



Dräger - your marine safety specialist

Firefighting monitor catalogue
Monitor control systems

Dräger Nederland B.V.
Marine & Offshore

Tel.: +31 (0)10 - 295 2740

Fax: +31 (0)10 - 295 2709

sales-mo.sd.nl@draeger.com

www.draeger-mo.com

© Copyright Dräger Nederland B.V.

All rights reserved. Reproduction in whole or part without prior written permission from Dräger is prohibited. Great care has been taken throughout the catalogue to be accurate, but Dräger cannot accept any responsibility for any errors or omissions which might occur.

All products, logos, names and technologies are trademarks and/or registered trademarks of their respective companies.

2016

Safety on board

As a Total Care Service organization Dräger would like to team up with your company as the service company for the annual service and maintenance for the following Fire fighting, Rescue & Safety (FRS) equipment.

Our scope of service capabilities includes (but is not limited to):

- portable and wheeled fire extinguishers
- fixed fire suppression systems and foam systems
- fire hoses and spray nozzles
- survival suits and lifejackets
- portable and fixed gas detection
- breathing protection and breathing compressors and fireman's outfits

ONE PARTNER FOR ALL FRS SOLUTIONS

Dräger has readily available resources to send qualified service teams and offshore containers offshore which have the skills to perform the required service on the above equipment in one visit.

This not only reduces overhead in organizing service and travelling of technicians but also gives you one point of contact for all maintenance, certification and related administration.

SAFETY MANAGEMENT SYSTEM

Our technicians all have offshore experience, and are trained to the required standards. Dräger is in possession of a ISO9001 certificate, has a Safety Management System in place and is an approved service organization for major class societies.

DEDICATED TO THE OFFSHORE WORLD

Years of experience and highly trained and certified technicians make Dräger an authority on fire fighting, rescue and safety projects for the marine and offshore industries. Our organization has a strong global presence and meets all of the requirements of high safety and quality standards.

Dräger Marine & Offshore is located in Rotterdam, Aberdeen and Stavanger. Dräger is available 24 hours a day, seven days a week and 365 days a year.

Meeting our customers needs is the cornerstone of our organization. We clearly understand that long-lasting relationships are built upon mutual trust and proven reliability.

DRÄGER INTERNATIONAL

Dräger was founded in 1889 in Lübeck, Germany. Dräger is one of the world's leading suppliers of personal protective equipment, gas detection technology, and interdisciplinary system solutions for total hazard management. The company, with more than 13,500 employees, has global sales of over 500 million euros.

Dräger. Technology for life.

Advanced service system

MONITORING MAINTENANCE

Dräger uses advanced ERP planning and registration software by Microsoft Navision®, which offers:

- Barcode marking of all equipment
- Equipment will be integrated into our ERP system
- ERP system equipped with service planning software
- One click overview of service to be performed per rig, per year
- Annual budget forecasting for up to five years

ADVANTAGES

- Every service action can be planned
- One overview of all equipment on board of all rigs
- One overview of service performed on a unit basis
- Certificates produced straight from the system

Every single item is registered:

- Barcode
- Serial number
- Type of equipment
- Manufacturer
- Lifetime of equipment
- Service actions required
- Special surveys

MOBILE WORKSHOP ON BOARD

Dräger has DNV approved offshore service containers, fully equipped with test equipment, spare parts and replacements, to perform FRS service on board of a platform.

The containers have been equipped with a computerized Dräger SCBA test bench and other test equipment. Service of fire fighting, life saving appliances such as life jackets and survival suits, portable and fixed gas detection equipment, hospital oxygen systems etc can all be performed on board.

Alongside the test equipment these containers have enough spare parts and new equipment to be able to carry out repairs and/or replace defective equipment as required.

FRS CERTIFICATE PORTAL

Dräger offers you the FRS Certificate Portal:

- Review, print, download and e-mail certificates in a digital online environment
- 24/7 availability, all you need is an Internet connection
- All certificates are clearly organized per order
- Only one login code needed for complete overview of all installations / locations / vessels
- This service is free of charge
- Registration via www.draeger-mo.com

This service is meant for everybody who manages FRS certificates on board of your rig.

Total Care FRS service contract concepts

In some cases it can be desirable to use service contracts to have a stable overview of what can be expected from service costs in the future. Dräger has developed two concepts offering a variable degree of certainty about future maintenance (and replacement) costs. We are able to offer contracts where the variables of service cost and replacements can be contractually bound. The contracts are developed to offer two degrees of certainty and are named as described in the following paragraph.

DRÄGER OFFSHORE SERVICE CONCEPTS

Dräger offers two service contract solutions to accommodate different customer requirements:

- Dräger Premium
- Dräger Life Cycle Management

These concepts form the basis for installment of service contracts, offering multiple levels of security on future FRS service spending.

DRÄGER PREMIUM

An Dräger Premium contract takes away uncertainty about current and future service costs and requires less administrative involvement of the customer.

Dräger-Premium covers all annual service needs:

- Deployment of offshore container to rig location
- Deployment of Dräger service technicians
- Includes all agreed FRS service activities
- Possibility to include discount on product groups and parts
- One-stop onboard service and maintenance of all FRS equipment
- Fully equipped offshore container, including all service equipment
- Small stock of new replacements present in container
- Spare parts and replacements are not included

DRÄGER PREMIUM ADVANTAGES

- One annual visit to service all FRS equipment
- Includes all mandatory service actions for the included equipment
- No backflow of service intervals
- One PO and one invoice per rig / per year
- Less administrative involvement of customer

DRÄGER LIFE CYCLE MANAGEMENT

The most advanced service contract is the Dräger Life Cycle Management contract.

Dräger LCM covers your concerns about FRS service and replacement to one service provider:

Dräger-Premium package plus:

- Replacement of the equipment at the end of the life cycle (excluding replacement of fixed equipment: hydrants, CO2 installations, etc.)
- Replacements of spare parts
- Standardization of equipment by replacement with latest standards and approvals
- Exchange equipment when necessary
- Requires preparation to implement
- An exact FRS inventory list per rig is required
- Easy to maintain / extent / decrease

DRÄGER LIFE CYCLE MANAGEMENT ADVANTAGES

- Only one visit to the rig
- Less involvement of crew in the service activities
- No additional spare part costs
- The equipment is up to date and in optimal condition
- Equipment to the latest technical/approval standards
- Crew members are more easily redistributed between rigs (because of standardization of equipment)

Rental equipment and training

RENTAL EQUIPMENT

Via a rental pool Dräger makes all the safety-relevant equipment required (during shutdown) available to you, from communications technology or gas detection devices to personal protection equipment.

