

extróma®

SLIM

Servoscala con piattaforma
per il trasporto di persona su carrozzina

Matr. Nr. C09G3XXXX Anno di costruzione 2009

Cliente XXXX

Indirizzo XXXX, XXXX - XXXX

extróma® srl

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WHEELCHAIR PLATFORM LIFT

SLIM

USER AND MAINTENANCE MANUAL

SPARE PARTS CATALOGUE



GENERAL SAFETY RULES

These safety rules are an integral part of the product. Read the information in this manual carefully since it provides important instructions for safe use and maintenance of the system. Keep these instructions in a safe place and ensure that anyone operating the machinery is familiar with them. This product should be used only for the specific purpose for which it is designed: any other use is improper and hazardous.

The manufacturer will not be held liable for damages caused by improper, incorrect or unreasonable use. Do not allow children to play or stand about in the area of action of the machine; do not allow unaccompanied children to use the elevator.

In case of failure or malfunction of the product, disconnect the power switch and do not attempt to repair the machine yourself; contact authorised professional technicians for this purpose. All maintenance and repairs must be done only by professional technicians, authorised for the purpose. To ensure the efficient and correct operation of the plant, observe the manufacturer's instruction regarding scheduled maintenance by authorised technicians; in particular, all safety equipment must be regularly checked. All installation, maintenance and repair work must be registered and the registers made available to the user.

Failure to comply with the above may generate hazards

Contents of the manual

- 1/ Conformity
- 2/ Characteristics and description of the machine
- 3/ Identification plate data
- 4/ Technical service
- 5/ Commissioning
- 6/ Proper and improper use
- 7/ Correct use of the elevator
- 8/ Safety systems
- 9/ Emergency operation by the user
- 10/ Vibration and noise
- 11/ Wiring diagrams
- 12/ Maintenance and inspections
- 13/ Disposal of substances and waste materials

1) CONFORMITY

With the aim of ensuring the highest levels of safety for the user, the design of the machinery and the installation of the SLIM inclined platform have been executed in accordance with the following safety regulations and legislation.

Machine:	European Machinery Directive 98/37 European Electromagnetic Compatibility Directive 86/336 Italian Ministerial Decree 89/236 Wheelchair Platform Lift Standard UNI 9801 Wheelchair Platform Lift Standard TUV 103 - B Machinery Safety Standard EN 292 - 1 - 2 Machinery Safety Standard EN 418 Standard Governing Electrical Equipment of Machinery EN 60204
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2) CHARACTERISTICS

Components of the plant:

Fixed parts:	rails rail mounts drive unit
Moving parts:	machine body
Control parts:	electrical cabinet control panel

Specifications:

Direction of travel	up/down – electrically driven Speed 0.1m/sec. Capacity 1 person on wheelchair Load 225 daN max (see data plate) Standard duty 30 cycles/hour
Ambient conditions	-10°C to +60°C - max. humidity 70% On-board controls travel direction buttons locking emergency stop button
Floor controls	call button key-switch

The SLIM wheelchair lift is designed for transporting disabled persons on wheelchairs.

The machine travels on two metal rails designed for this application, supported by feet mounted to the stairs and the wall, if present.

The drive unit with electric motor is located at the top end of the rails.

The machine is driven by a metal rope running inside the rail, which is anchored to the upper carriage.

An automatic levelling device keeps the platform horizontal no matter the angle of the rail.

The machine is composed of a fold-away platform with non-slip surface equipped with automatic ramps for connection to the floors, the machine body equipped with control buttons and fold-away safety bars.

The low speed of travel, hold-down controls, collision safety equipment, mechanical safety brake and overtravel terminal enable the unit to be installed on any kind of route, whether straight, curved, etc. in total safety. The floors are equipped with lift call buttons which are key-switch operated (optional).

3) IDENTIFICATION PLATE DATA

- manufacturer	Extrema srl via dell' Industria 2 – 46031 Bagnolo S.Vito (MN) tel. 039 / 0376 / 252443fax 039 / 0376 / 251091
- model	see data plate
- year of manufacture	see data plate
- serial number	see data plate
- load	225 daN max(see data plate)
- capacity	1 person on wheelchair
- speed	0.1m/sec.
-operating voltage	230 V AC 50 Hz
- control voltage	24 V DC
- consumption	2 kW max

4) TECHNICAL SERVICE

Stamp of retailer or authorised service agent



5) COMMISSIONING

After installation, final testing and hand-over to the customer, done by an authorised technician, the vertical platform is put into service by moving the mains switch on the electrical cabinet to ON.
In case of lengthy inactivity, we recommend switching off the plant.
Move the switch to OFF to switch it off.

6) PROPER AND IMPROPER USE

6.1) Proper use

INSTALLATION

Internal or external on existing stairs or route.

The customer is provided with the installation drawings including the mounting points for verification of the strength of the masonry and for building the shafts (if applicable).



WARNING:

Failure to observe the specifications of the installation design drawings can be the cause of hazard.

USE

Transport of only one person on a wheelchair with large rear wheels and small caster wheels at the front, in the direction of travel.

Alternatively, the unit can be equipped with a fold-away seat mounted to the machine body for only one person (optional).

The unit must be operated by persons who are physically and psychologically equipped to do so, and who are familiar with the operation, and the user and maintenance instructions for the device.



WARNING:

If the plant is to be used by a person who is not self-sufficient, it must be operated by a attendant.

6.2) Improper use

INSTALLATION

Do not install the plant in areas subject to the risk of flooding or explosion.



WARNING:

In case of failure to notify the possibility of such events, the manufacturer declines all liability for damages and personal injury.

USE

Use of the plant by unauthorised persons.

Transporting two or more persons on the wheelchair.

Transporting one or more persons upstanding on the platform.

Transporting loads on the platform.

Overloading the machine.

Obstacles inserted between the rail components or placed on the same rail.



WARNING:

Do not put body's parties or objects in the spaces between fixed components ad the ones in motion.

Do not put hands on the rail during the motion of the platform.



WARNING:

**Do not insert the fingers in the upper rail opening:
Danger for squashing!!!**



WARNING:

Do not pour liquids or insert foreign bodies into the holes or slots and do not make unauthorised modifications.

7) CORRECT USE OF THE WHEELCHAIR LIFT



WARNING:

**Use the plant in accordance with the proper use specifications of paragraph 6.
Read this manual thoroughly before operating the system.
Keep this manual in the vicinity of the machine.**

FLOOR CONTROLS

Button control panel located next to the floor halt:

- hold-down travel button
when pressed, automatically moves the machine to the floor in question from any other halt
- key-switch for enabling the controls
turn the key clockwise to enable the call button

BASIC version (manual safety bar operation)


- To close the machine: with the machine halted at the floor and no-one on board, raise the platform to release the lock and rotate the bars downwards; rotate the bars until they are vertically at the bottom with the platform at the top.
In this position the floor controls are enabled
- Enabling the floor controls: turn the key clockwise and hold the call button pressed until the machine arrives, at which point it will halt automatically.
- To open the machine: with the machine halted at the floor, lower the platform; rotate the bars upwards into the open position; the ramp will automatically open towards the floor to allow the passenger to embark.
WARNING: when operated as above, the bar and ramp on the disembarkation side will lock in the safety position to prevent the passenger falling down the stairs. In this position the floor controls are disabled



WARNING:

Check that in the range of operation of the platform and bars there are no obstacles or impediments which may cause damage or personal injury.

AUTOMATIC version (motorised bars and platform)


- To close the machine: with the machine halted at the floor and no-one on board, enable the floor controls by turning the key clockwise; press the button with
- 

the symbol; the platform and bars will move sequentially to the standby position with the bars below and the platform at the top.
In this position the floor controls are enabled

- Moving the machine: hold down the travel button until the machine arrives at the floor, at which point it will halt automatically.

To open the machine:

with the machine halted at the floor, enable the floor controls by turning

the key clockwise; press the button with the  symbol; the platform and bars will move sequentially to the open position; the ramp will automatically open towards the floor to allow access to the platform.

WARNING: when operated as above, the bar and ramp on the disembarkation side will lock in the safety position to prevent the passenger falling down the stairs. In this position the floor controls are disabled

Machine with ramp front access to the platform (optional):

on the AUTOMATIC version only, the motorised front access ramp moves in the same way as the disembarkation bar
bar vertically up = front access open
bar horizontal = front access ramp functions as foot guard
bar vertically down = front access folded away



WARNING:

Check that in the range of operation of the platform and bars there are no obstacles or impediments which may cause damage or personal injury.

ON-BOARD CONTROLS

Controls located on the upper section of the machine body (control board):

- hold-down travel button
when pressed, automatically moves the machine in the indicated direction from the starting floor to any other halt (floor 0 is always the lowest floor)
- red emergency STOP button
when pressed, locks down and instantly halts the machine in position, whatever the direction of travel; to reset the controls, turn clockwise until it releases

Hold down the button until the machine arrives at the floor where it halts automatically and releases the access side bar to allow disembarkation.

For intermediate halts and AUTOMATIC version (motorised bars and platform)

systems with intermediate halts are equipped with a control panel for the passenger's attendant with 4 buttons (up/down; open/close bars).

In this version the bars are opened at the floor manually by pressing the button on the attendant's control panel.

When the machine stops at an intermediate halt, a light or acoustic signal is activated. When the travel button is released, the machine stops and pressing the open button the bar facing the floor raises to enable disembarkation.



WARNING:

**The position of the wheelchair occupant must allow for access to the on-board controls and must be as far away as possible from the unprotected area.
Prevent accidental movement of the wheelchair by applying its brakes.**



WARNING:

Do not introduce parts of the body or other objects into the gaps between the fixed and moving parts.



WARNING:

Do not operate the plant unless there is a person nearby who is familiar with the manual emergency controls.

IN GENERAL

All motorised controls are delayed by 3 seconds and opening the bars vertically upwards disables the drive motor.

To prevent hazardous situations, the operator must be sure that the shaft and stairs to which the platform is installed are adequately illuminated.



WARNING:

The plant may only be used by persons who are authorised, capable of operating motorised machinery and familiar with the use of the plant.

8) SAFETY SYSTEMS

MECHANICAL SAFETIES

Structural dimensions =	designed as required by technical standards
Drive unit =	VSF reducer unit and gears for optimal load distribution
Speed limiter/ mechanical safety brake =	integrated into the mechanical safety brake mechanism, trips in case of excessive downwards travel speed
Mechanical overtravel stop =	stops the upwards travel of the platform
Bars unlockable from outside =	<u>BASIC versions</u> : press the push rods behind the machine's body <u>AUTOMATIC version</u> : engage the manual handwheel in the holes above the machine body



WARNING:

**Falling hazard!
This operation is only for trained persons, who are familiar with rescue procedures.**

ELECTRICAL SAFETIES

Component ratings =	designed as required by technical standards
Safety/control circuits =	low operating voltage
Overtravel cam =	stops the upwards travel of the machine beyond the top floor and disables the system



WARNING:

**For rescue of the passengers, refer to paragraph 9.
To re-activate the plant, we recommend contacting your authorised service centre.**

Cam = trips to disable the plant if the downward speed speed limiter exceeds a set value and mechanical safety brake



WARNING:

To re-activate the plant, you must contact your authorised service centre.

Bar lock control = enables the machine to operate when the bars are in the safety (horizontal) position

Emergency stop button = when pressed, locks down and instantly halts the machine in position whatever the direction of travel; to reset the controls, turn clockwise until it releases

Collision sensors = when pressed, stop the machine travelling; the machine can only start again if the sensors are disengaged. They are located along the sides of the machine body under the platform near to the ramps.

9) EMERGENCY OPERATION BY THE USER

OPERATION FROM THE FLOORS

If, when the call button is released, the platform continues to travel, disable the control by turning the key-switch key counterclockwise to OFF.



WARNING:

If this is not done immediately, the machine will continue to travel upwards/downwards until the safety sensors trip and disable the plant which requires the intervention of an authorised technician to return to normal service. To rescue the occupant, refer to the following paragraphs.

This operation is only necessary when the control circuit is malfunctioning: contact your authorised service centre to have the machine checked over.

ON-BOARD OPERATION

If, when the travel button is released, the platform continues to travel, disable the control by pressing the emergency STOP button.



WARNING:

If this is not done immediately, the machine will continue to travel upwards/downwards until the safety sensors trip and disable the plant. To rescue the occupant, refer to the following paragraphs. This operation is only necessary when the control circuit is malfunctioning: contact your authorised service centre to have the machine checked over.

TO RESCUE THE OCCUPANT

In case of electrical power failure, the travel of the platform can be continued by fitting the manual handwheel into the hole at the base of the drive unit so that it engages the shaft of the electric motor.



WARNING:

Do this only after having switched off the system by turning to OFF the mains switch on the electrical cabinet.

If the platform is blocked along its route, for example due to a power failure, the occupant can be rescued by releasing and opening the bar facing the upper section of the route.

For releasing the bar refer to paragraph 8- "Bars unlockable from outside".

When the bars are unlocked, the platform is disabled; to return to normal operation, move the bar back to the horizontal position.



WARNING: **Falling hazard! Only unlock the bar facing the upper part of the platform's route.**

FREEING UP THE ROUTE (STAIRWAY)

After the occupant has been rescued, the route can be freed up as follows:

BASIC version (manual safety bar operation)

Raise the platform to release the lock and rotate the bars downwards; rotate the bars until they are down with the platform up.

In this position the machine is in service and the floor controls are enabled

AUTOMATIC version (motorised bars and platform)

Fit the manual handwheel into the holes above the machine body and turn it to bring the bars down, then raise the platform.

In this position the machine is NOT in service and the floor controls are disabled

To return the machine to normal operation, move the bars and platform back to the horizontal position.

10) VIBRATION AND NOISE

The body and limbs of the user are subject to low frequency vibrations with very limited accelerations and for short cycles:

These factors are negligible as regards safety.

Noise level measured in the air: **less than 70 dB(A).**

11) WIRING DIAGRAMS

The wiring diagrams are provided as attachments to the documentation.

12) MAINTENANCE AND INSPECTIONS



WARNING: **To ensure an adequate level of safety, observe the specified maintenance intervals and use original spare parts.**

Maintenance is divided into two types:

USER MAINTENANCE

-- Normal cleaning (use a cloth with biodegradable detergent)



WARNING: **Before cleaning the system, switch the machine off by turning the mains switch on the electrical cabinet to OFF.**

MONTHLY INSPECTIONS:

- Check the operation of the control panel enabling keys turning the key to OFF should disable the controls
- Check the operation of the emergency STOP button pressing the button should disable the on-board and floor controls



WARNING: If the machine does not pass these checks disable the plant by turning the mains switch to OFF on the electrical cabinet and immediately contact your authorised service centre.

