MADE OF THERMOSETTING MATERIAL



ADVANCE GRP System

Switched Interlocked socket outlets

SCAME electrical solutions



OUTSTANDING IMPACT RESISTANCE

The glass-fibre reinforced polyester used in **ADVANCE GRP** and the high thickness of the casing walls guarantee an excellent mechanical resistance to impacts. The **SMC** technology used to produce the casings makes **ADVANCE GRP** an indestructible product.
The impact resistance of the casings is higher than 20J (IK10) according to EN50102, even under limit temperature conditions (-40°C +60°C).



RESISTANCE TO CHEMICAL AGENTS

The **ADVANCE GRP** interlocked sockets and casings, thanks to the glass-fibre reinforced polyester with which they are produced, have excellent resistance to aggressive chemical substances, saline solutions, diluted acids, hydrocarbons, mineral oils, alcoholic substances. They are ideal for use in highly corrosive atmospheres.



RESISTANCE TO ATMOSPHERIC AGENTS

The structure and materials used also make **ADVANCE GRP** a product suited for the most extreme environmental conditions. The double degree of protection IP66 and IP67 (IP66 for 125A), guarantees an excellent seal against the entry of solid objects or liquids into the casings.
Outstanding resistance to UV radiation, exceptional reliability under environmental stress and use at both low and high ambient temperatures (-40°C +60°C).



EX VERSIONS

The **ADVANCE GRP** product line also includes a series of 16A, 32A, 63A and 125A interlocked sockets for installation in environments with a potential risk of explosion identified as zone 22 (dust) which fall under the area of application of the Atex Directive (European Directive 94/9/EC), compliant with the standards EN61241-0 and EN61241-1.
Type of protection Ex: Ex II 3D - Ex tD A22 IP66 T90°C
Ta -25°C +60°C.

ADVANCE GRP System

> APPLICATION EXAMPLES





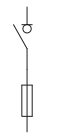
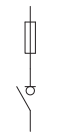
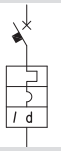


ADVANCE GRP System

> SWITCHED INTERLOCKED SOCKET OUTLETS



> VERSIONS WITH MECHANICAL INTERLOCK

	With switch-disconnector	
	With switch-disconnector and fuse	
	With fuse and switch-disconnector	125A
	With molded case circuit breaker with thermal magnetic trip unit	125A
	With molded case circuit breaker with thermal magnetic and residual current release trip units	125A

> VERSIONS WITH ELECTRICAL INTERLOCK

	With contactor	125A

> REFERENCE STANDARDS

EN 60309-1
Plugs, socket outlets and couplers for industrial purposes.
Part 1: general requirements.

EN 60309-2
Plugs, socket outlets and couplers for industrial purposes.
Part 2: dimensional interchangeability requirements for pin and contact-tube accessories of harmonised configurations.

EN 60309-4
Plugs, socket-outlets and couplers for industrial purposes.
Part 4: Switched socket-outlets and connectors with or without interlock.

IEC 61241-0 / EN 61241-0
Electrical apparatus for use in the presence of combustible dust.
Part 0: General requirements.

IEC 61241-1 / EN 61241-1
Electrical apparatus for use in the presence of combustible dust.
Part 1: Protection by enclosures 'tD'.

> PRODUCTS FOR USE IN A POTENTIALY EXPLOSIVE ENVIRONMENT

Scame offers products suitable for installation into environments under potential risk of explosion identified as Zone 22 and that enter into the field of application for the ATEX Directive (European Directive 94/9/CE).

SCAME
Via Costa Erta 15 Parre BG ITALY
3P+N+⏚ - 125A - 6h / 346-415V~

Cod. 503.12587-F		CE
SCAME ATEX 02		Ex II 3D
Ex tD A22 Ta -25°C +60°C		
IP66 T90°C		

DO NOT OPEN WHEN ENERGIZED
IN PRESENCE OF EXPLOSIVE ATMOSPHERE

> BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Limited Resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

For specific substances please contact our technical service.

