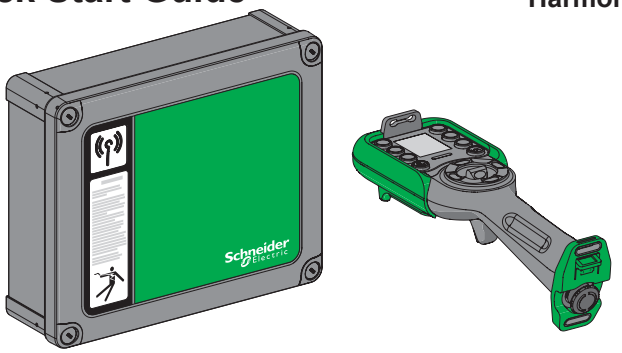
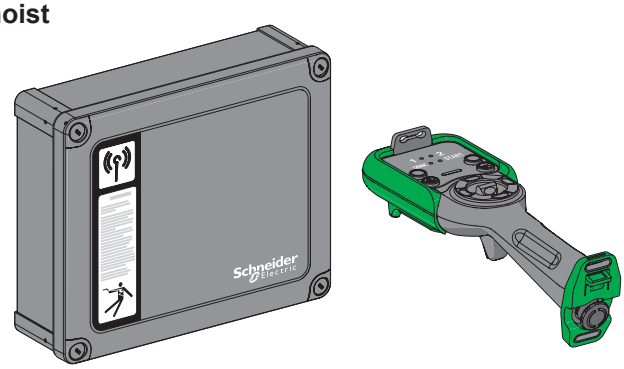
Quick Start Guide

Harmony™ eXLhoist



XARS8D18W / XARS8D18H / XARS12D18W / XARS12D18H



XARS8L12W / XARS8L12H

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power from all equipment including connected devices, prior to removing any covers or doors, or installing or removing any accessories, hardware, cables, or wires except under the specific conditions specified in the appropriate hardware guide for this equipment.
- Always use a properly rated voltage sensing device to confirm the power is off where and when indicated.
- Replace and secure all covers, accessories, hardware, cables, and wires and confirm that a proper ground connection exists before applying power to the unit.
- Use only the specified voltage when operating this equipment and any associated products.

Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Use appropriate safety interlocks where personnel and/or equipment hazards exist.
- Install and operate this equipment in an enclosure appropriately rated for its intended environment.
- Do not disassemble, repair, or modify this equipment.
- Do not connect any wiring to unused connections, or to connections designated as Not Connected (N.C.).

Failure to follow these instructions can result in death, serious injury, or equipment damage.

It is recommended to charge the battery once a week, for a duration of at least 4 hours.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.
No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.
You can download our technical user guide file as well as the eXLhoist configuration software from our website at www.schneider-electric.com.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Power line must be wired and protected with fuse or thermal magnetic switch (ex: Schneider-Electric GV2) in compliance with local and national regulatory requirements for the rated current and voltage of the particular equipment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

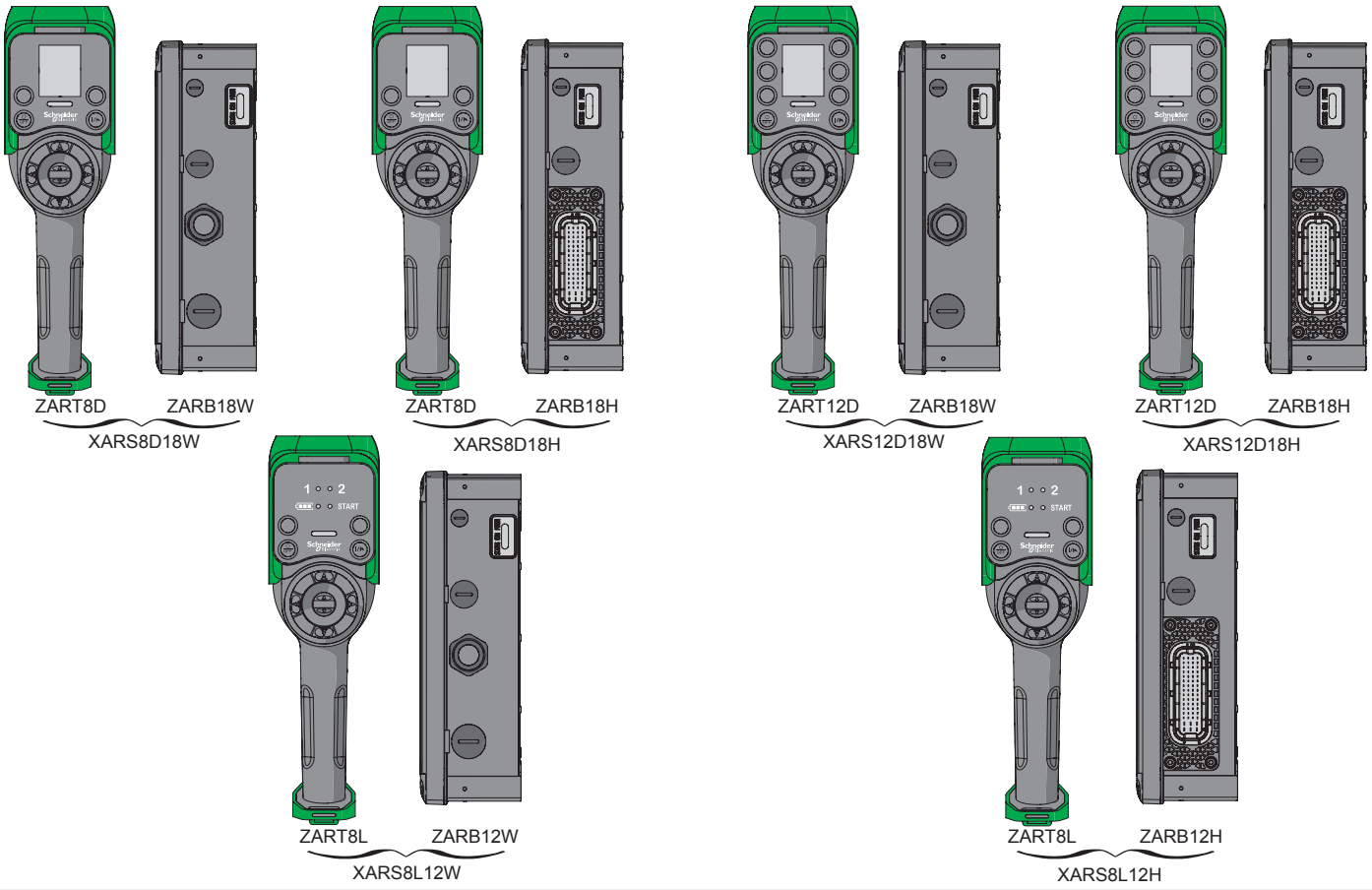
⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Put the remote into STOP mode when not operating the unit to avoid accidental operations of motions push buttons.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Note: You can decrease the "stand-by time out" value using the configuration software tool to reduce the time the remote is in run mode.