Renting devices – with predictable rental rates – is the ideal solution for clearly defined projects. If necessary, we provide you with detailed advice which devices you should keep available in which numbers.

You can trust our experience and expect realistic projections. 10 additional gas detection devices, 20 fall arrest belts and a ladder – not everything can be scheduled down to the day. No problem. We take care of it for you.

We record all material movements in our database. This documentation enables easy controlling and also forms the basis for traceable invoicing.

TRAINING

Complete safety does not end with the purchase of safety equipment – in fact it is only the beginning!

To be effective, operators need to be competent and empowered in the use, testing and troubleshooting of safety equipment. That's where effective training is an essential addition to a user's safety regime.

With over 100 years experience in safety, Dräger is able to bring a wealth of knowledge in the use of equipment and best practice procedures in response to hazardous situations.

With a comprehensive range of training programmes for the oil and gas industry we can help to ensure your equipment and personnel are always ready – whatever the situation. Courses can be customised to suit specific requirements, known hazards or unusual applications and conducted at operational sites.

If preferred, they can also be carried out at our purpose built training facilities using simulated environments including crawl galleries and confined spaces.

Courses cover both theory and hands on use of equipment in practical applications; testing; maintenance and troubleshooting - for everything from gas detection set up and calibration – both fixed and portable; breathing apparatus; drugs and alcohol detection and first aid.

Quality, safety and liability

QUALITY

We guarantee that the offered services are performed to the very highest standards. The quality of our work and our organization is safeguarded by a certified Quality Management System ISO 9001:2000, ISO14001 and OHSAS18001.

During a contract period Dräger always commits itself to keep the Quality Management System certified and valid. In addition, we welcome an audit by your quality manager at any time.

SAFETY

Safety on board is a key consideration for all professional operators. It is therefore reassuring that our service technicians are all in possession of a basic safety certificate. They understand the possible risks on board and they know what is expected from them to ensure the safety for themselves, your crew and your assets.

Our safety management system ensures that our procedures and our behavior are regularly monitored and adjusted where required. Of course it is possible to audit our safety system. Please ask your safety manager to contact us at any time to make an appointment.

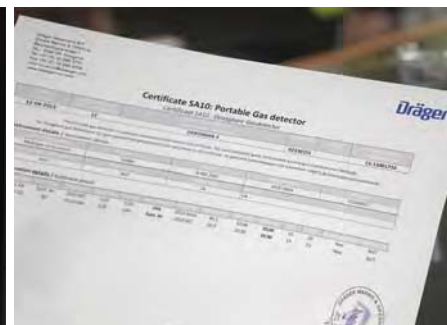
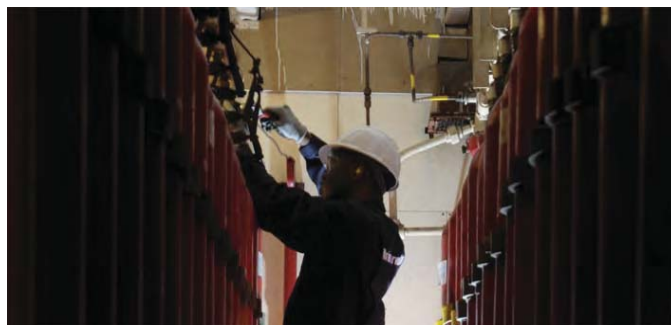
LIABILITY INSURANCE

As part of the world wide operating Dräger group (www.draeger.com) our organization is in possession of a liability insurance which cover our activities. On request we can send you a copy of the insurance policy.

CUSTOMER SATISFACTION

We are your Fire fighting, Rescue and Safety partner who will provide solutions to meet your needs. We clearly understand that long-lasting relationships are built upon mutual trust and proven reliability. Therefor customer satisfaction is a key performance indicator for us.

We constantly monitor our customer satisfaction level and strive to improve our performance, our procedures and general behavior based on your feedback. We have a procedure in place which offers you the opportunity to share your suggestions and/or concerns.



MASTER CONSOLE (POTENZA E CONTROLLO) PER MONITORI A CONTROLLO REMOTO
MASTER PANELS (POWER & CONTROL) FOR REMOTE CONTROLLED MONITORS

Leggio / Podium



Pannello di Potenza e controllo Exd / Exd
Power & Control Panel



Descrizione



Le Console Master di potenza e controllo sono quadri appositamente sviluppati per i monitori a controllo remoto elettrici ed elettro-idraulici. Questi pannelli sono usati per fornire ai monitori la potenza elettrica e comandare da remoto tutti i loro movimenti, inclusa l'automazione delle valvole di isolamento acqua e schiuma. Le soluzioni standard disponibili consentono la composizione di svariate architetture di controllo. Le soluzioni disponibili consentono la composizione di architetture idonee all'installazione sia in area sicura che classificata Zona 1 o 2 GD in accordo alla direttiva ATEX. Ogni quadro è configurabile in funzione dei controlli necessari, delle segnalazioni e della tipologia di comandi preferita nonché nella composizione dei materiali delle carpenterie e della verniciatura. Per soluzioni complesse, dove le soluzioni standard non trovano applicazione, contattare SA Fire Protection per discutere i dettagli dell'architettura desiderata.

Per architetture alternative dove:

1. E' richiesta una Console Secondaria
2. E' Richiesta una unità wireless

fare riferimento ai seguenti Data Sheets:

Console SLAVE : DS B 40 10 10 30

Unità Wireless: DS B 40 10 10 40

Description



The Master Panels (Power & Control) are specifically designed for remote controlled monitors electric and electro-hydraulic. This panels are used to supply the monitors with the required electrical power and controls for their movements including the automation of the isolation valves such as water and foam concentrate valves. The various combination available allow for the composition of systems architecture suitable for installation within safe or hazardous area Zone 1 or 2 GD according to ATEX directive. Every panel can be tailored to meet the specific project requirements in terms of controls, signaling and commands type as well as panel housing materials and painting system. For complex systems in which the standard solution may not fit the requirements, contact SA Fire Protection to discuss the detail of the desired architecture.