> TECHNICAL CHARACTERISTICS

Rated current:	**16A-32A-63A-125A**
Rated voltage:	**100÷690V~**
Frequency:	**50÷60Hz**
Insulating voltage:	**500/690V~**
Self-extinguishing GW test:	**960°C**
Self-extinguishing UL94:	**V0**
Switch-disconnectors:	
16A-32A-63A	**COMMAND Series**
125A	**Switch ABB OT 160**
Fuse:	
16A-32A	**gG 10,3x38mm**
63A	**gG 22x58mm**
125A	**NH00**
Colour:	**Grey RAL7037**
ATEX Code:	**Ex II 3D**
Ex Protection type:	**Ex tD A22 IP66 T90°C Ta -25°C +60°C**
Operating temperature according to the reference standard:	**-25°C +60°C**
Maximum permissible surface temperature:	**T90°C**
Switched socket outlets with interlock degree of Protection:	**IP66**
Plugs - degree of Protection:	**IP66/IP67**
Impact Resistance:	**IK10 (20J) - (24V 4J)**
Switched socket outlets with interlock material:	**Thermosetting**
Interlocked switch sockets outlets CE certificate:	
16A-32A-63A	**SCAME ATEX 04**
125A:	**SCAME ATEX 02**
Plugs CE certificate:	**SCAME ATEX 03**

Thermal magnetic protection:	**Molded case circuit breaker ABB Tmax T1B (16kA) with thermal magnetic trip unit TMD (adjustable thermal threshold 0,7…1 x In fixed magnetic threshold 10 x In)**
Thermal-magnetic and residual current protection:	**Molded case circuit breaker ABB Tmax T1B (16kA) with thermal magnetic trip unit TMD (adjustable thermal threshold 0,7…1 x In fixed magnetic threshold 10 x In) + residual current release trip units RC221/1 (adjustable residual current trip 0,03 - 0,1 - 3A and time limit for non-trip instantaneous)**
Version with contactor:	**Contactor CL09 GE POWER CONTROL**

> CABLE ENTRY

Maximum entry with cable glands

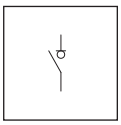
Rated current (A)	Single socket	
	Upper	Lower
16A-32A	M32	M32
63A	M40	M40
125A	M63	M63

> WIRING OPERATIONS

Wiring capacity of the terminals (mm²)

Rated current (A)	Socket outlets		Plugs	
	Min	Max	Min	Max
16A	4	4	2,5	2,5
32A	10	10	6	6
63A	25	25	10	16
125A	50	95	25	50

> MECHANICALLY INTERLOCKED SOCKET OUTLETS WITH I-Device 16A-32A-63A IP66 - VOLTAGE >50V

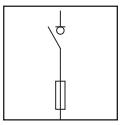








Description	Socket	Hz	Volt	Colour	h		16A	32A	63A
Switch-disconnector	2P+E	50/60	200-250V		6	1	**503.1683**	**503.3283**	**503.6383**
	3P+E	50/60	380-415V		6	1	**503.1686**	**503.3286**	**503.6386**
	3P+N+E	50/60	346-415V		6	1	**503.1687**	**503.3287**	**503.6387**









Description	Socket	Hz	Volt	Colour	h		16A	32A	63A
Switch-disconnector and fuse (*)	2P+E	50/60	200-250V		6	1	**503.1683-F**	**503.3283-F**	**503.6383-F**
	3P+E	50/60	380-415V		6	1	**503.1686-F**	**503.3286-F**	**503.6386-F**
	3P+N+E	50/60	346-415V		6	1	**503.1687-F**	**503.3287-F**	**503.6387-F**

(*) Fuses not included.

Pack Quantity.

> WITH FUSE HOLDER IP66 - VOLTAGE <50V



Description	Socket	Colour	Rated voltage		
With transformer (*)	**2P-16A**		20-25V~	1	**503.2416-F**

(*) SELV transformer ⓢ 220/24V~ 150VA.

Pack Quantity.



579.0030



579.0040



579.0021



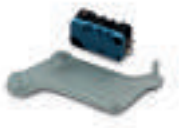
579.0031



579.0022

EX batteries can be produced by request with special order.

> ACCESSORIES AND COMPLEMENTARY PRODUCTS



Description	Contacts		
Microswitch Kit for Advance GRP 16A-32A-63A for plug-inserted control	1NO/1NC	1/12	**579.0100**

Max 1 kit for 16A-32A sockets; Max 2 kit for 63A sockets.