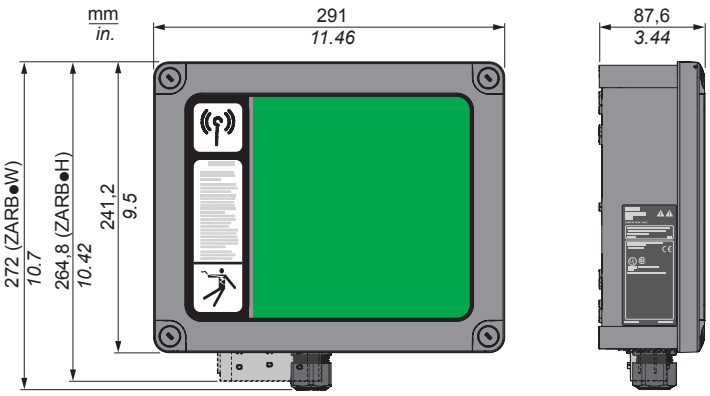


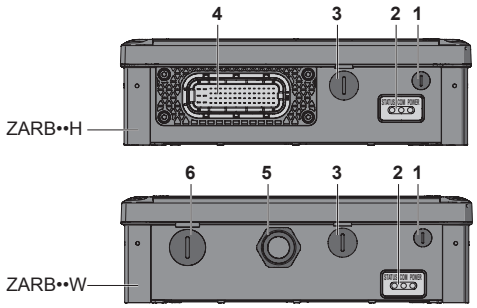
Main characteristics

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION
Install and operate this equipment according to the environmental conditions described in the operating limits.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Base station ZARB●●●

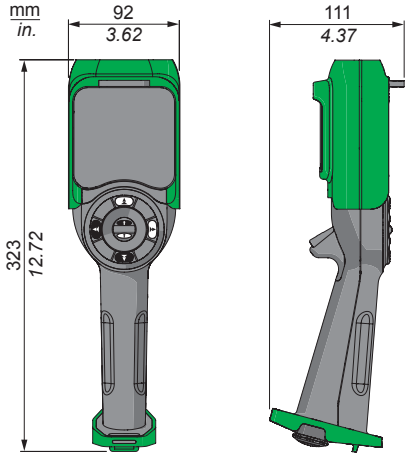




1 : M12 for external antenna (covered by cap)
2 : Status LEDs
3 : M20 for the safeguarding function input wires (covered by cap)
4 : 62 pins connector
5 : M25 for output wires (covered by cable gland)
6 : M25 for detected applicative alarms input wires (covered by cap)

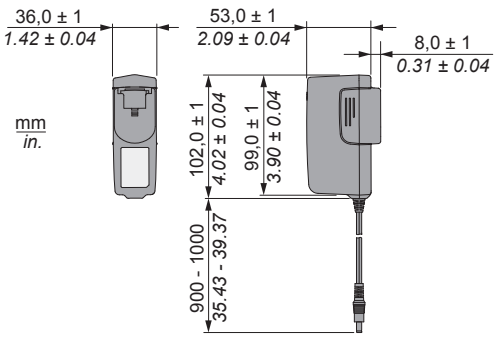
Specifications	Details	Values			
		ZARB12H	ZARB12W	ZARB18H	ZARB18W
Operating voltage	-	24...48 V ac/dc ± 20%	24...240 V ac/dc ± 20%	24...48 V ac/dc ± 20%	24...240 V ac/dc ± 20%
Current consumption	AC power supply min.	24 V ac / 535 mA			
	AC power supply max.	48 V ac / 312 mA	240 V ac / 250 mA	48 V ac / 312 mA	240 V ac / 250 mA
	DC power supply min.	24 V dc / 328 mA			
	DC power supply max.	48 V dc / 155 mA	240 V dc / 44 mA	48 V dc / 155 mA	240 V dc / 44 mA
Operating temperature	For 24...48 V ac/dc power supply	-25...70°C *(-13...158°F)*			
	For 48...130 V ac/dc power supply	-	-25...70°C *(-13...158°F)*	-	-25...70°C *(-13...158°F)*
	For 130...240 V ac/dc power supply	-	-25...50°C *(-13...122°F)*	-	-25...50°C *(-13...122°F)*
Degree of protection	-	IP65 / NEMA 4			

Remote control ZART●●●



Specifications	Details	Values		
		ZART8L	ZART8D	ZART12D
Operating radio range	Free field	100 m		
Operating temperature	-	-20...60°C *(-4...140°F)*		
Operating temperature to charge battery	Office environment	10...40°C *(50...104°F)*		
Degree of protection	-	IP65 / NEMA 4		

Charger for remote device



Output Plug :
Ø 5.5 x Ø 2.5 x 11.0 mm
Inner Positive

Specifications	Details	Values
Operating voltage	-	110 / 240 VAC
Operating temperature to charge battery	Office environment	10...40°C *(50...104°F)*
Degree of protection	-	IP20

