ADVANCE-GRP System

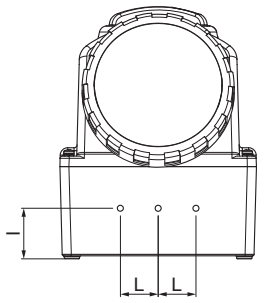
UL LISTED:
E238171, E238172

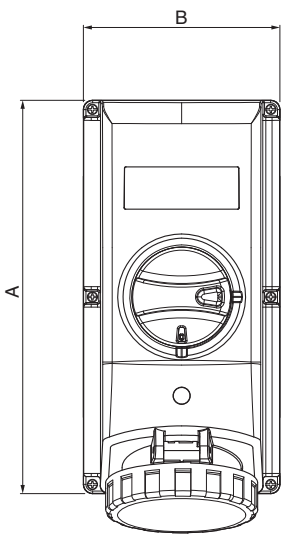
UL CLASSIFIED:
E238170

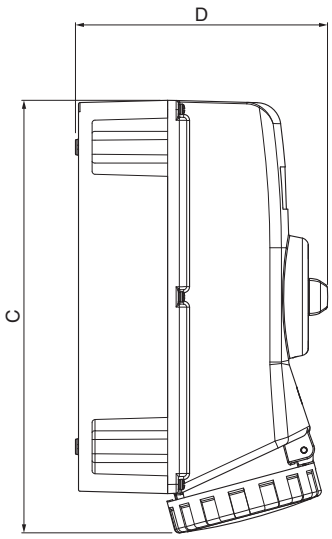
A	Poles & Wires	Configuration			Voltage/ Color Coding	With base
		Receptacle/ Connector	Plug/ Inlet	Clock position		
60	2P 3W			6h	250	SCM360MI6W
	2P 3W			7h	480	SCM360MI7W
	3P 4W			7h	3ø480	SCM460MI7W
	3P 4W			9h	3ø250	SCM460MI9W
	3P 4W			5h	3ø600	SCM460MI5W
	4P 5W			7h	3øY277/408	SCM560MI7W
	4P 5W			9h	3øY120/208	SCM560MI9W
	4P 5W			5h	3øY347/600	SCM560MI5W

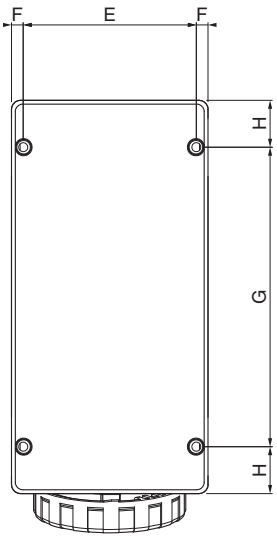
ADVANCE-GRP System

DIMENSIONS - SOCKET OUTLETS ADVANCE-GRP 20A-30/32A-60A









VERSION	Amp.	A	B	C	D	E	F	G	H	I	L
2P+E	**20A**	260	130	280	167	114	8	198	31	33.5	25
3P+E	**20A**	260	130	282	167	114	8	198	31	33.5	25
3P+N+E	**20A**	260	130	282	167	114	8	198	31	33.5	25
2/3P+E	**30/32A**	260	130	285	167	114	8	198	31	33.5	25
3P+N+E	**30/32A**	260	130	286	167	114	8	198	31	33.5	25
2P+E	**60A**	380	170	420	206	150	10	310	35	40	32.5
3P+E	**60A**	380	170	420	206	150	10	310	35	40	32.5
3P+N+E	**60A**	380	170	420	206	150	10	310	35	40	32.5

(Dimensions in mm)

ADVANCE-GRP System

UNFUSED MECHANICAL INTERLOCKS

QUALITY MARKS

UL LISTED:
E238171, E238172

UL CLASSIFIED:
E238170

In accordance with the National Electrical Code (NEC) a disconnecting means must be located in sight from the motor and the driven machinery location. The disconnection means must be marked “Suitable as Motor Disconnect” in compliance with UL508 (old version) or UL 60947-4-1 (new version) standard.
Advance GRP series includes the disconnect switch listed as “Suitable as Motor Disconnect” and receptacle in a single compact device made in the outstanding impact, heat and fire and chemical resistant GRP material. The Pre-wired switch and Interlocked Receptacles provides safety and reliability thanks to its double mechanical interlock which prevents making and breaking of power under load.
The switch can be turned “ON“ only when an IEC compatible plug is completely engaged and the plug cannot be removed until the switch is in the OFF position. Furthermore, it prevents dangerous incomplete plug insertion from lazy connections.
The non-metallic heavy duty enclosure in GRP material guarantees extreme impact and mechanical resistance even against misuses and accidental impacts; very frequent in surface mounting devices. The enclosure is also resistant to chemical substances and atmospheric agents.
Its dielectric features increases electric safety and can be connected to the metallic conduit and by the internal pre-wired grounding plate and doesn’t obstruct the ground continuity.
The robust and ample handle can be padlocked in ON and OFF positions and can be used as a method of compliance with the OSHA Lockout/Tagout regulation. Its ergonomic design and dimension allows it to be operated even if workers are wearing gloves.
There is clear indication of the position of the contacts switch by the high visibility handle along with a LED light located on the front of the device which shows if the receptacle is powered.
Door interlock allows the cover to be removed only when the switch is in the OFF position.