> AUXILIARY CONTACTS



Description	For switches		
NC contact	16A-32A	10	**590.PL004001**
	63A	10	**590.PL004003**
NO contact	16A-32A	10	**590.PL004002**
	63A	10	**590.PL004004**

NC= normally closed.
NO= normally open.

Pack Quantity.

> COMPLEMENTARY PRODUCTS - OPTIMA EX SERIES - PLUGS 16A-32A-63A IP66/IP67







Description	Poles	Hz	Volt	Colour	h		16A	32A	63A
Plug	2P+E	50/60	200-250V		6	1	**218.EX1633**	**218.EX3233**	**218.EX6333**
	3P+E	50/60	380-415V		6	1	**218.EX1636**	**218.EX3236**	**218.EX3236**
	3P+N+E	50/60	346-415V		6	1	**218.EX1637**	**218.EX3237**	**218.EX6337**

Description	Poles	Hz	Volt	Colour	h		16A
Plug	2P	50/60	20-25		-	1	**235.EX1600**

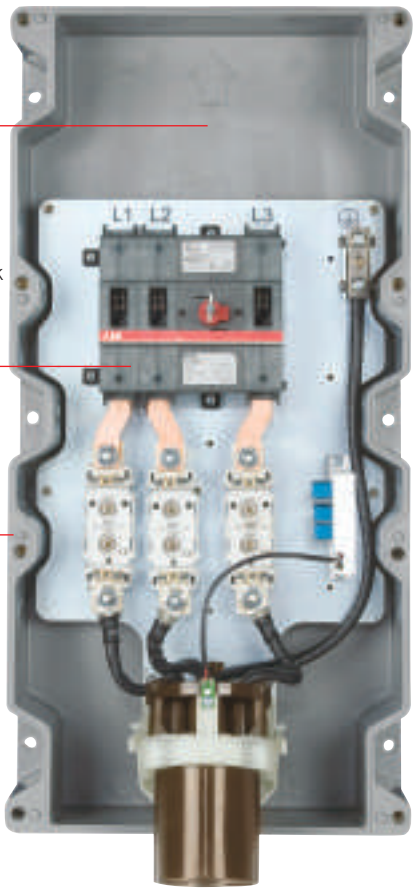
Pack Quantity.

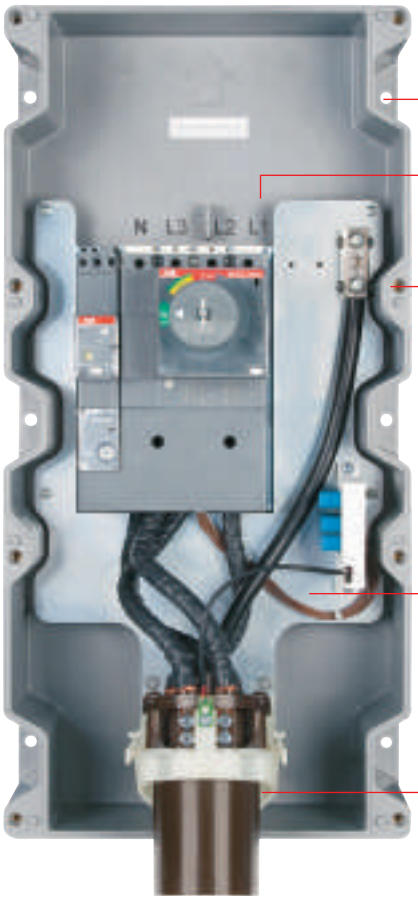
> TECHNICAL CHARACTERISTICS VERSION 125A

Ample space for easy wiring

Switch-disconnector with mechanical lock that can be accessorized with auxiliary contacts

Punched marks for easy closure of the cover





Outdoor wall fastening

Under-plate cable runway

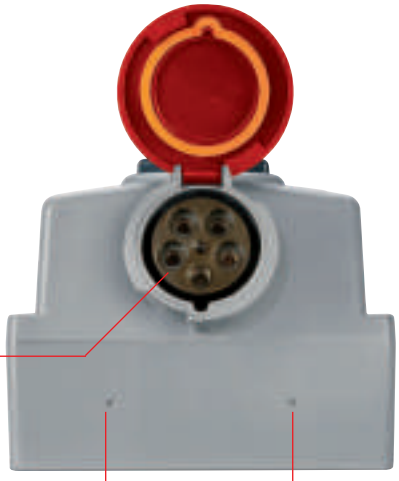
Threaded metal inserts

Easily extractable bottom plate

Possibility to assemble microswitch

BOTTOM VIEW

Module in high-temperature resistant engineering polymer



Possible entry from bottom side (input-output also)