Wiring

⚠ WARNING

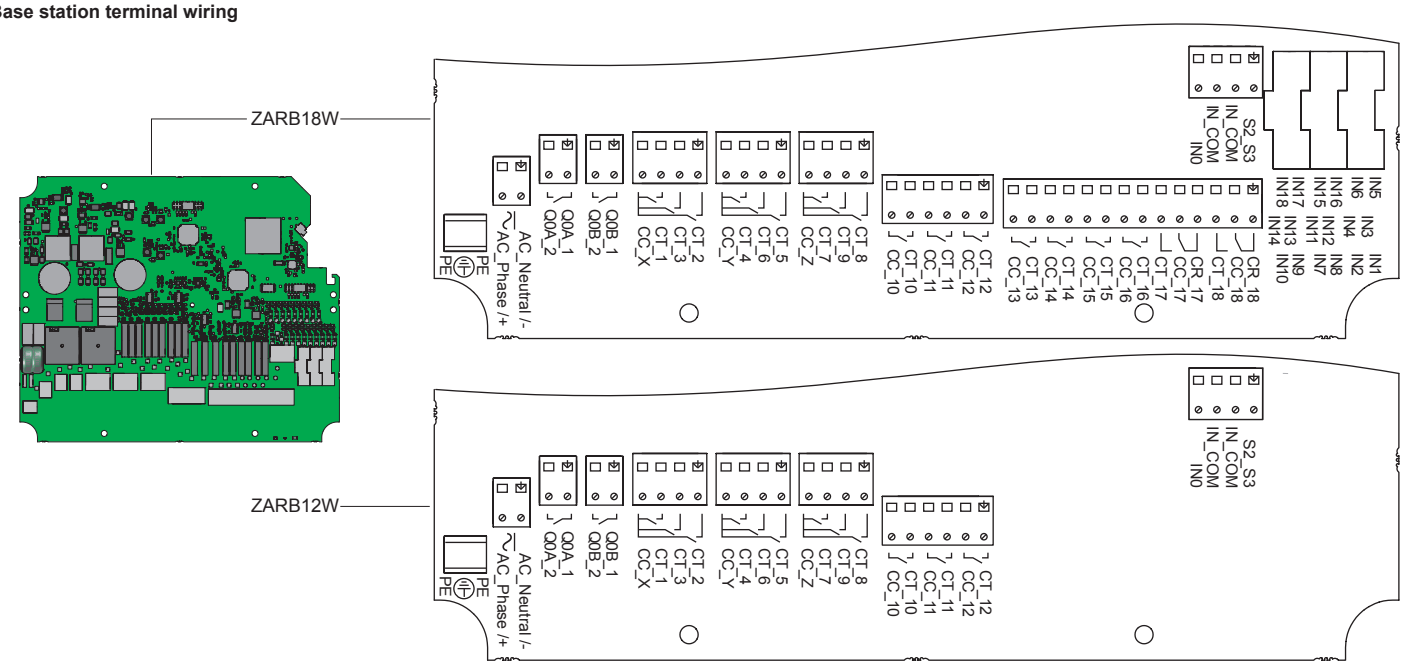
UNINTENDED EQUIPMENT OPERATION
- Use shielded cables wherever specified for inpunts and outputs connections.
- Properly ground the cable shields as indicated in the related documentation.
- Route I/O cables separately from power cables.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

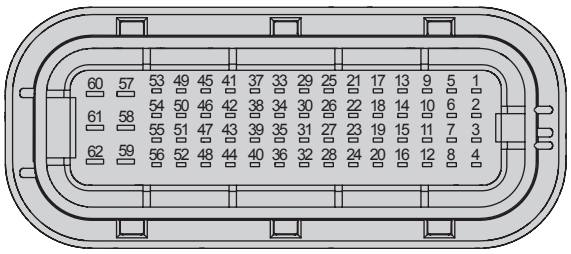
⚠ WARNING

UNINTENDED EQUIPMENT OPERATION
Connect the Base Station protective earth ground connection to the machine ground.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Base station terminal wiring



Base station ZARB●●H - Connector pin out



A : Pin number
B : ZARB18H description
C : ZARB12H description

A	B	C
1	CR_18	-
2	CC_18	-
3	CT_18	-
4	CT_13	-
5	CR_17	-
6	CC_17	-
7	CT_17	-
8	CC_13	-
9	CT_14	-
10	CC_12	CC_12
11	CT_11	CT_11
12	CC_10	CC_10
13	CC_14	-
14	CT_12	CT_12
15	CC_11	CC_11
16	CT_10	CT_10

A	B	C
17	CT_16	-
18	CT_15	-
19	S2/S3	S2/S3
20	IN3	-
21	CC_16	-
22	CC_15	-
23	-	-
24	IN2	-
25	CT_9	CT_9
26	CT_8	CT_8
27	CT_5	CT_5
28	IN_COM	-
29	CC_Z	CC_Z
30	CT_6	CT_6
31	CT_4	CT_4
32	IN0	IN0

A	B	C
33	CT_7	CT_7
34	CC_Y	CC_Y
35	CT_2	CT_2
36	IN1	-
37	Q0A_1	Q0A_1
38	Q0A_2	Q0A_2
39	CT_3	CT_3
40	IN4	-
41	Q0B_1	Q0B_1
42	Q0B_2	Q0B_2
43	CT_1	CT_1
44	IN5	-
45	PE	PE
46	-	-
47	CC_X	CC_X
48	IN6	-

A	B	C
49	-	-
50	-	-
51	-	-
52	-	-
53	-	-
54	-	-
55	-	-
56	-	-
57	-	-
58	-	-
59	-	-
60	AC_Neutral	AC_Neutral
61	-	-
62	AC_Phase	AC_Phase

Cable length maximum 50 m *(164 ft)*

⚠ DANGER

FIRE HAZARD
Use only the recommended wire sizes for I/O channels and power supplies.
Failure to follow these instructions will result in death or serious injury.