MAINTENANCE TO BE DONE BY AUTHORISED TECHNICIANS

SIX-MONTHLY INSPECTIONS:

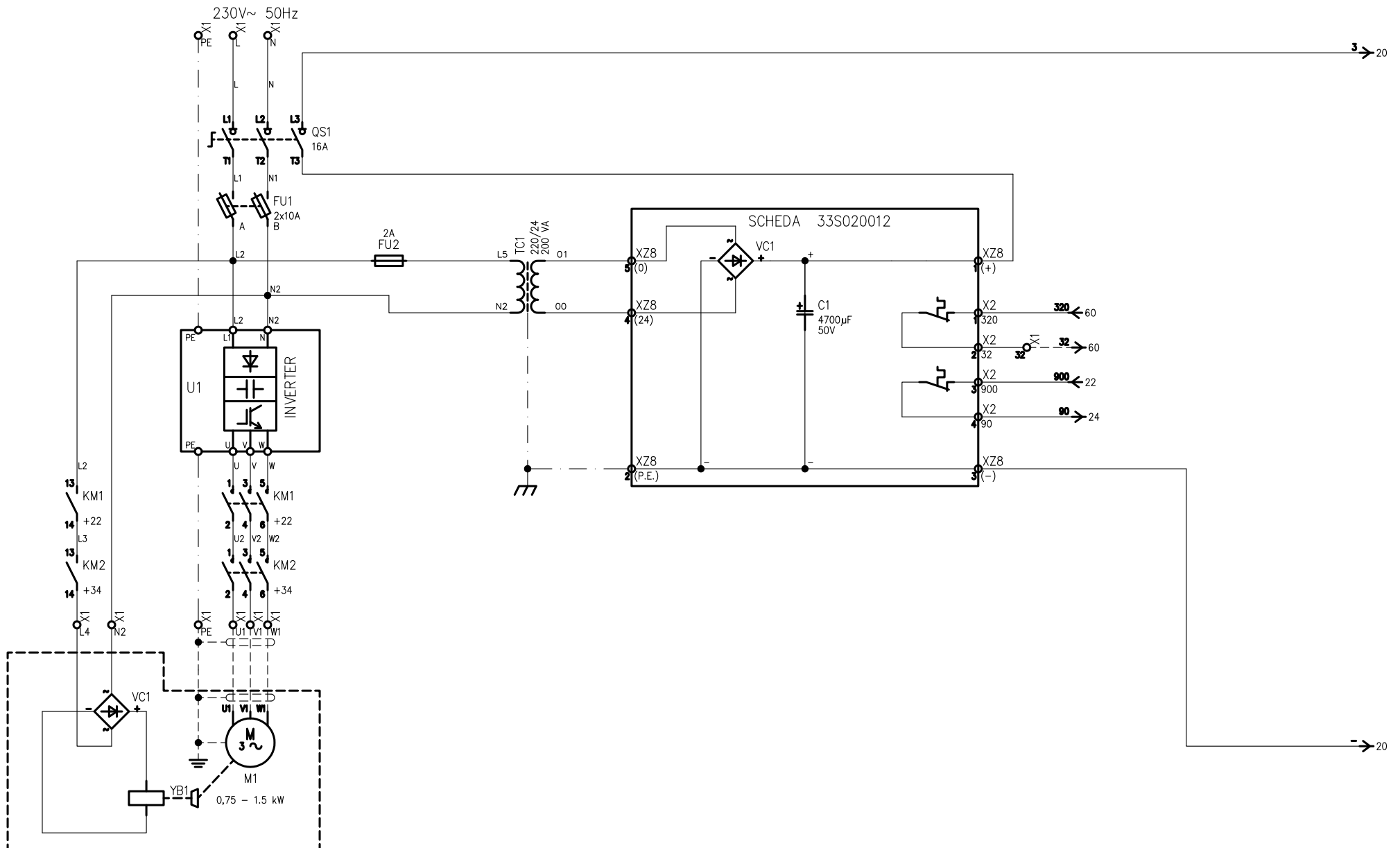
- Check the operation of the mechanical safeties
(wear of the transport rope, operation of the speed limiter/safety brake, mechanical overtravel limit, unlocking the bars from outside, stability of rails and fastenings, grease rails and all rotation axis point).
- Check the operation of the electrical safeties
(overtravel cams, speed limiter and safety brake, sliding contacts, detection of the platform at the floor halt, locking of the bars, emergency STOP, on-board and floor controls)



WARNING: Switch the machine off at the mains switch before working on the electrical cabinet.

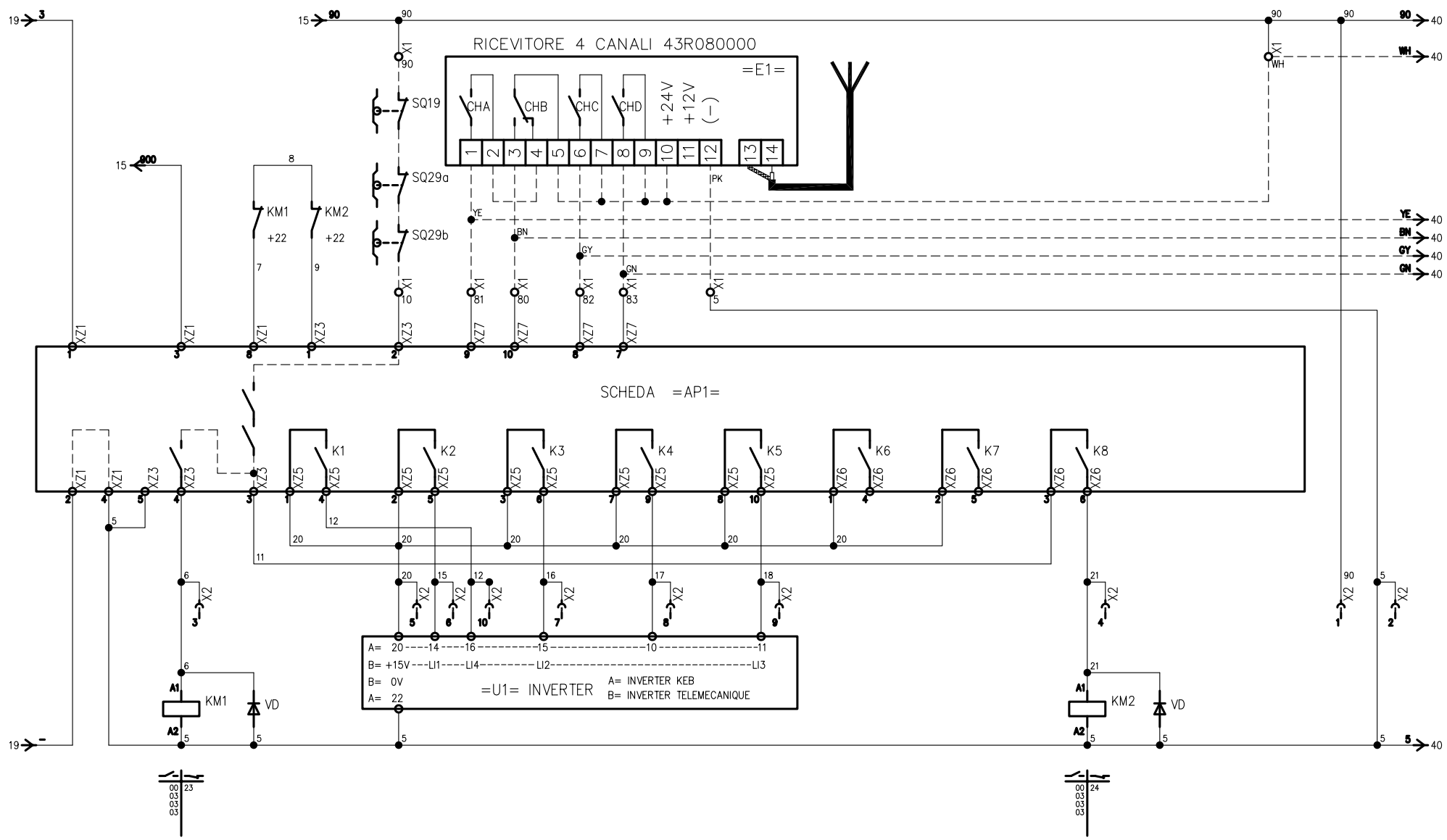
13) DISPOSAL OF SUBSTANCES AND WASTE MATERIALS

- The plant does not contain toxic substances in need of special disposal.
- All spare parts, such as cables, cams, etc. in rubber and plastic, should be delivered to authorised collection and disposal centres as provided by established legislation
- Exhausted oils and greases should be delivered to authorised collection and disposal centres as provided by established legislation.

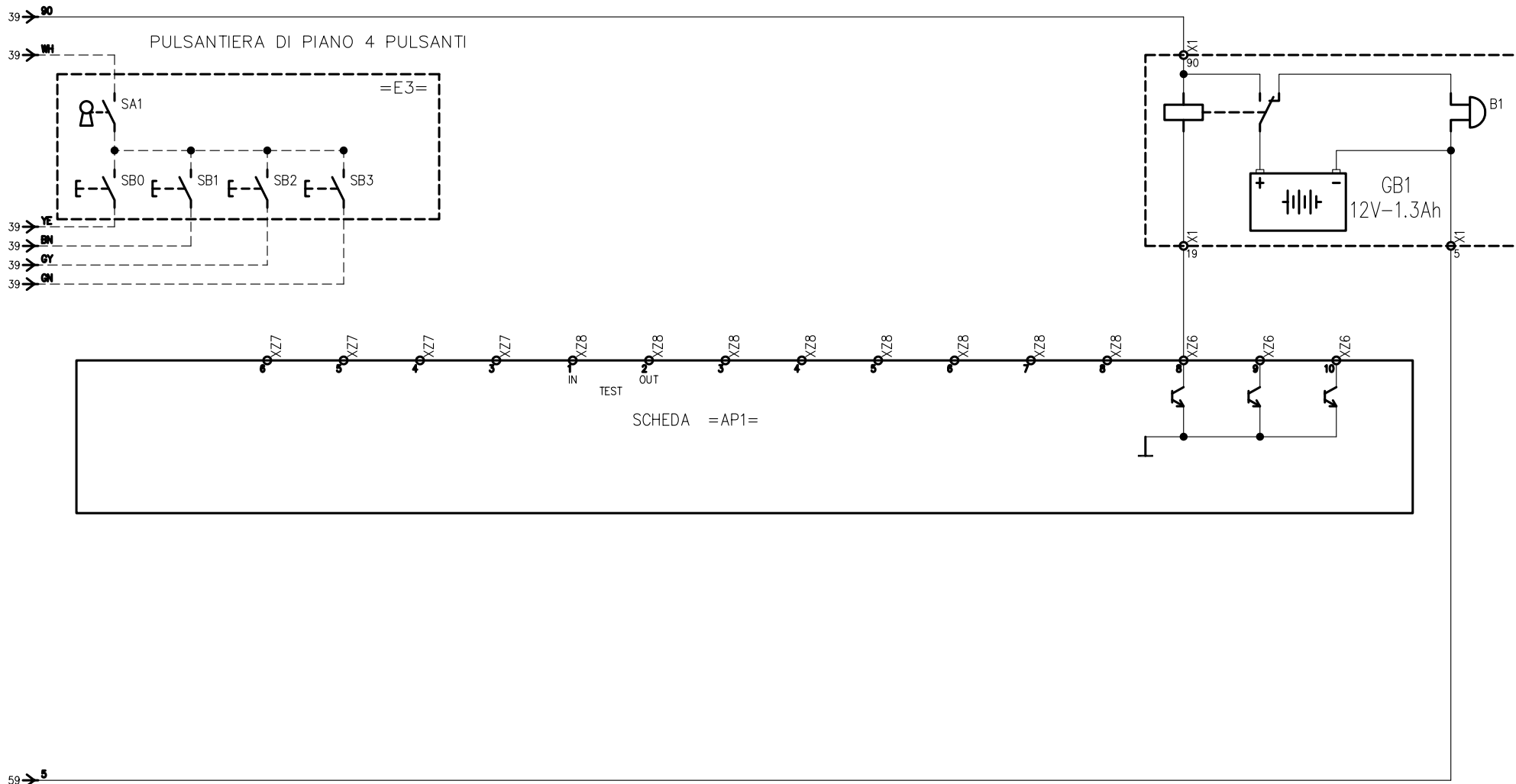


c	Aggiornato descrizione SB0 - SB1 - SB2 - SB3	C.M.	04/08/06 Stefano L.
b	Introduzione colorazione ricevitore	C.M.	22/02/06 P. Mecenero
a	Introduzione coloraz. guaina pulsantiera di piano cablata	C.M.	07/11/05 P. Mecenero

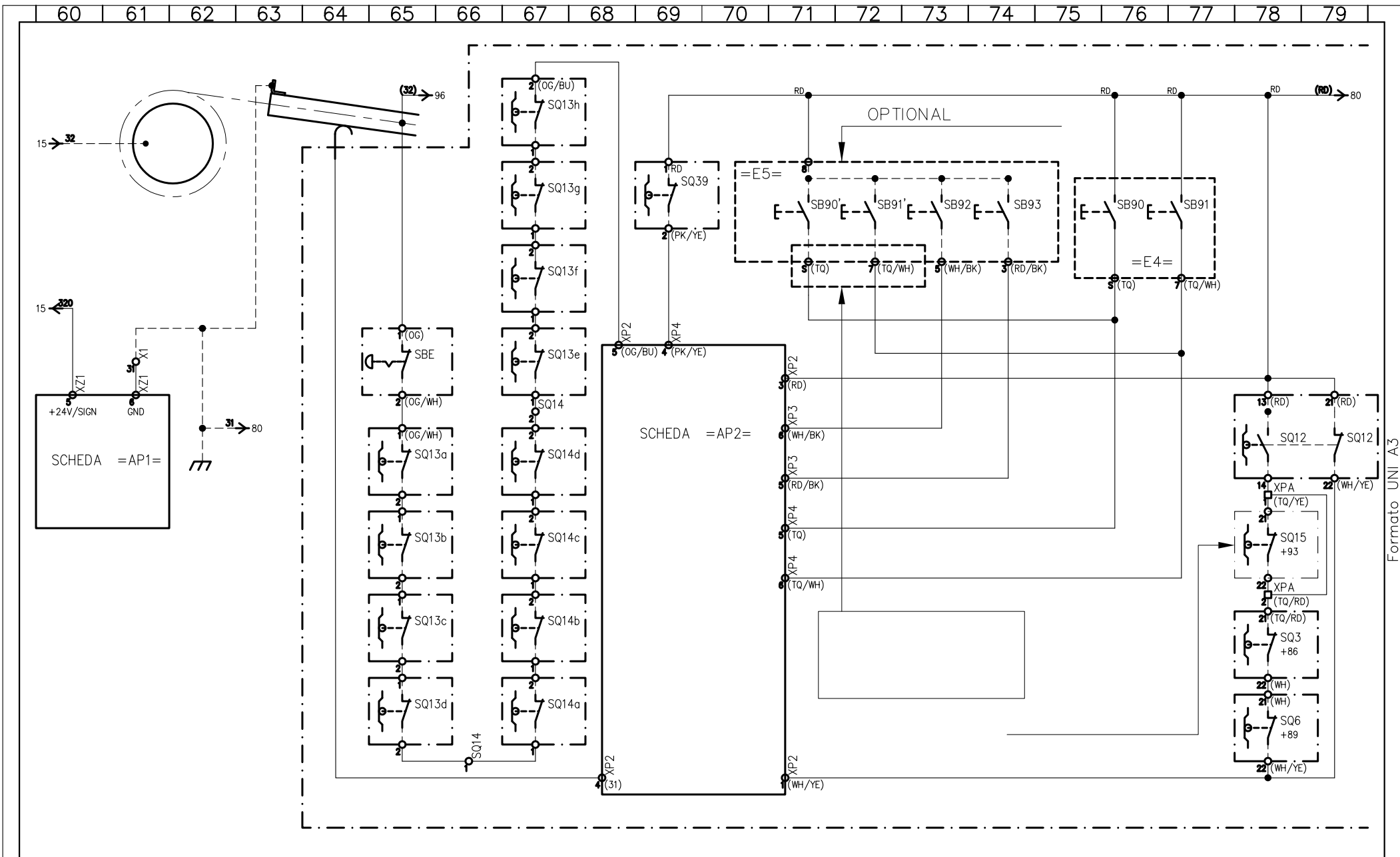
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Barre motorizzate		DATA	
		DISEGNATO	Mecenero P.
		SCALA	---
		FOGLIO	1 di 7
			CODICE
			63G300006/c



SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	extrisma
Barre motorizzate		Imp.Elettrico	
		DATA	02/09/05
		DISEGNATO	Mecenero P.
		SCALA	---
		FOGLIO	2 di 7
		CODICE	63G300006/c



SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	Imp.Elettrico
Barre motorizzate		DATA	
		DISEGNATO	Mecenero P.
		SCALA	---
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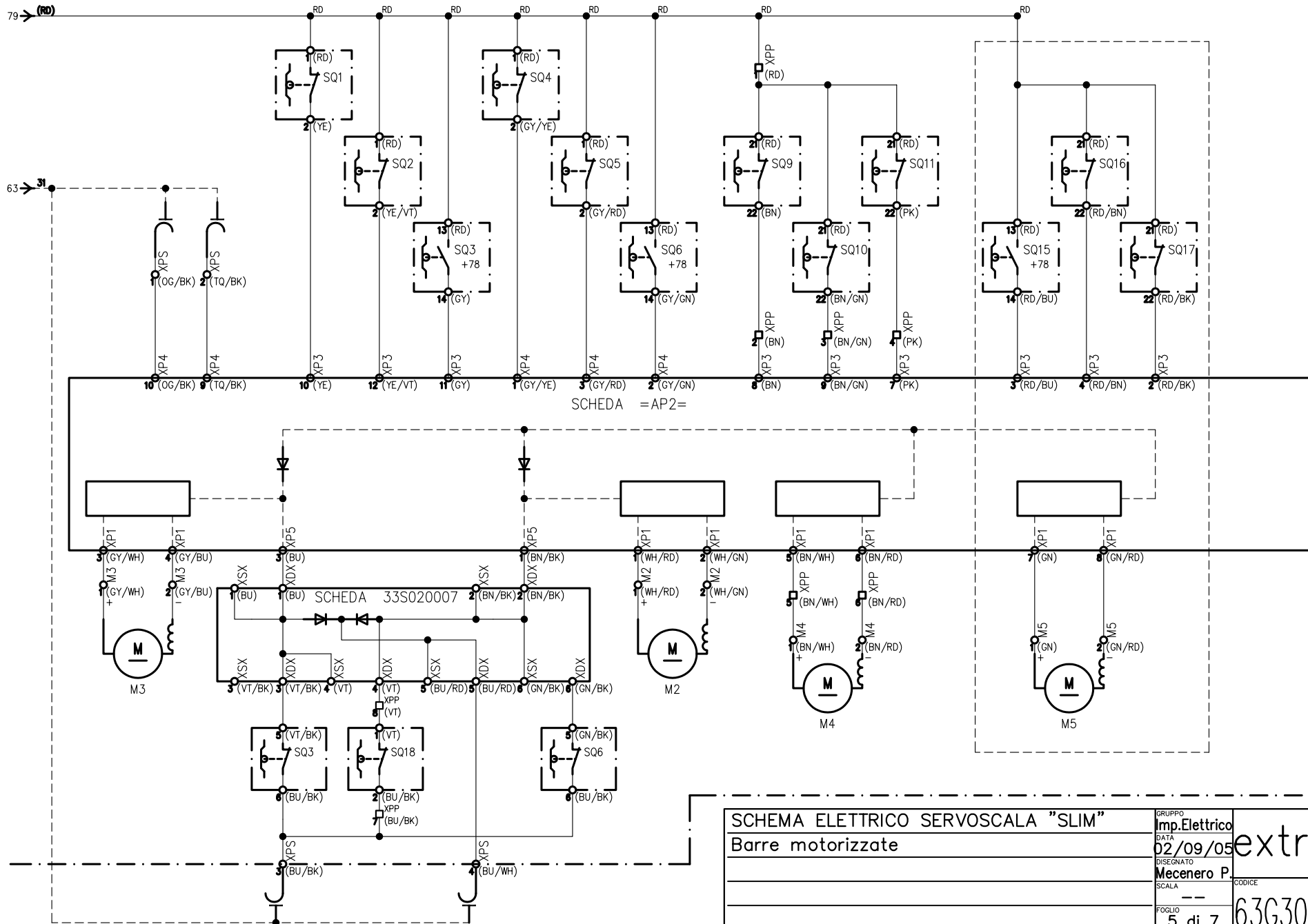


SCHEMA ELETTRICO SERVOSCALA "SLIM"
 Barre motorizzate

GRUPPO
 Imp. Elettrico
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 02/09/05
 DISEGNATO
 Mecenero P.
 SCALA

 FOGGIO
 4 di 7

extrisma
 CODICE
 63G300006/c



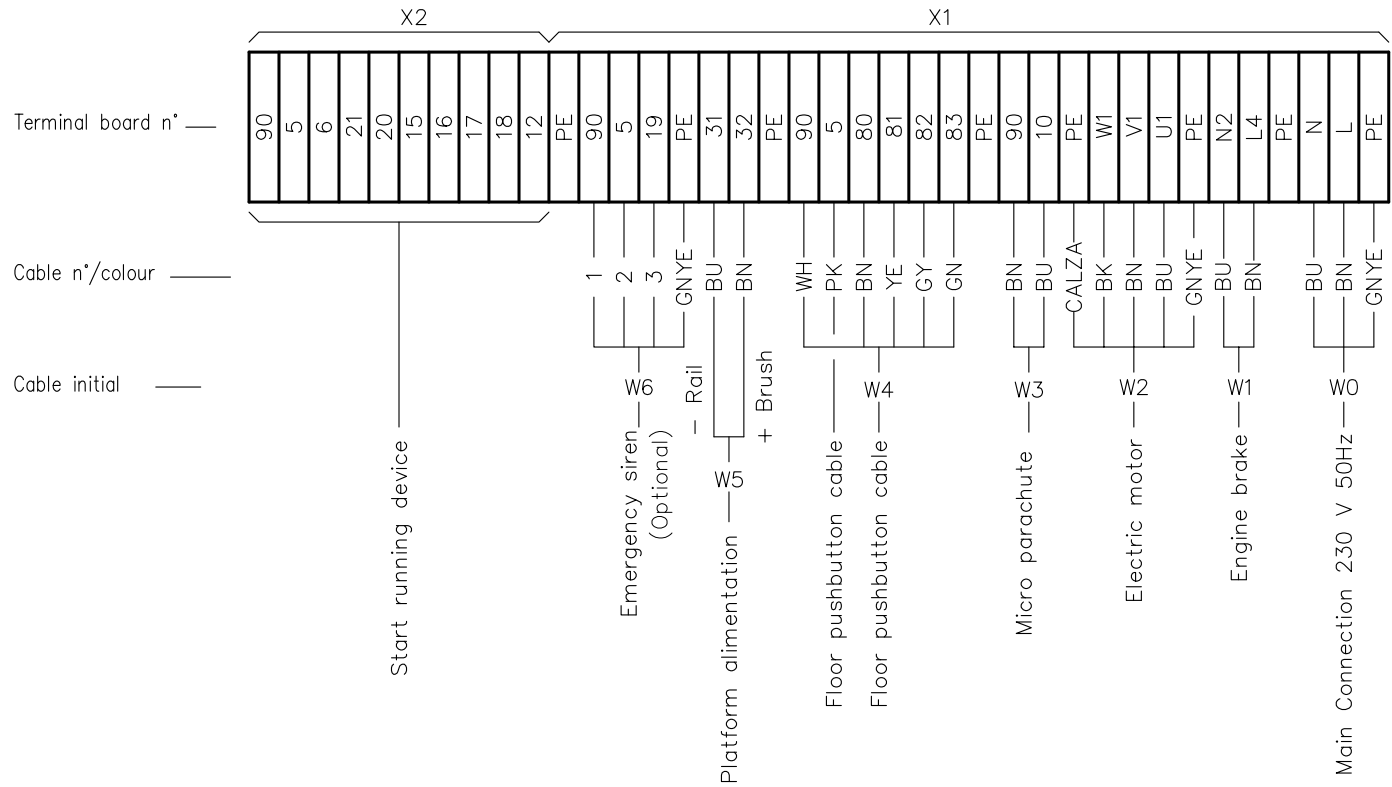
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Barre motorizzate		Imp. Elettrica
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		Mecenero P.
		SCALA

		FOGLIO
		5 di 7

extrisma
CODICE
63G300006/c

Instructions for thr insulation tests

- A) Stop the platform between two floors
- B) Switch the main switch OFF
- C) Disconnect the feeding from inverter and take out the fuse FU4 body
- D) Disconnect the ground cable (earth) of the feeding cable
Operation circuit: check the insulation to earth of "90" terminal
- E) Manually switch the electromagnetic power switches KM1 and KM2 on
Traction motor circuit: check the insulation to earth of "U1", "V1", and "W1" terminal
Finally check the reciprocal insulation between terminals "90" and "U1", "90" and "V1", "90" and "W1"



IEC 757 CABLE CODE

COLOR	CODE
BLACK	BK
BROWN	BN
RED	RD
ORANGE	OG
YELLOW	YE
GREEN	GN
YELLOW/GREEN	GNYE
BLEU	BU
VIOLET	VT
GRAY	GY
WHITE	WH
PHINK	PK
TURQUOISE	TQ

SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	
Barre motorizzate		Imp.Elettrico	
		DATA	
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		DISEGNATO	
		Mecenero P.	CODICE
		SCALA	

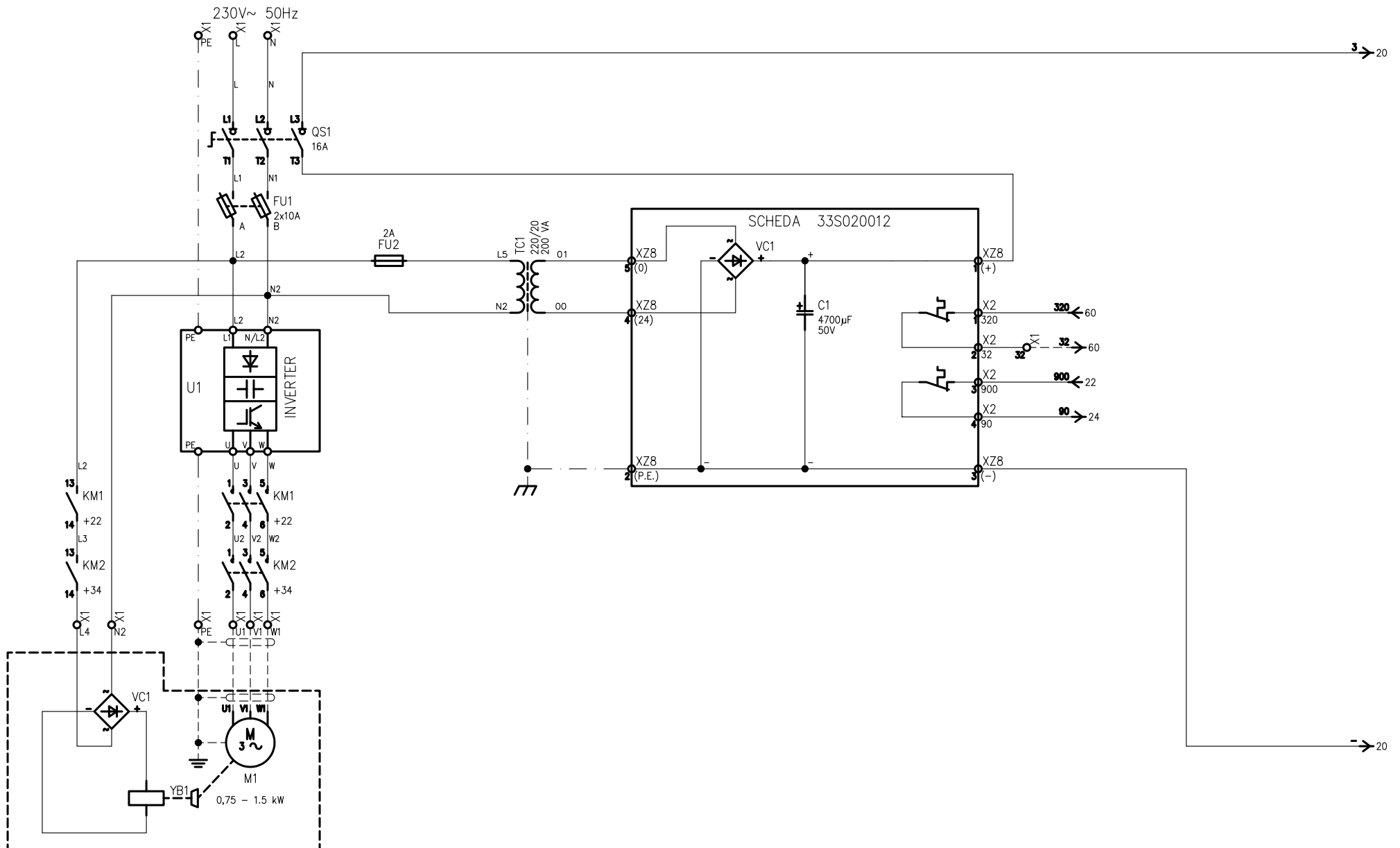
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SIMB.	DESCRIPTION	RAMO
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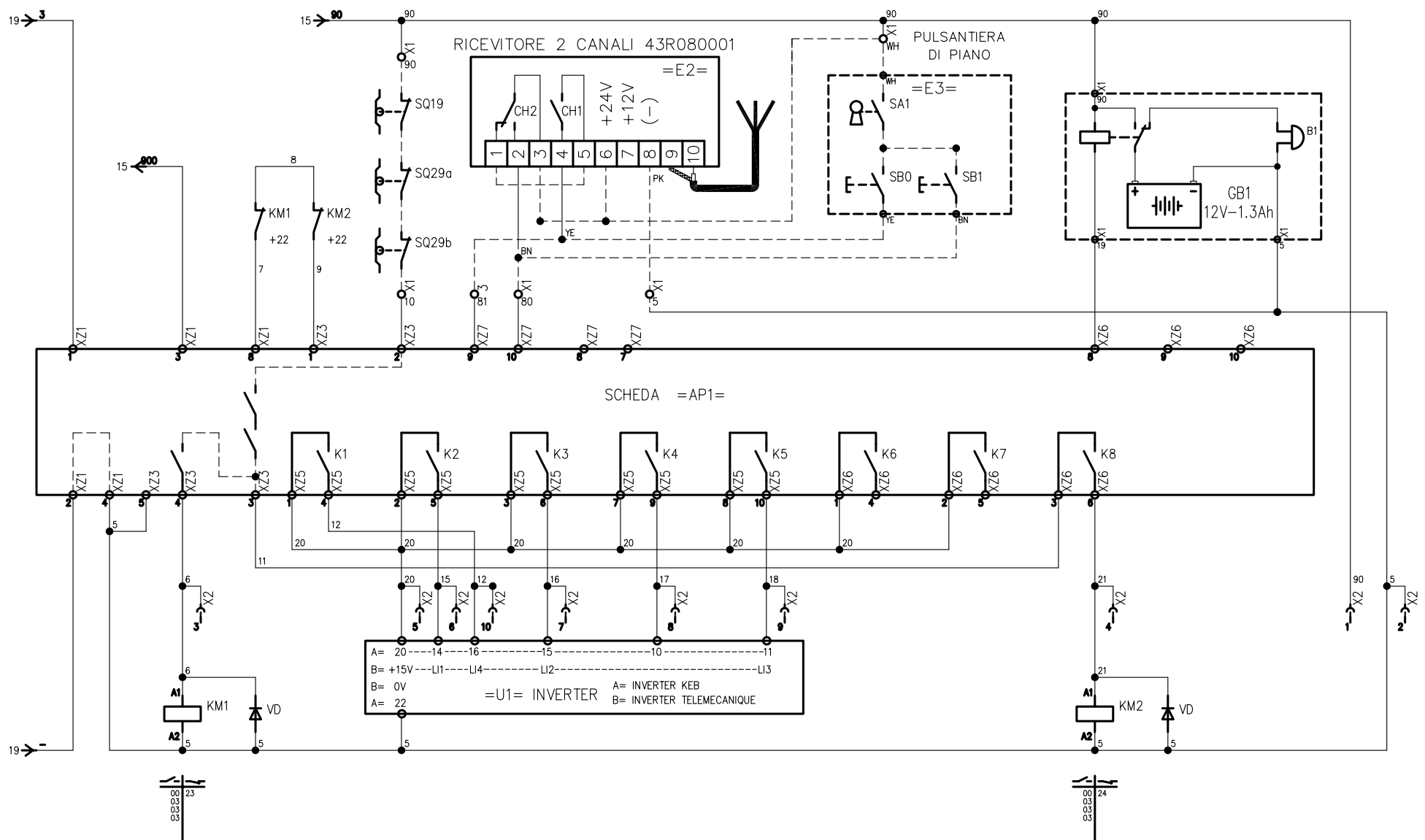


SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO Imp. Elettrico	extrisma
Barre motorizzate		DATA 02/09/05	
		DISEGNATO Mecenero P.	CODICE 63G300006/c
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		FOGLIO 7 di 7	



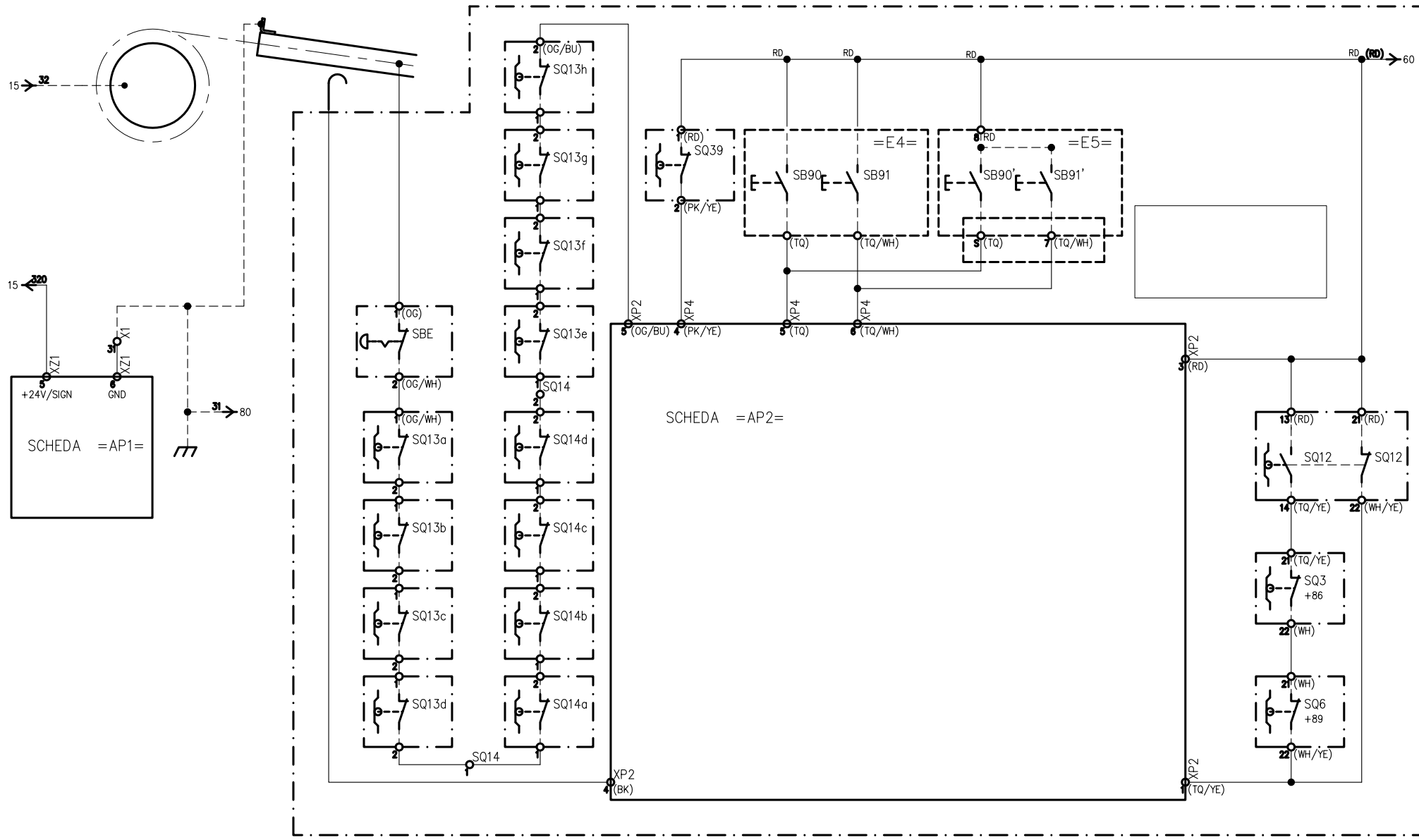
c	Introduzione SQ29a-b adeguato SB0-SB1	C.M.	05/09/06 Stefano L.
b	Introduzione colorazione ricevitore	C.M.	22/02/06 P. Mecenero
a	Introduzione coloraz. guaina pulsantiera di piano cablata	C.M.	07/11/05 P. Mecenero

SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	Imp.Elettrico
Barre manuali		DATA	
		DISEGNATO	Mecenero P.
		SCALA	---
		FOGLIO	1 di 6
			CODICE
			63G300007/c

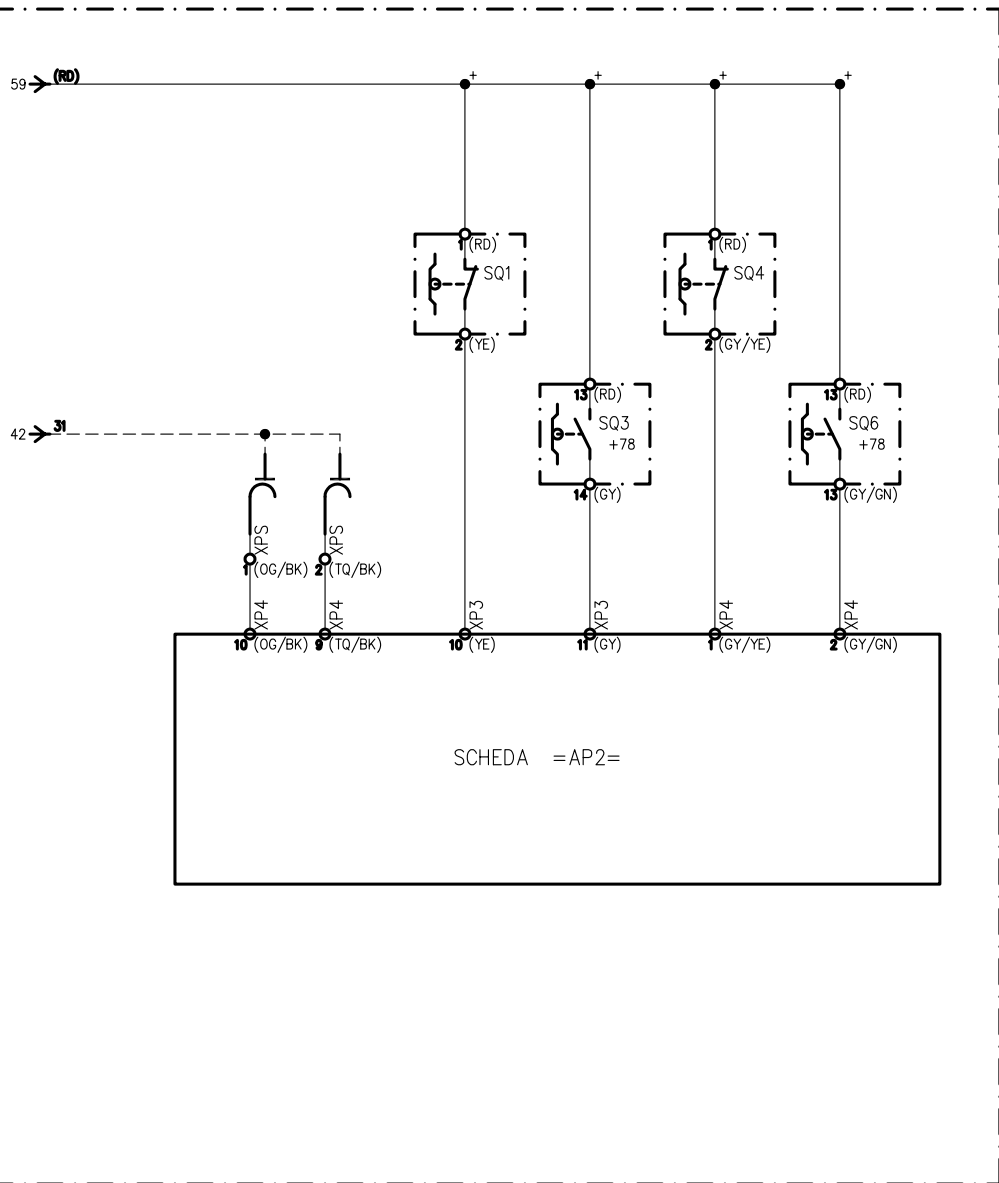


SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	
Barre manuali		Imp.Elettrico	
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		DISEGNATO	
		Mecenero P.	CODICE
		SCALA	

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SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	Imp. Elettrico	extrisma
Barre manuali		DATA		
		DISEGNATO	Mecenero P.	
		SCALA		CODICE
		FOGLIO	3 di 6	63G300007/c

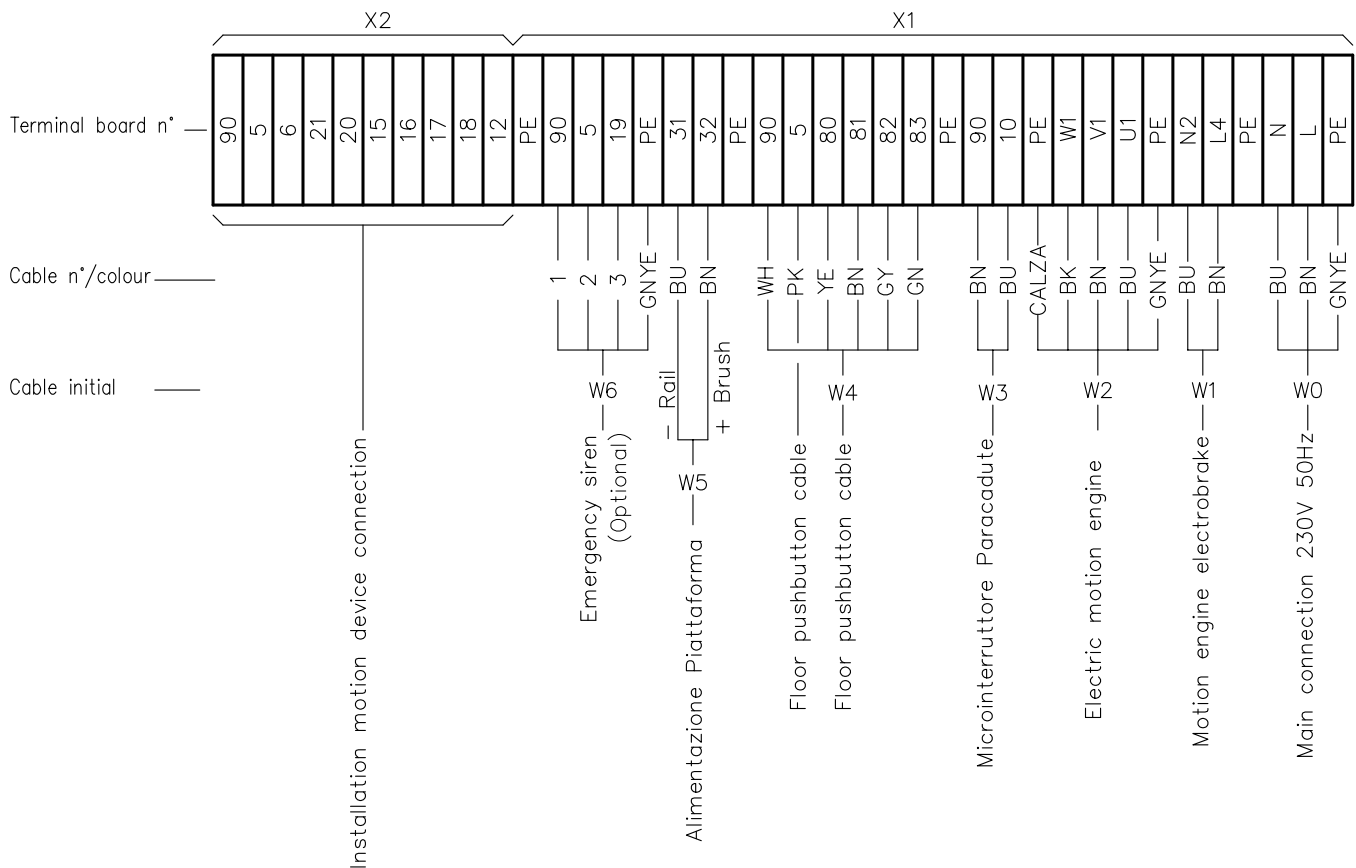


SCHEDA =AP2=

SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO	Imp.Elettrico
Barre manuali		DATA	08/09/05
		DISEGNATO	Mecenero P.
		SCALA	---
		FOGLIO	4 di 6
		CODICE	63G300007/c

Instructions for thr insulation tests

- A) Stop the platform between two floors
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- C) Disconnect the feeding from inverter and take out the fuse FU4 body
- D) Disconnect the ground cable (earth) of the feeding cable
Operation circuit: check the insulation to earth of "90" terminal
- E) Manually switch the electromagnetic power switches KM1 and KM2 on
Traction motor circuit: check the insulation to earth of "U1", "V1", and "W1" terminal
Finally check the reciprocal insulation between terminals "90" and "U1", "90" and "V1", "90" and "W1"