For system architectures where:

1. A secondary Console is required
2. A wireless control unit is required

please refer to the following Data Sheets:

SLAVE Control Panels : DS B 40 10 10 30

Wireless Unit: DS B 40 10 10 40

Caratteristiche tecniche

Modulo di Potenza e comandi di controllo:

- Carpenteria a scelta tra:
 - Lamiera di Acciaio al Carbonio ⁽¹⁾
 - Acciaio Inox AISI 316
 - Lega di Alluminio⁽²⁾
- Guarnizioni in Poliuretano ⁽³⁾
- Morsetti di messa a terra per ciascun elemento
- Interruttore principale 0 / 1
- Pulsante di stop in emergenza
- Indicatore a LED di guasto
- Indicatore a LED di presenza tensione
- Pulsante di test lampade
- Alimentazione elettrica:
 - 400 VCA 3F+N 50 Hz
 - 230 VCA 1F+N 50 Hz
 - 24 VDC
- Costruzione idonea per:
 - Area Sicura grado di protezione IP 55, IP 65 o IP 67
 - Area classificata ATEX II 2(1) GD Ex-d II B / II B + H2 ⁽²⁾
- Formati carpenteria:
 - A leggìo
 - JB⁽²⁾
- Comandi:
 - Joystick ⁽⁴⁾
 - Pulsanti
- Indicatori a LED comandi

Monitori controllabili:

- Elettrici
 - Elettro-idraulici
- Movimenti e controlli:
 - Monitore Alto/Basso
 - Monitore Destra/Sinistra
 - Bocchello o deflettore Jet/Fog
 - Valvola principale acqua
 - Valvola schiuma

Colorazioni standard:

- Colore rosso RAL 3000
- Colore grigio RAL 7035

Technical characteristics

Control Panel and Power Module:

- Housing to be selected among:
 - Carbon Steel Sheets ⁽¹⁾
 - Stainless Steel AISI 316
 - Aluminium alloy ⁽²⁾
- Polyurethane Gasket ⁽³⁾
- Earth connection terminals for each component
- Main switch 0 / 1
- Emergency stop push button
- LED indicator for fault
- LED indicator for power presence
- Lamp test push button
- Power Supply:
 - 400 VAC 3PH+N 50 Hz
 - 230 VAC 1PH+N 50 Hz
 - 24 VDC
- Construction suitable for installation within:
 - Safe Area protection grade IP 55, IP 65 or IP 67
 - Classified area ATEX II (2)1 GD Ex-d II B / II B + H2 ⁽²⁾
- Housing shapes:
 - Podium
 - JB⁽²⁾
- Command:
 - Joystick ⁽⁴⁾
 - Push button
- LED indicator command

Controllable monitors:

- Electric
 - Electro-hydraulics
- Movements and Controls:
 - Monitor Upwards / Downwards
 - Monitor Rightwards / Leftwards
 - Nozzle or Spreader Jet/Fog
 - Main valve water
 - Foam Valve

Standard colors:

- Colour red RAL 3000
- Colour grey RAL 7035

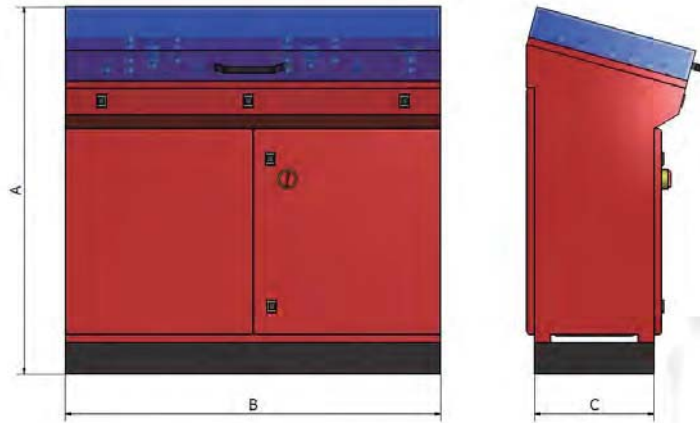
Note:

- (1) Valido solo per armadi a leggìo
 (2) Valido solo per quadri Ex-d
 (3) Valido solo per armadi a leggìo
 (4) Valido solo per area sicura

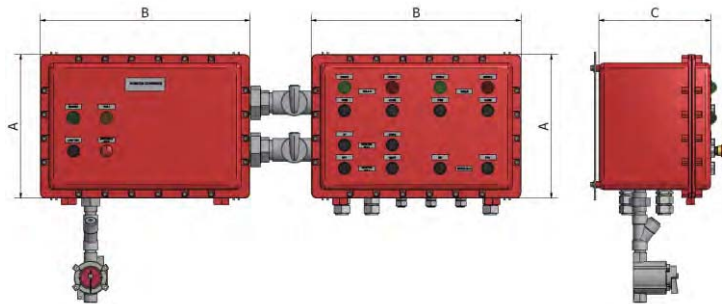
Notes:

- (1) Valid only for podiums
 (2) Valid only for Ex-d panels
 (3) Valid only for podiums
 (4) Valid only for safe area

Leggio / Podium



Pannello di controllo Ex d / Ex d Control Panel



Installazione Installation	Console	Tipo Pannello Panel Type	Potenza Power			Comandi Commands	Segnali Signals	Monitori Monitors	A mm	B mm	C mm	Peso Weight (kg)
			400VAC 50Hz 3Ph	230VAC 50Hz 1Ph	24VDC							
Sicura Safe	Comandi & Modulo di potenza Control & Power Module	Leggio Podium	x	x	x	P,J	L	1	1208	600	400	100
			2	1208	1200			400	180			
			3	1208	1600			400	240			
Zona 1, 2 Zone 1, 2	Power Module Ex-d	Modulo di Potenza Power Module	x	x	x	P	L	-	432 ⁽⁵⁾	632 ⁽⁵⁾	335 ⁽⁵⁾	60
	Comandi Controls Ex-d	Control Panel	-	-	-	P	L	1 ⁽⁵⁾	432 ⁽⁶⁾	632 ⁽⁶⁾	335 ⁽⁶⁾	60

LEGENDA / LEGEND:

P – Pulsanti / Push Buttons; J – Joystick; L – Led

Opzioni

- Copertura pulsantiera in plexiglas trasparente con molle
- Copertura pulsantiera in plexiglas trasparente con pistoni pneumatici
- PLC
- Scaldiglia Anticondensa
- Ciclo di verniciatura diverso dallo Standard SA
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Plexiglas cover for controls with springs
- Plexiglas cover for controls with pneumatic pistons
- PLC
- Anti-condensation Heater
- Painting system different from Standard SA
- For additional options or special versions contact SA Fire Protection

Note:

(5) Valido fino a tre monitori
(6) Valido per i comandi di un monitor

Note:

(5) Valid up to three monitors
(6) Valid for the controls of one monitor

Codice Identificativo
Identification Form

Mod. **CM** / / /

OPZIONI / OPTIONS

/ /

Quantità / Quantity

MODULO DI POTENZA E COMANDI DI CONTROLLO / CONTROL PANEL AND POWER MODULE

CONFIGURAZIONE CONSOLE CONSOLE CONFIGURATION	1	Tipologia Type	Console Principale con potenza integrata Master Console with built in power module	CM <input checked="" type="checkbox"/>	
	2	Numero monitori Monitors number	1	1 <input type="checkbox"/>	
			2	2 <input type="checkbox"/>	
			3	3 <input type="checkbox"/>	
			Più di tre monitori More than three monitors	() <input type="checkbox"/>	Indicare all'interno delle parentesi il numero di monitori da controllare. Specify within brackets the number of monitors to be controlled.
	3	Formato Shape	Leggio – Area Sicura Podium – Safe Area	PS <input type="checkbox"/>	
			JB – Ex d (Zone 2)	JBA2 <input type="checkbox"/>	
			JB – Ex d (Zone 1)	JBA1 <input type="checkbox"/>	
	4	Materiale Material	Lamiera acciaio al carbonio Carbon steel sheet	CAC70 <input type="checkbox"/>	Disponibile solo per formato a leggio, materiale standard per installazione interna. Available only for podium shape, standard material for indoor installation.
			Lamiera acciaio inox AISI 316 Stainless steel sheet AISI 316	CAI72 <input type="checkbox"/>	Disponibile solo per formato a leggio, materiale standard per installazione esterna. Available only for podium shape, standard material for outdoor installation.
			Lega di alluminio Aluminium alloy	CAL11 <input type="checkbox"/>	Disponibile solo per formato JB. Available only for JB shape.
			Acciaio inox AISI 316 Stainless steel AISI 316	CAI12 <input type="checkbox"/>	Disponibile solo per formato JB. Available only for JB shape.
	5	Verniciatura Painting	Colore rosso RAL3000 Colour red RAL 3000	RED <input type="checkbox"/>	
			Colore grigio RAL 7035 Colour grey RAL 7035	GREY <input type="checkbox"/>	
	6	Protezione Protection	IP55	IP55 <input type="checkbox"/>	Disponibile solo per formato a leggio. Available only for podium shape.
			IP65	IP65 <input type="checkbox"/>	Non disponibile in acciaio al carbonio Not available in carbon steel
			IP67	IP67 <input type="checkbox"/>	
	7	Alimentazione Power Supply	400 Vca 3F 50 Hz 400 Vac 3Ph 50 Hz	400 <input type="checkbox"/>	
			230 Vca 1F 50 Hz 230 Vac 1Ph 50 Hz	230 <input type="checkbox"/>	Utilizzabile solo con monitori con alimentazione 230 Vca 1F o 24 Vcc. Suitable only for monitors with power supply 230 Vac 1Ph or 24 Vdc.
			24 Vcc 24 Vdc	24 <input type="checkbox"/>	Utilizzabile solo con monitori con alimentazione 24 Vcc. Suitable only for monitors with power supply 24 Vdc.
	8	LED LED	Indicatore di posizione Position indicator	L <input type="checkbox"/>	
			Senza indicatore di posizione Without position indicator	NL <input type="checkbox"/>	

Prosegue alla pagina seguente / Continue to the next page

MONITORI MONITORS	9	Tipologia monitori Monitors type	Elettrici Electric	E <input type="checkbox"/>	Allegare Data sheet Monitore/i Attachment monitor/s Data sheet
			Elettro-idraulici Electro-hydraulic	EO <input type="checkbox"/>	Allegare Data sheet Monitore/i Attachment monitor/s Data sheet
	10	Comandi Controls	Pulsanti Push buttons	1P <input type="checkbox"/>	
			Manipolatore Joystick	1J <input type="checkbox"/>	
BOCCELLO/LANCIA NOZZLE/BRANCHPIPE	11	Bocchello/Lancia Nozzle/Branchpipe	Bocchello jet/fog a comando remoto Nozzle jet/fog remote controlled	B <input type="checkbox"/>	Allegare Data sheet bocchello/i Attachment nozzle/s Data sheet
			Lancia schiuma con deflettore a comando remoto Foam branchpipe with spreader remote controlled	D <input type="checkbox"/>	Allegare Data sheet lancia/e Attachment branchpipe/s Data sheet
			Bocchello/Lancia <u>senza</u> controllo remoto Nozzle/Branchpipe <u>without</u> remote control	X <input type="checkbox"/>	
	12	Comandi Controls	Pulsanti Push buttons	2P <input type="checkbox"/>	Specificare solo in caso di bocchello/lancia a comando remoto. Specify only in case of nozzle/branch pipe remote controlled
			Manipolatore Joystick	2J <input type="checkbox"/>	Specificare solo in caso di bocchello/lancia a comando remoto. Specify only in case of nozzle/branch pipe remote controlled
	VALVOLA ACQUA WATER VALVE	13	Valvola acqua Water valve	Valvola con attuatore elettrico Valve with electric actuator	VA <input type="checkbox"/>
Valvola a diluvio ON/OFF con elettrovalvola Deluge valve ON/OFF with solenoid valve				DA <input type="checkbox"/>	Specificare in Note la tensione di alimentazione della elettrovalvola. Specify in Notes the voltage of the solenoid valve.
Non presente Absent				X <input type="checkbox"/>	
14		Comandi Controls	Pulsanti Push buttons	3P <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.
	Manipolatore Joystick		3J <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.	
VALVOLA SCHIUMA FOAM VALVE	15	Valvola schiuma Foam valve	Valvola con attuatore elettrico Valve with electric actuator	VF <input type="checkbox"/>	Allegare Data sheet valvola Attach valve Data sheet
			Valvola a diluvio ON/OFF con elettrovalvola Deluge valve ON/OFF with solenoid valve	DF <input type="checkbox"/>	Specificare in Note la tensione di alimentazione della elettrovalvola. Specify in Notes the voltage of the solenoid valve.
			Non presente Absent	X <input type="checkbox"/>	
	16	Comandi Controls	Pulsanti Push buttons	4P <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.
			Manipolatore Joystick	4J <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.
OPZIONI OPTIONS	17	Copertura Cover	Copertura in plexiglass con molle Plexiglass cover with springs	M <input type="checkbox"/>	Disponibile solo per formato a leggione. Available only for podium shape.
			Copertura in plexiglass con pistoni pneumatici Plexiglass cover with pneumatic pistons	PP <input type="checkbox"/>	Disponibile solo per formato a leggione. Available only for podium shape.
	18	PLC	PLC	PLC <input type="checkbox"/>	Descrivere in Note la logica di funzionamento richiesta. Specify in Notes the operating logic required.
	19	Scaldiglia Heater	Scaldiglia anticondensa Anti-condensation heater	SA <input type="checkbox"/>	Compilare solo se richiesto. To be filled only if required.
	20	Verniciatura Painting	Verniciatura diversa dallo standard. Painting system different for standard	C <input type="checkbox"/>	Specificare in Note il ciclo di verniciatura richiesto. Specify in Notes the painting procedure required.