NOTICE

INOPERABLE EQUIPMENT
Do not tighten screw terminals beyond the specified maximum torque (Nm / lb-in.).
Failure to follow these instructions can result in equipment damage.

mm / in. 7 / 0.28								
mm²	0.2…2.5	0.2…2.5	0.25…2.5	0.25…2.5	2 x 0.2…1	2 x 0.2…1.5	2 x 0.25…1	2 x 0.5...1.5
AWG	*24…14*	*24…14*	*23...14*	*23...14*	*2 x 24…17*	*2 x 24…16*	*2 x 23…17*	*2 x 20...16*

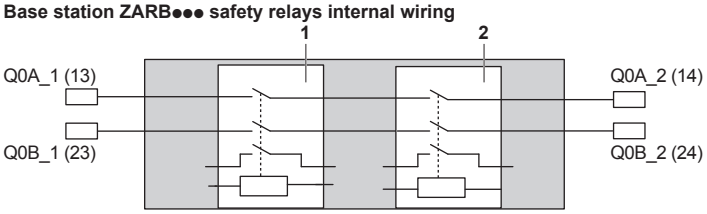
Ø 3,5 mm (*0.14 in.*)		N•m	0.5...0.6
		lb-in	*4.42...5.31*

Electrical diagram

Base station ZARB●●● - Inputs / Outputs

Input / Output	Possible uses (depending of the configuration)
IN0	Feedback loop input
IN1...IN6	Applicative Alarm (only for ZARB18●)
IN7...IN18	Limit Switches (only for ZARB18●)
Q0A (13/14) Q0B (23/24)	Safety relays
Q1...Q9	Motion relays
Q10...Q16 (NO type)	Auxiliary relays (Q13 to Q18 only for ZARB18●)
Q17, Q18 (NO+NC type)	Specific relays (only for ZARB18●)

Base station ZARB●●● safety relays internal wiring



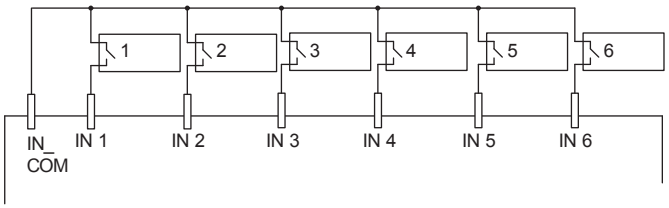
1 : Safety relay 1
2 : Safety relay 2

Base station ZARB18● - Applicative alarms

Input	Description
IN1	Overload pre-alarm
IN2	Overload alarm
IN3	Over wind pre-alarm
IN4	Over wind alarm
IN5	Over speed alarm
IN6	Generic alarm

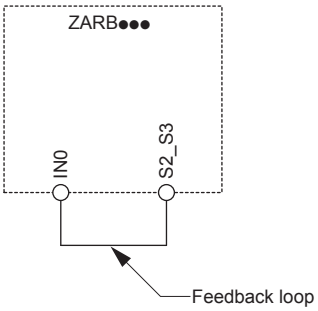
The ZARB18● base station implements 6 inputs : IN1...IN6
Differents sensors can be connected to these inputs
These inputs are dedicated for applicative alarms

Base station ZARB18● wiring diagram for the applicative alarm devices

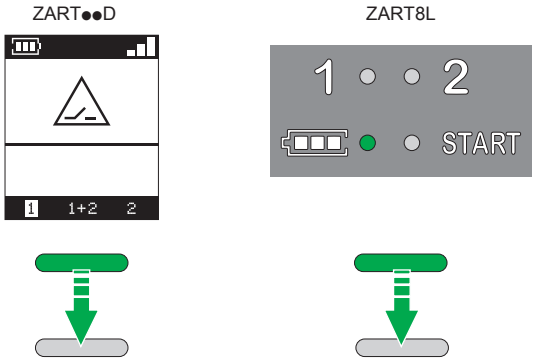


The IN1 to IN6 input cable length should not exceed 50 m *(164 ft)*

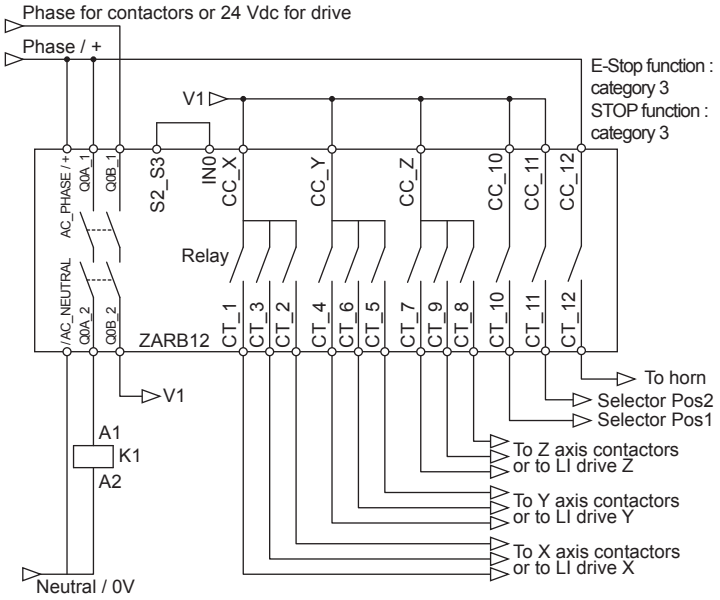
For E-Stop SIL3, PLe, category 4 refer to the user manual.
For the other cases, connect IN0 to S2_S3 signals.



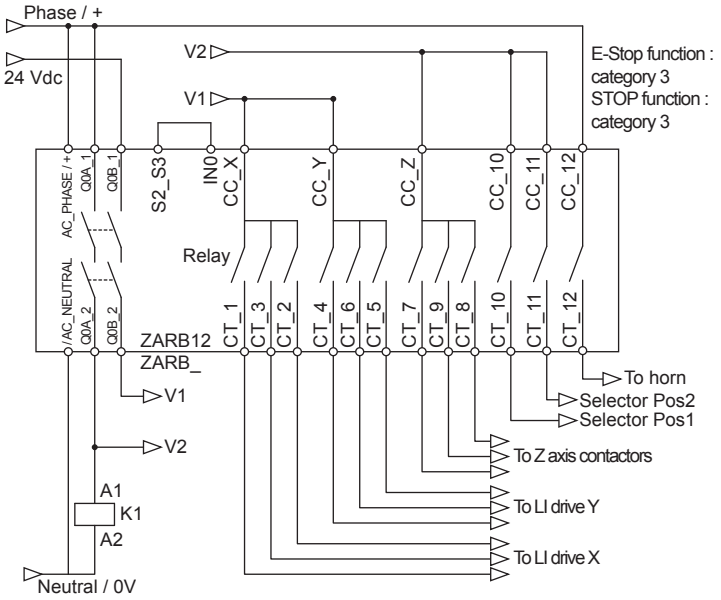
Informs that the feedback loop is opened