CODICE COLORAZIONE CAVI SECONDO IEC757

Colore	Abbreviazione
	BK
	BN
	RD
	OG
	YE
	GN
	GNYE
	BU
	VT
	GY
	WH
	PK
	TQ

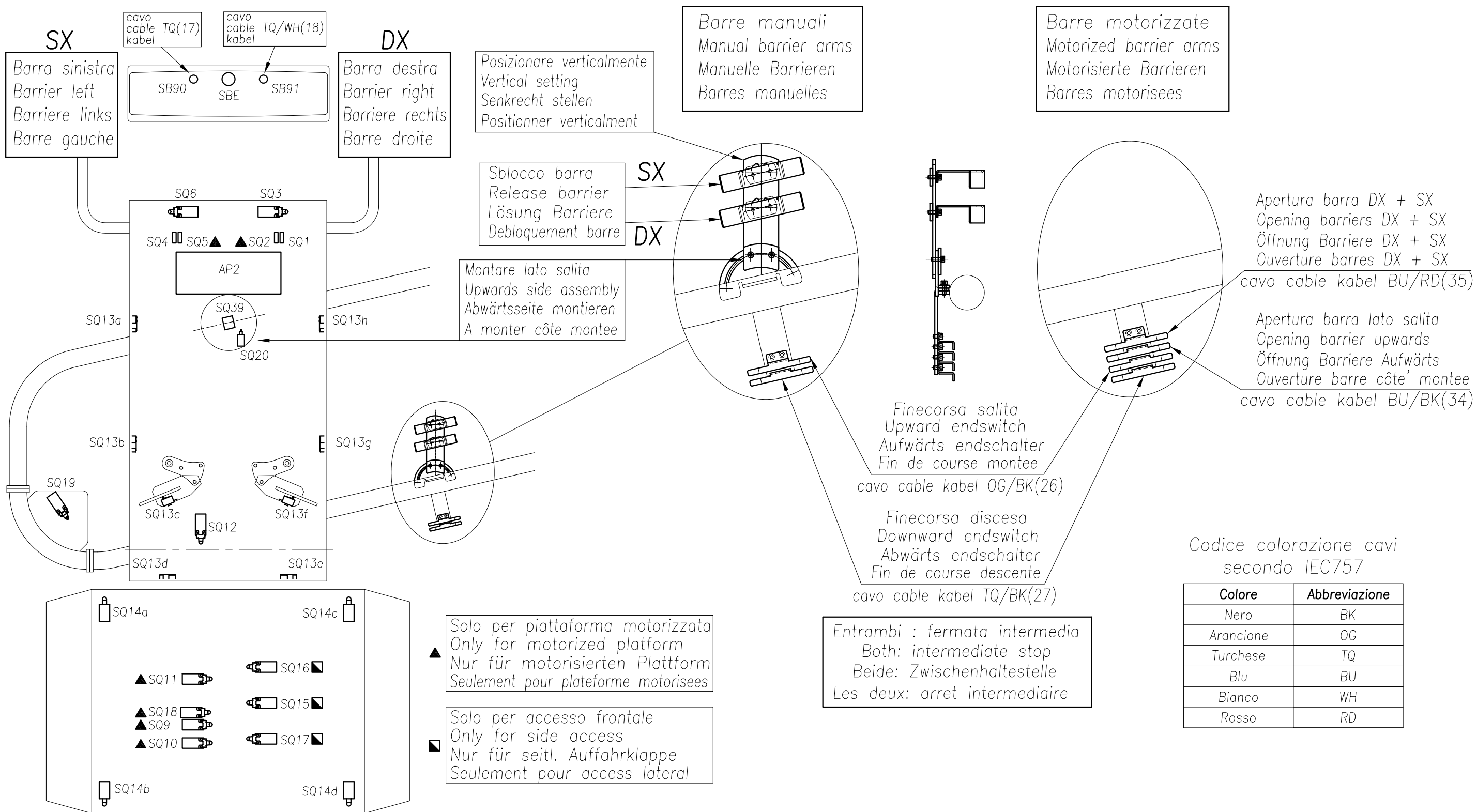
SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO Imp. Elettrico
Barre manuali		DATA 08/09/05
		DISEGNATO Mecenero P.
		SCALA ---
		FOLGIO 5 di 6
		CODICE 63G300007/c

SIMB.	DESCRIPTION	RAMO
AP1	SUPERVISOR AND POWERING PRINT	20-->41
AP2	CONTROL ONBOARD PRINT	48-->68
B1	EMERGENCY SIREN	34-->38
C1	CAPACITOR 4700µF 50V	11
E2	2 CHANNELS RECEIVER	26-->30
E3	FLOOR CONTROL	31-->33
E4	ON-BOARD CONTROL	50-->52
E5		53-->55
FU1(A,B)	MAIN LINE FUSES 2X10A	03
FU2	TRANSFORMER FUSE 1A	05
FU3	SUB-CIRCUIT FUSE 10A	08
FU4	AUXILIARY FUSE 24 VDC 10A	11
KM1	MAIN CONTACTOR 1	00-03-22-23
KM2	MAIN CONTACTOR 2	00-03-24-35
M1	ELECTRIC MOTION ENGINE	03
QS1	MAIN SWITCH	03
SBE	STOP-PUSHBUTTON ON BOARD	45
SA1	FLOOR CONTROL KEY SWITCH	31
SB0	FLOOR UPWARD PUSHBUTTON	32
SB1	FLOOR DOWNWARD PUSHBUTTON	33
SB90	ON-BOARD UPWARD PUSHBUTTON	51
SB91	ON-BOARD DOWNWARD PUSHBUTTON	52
SB90'	FLEXIBLE ON-BOARD UPWARD PUSHBUTTON	53
SB91'	FLEXIBLE ON-BOARD DOWNWARD PUSHBUTTON	55
SQ1	CLOSED RIGHT ARM MICROSWITCH	64
SQ3	HORIZONTAL RIGHT ARM MICROSWITCH	58-66
SQ4	CLOSED LEFT ARM MICROSWITCH	67
SQ6	HORIZONTAL LEFT ARM MICROSWITCH	58-68
SQ12	FOLDED PLATFORM CHECK MICROSWITCH	68-69
SQ13a..h	LEFT/RIGHT ANTISHOCKING MICROSWITCH	45-47
SQ14a..d	PLATFORM BOTTOM ANTISHOCKING MICROSWITCH	47

SIMB.	DESCRIPTION	RAMO
SQ19	PARACHUTE MICROSWITCH	25
SQ29a-b	SAFETY LIMIT MICROSWITCH	25
SQ39	SLOW DOWNING MICROSWITCH	49
TC1	AUXILIARY TRANSFORMER	07
VC1	BRAKE ENGINE DIODE BRIDGE RECTIFIER	01
VC2	DIODE RECTIFIER FOR AUXILIARY	09
VD	DIODE	23-36
X1	ELECTRIC BOX MAIN TERMINAL BOARD	--
X2	INSTALLATION DEVICE CONNECTION	--
XPS	CRAWLING CONTACTS FLOOR STOP	62-63
YB1	MOTION ENGINE ELECTROBRAKE	02
U1	INVERTER FOR TRANSLATE MOTORS	03-25-->31



SCHEMA ELETTRICO SERVOSCALA "SLIM"		GRUPPO Imp. Elettrico	extrisma
Barre manuali		DATA 08/09/05	
		DISEGNATO Mecenero P.	CODICE 63G300007/c
		SCALA ---	
		FOGLIO 6 di 6	



SX
Barra sinistra
Barrier left
Barriere links
Barre gauche

cavo cable kabel TQ(17)
cavo cable kabel TQ/WH(18)

DX
Barra destra
Barrier right
Barriere rechts
Barre droite

Barre manuali
Manual barrier arms
Manuelle Barrieren
Barres manuelles

Barre motorizzate
Motorized barrier arms
Motorisierte Barrieren
Barres motorisees

Posizionare verticalmente
Vertical setting
Senkrecht stellen
Positionner verticalment

Sblocco barra
Release barrier
Lösung Barriere
Debloquemet barre

Montare lato salita
Upwards side assembly
Abwärtsseite montieren
A monter côté montee

Finecorsa salita
Upward endswitch
Aufwärts endschalter
Fin de course montee
cavo cable kabel OG/BK(26)

Finecorsa discesa
Downward endswitch
Abwärts endschalter
Fin de course descente
cavo cable kabel TQ/BK(27)

Entrambi : fermata intermedia
Both: intermediate stop
Beide: Zwischenhaltestelle
Les deux: arret intermediaire

Apertura barra DX + SX
Opening barriers DX + SX
Öffnung Barriere DX + SX
Ouverture barres DX + SX
cavo cable kabel BU/RD(35)

Apertura barra lato salita
Opening barrier upwards
Öffnung Barriere Aufwärts
Ouverture barre côté montee
cavo cable kabel BU/BK(34)

Codice colorazione cavi secondo IEC757

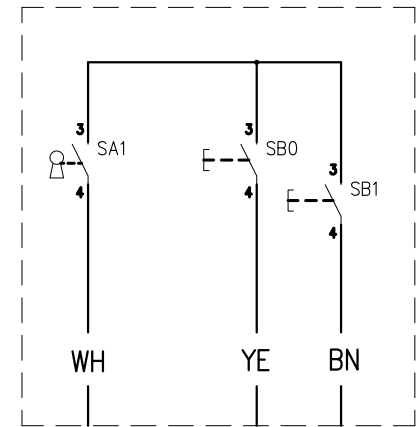
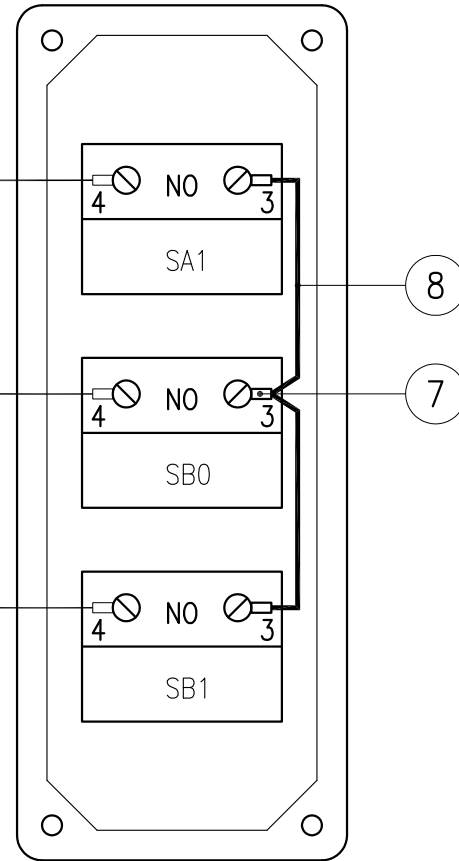
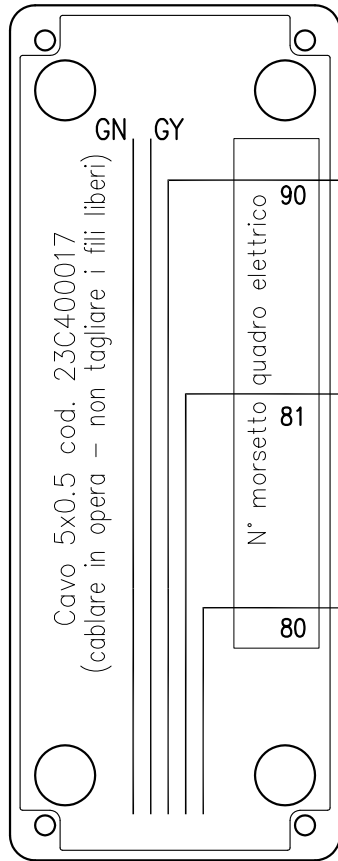
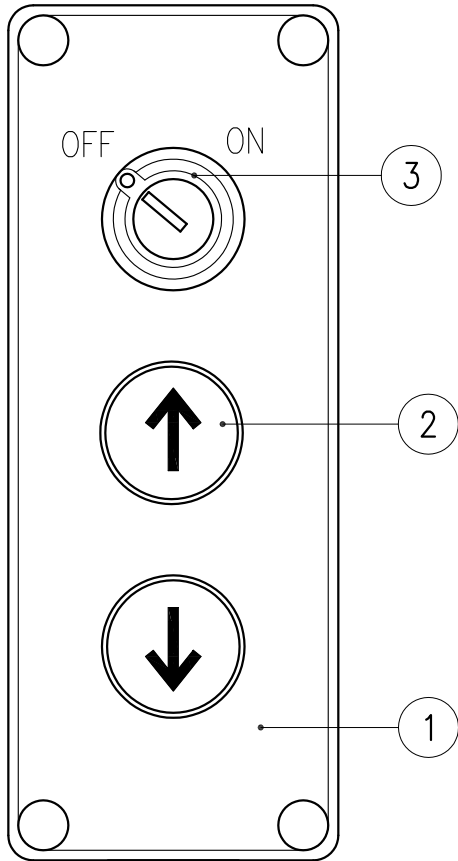
Colore	Abbreviazione
Nero	BK
Arancione	OG
Turchese	TQ
Blu	BU
Bianco	WH
Rosso	RD

▲ Solo per piattaforma motorizzata
Only for motorized platform
Nur für motorisierten Plattform
Seulement pour plateforme motorisees

■ Solo per accesso frontale
Only for side access
Nur für seitr. Auffahrklappe
Seulement pour access lateral

Per sigle componenti vedi schemi elettrici
For components codes see wiring diagrams
Für Komponentenzeichen siehe el. Schaltpläne
Pour identificatif composant voir schemas electriques
63G300006 – 63G300007

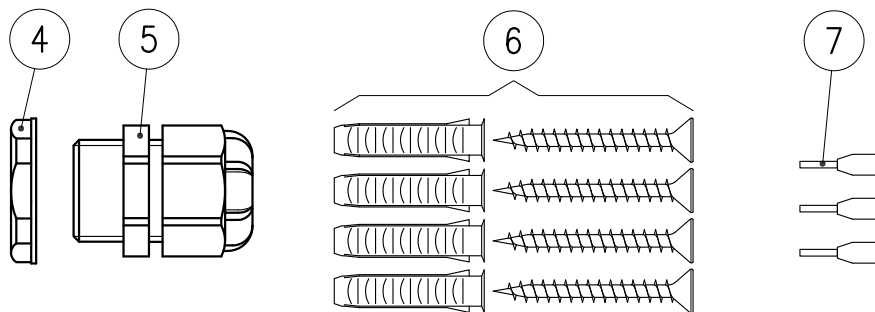
PRELIEVO CODICE	DESCRIZIONE	MATERIALE	
TRATTAMENTO	SCALA	DISEGNATO	DATA
SUPERFICI E LAVORAZIONI	SUP. mq PESO kg	S. Lui	15/03/05
VIETATE LE RIPRODUZIONI NON AUTORIZZATE REPRODUCTION NOT PERMITTED AL RIGHT RESERVED	LQ	extrisma	
DESCRIZIONE	TOLLERANZE GENERALI		
Schema mont. micro e camme	LINEARI H12 - h12 ANGOLARI ± 1° DIAMETRO FORI 0 +0,2 RACCORDI R 1,2 SMUSSI 0,5x45°	CODICE	
GRUPPO	Servoscala SLIM	63G300005/a	