TOP VIEW



Self-centering punch marks to facilitate drilling

Single-piece waterproof gasket

Rating on metal plate

Captive stainless steel closing screws

Ergonomic knob which can be padlocked in position 0 and 1, manoeuvrable even with gloves





Dual mechanical lock as required by the ATEX Directive

High-strength material with superior UV and chemical resistance

Residual current release trip units test push button

Cover entirely separate from the base for easy installation



I-Device

An electronic device controls (*Intelligence Device*) the status of the interlocked socket, monitoring the electrical functionality:
- operation of the signalling and control card is guaranteed even when the load is not connected;

INDICATOR LIGHT ON
- indicates that the fuses are not open and all the phases are present;
- indicates that the socket outlet is powered correctly;

INDICATOR LIGHT FLASHING
- signals the interruption of one or more fuses;
- signals the absence of a phase*;

INDICATOR LIGHT OFF
- indicates that the socket outlet is not powered.

** for single-phase products in the event of phase/neutral loss led signaling appears off.*

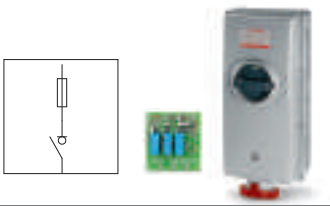
> MECHANICALLY INTERLOCKED I-Device SOCKET OUTLETS 125A - IP66



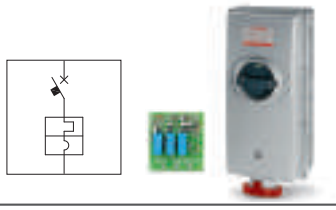
Description	Plug	Hz	Volt	Colour	h		
Switch-disconnector	2P+E 125A	50/60	200-250V		6	1	**503.12583**
	3P+E 125A	50/60	380-415V		6	1	**503.12586**
	3P+N+E 125A	50/60	346-415V		6	1	**503.12587**



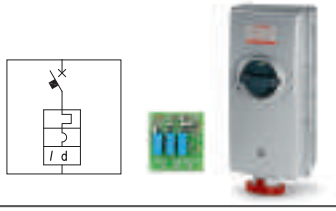
Description	Plug	Hz	Volt	Colour	h		
Switch-disconnector and fuse (*)	2P+E 125A	50/60	200-205V		6	1	**503.12583-F**
	3P+E 125A	50/60	380-415V		6	1	**503.12586-F**
	3P+N+E 125A	50/60	346-415V		6	1	**503.12587-F**



Description	Plug	Hz	Volt	Colour	h		
Fuse (*) and switch-disconnector	2P+E 125A	50/60	200-205V		6	1	**503.12583-FS**
	3P+E 125A	50/60	380-415V		6	1	**503.12586-FS**
	3P+N+E 125A	50/60	346-415V		6	1	**503.12587-FS**



Description	Plug	Hz	Volt	Colour	h		
Molded case circuit breaker with thermal magnetic trip unit	2P+E 125A	50/60	200-205V		6	1	**503.12583-M**
	3P+E 125A	50/60	380-415V		6	1	**503.12586-M**
	3P+N+E125A	50/60	346-415V		6	1	**503.12587-M**

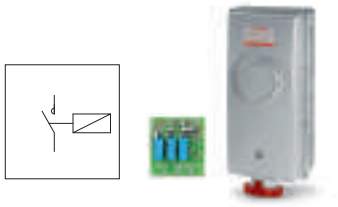


Description	Plug	Hz	Volt	Colour	h		
Molded case circuit breaker with thermal magnetic and residual current release trip units	2P+E 125A	50/60	200-205V		6	1	**503.12583-RM**
	3P+E 125A	50/60	380-415V		6	1	**503.12586-RM**
	3P+N+E 125A	50/60	346-415V		6	1	**503.12587-RM**

(*) Fuses not included

Pack Quantity.