REFERENCE STANDARDS

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

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

UL 1682
Plugs, receptacles and cable connectors of the pin and sleeve type.

UL 1686
Standard for pin and sleeve configuration.

EN 60947-3
Low voltage switchgear and controlgear.
Part 3: switches, disconnectors, switch-disconnectors and fuse-combination unit.

UL 508 (NON-FUSED)
Industrial control equipement.

UL 60947-4-1
Low voltage switchgear and controlgear.
Part 4-1: contactors and motor-starters: Electromechanical contactors and motor-starters.

TECHNICAL CHARACTERISTICS

Rated current:	**20A-30A-60A**
Rated voltage:	**100÷600V~**
Frequency:	**50÷60Hz**
Insulating voltage:	**500/690V~**
Protection degree:	**IP66/IP67/IP69 (UL 94 type 3R, 4/4X, 12)**
Operating ambient temperature according to the reference standard:	**-25°C +40°C**
Minimum operating ambient temperature:	**-40°C**
Max. operating ambient temperature:	**+70°C**
Self-extinguishing GW test:	**960°C**
Self-extinguishing UL94:	**V0**
Material:	**Thermosettting**
IK degree at 20°C:	**IK10 (20J)**
Colour:	**Grey RAL7037**

ADVANCE-GRP System

TERMINAL CAPACITY

Wire size range	20/30A	60A
Switch / ground / neutral	16-6 AWG (1.5÷10mm²)	6-1 AWG (10÷35mm²)
Auxiliary contact	10-18 AWG (1.5÷10mm²)	

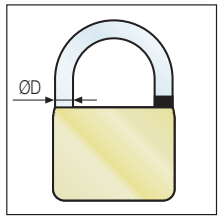
TERMINAL TORQUE

	20/30A	60A
Switch	0.8 Nm (7 lb•in)	3.6 Nm (32 lb•in)
Ground / neutral	0.8 Nm (7 lb•in)	1.5 Nm (13 lb•in)
Auxilary contact	0.8 Nm (7 lb•in)	0.8 Nm (7 lb•in)
Pilot	_	0.8 Nm (7 lb•in)

PADLOCK TO BE USED

Choice of padlock for socket knob, fuse door and switchboard door

Rated current (A)	Ø D (mm)
20/30	5
60	6,3



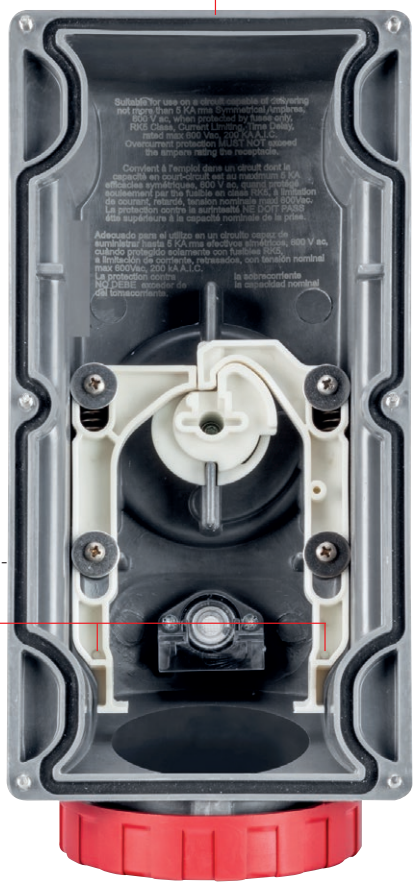
SWITCH DISCONNECTORS ELECTRICAL DATA ACCORDING TO UL 508

General purpose amp rating				20A	30A	60A
Max operating voltage			V	600	600	600
Max. horsepower ratings	Three phase	120V	Hp	3	3	5
		240V	Hp	5	7.5	15
		415V	Hp	7.5	10	25
		480V	Hp	10	20	30
		600V	Hp	15	25	40
	Single phase	120	V	2	3	5
		240	V	3	5	10
		480	V	10	15	20
Short circuit ratings with fuse	Fuse RK5 (time delay)		(A) rms	5000	5000	5000
	Fuse class J (fast-acting)		(A) rms	10000	10000	10000
Maximum fuse size			A	40	40	80
Min electrical endurance (with rated current)			ON/OFF cycles	6000	6000	6000

ADVANCE-GRP System

TECHNICAL CHARACTERISTICS 20A-30A-60A VERSIONS

Single-piece waterproof gasket



Dual mechanical interlock to increase safety

Pre-wired grounding plate connects to metal conduit grounding system

Fixing hole

Wide space for easy and comfortable wiring

Neutral terminal

Motor disconnect switch

Threaded metal insert

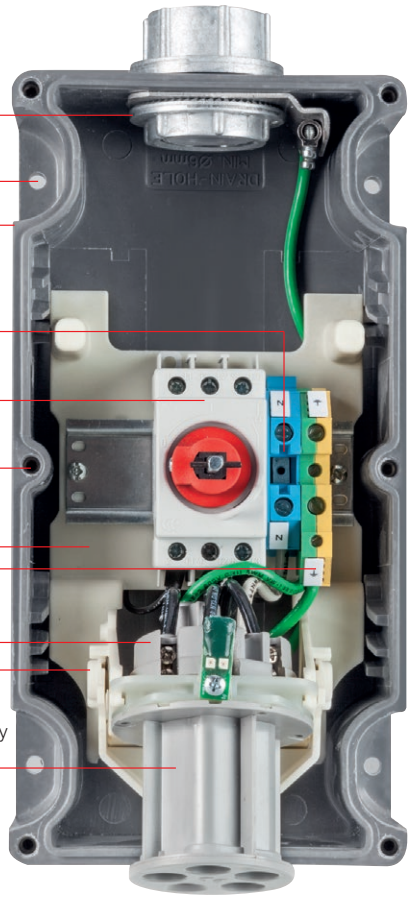
Easily extractable support

Earth terminal

Power indicator led

Possibility for plug-inserted control microswitch assembly

Prewired receptacle accepts all manufacturer's IEC 60309-2 pin and sleeve plugs



ADVANCE-GRP System

TECHNICAL CHARACTERISTICS 20A-30A-60A VERSIONS

High-performance material with oustanding mechanical UV and chemical resistance

Lockable handle to meet OSHA lockout/tagout regulation

Power indicator LED

- **LIGHT ON** - socket powered;
- **LIGHT OFF** - socket not powered.

Cover entirely separate from the base for easy installation

Captive stainless steel closing screws

BOTTOM VIEW

Module in high-temperature resistant engineering polymer

(A)	Conduit hub
20/30	1"
60	1 1/4"

Possible entry from bottom side

TOP VIEW

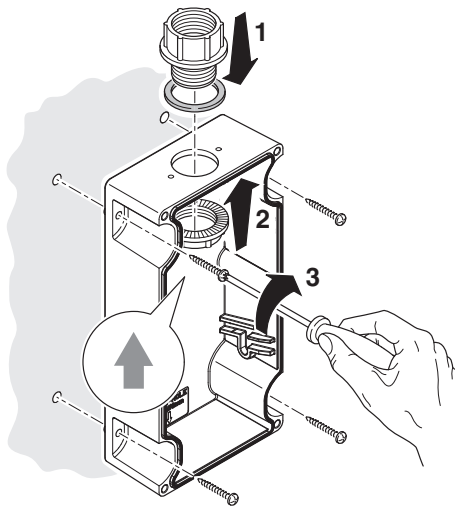
Self-centering punch marks to facilitate drilling

Pre-called cable entries available on request.