Collegamenti elettrici interni

CODICE COLORAZIONE CAVI
SECONDO IEC757

Colore	Abbreviazione
Marrone	BN
Giallo	YE
Bianco	WH



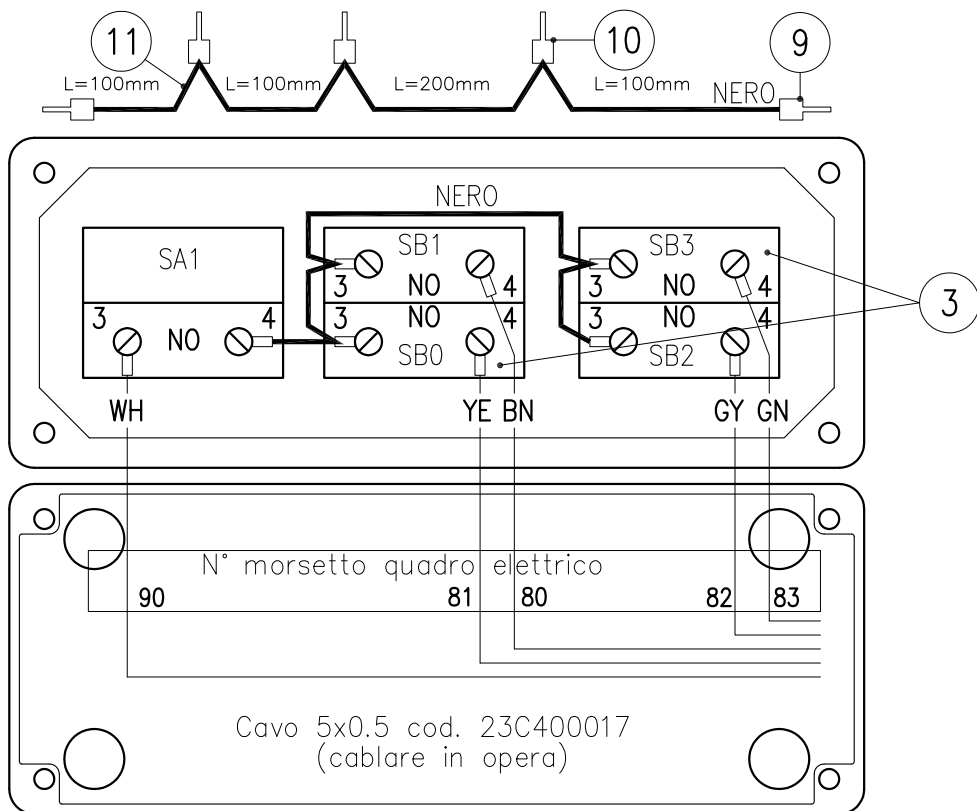
NB: Fornire pressacavo, tasselli e puntalini non assemblati.
Introdurre nell'imballo la stampa del disegno 43P370010

e	Introdotta capicorda e stampa schema cablaggio	C.M.	19/07/06 Stefano L.
d	Introdotta colorazione cavo di collegamento	C.M.	07/11/05 P. Mecenero
c	Eliminato filo 2 (necessario solo per schede KLDST)	C.M.	18/06/03 D. Ferrari
b	Disegno rifatto; inseriti componenti	C.M.	06/12/02 D. Ferrari
a	Inserito nota per fornitore	C.M.	21/11/01 S. Lui

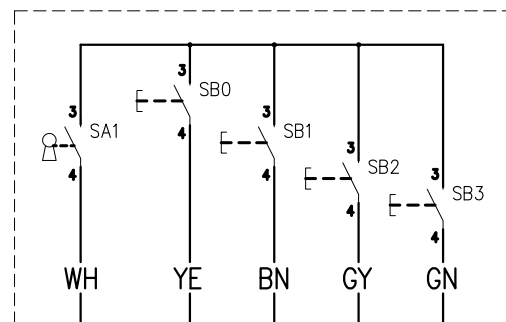
8	m0,2	Corde unipolare nera sez. 0,5mmq	.
7	6	Capocorda a tubetto isol. CEMBRE art.PKC508	23C070003
6	4	Tassello Fischer S6	25T030503
5	1	Pressacavo ST 13.5 REITER art. SKINTOP 53015030	23P390002
4	1	Controdado REITER art. SKINTOP 53019030	23C440000
3	1	Interruttore a chiave TELEMECANIQUE art. XB5-AG21	23I070010
2	2	Pulsante Telemecanique art. XB5-AA3341	23P360015
1	1	Scatola Gewiss art. GW 27103	23S010000
Pos.	N.Pz	Descrizione	Codice

Pulsantiera con cavo 2 pulsanti		GRUPPO Imp.Elettrico	
		DATA 09/04/01	
		DISEGNATO Cuccarolo M.	
		SCALA 1:2	
		FOLGIO 1/1	
			CODICE 43P370010/e

Per il collegamento del filo comune seguire il disegno sotto.

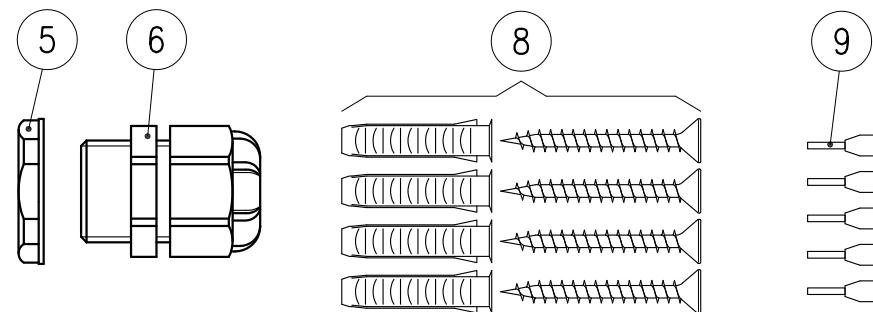


Collegamenti elettrici interni

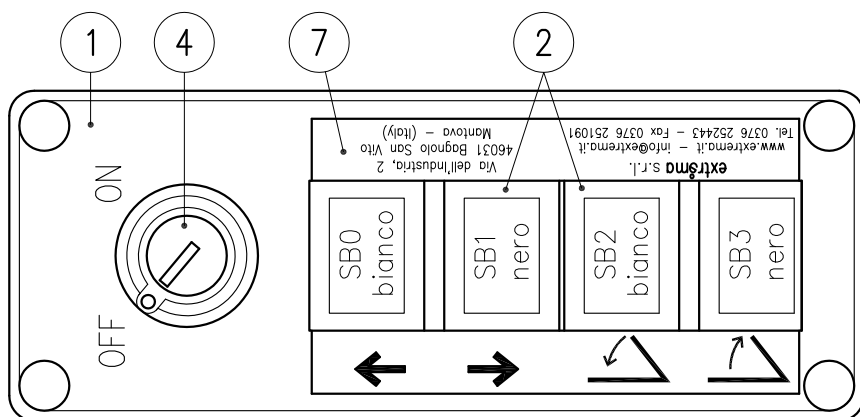


CODICE COLORAZIONE CAVI SECONDO IEC757

Colore	Abbreviazione
Marrone	BN
Giallo	YE
Verde	GN
Grigio	GY
Bianco	WH



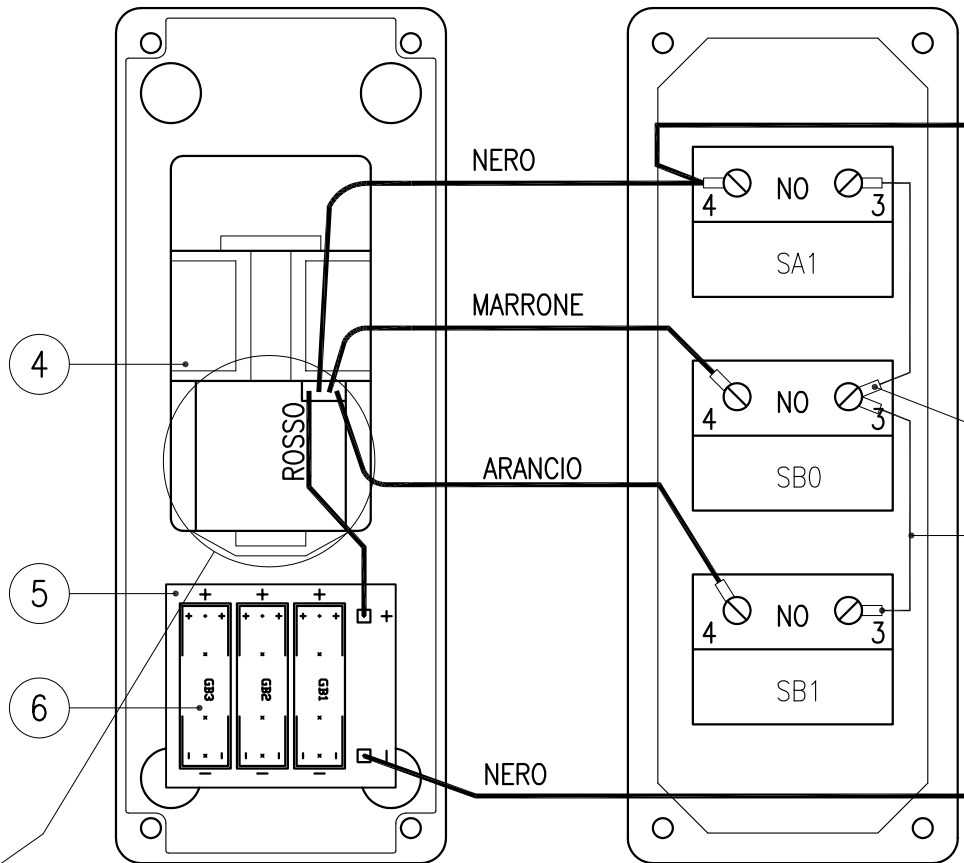
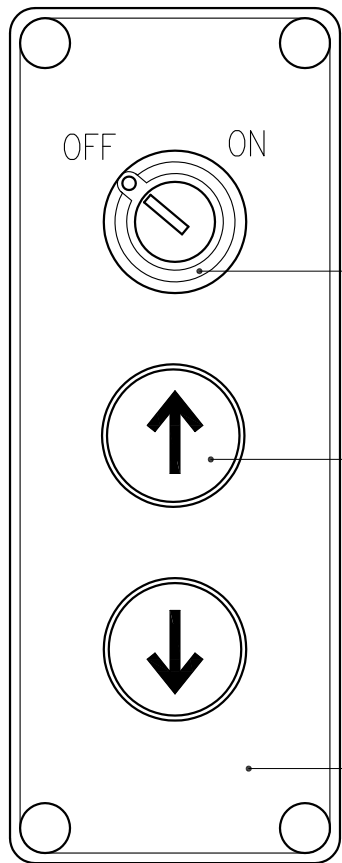
NB: Fornire pressacavo, tasselli e puntalini non assemblati. Introdurre nell'imballo la stampa del disegno 43P370027.



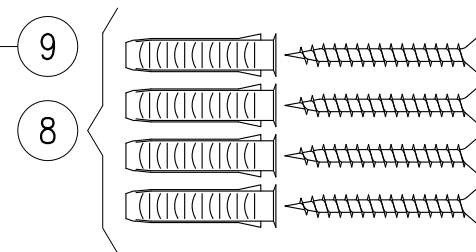
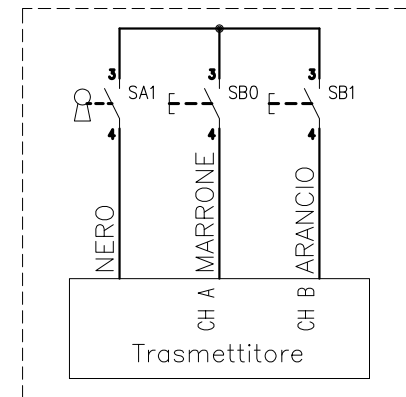
c	Introdotta capicorda e stampa schema di cablaggio	C.M.	20/07/06	Stefano L.
b	Introdotta colorazione del cavo di collegamento	C.M.	07/11/05	P. Mecenero
a	Eliminato filo 2 (necessario solo per schede KLDST)	C.M.	18/06/03	D. Ferrari

11	0,5	Corda unipolare nera sez. 0,5mmq	.
10	3	Capocorda a tubetto isol. CEMBRE art.PKT7508	23C070005
9	7	Capocorda a tubetto isol. CEMBRE art.PKC508	23C070003
8	4	Tassello Fischer S6	25T030503
7	1	Targhetta 4 pulsanti SLIM	31T020010
6	1	Pressacavo ST 13.5 REITER art. SKINTOP 53015030	23P390002
5	1	Controdado REITER art. SKINTOP 53019030	23C440000
4	1	Interruttore a chiave TELEMECANIQUE art. XB5-AG21	23I070010
3	2	Corpo contatti NO art. ZB5-AZ103	23C250011
2	2	Corpo a 2 pulsanti filo ghiera ZB5-AA9112 (IP66)	23P360016
1	1	Scatola Gewiss art.GW 27103	23S010000
Pos. N.Pz	Descrizione		Codice

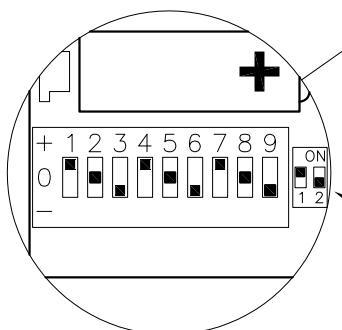
Pulsantiera con cavo 4 pulsanti		GRUPPO	
Macchina automatica		Imp.Elettrico	
		DATA	
		23/10/02	
		DISEGNATO	
		Alberti D.	
		SCALA	CODICE
		1:1	43P370027/c
		FOLGIO	
		1/1	



Collegamenti elettrici interni



NB: Fornire i tasselli per il fissaggio alla parete. Introdurre nell'imballaggio la stampa del disegno 43P370023.



N.B.: Fissare il trasmettitore e la scheda all'interno della scatola utilizzando il biadesivo a corredo del trasmettitore stesso.