> ELECTRICALLY INTERLOCKED SOCKET OUTLETS - IP66



Description	Plug	Hz	Volt	Colour	h		
Contactor (*)	2P+E 125A	50/60	200-205V		6	1	**503.12583-T**
	3P+E 125A	50/60	380-415V		6	1	**503.12586-T**
	3P+N+E 125A	50/60	346-415V		6	1	**503.12587-T**

(*) Microswitch already provided.
Contactor operated by microswitch.

Pack Quantity.

> ACCESSORIES



Description	Contacts	Terminals	
Microswitch kit 400V 10A (microswitch + terminal block)	1NO+1NC	4x4 mm²	**579.0125**

Max 2 kit.

For products with mechanical interlock.

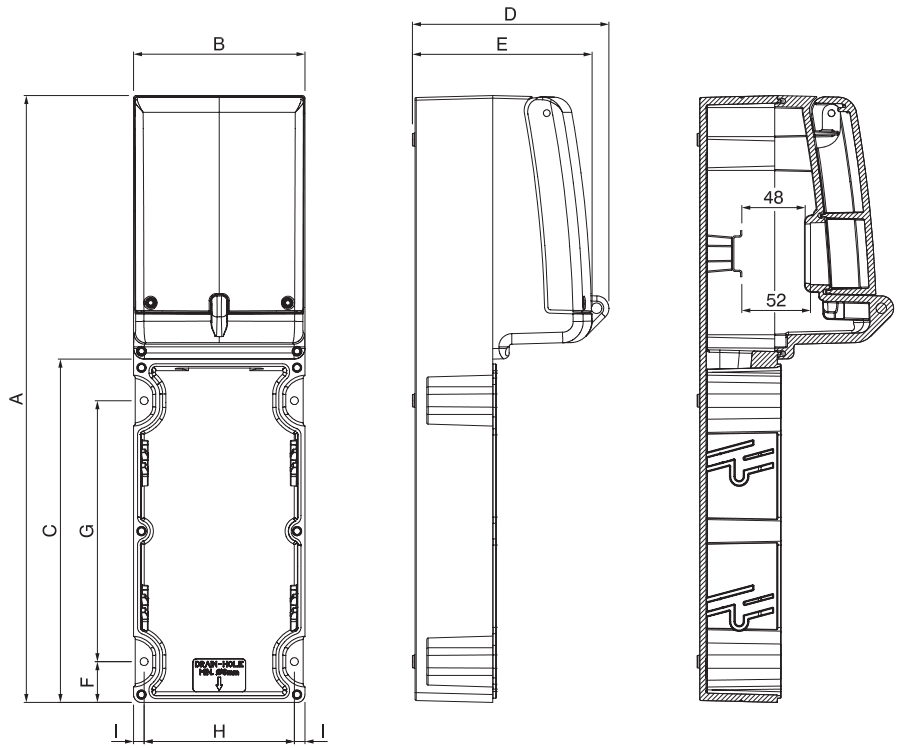
> COMPLEMENTARY PRODUCTS - OPTIMA-EX SERIES - PLUGS 125A IP66/IP67



Description	Plug	Hz	Volt	Colour	h		
Plugs	2P+E 125A	50/60	200-250V		6	1	**218.EX12533**
	3P+E 125A	50/60	380-415V		6	1	**218.EX12536**
	3P+N+E 125A	50/60	346-415V		6	1	**218.EX12537**

Pack Quantity.

