50μs wave:	U_p	900V
Protection level at 5kA; 8/20μs wave:		1100V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 50kA (for maximum fuse)
Dimensions:		200 x 159 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum according to 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector



AT8120 - ATCOMPACT T 60kA/220kA:
Compact assembly for three-phase power
line protection

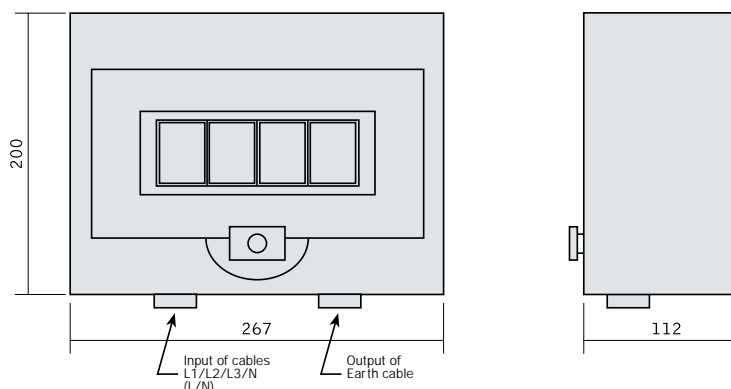
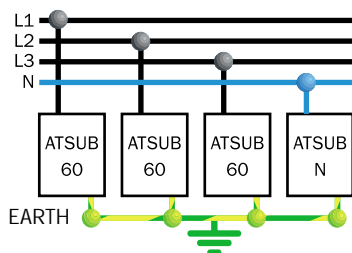
		ATCOMPACT T 60kA/220kA
		AT8120
Reference		II, III, IV
Protection categories according to RBT2002:		II, III, IV
Nominal voltage:	U_n	380V _{AC} (L-L), 50Hz
Maximum continuous operating voltage:	U_c	440V _{AC} (L-L), 50Hz
Nominal discharge current (8/20μs wave):	I_n	30kA / 50kA
Maximum discharge current (8/20μs wave):	I_{max}	60kA / 220kA
Impulse current (10/350μs wave):	I_{imp}	15kA / 60kA
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	1600V
Protection level for 1,2/50μs wave:	U_p	900V
Protection level at 5kA; 8/20μs wave:		1100V
Response time:	t_r	< 25ns
Backup fuse ⁽¹⁾ :		125A gL/gG
Maximum short-circuit current:		25kA / 100kA (for maximum fuse)
Dimensions:		200 x 267 x 112 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum according to 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / NFC 61-0740 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector





AT8149 - ATCOMPACT M 100kA/200kA:

Compact assembly for single-phase power line protection

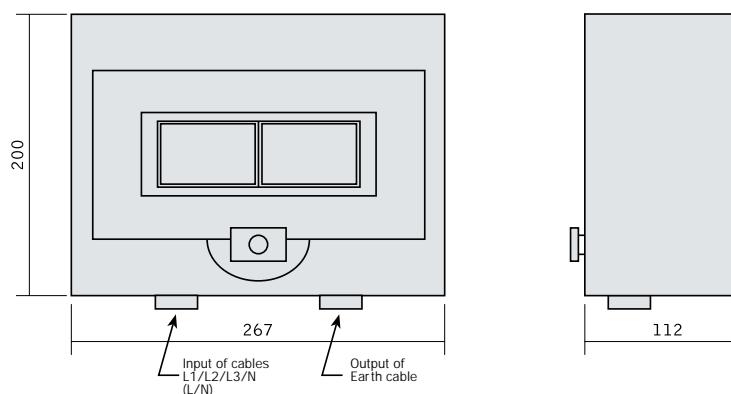
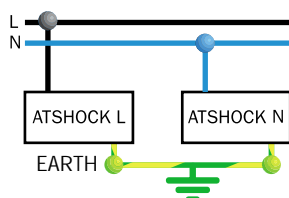
		ATCOMPACT M 100kA/200kA	
		AT8149	
Reference		AT8149	
Protection categories according to RBT2002:		III and IV	
Tests according to IEC61643-1, EN61643-11:		Class I	
Nominal voltage:	U_n	220V _{AC} (L-N), 50Hz	
Maximum continuous operating voltage:	U_c	255V _{AC} (L-N), 50Hz	
Nominal discharge current (8/20μs wave):	I_n	50kA / 100kA	
Impulse current (10/350μs wave):	I_{imp}	100kA / 200kA	
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	< 4 kV	
Follow current extinguishing capability:	I_r	3 kA _{eff} (L-T), 100 A _{eff} (N-T)	
Protection level at 5kA; 8/20μs wave:		1100V	
Response time:	t_r	< 100ns	
Backup fuse ⁽¹⁾ :		160A gL/gG	
Maximum short-circuit current:		50kA / 100kA (for maximum fuse)	
Dimensions:		200 x 267 x 112 mm	
Fixing:		Wall or vertical support	
Working temperature:	ϑ	-55°C to +85°C	
Enclosure material:		Autoextinguishing, isolating	
Fire resistance:		650°C according to IEC 695-2-1	
Enclosure protection:		IP65 according to IEC 60.529	
Impact protection:		IK09 according to EN 50.102	
Connections L/N/G:		Maximum according to 25mm ² (AWG 3)	

Certificated tests according to: IEC 61643-1 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector





AT8150 - ATCOMPACT T 100kA/400kA:
Compact assembly for three-phase power
line protection

ATCOMPACT T 100kA/400kA

AT8150

Reference		III and IV
Protection categories according to RBT2002:		Class I
Tests according to IEC61643-1, EN61643-11:		
Nominal voltage:	U_n	380V _{AC} (L-L), 50Hz
Maximum continuous operating voltage:	U_c	440V _{AC} (L-L), 50Hz
Nominal discharge current (8/20μs wave):	I_n	50kA / 200kA
Impulse current (10/350μs wave):	I_{imp}	100kA / 400kA
Protection level at I_n , 8/20μs wave:	$U_p(I_n)$	< 4 kV
Follow current extinguishing capability:	I_f	3 kA _{eff} (L-G), 100 A _{eff} (N-G)
Protection level at 5kA; 8/20μs wave:		1100V
Response time:	t_r	< 100ns
Backup fuse ⁽¹⁾ :		160A gL/gG
Maximum short-circuit current:		50kA / 200kA (for maximum fuse)
Dimensions:		280 x 448 x 160 mm
Fixing:		Wall or vertical support
Working temperature:	ϑ	-55°C to +85°C
Enclosure material:		Autoextinguishing, isolating
Fire resistance:		650°C according to IEC 695-2-1
Enclosure protection:		IP65 according to IEC 60.529
Impact protection:		IK09 according to EN 50.102
Connections L/N/G:		Maximum according to 25mm ² (AWG 3)

Certificated tests according to: IEC 61643-1 / EN 61643-11 / IEC 61312-3

Complies with requirements of: UL 1449

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector