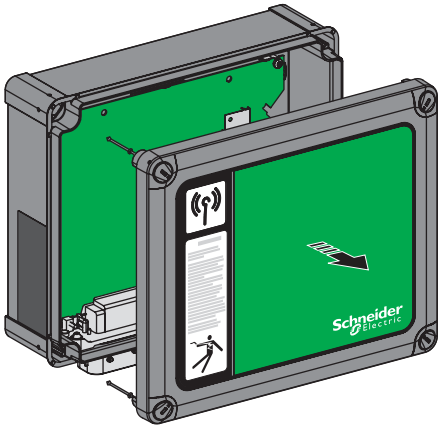
Example of wiring for E-Stop and Stop SIL2, PLd, category 3

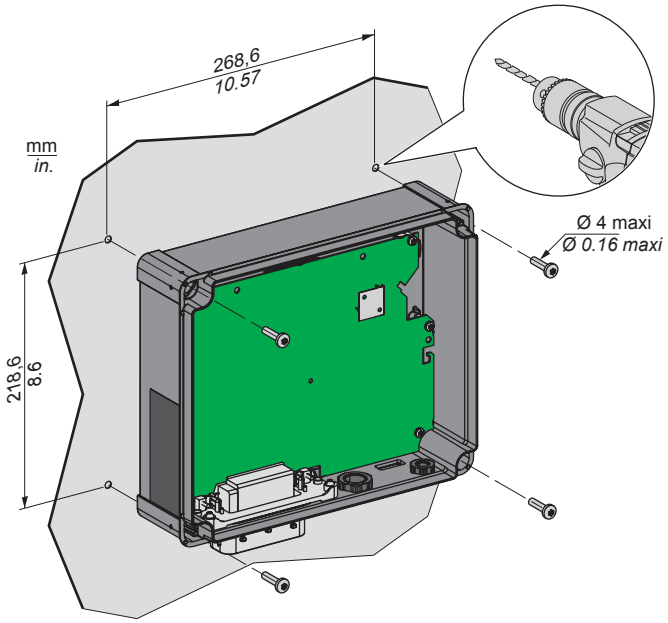


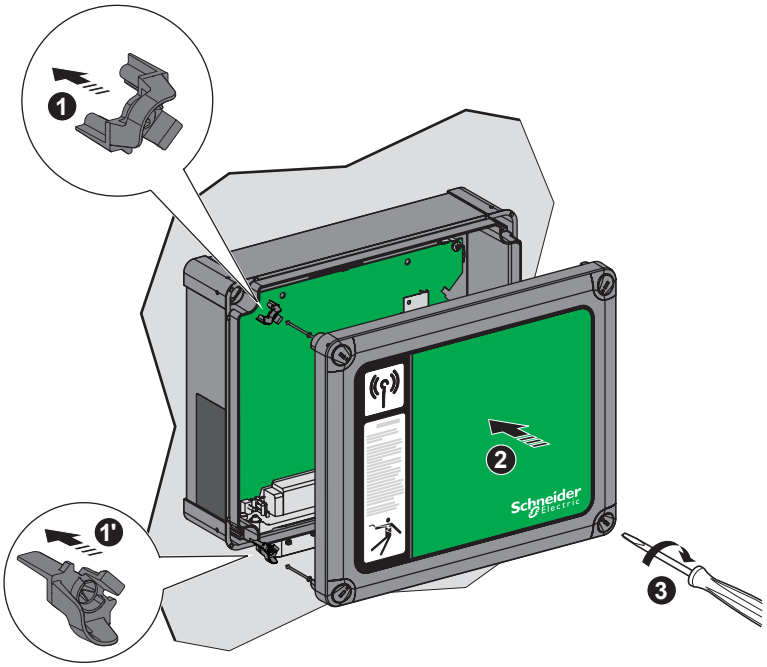
Example of wiring for E-Stop and Stop SIL2, PLd, category 3, mix drives and contactors