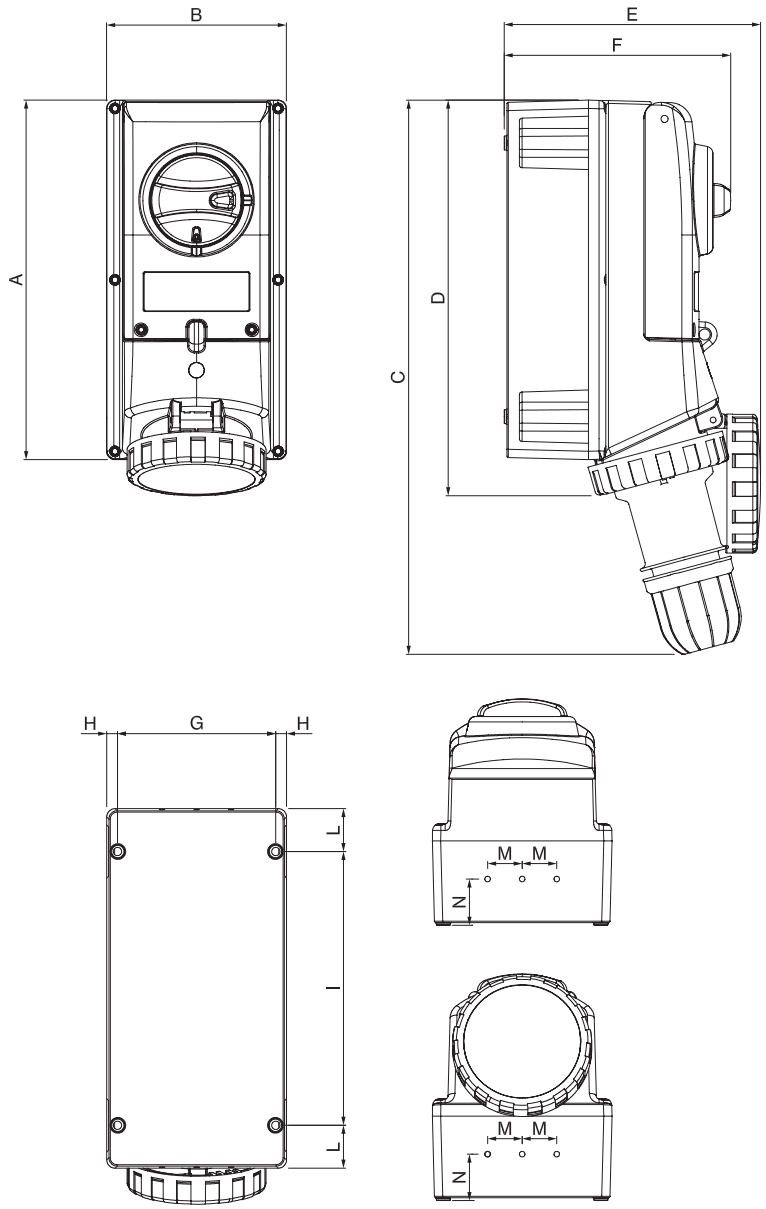
> VERSION 16A-32A-63A BASES AND CONSUMER UNIT DIMENSIONS



VERSION	A	B	C	D	E	F	G	H	I
579.5110	460	130	260	-	137	31	198	114	8
579.5111	460	130	260	150	137	31	198	114	8
579.5121	460	260	260	-	137	31	198	244	8
579.5120	460	260	260	150	137	31	198	244	8
579.5210	580	170	380	-	181,5	35	310	150	10
579.5211	580	170	380	168	181,5	35	310	150	10

(Dimensions in mm)