Selezione canale B

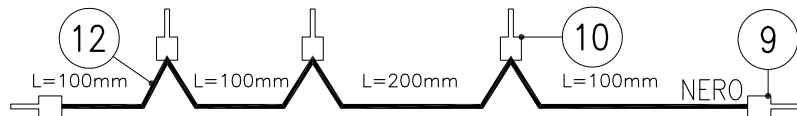
ATTENZIONE:
impostare identico codice anche sul ricevitore

9	m0,2	Corda unipolare nera sez. 0,5mmq	.
8	4	Tassello Fischer S6	25T030503
7	3	Capocorda a tubetto isol. CEMBRE art.PKC508	23C070003
6	3	Batteria alcalina 12V tipo MN21 (V 23 GA)	23B130002
5	1	Scheda batterie	33S020010
4	1	Trasmettitore 2 canali modificato	43P370025
3	1	Interruttore a chiave TELEMECANIQUE art. XB5-AG21	23I070010
2	2	Pulsante Telemecanique art. XB5-AA3341	23P360015
1	1	Scatola Gewiss art. GW 27103	23S010000
POS. N.Pz		DESCRIZIONE	Codice

Pulsantiera radiocomando 2 canali		GRUPPO	
Macchina manuale		Imp.Elettrico	
		DATA	
		23/10/02	
		DISEGNATO	CODICE 43P370023/c
		Alberti D.	
		SCALA	
		1:1	
		FOLGIO	
		1/1	

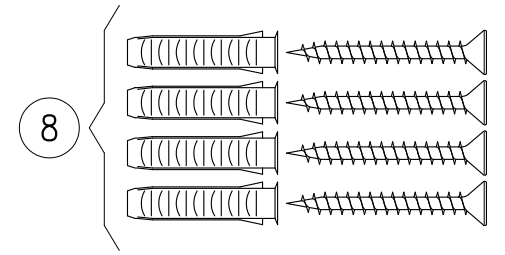
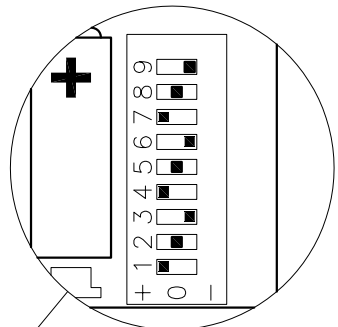
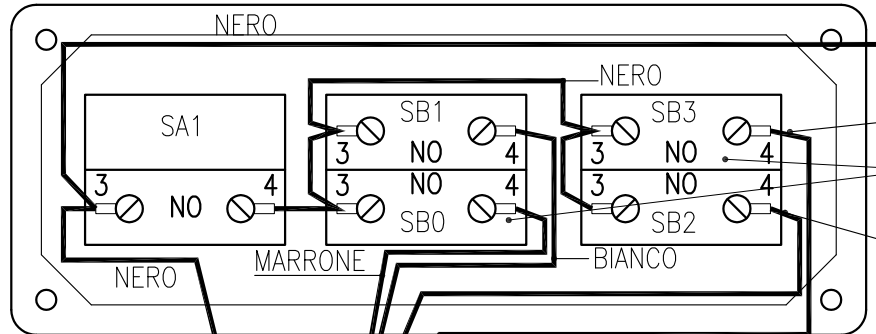
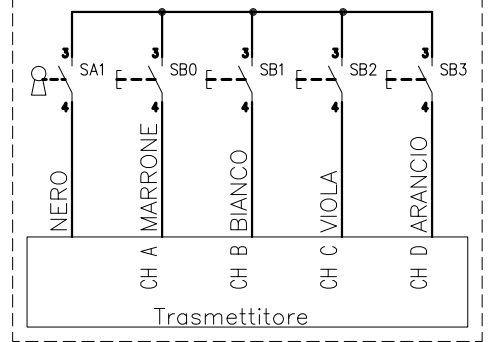
c	Aggiornato schema e distinta	C.M.	31/08/06 Stefano L.
b	Aggiunta scheda pos.3	C.M.	28/08/03 R.Vignoli
a	Disegno rifatto	C.M.	06/12/02 D. Ferrari

Per il collegamento del filo comune seguire il disegno sotto.



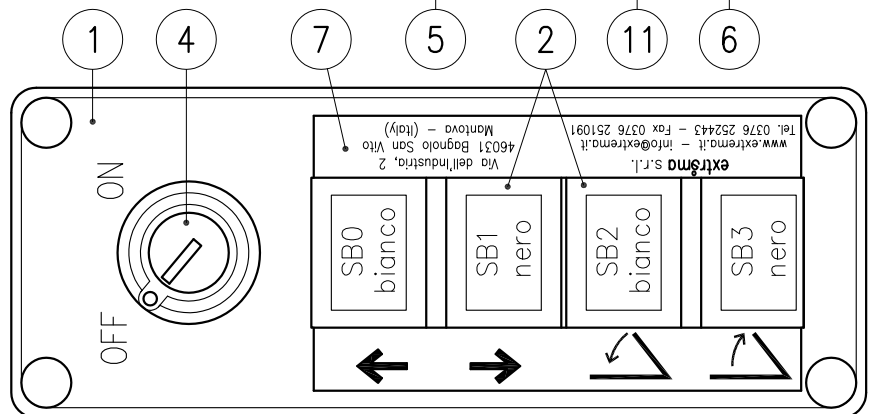
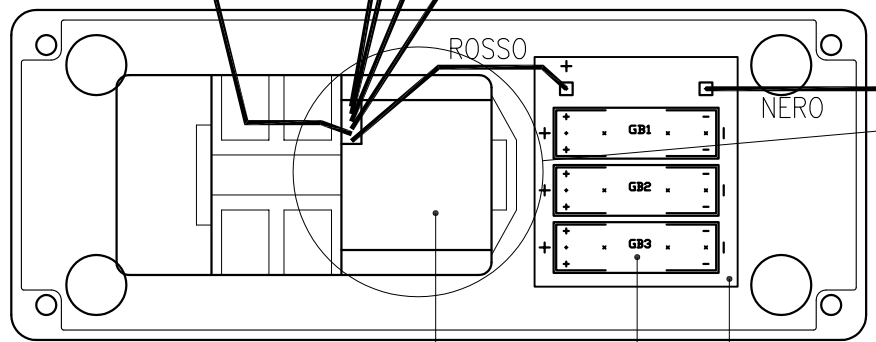
ATTENZIONE: impostare identico codice anche sul ricevitore

Collegamenti elettrici interni



N.B.: Fissare il trasmettitore e la scheda all'interno della scatola utilizzando il biadesivo a corredo del trasmettitore stesso.

NB: Fornire i tasselli per il fissaggio alla parete. Introdurre nell'imballo la stampa del disegno 43P370024.

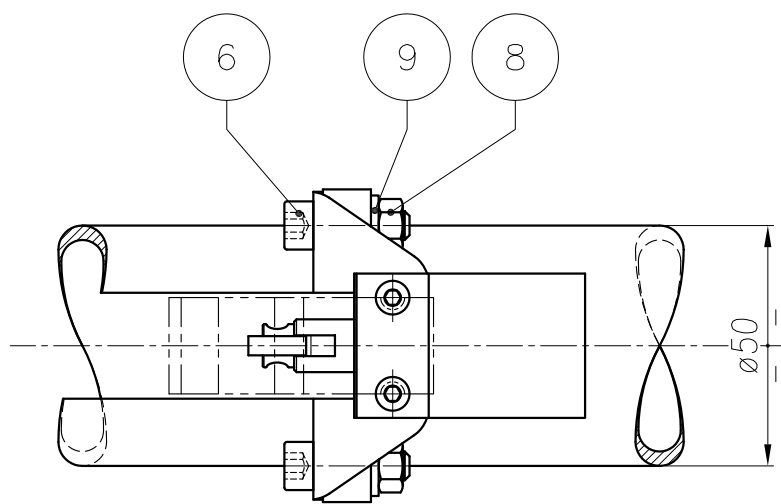
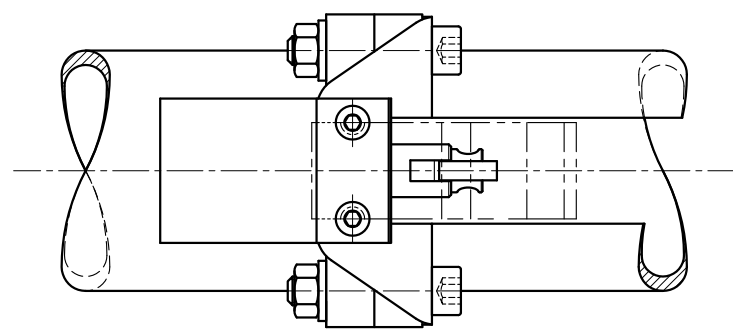


Pos.	N.Pz	Descrizione	Codice
12	0,5	Corda unipolare nera sez. 0,5mmq	.
11	3	Batteria alcalina 12V tipo MN21 (V 23 GA)	23B130002
10	3	Capocorda a tubetto isol. CEMBRE art.PKT7508	23C070005
9	2	Capocorda a tubetto isol. CEMBRE art.PKC508	23C070003
8	4	Tassello Fischer S6	25T030503
7	1	Targhetta 4 pulsanti SLIM	31T020010
6	1	Scheda batterie	33S020010
5	1	Trasmettitore 4 canali modificato	43P370026
4	1	Interruttore a chiave TELEMECANIQUE art. XB5-AG21	23I070010
3	2	Corpo contatti NO art. ZB5-AZ103	23C250011
2	2	Corpo a 2 pulsanti filo ghiera ZB5-AA9112 (IP66)	23P360016
1	1	Scatola Gewiss art.GW 27103	23S010000
Pos.	N.Pz	Descrizione	Codice

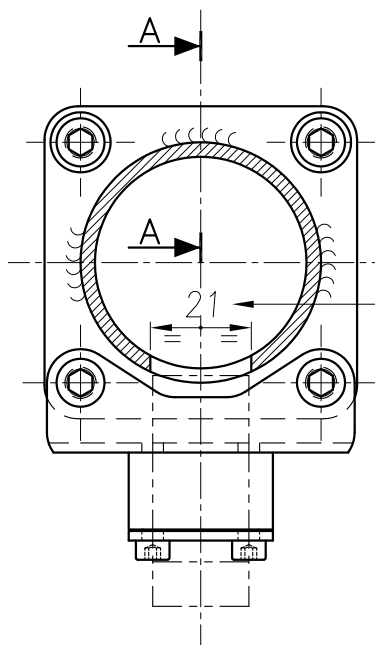
Pulsantiera radiocomando 4 canali		GRUPPO Imp.Elettrico	extrisma
Macchina automatica		DATA 23/10/02	
		DISEGNATO Alberti D.	
		SCALA 1:1	
		FOLGIO 1/1	CODICE 43P370024/b

b	Aggiornato schema e distinta - inserito stampa schema	C.M.	21/07/06	Stefano L.
a	Aggiunta scheda pos.3	C.M.	28/08/03	R.Vignoli

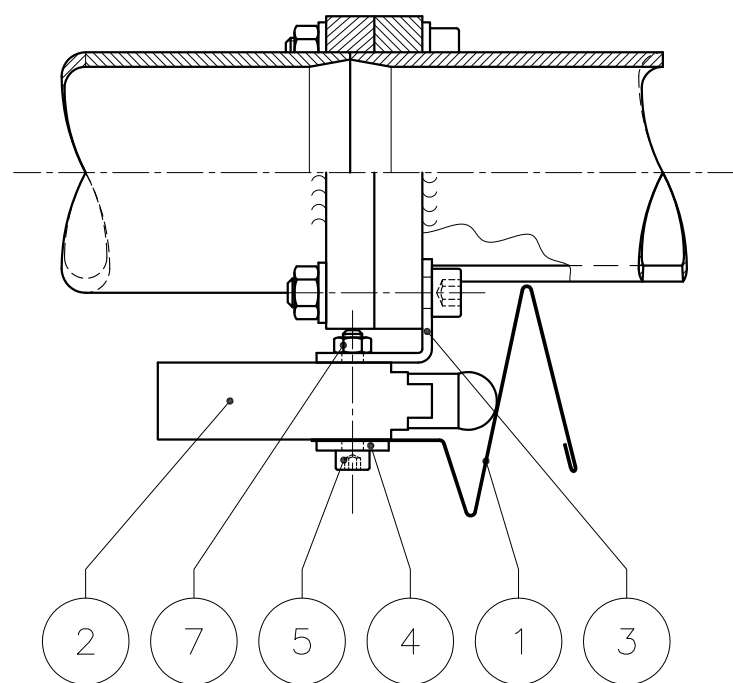
Anticollisione inferiore



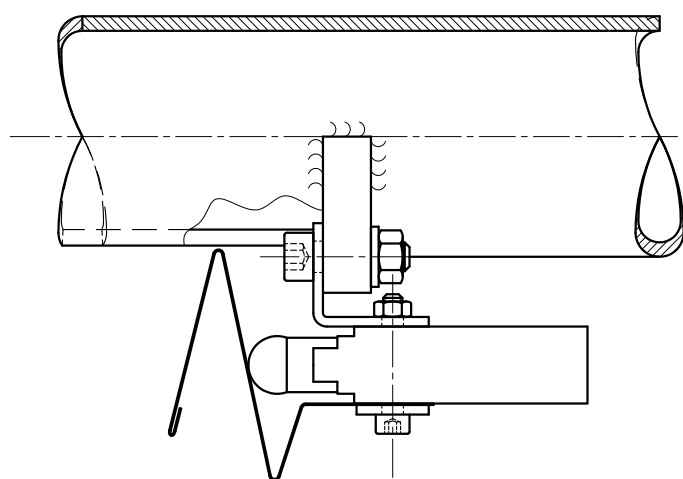
Anticollisione superiore



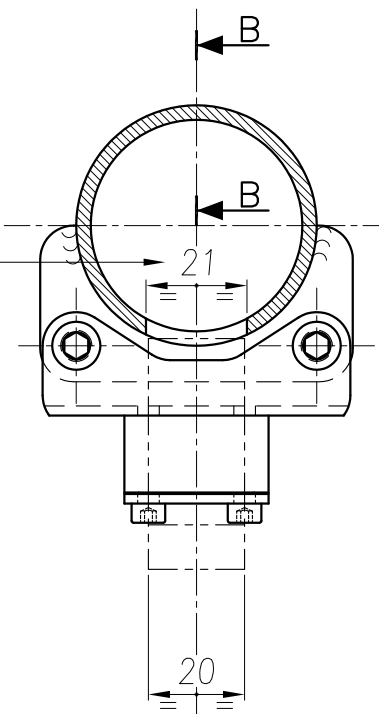
Apertura tubo



Sez. A-A



Apertura tubo



Sez. B-B

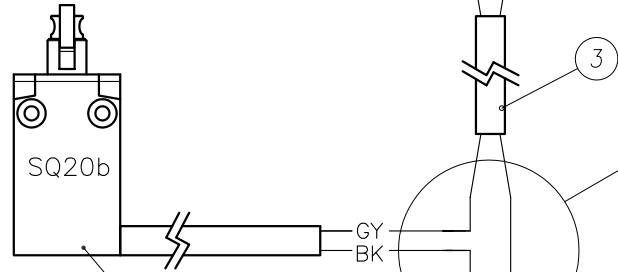
10	Schema di collegamento	63G300009	1
9	Rosetta 6x12.5 UNI 6592 INOX	25R130002X	2
8	Dado M6 UNI 5588 INOX	25D010019X	2
7	Dado M4 UNI 5588 INOX	25D010017X	4
6	Vite TCEI M6x20 UNI 5931 INOX	25V070050X	2
5	Vite TCEI M4x25 UNI 5931 INOX	25V070009X	4
4	Piastra di serraggio molla	31P390114	2
3	Supporto microinterruttore	31S310127	2
2	Microinterruttore anticollisione/antischiacciamento	33G090162	2
1	Molla micro extracorsa	31M080005	2
Pos.	Descrizione	Codice	N°.pz.