CONSOLE SLAVE PER MONITORI A CONTROLLO REMOTO
SLAVE CONTROL PANELS FOR REMOTE CONTROLLED MONITORS

Leggio / Podium



Pannello di controllo Exd / Exd
Control Panel



Descrizione



I pannelli di controllo SLAVE sono quadri appositamente sviluppati per i monitori a controllo remoto elettrici ed elettro-idraulici. Questi pannelli sono usati per comandare da remoto i monitori automatici inclusa l'automazione delle valvole di isolamento acqua e schiuma. Le soluzioni disponibili consentono la composizione di architetture idonee all'installazione sia in area sicura che classificata Zona 1 o 2 GD in accordo alla direttiva ATEX. Ogni quadro è configurabile in funzione dei controlli necessari, delle segnalazioni e della tipologia di comandi preferita nonché nella composizione dei materiali delle carpenterie e della verniciatura. Per soluzioni complesse, dove le soluzioni standard non trovano applicazione, contattare SA Fire Protection per discutere i dettagli dell'architettura desiderata. I pannelli di controllo SLAVE sono normalmente dislocati in impianto e/o in sala controllo e possono essere usati per comporre sistemi di controllo multipli. In questi sistemi sono presenti più console di comando per il controllo degli stessi monitori. Non possedendo al loro interno moduli di potenza, le console SLAVE devono sempre fare capo ad una Master Console. Per informazioni più specifiche riferirsi ai seguenti data sheets:

Master Console: DS B 40 10 10 20

Unità Wireless: DS B 40 10 10 40

Description



SLAVE control panels are specifically designed for remote controlled monitors electric and electro-hydraulic. This panels are used to control the automatic monitors including the automation of the isolation valves such as water and foam concentrate valves. The various combination available allow for the composition of systems architecture suitable for installation within safe or hazardous area Zone 1 or 2 GD according to ATEX directive. Every panel can be tailored to meet the specific project requirements in terms of controls, signaling and commands type as well as panel housing materials and painting system. For complex systems in which the standard solution may not fit the requirements, contact SA Fire Protection to discuss the detail of the desired architecture. SLAVE control panels are normally installed in the plant and/or in the control room and can be interconnected to form a multiple control system. In such systems more control panels are used in order to control the same monitors. Having no internal power modules, the SLAVE consoles must be interconnected to a Master Power and Control Panel. For additional information please refer to the following data sheets:

Master Panels: DS B 40 10 10 20

Wireless Unit: DS B 40 10 10 40

Caratteristiche tecniche

Quadro di Controllo:

- Carpenteria a scelta tra:
 - Lamiera di Acciaio al Carbonio ⁽¹⁾
 - Acciaio Inox AISI 316
 - Lega di Alluminio⁽²⁾
- Guarnizioni in poliuretano ⁽³⁾
- Morsetti di messa a terra per ciascun elemento
- Grado di protezione IP 55, IP 65 o IP 67
- Costruzione idonea per:
 - Area Sicura grado di protezione IP 55, IP 65 o IP 67
 - Area classificata ATEX:
 - II 2(1) GD Ex-d II B / II B + H2 ⁽²⁾
 - II 2 G Ex-ia II B ⁽¹⁾
- Formati carpenteria:
 - A leggìo
 - JB⁽²⁾
- Comandi:
 - Joystick ⁽⁴⁾
 - Pulsanti
- Indicatori a LED comandi

Monitori controllabili:

- Elettrici
 - Elettro-idraulici
- Movimenti e controlli:
 - Monitore Alto/Basso
 - Monitore Destra/Sinistra
 - Bocchello o deflettore Jet/Fog
 - Valvola principale acqua
 - Valvola schiuma

Colorazioni standard:

- Colore rosso RAL 3000
- Colore grigio RAL 7035

Technical characteristics

Control Panel:

- Housing to be selected among:
 - Carbon Steel Sheets ⁽¹⁾
 - Stainless Steel AISI 316
 - Aluminium alloy ⁽²⁾
- Polyurethane Gasket ⁽³⁾
- Earth connection terminals for each component
- Protection grade IP 55, IP 65 or IP 67
- Construction suitable for installation within:
 - Safe Area protection grade IP 55, IP 65 or IP 67
 - Classified area ATEX :
 - II (2)1 GD Ex-d II B / II B + H2 ⁽²⁾
 - II 2 G Ex-ia II B ⁽¹⁾
- Housing shapes:
 - Podium
 - JB⁽²⁾
- Command:
 - Joystick ⁽⁴⁾
 - Push button
- LED indicator command

Controllable monitors:

- Electric
 - Electro-hydraulics
- Movements and Controls:
 - Monitor Upwards / Downwards
 - Monitor Rightwards / Leftwards
 - Nozzle or Spreader Jet/Fog
 - Main valve water
 - Foam Valve

Standard colors:

- Colour red RAL 3000
- Colour grey RAL 7035

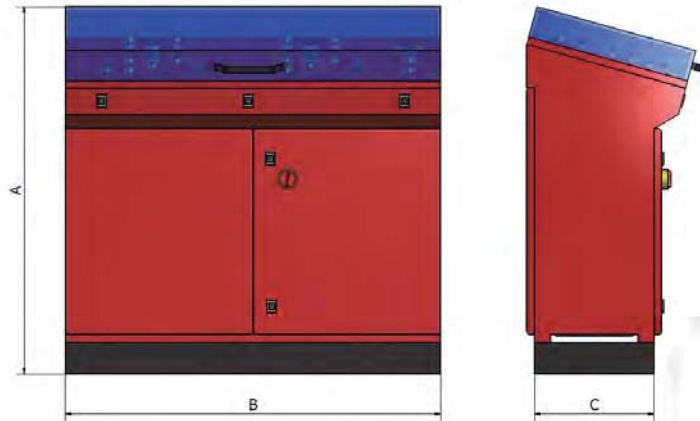
Note:

- (1) Valido solo per armadi a leggìo
 (2) Valido solo per quadri Ex-d
 (3) Valido solo per armadi a leggìo
 (4) Non disponibile per quadri Ex-d

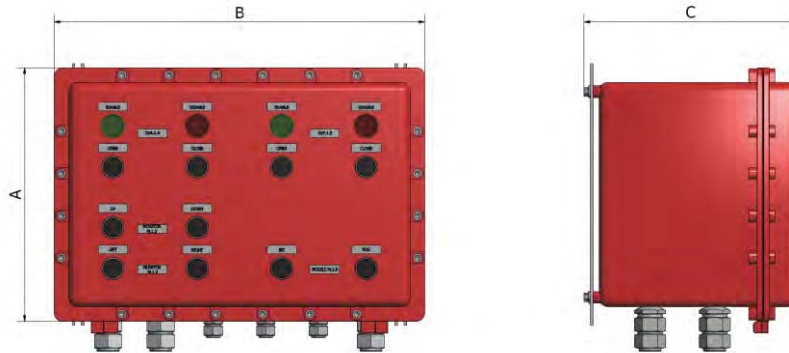
Notes:

- (1) Valid only for podiums
 (2) Valid only for Ex-d panels
 (3) Valid only for podiums
 (4) Not available for Ex d panels

Leggio / Podium



Pannello di controllo Ex d / Ex d Control Panel



Installazione Installation	Console	Tipo Pannello Panel Type	Comandi Commands	Segnali Signals	Monitori Monitors	A mm	B mm	C mm	Peso Weight (kg)
Sicura Safe	Comandi Command	Leggio Podium	P,J	L	1	1208	600	400	100
					2	1208	1200	400	180
					3	1208	1600	400	240
Zona 1, 2 Zone 1,2	Comandi Command Ex-d	Control Panel	P	L	1 ⁽⁴⁾	432 ⁽⁴⁾	632 ⁽⁴⁾	335 ⁽⁴⁾	60

Opzioni

- Copertura pulsantiera in plexiglas trasparente con molle
- Copertura pulsantiera in plexiglas trasparente con pistoni pneumatici
- PLC
- Scaldiglia Anticondensa
- Ciclo di verniciatura diverso dallo Standard SA
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Plexiglas cover for controls with springs
- Plexiglas cover for controls with pneumatic pistons
- PLC
- Anti-condensation Heater
- Painting system different from Standard SA
- For additional options or special versions contact SA Fire Protection

Note:

(4) Valido per i comandi di un monitor e due valvole

Note:

(4) Valid for the controls of one monitor and two valves

Codice Identificativo
Identification Form

Mod. **CS** / / / /

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

OPZIONI / OPTIONS

/

16
17
18
19

Quantità / Quantity

QUADRO DI CONTROLLO / CONTROL PANEL

CONFIGURAZIONE CONSOLE CONSOLE CONFIGURATION	1	Tipologia Type	Console Secondaria Slave Console	CS <input checked="" type="checkbox"/>	
	2	Numero monitori Monitors number	1	1 <input type="checkbox"/>	
			2	2 <input type="checkbox"/>	
			3	3 <input type="checkbox"/>	
			Più di tre monitori More than three monitors	(___) <input type="checkbox"/>	Indicare all'interno delle parentesi il numero di monitori da controllare. Specify within brackets the number of monitors to be controlled.
	3	Formato Shape	Leggio – Area Sicura Podium – Safe Area	PS <input type="checkbox"/>	
			Leggio – Ex ia (Zona 2) Podium – Ex ia (Zone 2)	PA2 <input type="checkbox"/>	Non può installare PLC. Cannot Install PLC.
			JB – Ex d (Zone 2)	JBA2 <input type="checkbox"/>	
			JB – Ex d (Zone 1)	JBA1 <input type="checkbox"/>	
	4	Materiale Material	Lamiera acciaio al carbonio Carbon steel sheet	CAC70 <input type="checkbox"/>	Disponibile solo per formato a leggio, materiale standard per installazione interna. Available only for podium shape, standard material for indoor installation.
Lamiera acciaio inox AISI 316 Stainless steel sheet AISI 316			CAI72 <input type="checkbox"/>	Disponibile solo per formato a leggio, materiale standard per installazione esterna. Available only for podium shape, standard material for outdoor installation.	
Lega di alluminio Aluminium alloy			CAL11 <input type="checkbox"/>	Disponibile solo per formato JB. Available only for JB shape.	
Acciaio inox AISI 316 Stainless steel AISI 316			CAI12 <input type="checkbox"/>	Disponibile solo per formato JB. Available only for JB shape.	
5	Verniciatura Painting	Colore rosso RAL3000 Colour red RAL 3000	RED <input type="checkbox"/>		
		Colore grigio RAL 7035 Colour grey RAL 7035	GREY <input type="checkbox"/>		
6	Protezione Protection	IP55	IP55 <input type="checkbox"/>	Disponibile solo per formato a leggio. Available only for podium shape.	
		IP65	IP65 <input type="checkbox"/>	Non disponibile in acciaio al carbonio Not available in carbon steel	
		IP67	IP67 <input type="checkbox"/>		
7	LED LED	Indicatore di posizione Position indicator	L <input type="checkbox"/>		
		Senza indicatore di posizione Without position indicator	NL <input type="checkbox"/>		
8	Tipologia monitori Monitors type	Elettrici Electric	E <input type="checkbox"/>		
		Elettro-idraulici Electro-hydraulic	EO <input type="checkbox"/>		
9	Comandi Controls	Pulsanti Push buttons	1P <input type="checkbox"/>		
		Manipolatore Joystick	1J <input type="checkbox"/>	Non disponibile in versione Ex d Ex d version not available	