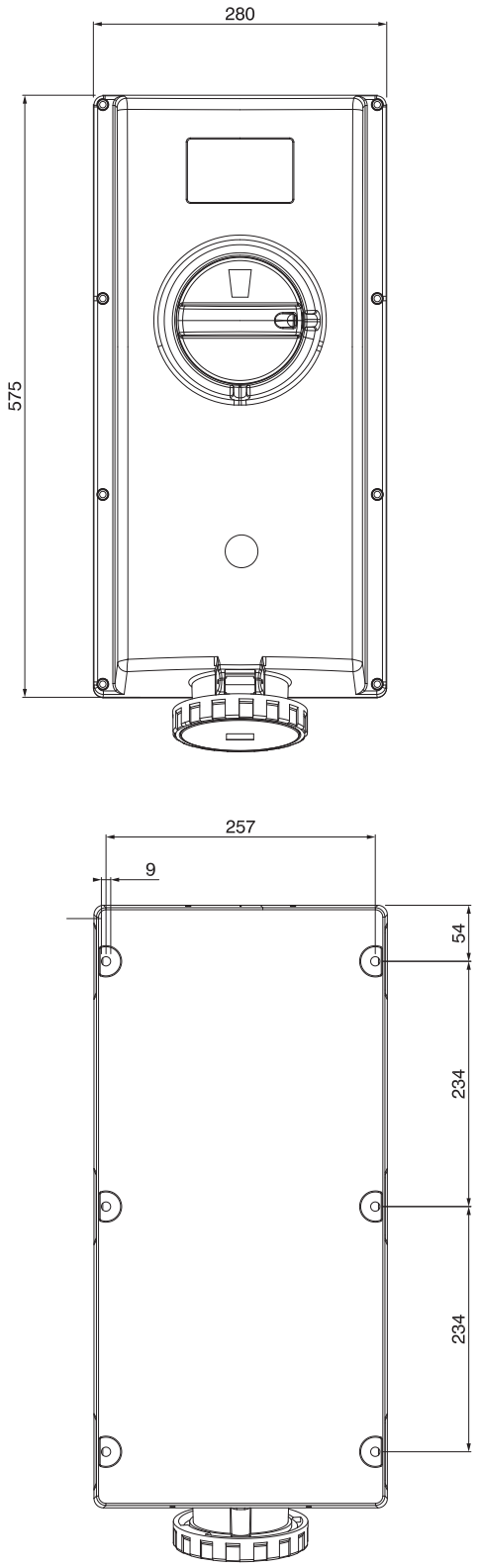
> VERSION 16A-32A-63A SOCKET DIMENSIONS

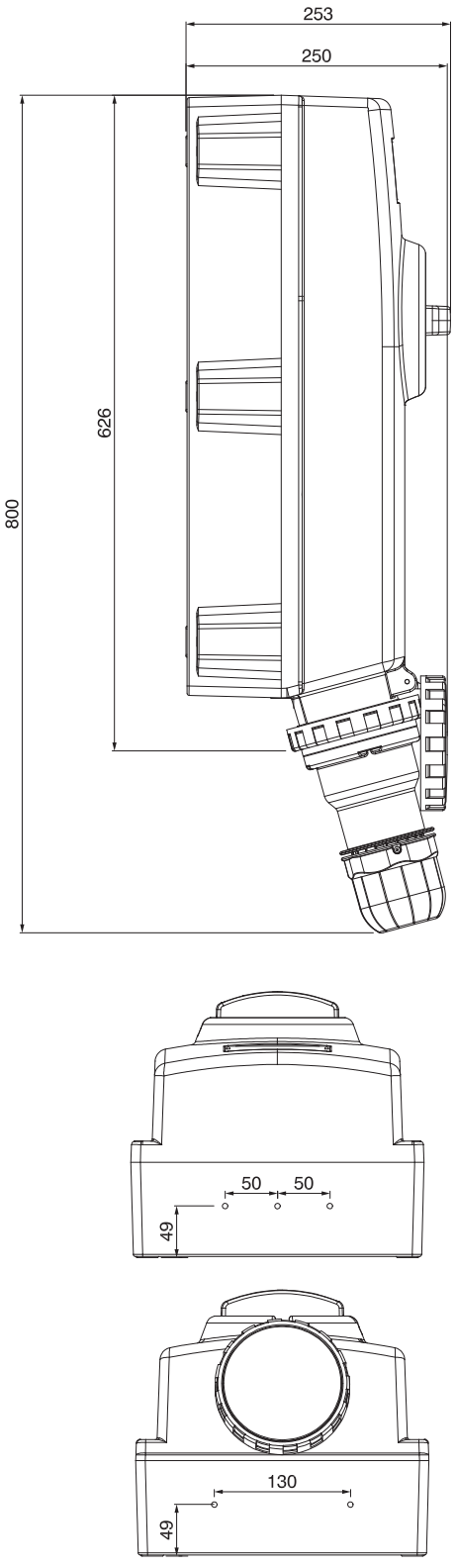


VERSION	A	B	C	D	E	F	G	H	I	L	M	N
2P+E 16A	260	130	360	280	170	164	114,5	7,75	198	31	25	33,5
3P+E 16A	260	130	365	282	175	164	114,5	7,75	198	31	25	33,5
3P+N+E 16A	260	130	390	282	182	164	114,5	7,75	198	31	25	33,5
2/3P+E 32A	260	130	390	285	189	164	114,5	7,75	198	31	25	33,5
3P+N+E 32A	260	130	400	286	185	164	114,5	7,75	198	31	25	33,5
2P+E 63A												
3P+E 63A	380	170	550	420	225	203	150	8,3	310	35	32,5	40
3P+N+E 63A												

(Dimensions in mm)