PRELIEVO CODICE	DESCRIZIONE	MATERIALE	
		SCALA	DISEGNATO
		1:1.5	Bertozzo
			DATA
			15/06/06
		SUP. mq	PESO kg
			LQ
		TOLLERANZE GENERALI	
		LINEARI	H12 - h12
		ANGOLARI	± 1°
		DIAMETRO FORI	0 +0,2
		RACCORDI	R 1,2
		SMUSSI	0,5x45°
		CODICE	
		51A230002	
		DESCRIZIONE	
		Kit anticollisione a molla	
		GRUPPO	
		Sicurezze Slim	

extrisma

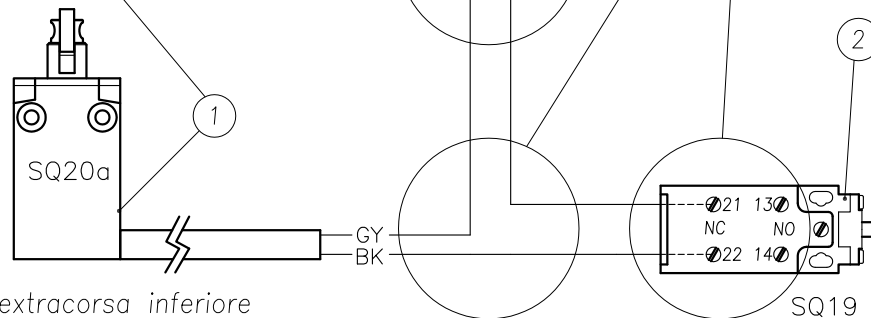
Morsettiere quadro elettrico
 Electric box connection
 Schalttafel Klemmbrett
 Bornier du tableau électrique
 Bornera cuadro electrico

Micro extracorsa superiore
 Upper safety limit switch
 Überfahrwegesicherheitsschalter
 Micro extracourse supérieur
 Micro extrarecorrido superior



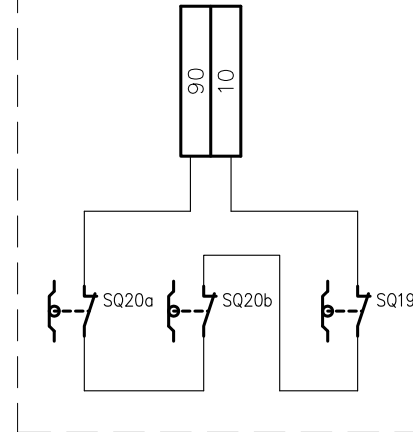
Cablare in opera
 Wiring on the site
 Verdrahtung ins Werk
 Relier en oeuvre
 Cablear en obra

Micro extracorsa inferiore
 Lower safety limit switch
 Unterfahrwegesicherheitsschalter
 Micro extracourse inférieur
 Micro extrarecorrido inferior



Micro paracadute
 Parachute microswich
 Mikroschalter Fangvorrichtung
 Micro parachute
 Micro paracaidas

Schema elettrico
 Wiring connections
 Elektrisch diagramm
 Schéma électrique
 Diagrama eléctrico



Wiring color	Code
BK (Black)	NC
GY (Gray)	NC

3	Cavo 2x1 REITER Olflex/110-03	23C400013	1
2	Micro Telemecanique Cod. XCK-B110	23M070012	1
1	Guaina micro dispositivo anticollisione/antischiacciamento	33G090162	2
Pos.	Descrizione	Codice	N°.pz.

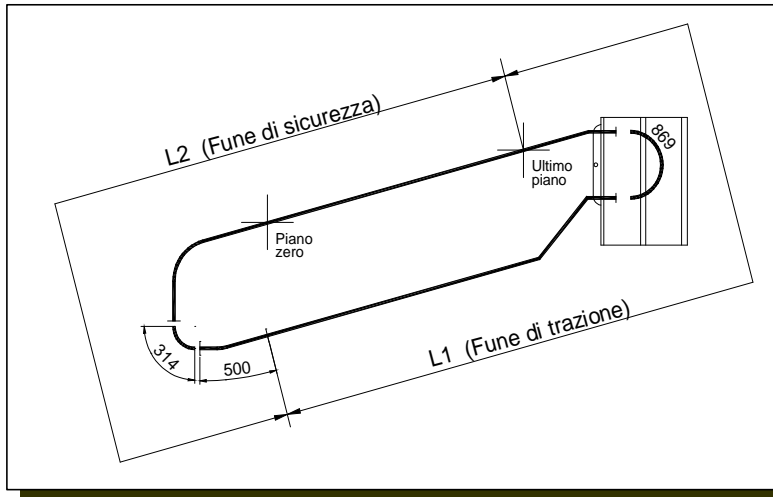
PRELIEVO CODICE		DESCRIZIONE		MATERIALE	
TRATTAMENTO		SCALA	DISEGNATO	DATA	
SUPERFICI E LAVORAZIONI		SUP. mq	PESO kg	LQ	
VIETATE LE RIPRODUZIONI NON AUTORIZZATE REPRODUCTION NOT PERMITTED AL RIGHT RESERVED				extrisma	
DESCRIZIONE		TOLLERANZE GENERALI		CODICE	
Schema collegamento SLIM		LINEARI H12 - h12 ANGOLARI ±1°		63G300009	
GRUPPO		DIAMETRO FORI 0 +0,2 RACCORDI R 1,2 SMUSSI 0,5x45°			
dispositivo anticollis./antischiaacc.					

Fornitore gruppo funi
Extrema s.r.l.

Comm. **C09G3XXXX**
Rif.to Cliente **XXXX**

Ord. N° **XXXX**

Tipo motorizzazione 0 N° variazioni pend. 0
Potenza motore consigliata kW N° curve 180° 0
Potenza inverter consigliata kW N° curve 90° 0



L tubo superiore	10000
L tubo inferiore	10000
Distanza ultima fermata da fine tubo superiore	1500
Quota L1	11869
Quota L2	9314

Fune di trazione cod. 31F17XXXX dis/e
Lunghezza nominale **FT** = 11854 n° sfere = 105

Fune di sicurezza cod. 31F20XXXX dis/c
Lunghezza nominale **FS** = 9735 n° passi = 219
N° passi tratta STD= 26
Passo cuneo paracadute= 41,7

N° "X" tratta STD	Cunei interi tratta Variabile
8	0
Tratta variabile presente?	
SI	

Distinta materiali

Codice	Descrizione	U.M.	Quantità
31F17XXXX	Fune di trazione comm. C09G3XXXX	nr	1
21F140001	Fune TECl Ø 8 zincata	mt	11,854
31B210011	Bussola per fune	nr	106
31S160006	Semisfera stampata	nr	210
25V110016	Vite STEI M5x6 UNI 5923	nr	1
31B210015	Bussola isolamento giunzione	nr	1
31G060001	Giunzione femmina	nr	1
31B210021	Bussola per terminale fune	nr	1
21M080005	Molla Omicron A/2956	nr	1
31F20XXXX	Fune di sicurezza comm. C09G3XXXX	nr	1
21F140001	Fune TECl Ø 8 zincata	mt	9,735
31B210011	Bussola per fune	nr	11
31C460005	Cono tagliato	nr	10
31C460004	Cuneo fune paracadute	nr	210
31C460006	Semisfera tagliata	nr	10
31G060000	Giunzione maschio	nr	1

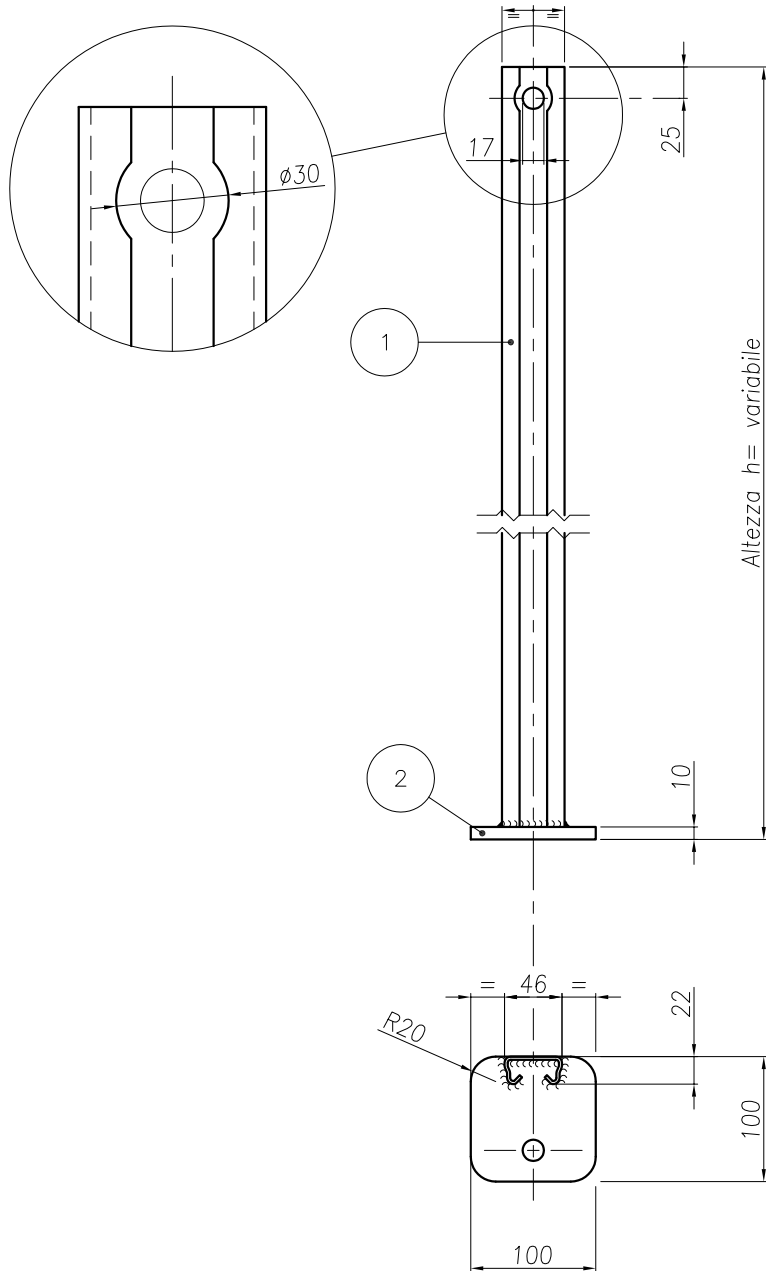
NOTE:

Emesso da

in data

CODIFICA SUPPORTI GUIDA

31P43XXXX codice identificazione
 XXXX altezza "h" in cm
 (h = distanza pavimento da
 asse tubo sup. + 100 mm)



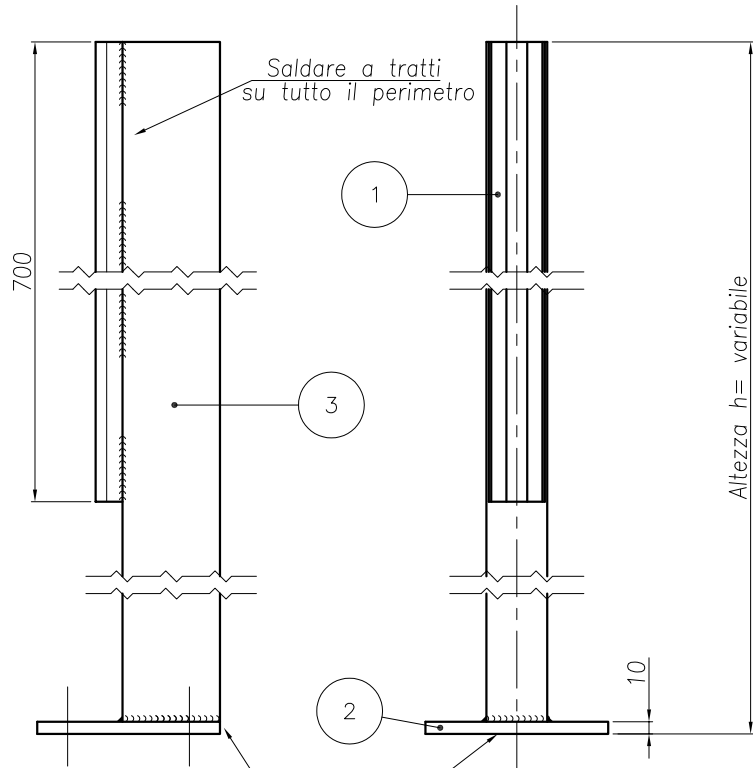
N° pezzi	Altezza piede	Codice	Peso unit.	Peso tot.
1	XXXX	31P43XXXX	X.X	XX.X
1	XXXX	31P43XXXX	X.X	XX.X
1	XXXX	31P43XXXX	X.X	XX.X
1	XXXX	31P43XXXX	X.X	XX.X
1	XXXX	31P43XXXX	X.X	XX.X

NB: Raccordare tutte le saldature ed eliminare spigoli vivi

Comm. C09G30XXX Tot. X pezzi Saldature ∇ 3x3

2	Piastra di base	31P390027	-
1	Profilato "C" sp. 2 L.B. 3 mt.	100P24102	-
Pos.	Descrizione	Codice	N.Pz
PRELIEVO CODICE DESCRIZIONE		MATERIALE	
Composto		Fe 360 B	
TRATTAMENTO		SCALA	DISEGNATO DATA
		1:4	XXXXXX XX/XX/XX
SUPERFICI E LAVORAZIONI		SUP. mq	PESO kg
		LQ	
VIETATE LE RIPRODUZIONI NON AUTORIZZATE REPRODUCTION NOT PERMITTED ALL RIGHTS RESERVED			
DESCRIZIONE		TOLLERANZE GENERALI	
Piede per fissaggio a parete		LINEARI H12 - h12 ANGOLARI ±1° DIAMETRO FORI 0 +0,2 RACCORDI R 1,2 SMUSSI 0,5x45°	
GRUPPO		CODICE	
Imp. XXXX - XXXX N° XXXX		41P430XXX	

extrima[®]

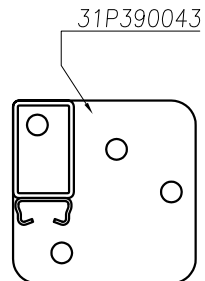
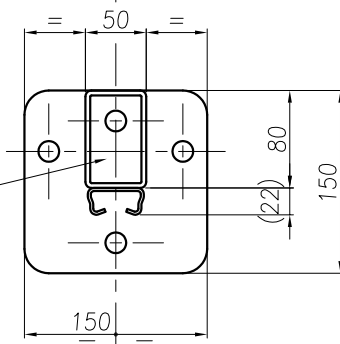


Saldare a tratti su tutto il perimetro

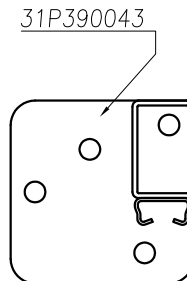
Altezza h = variabile

Att.: saldatura strutturale esente da pori e difetti

Eeguire foro di scarico per zincatura



Sx



Dx

CODIFICA SUPPORTI GUIDA

31P45XXXX codice identificazione

XXXX altezza "h" in cm

(h = distanza pavimento da asse tubo superiore)

(ATT: per collegamento STD + 50 mm)

N° pezzi	Altezza piede	Codice	Peso unit.	Peso tot.
1		31P45XXXX	X.X	X.X
1		31P45XXXX	X.X	X.X
1		31P45XXXX	X.X	X.X
1		31P45XXXX	X.X	X.X
1		31P45XXXX	X.X	X.X

NB: Raccordare tutte le saldature ed eliminare spigoli vivi

Comm. C09G30XXX Tot. X pezzi Saldature ∇ 5x5

3	Tubo rett. lam. 80x50 sp. 4	100T26244	1
2	Piastra di base	31P390026	1
1	Profilato "C" sp. 2 L.B. 3 mt.	100P24102	1
Pos.	Descrizione	(Q.tà per n°1 piede)	Codice N.Pz

PRELIEVO CODICE	DESCRIZIONE	MATERIALE	
Composto		Fe 360 B	
TRATTAMENTO	SCALA	DISEGNATO	DATA
			XX/XX/XX
SUPERFICI E LAVORAZIONI	PESO kg	LQ	extrisma
	TOT		
VIETATE LE RIPRODUZIONI NON AUTORIZZATE REPRODUCTION NOT PERMITTED AL RIGHT RESERVED			CODICE
DESCRIZIONE		TOLLERANZE GENERALI	
Piede portante senza parete		LINEARI H12 - h12 ANGOLARI ±1° DIAMETRO FORI 0 +0,2 RACCORDI R 1,2 SMUSSI 0,5x45°	
GRUPPO		41P450XXX	
Imp. XXXX - XXXX N° XXXX			