Prosegue alla pagina seguente / Continue to the next page

BOCCHELLO/LANCIA NOZZLE/BRANCHPIPE	10	Bocchello/Lancia Nozzle/Branchpipe	Bocchello jet/fog a comando remoto Nozzle jet/fog remote controlled	B <input type="checkbox"/>	
			Lancia schiuma con deflettore a comando remoto Foam branchpipe with spreader remote controlled	D <input type="checkbox"/>	
			Bocchello/Lancia <u>senza</u> controllo remoto Nozzle/Branchpipe <u>without</u> remote control	X <input type="checkbox"/>	
	11	Comandi Controls	Pulsanti Push buttons	2P <input type="checkbox"/>	Specificare solo in caso di bocchello/lancia a comando remoto. Specify only in case of nozzle/branchpipe remote controlled
			Manipolatore Joystick	2J <input type="checkbox"/>	Specificare solo in caso di bocchello/lancia a comando remoto. Disponibile solo per Area Sicura. Specify only in case of nozzle/branchpipe remote controlled. Available only for Safe Area.
	VALVOLA ACQUA WATER VALVE	12	Valvola acqua Water valve	Valvola con attuatore elettrico Valve with electric actuator	VA <input type="checkbox"/>
Valvola a diluvio ON/OFF con elettrovalvola Deluge valve ON/OFF with solenoid valve				DA <input type="checkbox"/>	Specificare in Note la tensione di alimentazione della elettrovalvola. Specify in Notes the voltage of the solenoid valve.
Non presente Absent				X <input type="checkbox"/>	
13		Comandi Controls	Pulsanti Push buttons	3P <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.
			Manipolatore Joystick	3J <input type="checkbox"/>	Specificare solo se la valvola è presente. Disponibile solo per Area Sicura. Specify only in case the valve is present. Available only for Safe Area.
VALVOLA SCHIUMA FOAM VALVE		14	Valvola schiuma Foam valve	Valvola con attuatore elettrico Valve with electric actuator	VF <input type="checkbox"/>
	Valvola a diluvio ON/OFF con elettrovalvola Deluge valve ON/OFF with solenoid valve			DF <input type="checkbox"/>	Specificare in Note la tensione di alimentazione della elettrovalvola. Specify in Notes the voltage of the solenoid valve.
	Non presente Absent			X <input type="checkbox"/>	
	15	Comandi Controls	Pulsanti Push buttons	4P <input type="checkbox"/>	Specificare solo se la valvola è presente. Specify only in case the valve is present.
			Manipolatore Joystick	4J <input type="checkbox"/>	Specificare solo se la valvola è presente. Disponibile solo per Area Sicura. Specify only in case the valve is present. Available only for Safe Area.
	OPZIONI OPTIONS	16	Copertura Cover	Copertura in plexiglass con molle Plexiglass cover with springs	M <input type="checkbox"/>
Copertura in plexiglass con pistoni pneumatici Plexiglass cover with pneumatic pistons				PP <input type="checkbox"/>	Disponibile solo per formato a leggjo. Available only for podium shape.
17		PLC	PLC	PLC <input type="checkbox"/>	Descrivere in Note la logica di funzionamento richiesta. Specify in Notes the operating logic required.
18		Scaldiglia Heater	Scaldiglia anticondensa Anti-condensation heater	SA <input type="checkbox"/>	Compilare solo se richiesto. To be filled only if required.
19		Verniciatura Painting	Verniciatura diversa dallo standard. Painting system different for standard	C <input type="checkbox"/>	Specificare in Note il ciclo di verniciatura richiesto. Specify in Notes the painting procedure required.

UNITÀ WIRELESS CONTROLLO PER MONITORI A CONTROLLO REMOTO
WIRELESS UNIT FOR REMOTE CONTROLLED MONITORS



Descrizione



Le unità wireless sono dei dispositivi appositamente sviluppati per consentire il controllo dei monitori automatici e l'apertura/chiusura delle valvole di radice acqua e/o schiuma. L'architettura si compone di una trasmittente e di una ricevente integrata o collegata hard-wired ad un pannello di controllo e potenza dove è installato un PLC. Il segnale di controllo della trasmittente viene trasferito in frequenza alla ricevente a cui è affidato il dialogo con il PLC principale della Master Console di Potenza e Controllo. Le soluzioni disponibili consentono la composizione di architetture idonee all'installazione della ricevente sia in area sicura che classificata Zona 1 o 2 GD mentre la trasmittente può operare solo in Zona 2 GD. Per soluzioni complesse, dove le soluzioni standard non trovano applicazione, contattare SA Fire Protection per discutere i dettagli dell'architettura desiderata. Per maggiori dettagli sulle Console MASTER di potenza e controllo su cui collegare la trasmittente fare riferimento al seguente data sheet:

Master Console : DS B 40 10 10 20

Description



The wireless units are devices used specifically to control automatic monitors together with the opening and closing of their isolation valves. The system architectures is made of a transmitter and a receiver that can be embedded or interconnected to a PLC located into a power and control console. The control signals are transferred from the transmitter to the receiver in frequency which are then exchanged to the PLC located in the Master Panel (Power & Control). The available solutions allow for the receiver installation in safe area as well as Zone 1 and 2 GD whereas the transmitter can be operated up to Zone 2 GD. For complex systems in which the standard solution may not fit the requirements, contact SA Fire Protection to discuss the detail of the desired architecture. For additional information on MASTER Control Panels (Power & Control) where the transmitter can be connected please refer to the following data sheet:

Master Control Panels: DS B 40 10 10 20



Caratteristiche tecniche

Unità Wireless:

Trasmettitore:

- Struttura in Nylon
- Pulsante di abilitazione
- Joystick per i movimenti del monitor : alto / basso / destra / sinistra
- Joystick o pulsanti per bocchello o deflettore Jet/Fog
- Pulsanti per valvole acqua
- Pulsanti per valvola schiuma
- Selettore 1/n per prendere il controllo nelle installazioni multi monitori
- Caricatore per batterie
- Costruzione idonea per:
 - Area Sicura grado di protezione IP 65
 - Area classificata ATEX:
 - Ex II 3 GD Ex nA nL IIB T6
- Formati carpenteria:
 - Portatile a tracolla