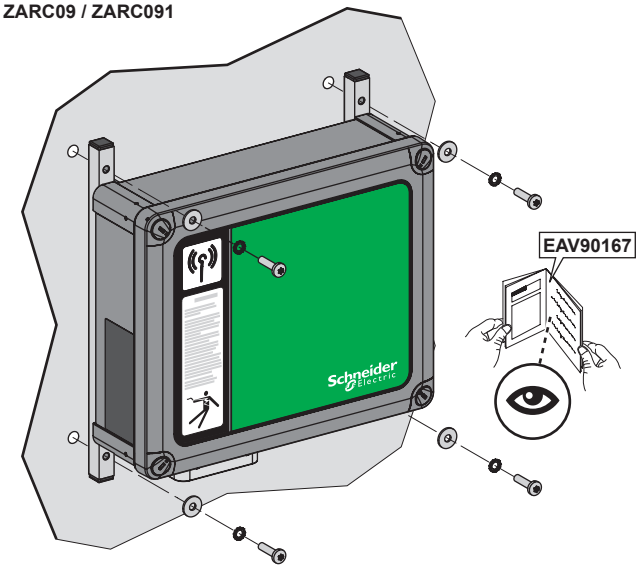
Mechanical installation



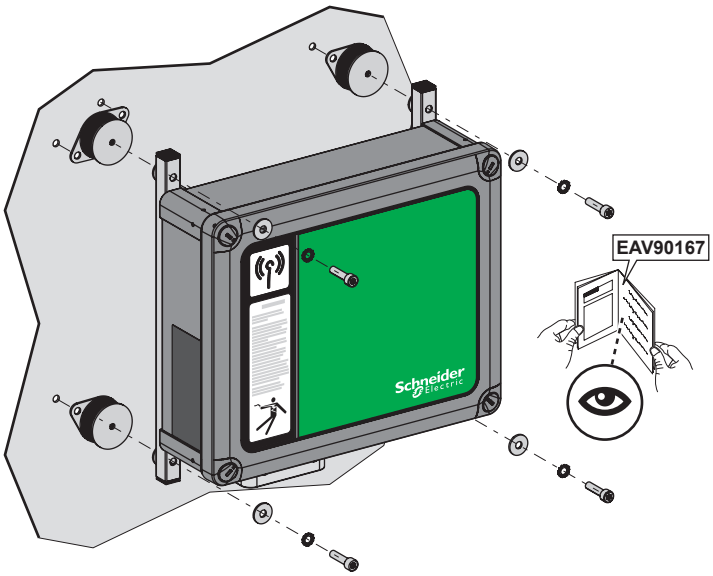




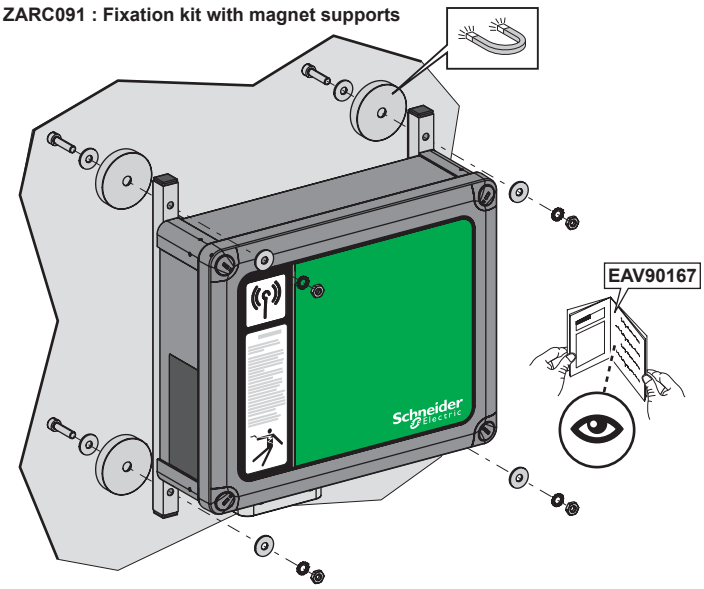
ZARC09 / ZARC091



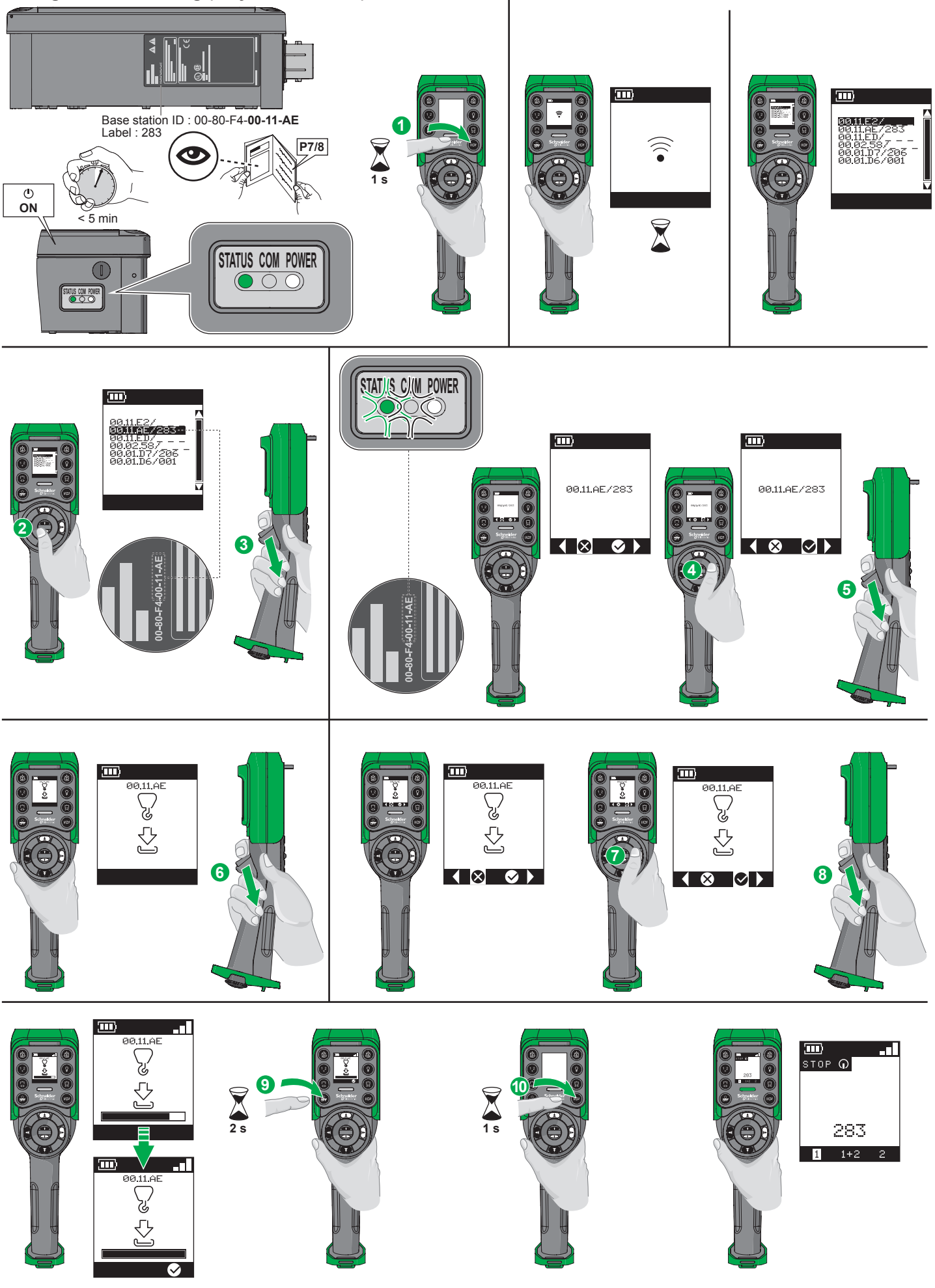
ZARC09 : Fixation kit with silent block



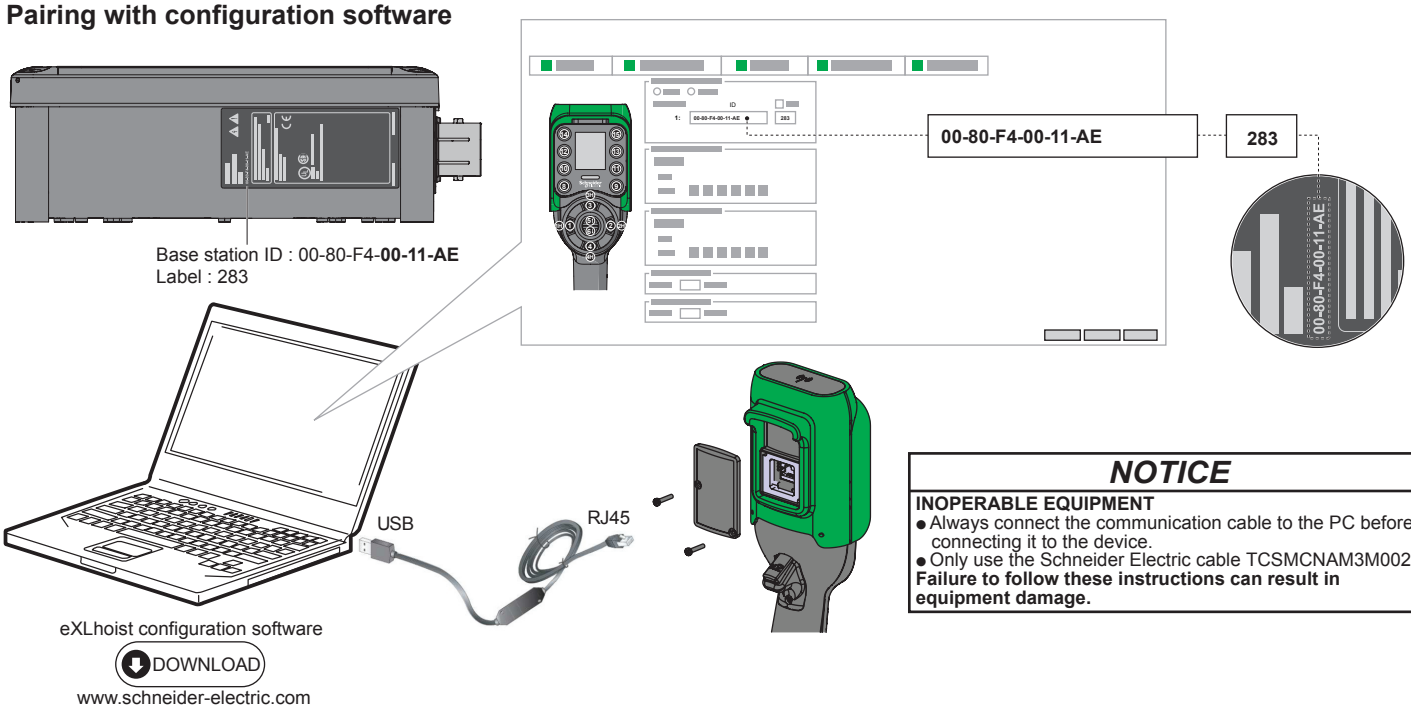
ZARC091 : Fixation kit with magnet supports



Pairing with discovering (only for ZART●●D)



Pairing with configuration software



NOTICE

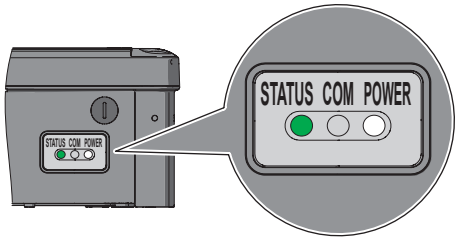
INOPERABLE EQUIPMENT

- Always connect the communication cable to the PC before connecting it to the device.
- Only use the Schneider Electric cable TCSMCNAM3M002P.

Failure to follow these instructions can result in equipment damage.