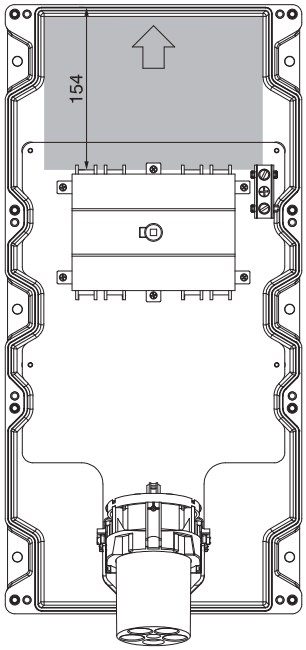
> VERSION 125A SOCKET DIMENSIONS



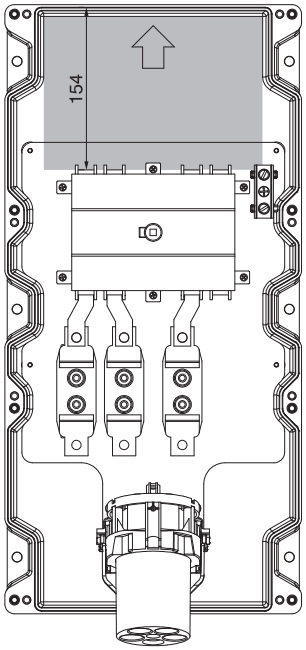


(Dimensions in mm)

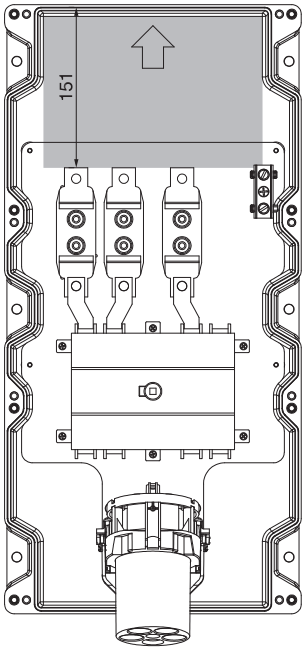
Switch-disconnector



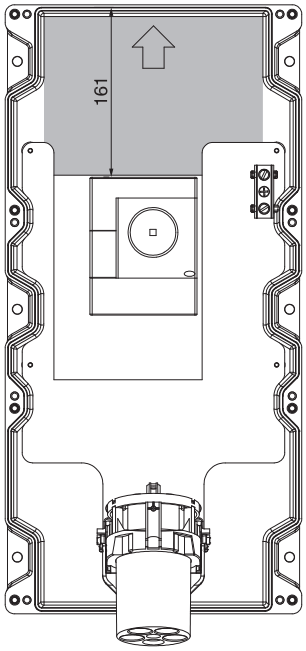
Switch-disconnector and fuse



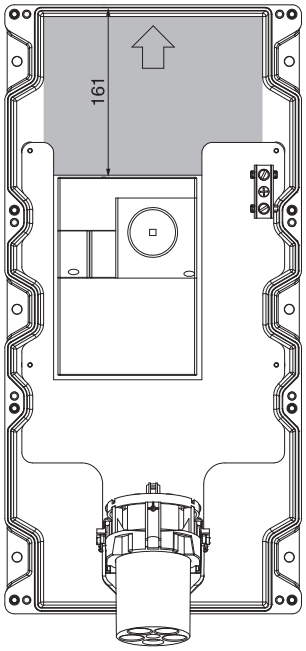
Fuse and switch



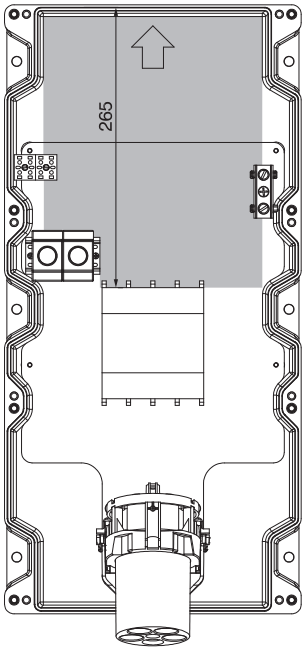
Molded case circuit breaker with thermal magnetic trip unit



Molded case circuit breaker with thermal magnetic and residual current release trip units



Contactor



(Dimensions in mm)