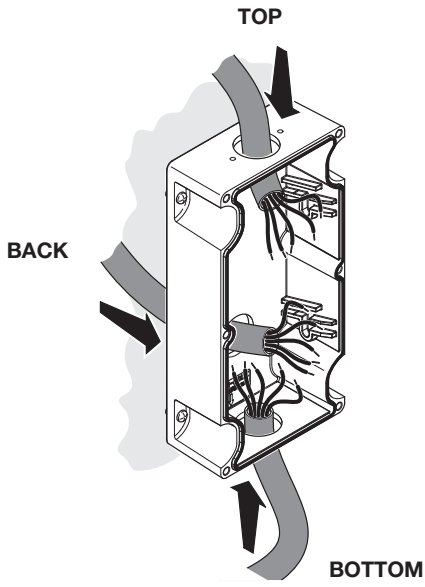
ADVANCE-GRP System

MOUNTING INSTRUCTION

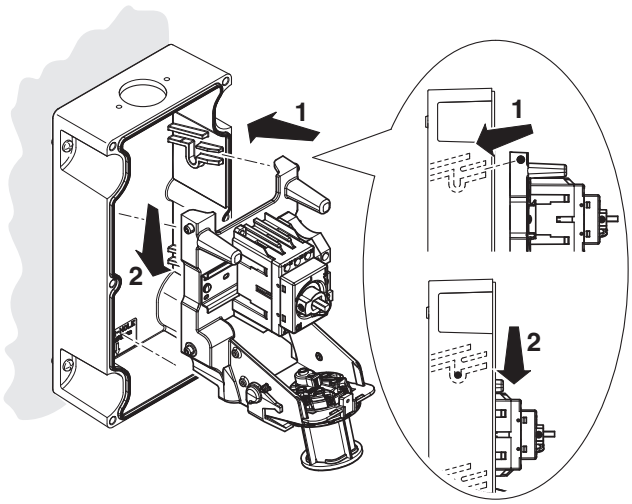
Base wall fixing



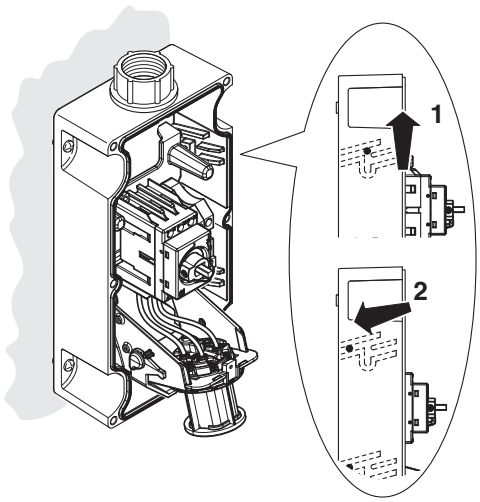
Cable entries



Insert fixing



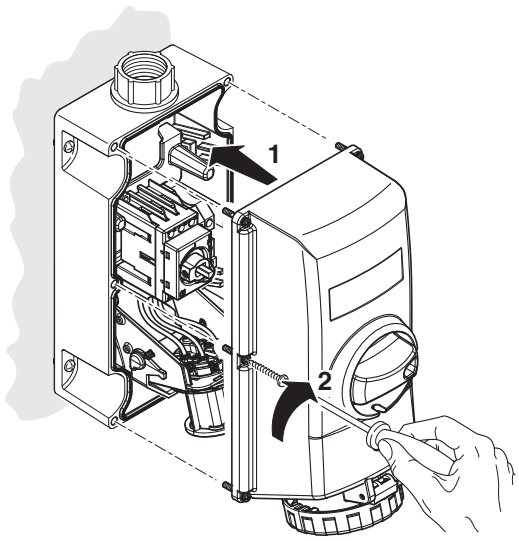
Enclosure closing



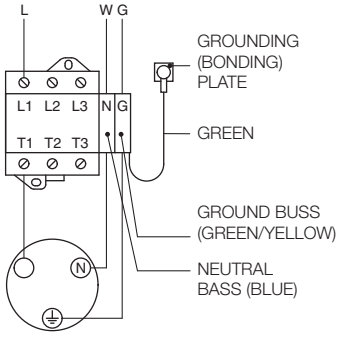
SCAME

ADVANCE-GRP System

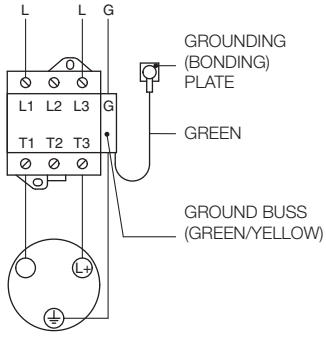
Reinstall
the cover



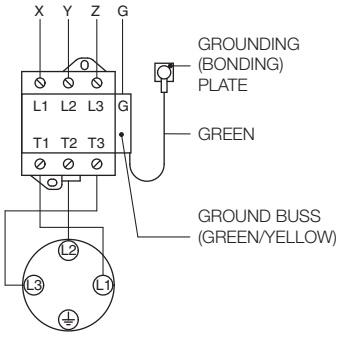
Wiring diagram



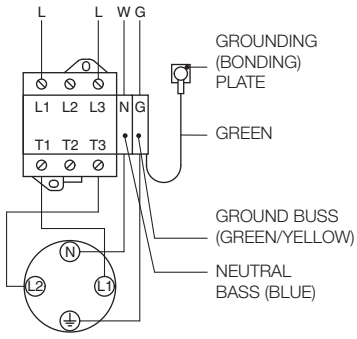
2 POLES 3 WIRES
Single fase



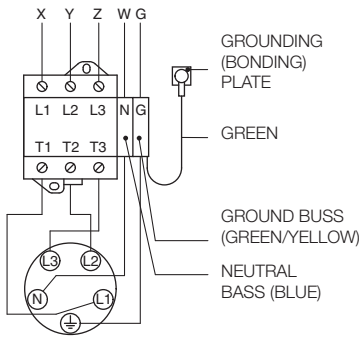
2 POLES 3 WIRES
Single fase (no neutral)



3 POLES 4 WIRES
3 Ø



3 POLES 4 WIRES
Edison system



4 POLES 5 WIRES
3 Ø