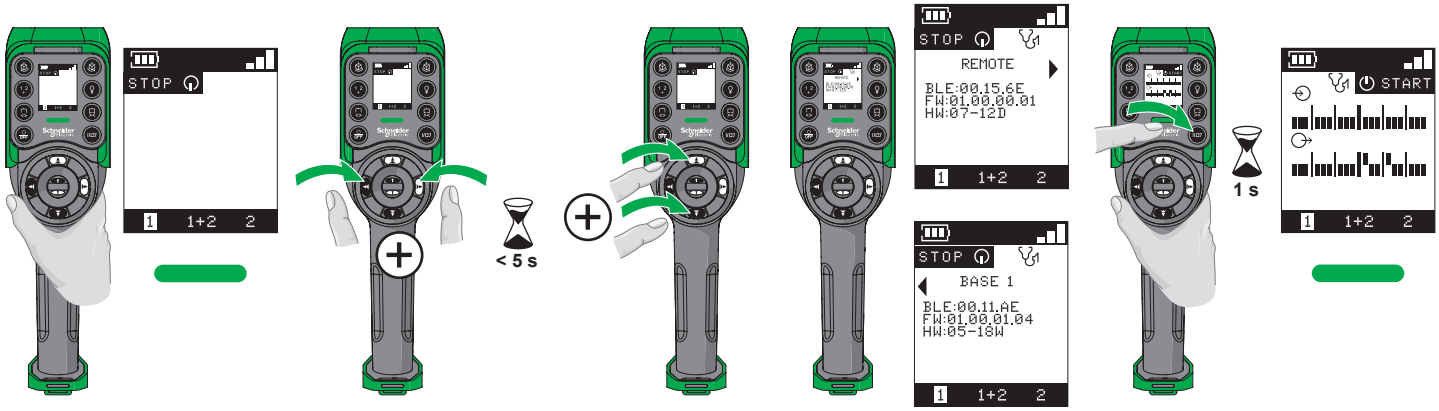
Diagnostics

Base station ZARB●●● - Diagnostic LEDs

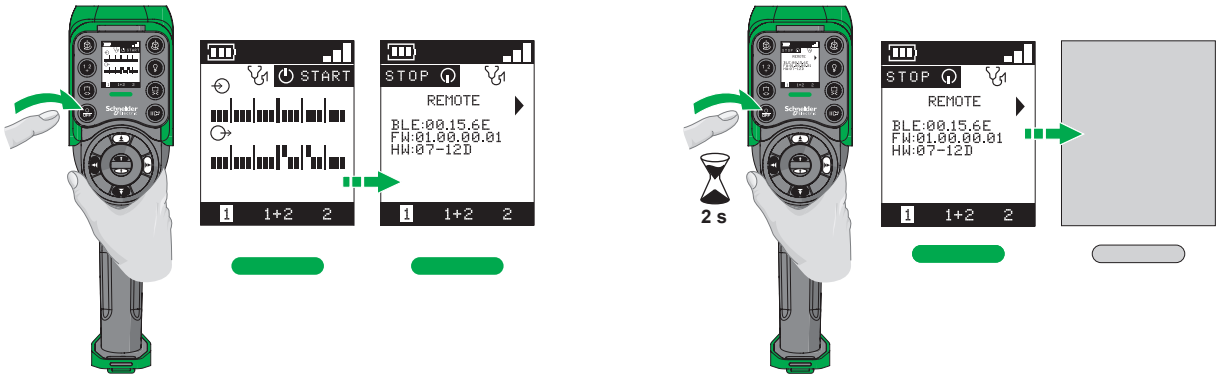


LED	Color	State	Description
Status	Green	ON	The remote control system is working properly
		OFF	Base station power OFF or internal fault detected
COM	Yellow	OFF	No communication between the base station and the remote control device
		Blinking	The communication is established between the base station and the remote control device
Power	White	OFF	Base station powered OFF
		ON	Base station powered ON

Remote device ZART●●D - Diagnostic Display

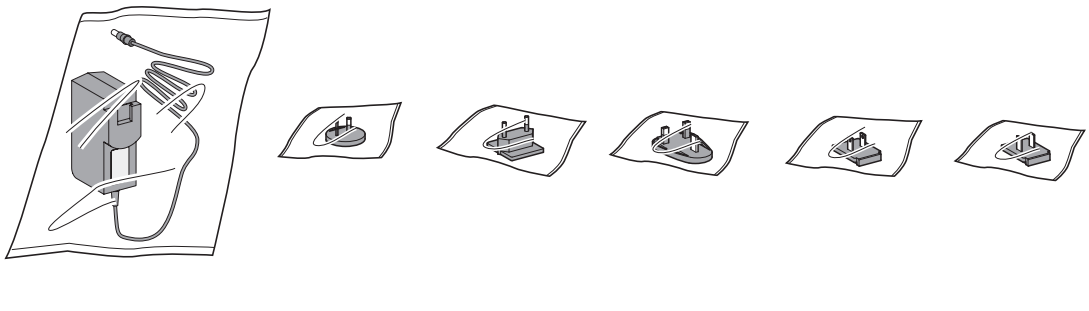


Exit

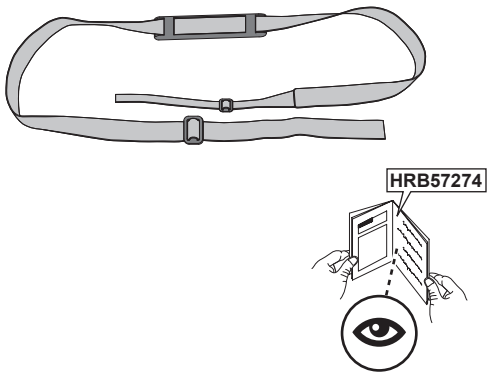


Accessories

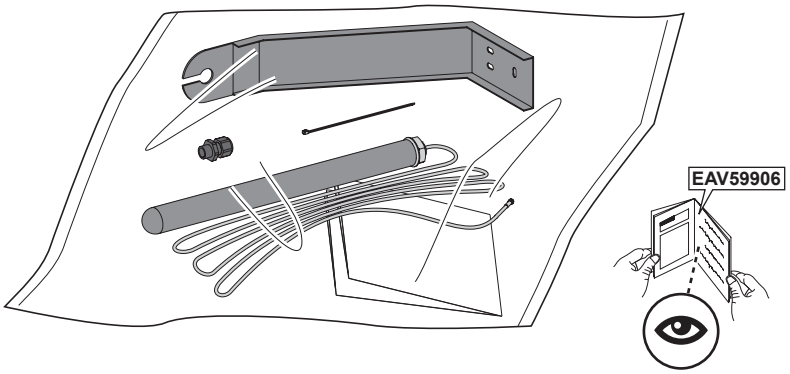
ZARC01 : Charger for remote device



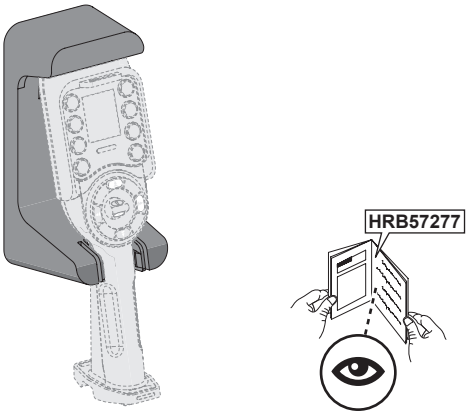
ZARC02 : Shoulder belt for remote device



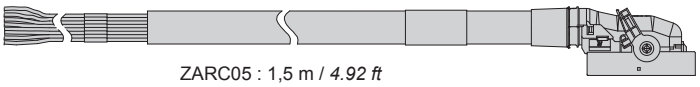
ZARC03 : External antenna for base station



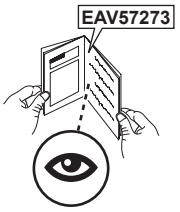
ZARC04 : Holder for remote device



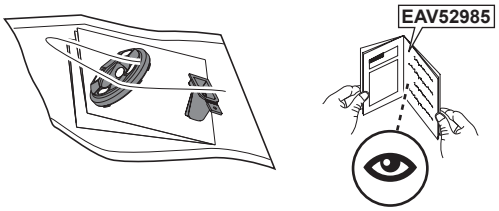
ZARC05 / ZARC12 / ZARC18 : Connector plug female



ZARC05 : 1,5 m / *4.92 ft*
ZARC12 : 3 m / *9.84 ft*
ZARC18 : 5 m / *16.40 ft*



ZARC20 : Bellows



ZARC21 : Protections