Ricevitore:

- Struttura in Nylon
- Costruzione idonea per:
 - Area Sicura grado di protezione IP 65
 - Area classificata ATEX:
 - Fornita in JB II 2 GD Ex d IIB+H2 Ex tD T5 IP66
- Antenna ricevente: raggio di copertura 150 m

Monitori controllabili:

- Elettrici
- Elettro-idraulici
- Movimenti e controlli:
 - Monitor Alto/Basso
 - Monitor Destra/Sinistra
 - Bocchello o deflettore Jet/Fog
 - Valvola principale acqua
 - Valvola schiuma

Technical characteristics

Wireless Unit:

Transmitter:

- Housing in Nylon
- Enabling push button
- Joystick for monitor upwards / downwards / rightwards / leftwards
- Joystick or push buttons for nozzle or spreader Jet/fog
- Push Buttons for water valve
- Push buttons for foam valve
- Selector switch 1/n for taking control in multi-installation monitors
- Battery charger
- Construction suitable for installation within:
 - Safe Area protection grade IP 65
 - Classified area ATEX :
 - Ex II 3 GD Ex nA nL IIB T6
- Housing shapes:
 - Portable with shoulder strap

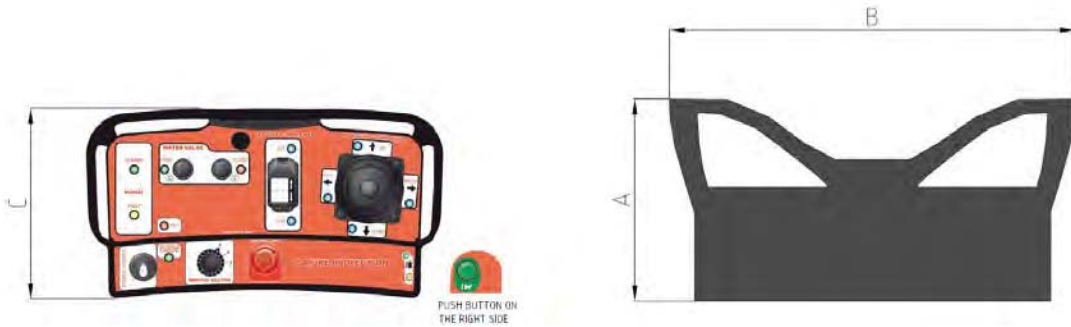
Receiver:

- Housing in Nylon
- Construction suitable for installation within:
 - Safe Area protection grade IP 65
 - Classified area ATEX:
 - Supplied in JB II 2 GD Ex d IIB+H2 Ex tD T5 IP66
- Receiving antenna: coverage area 150 m

Controllable monitors:

- Electric
- Electro-hydraulics
- Movements and Controls:
 - Monitor Upwards / Downwards
 - Monitor Rightwards / Leftwards
 - Nozzle or Spreader Jet/Fog
 - Main valve water
 - Foam Valve

Unità Wireless / Wireless Unit



ATEX Area	Console	Tipo Pannello Panel Type	Comandi Commands	Segnali Signals	Monitori Monitors	A mm	B mm	C mm	Peso Weight (kg)
Sicura Safe	Secondario Slave IP	Wireless	P,J	L	1	147	296	155	5
					2				
					3				
Zona 1, 2 Zone 1, 2	Secondario Slave Ex-ia ⁽¹⁾	Wireless	P,J	L	1	147	296	155	5
					2				
					3				

LEGENDA / LEGEND:

P – Pulsanti / Push Buttons; J – Joystick; L – Led

Note:

(1) Ricevitore idoneo per Zona 1 e 2 GD, Trasmettitore idoneo solo per zona 2 GD

Note:

(1) Receiver for Zone 1 and 2 GD, Transmitter can be used only up to Zone 2

Opzioni

- Batterie di riserva per trasmettitore
- Cassetta in acciaio al carbonio per trasmettitore e carica batterie
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Spare Batteries for transmitter
- Carbon steel box for transmitter and battery charger
- For additional options or special versions contact SA Fire Protection

Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod.

/ / /

1

2

3

4

5

6

7

8

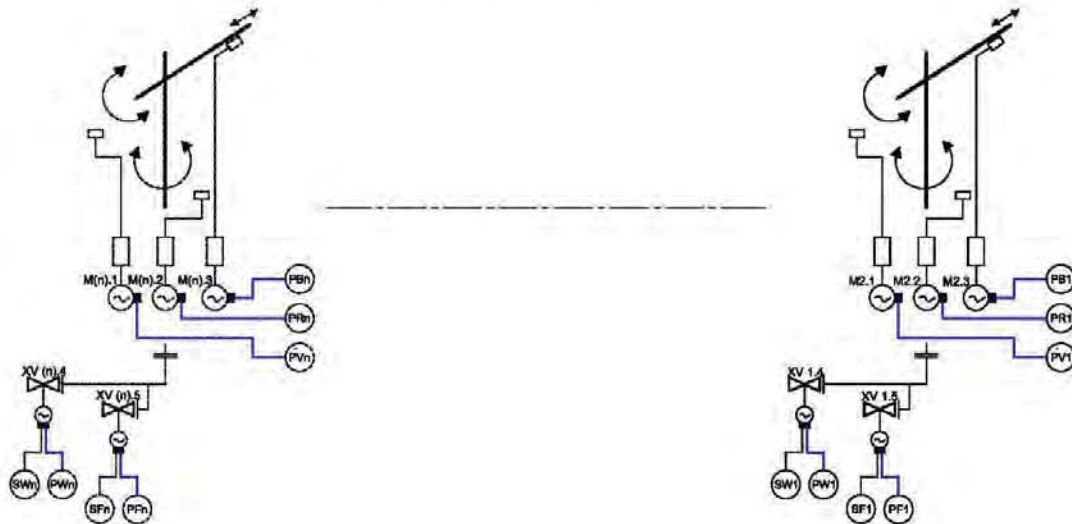
Quantità / Quantity

UNITÀ WIRELESS / WIRELESS UNIT

UNITÀ WIRELESS / WIRELESS UNIT					
CONFIGURAZIONE CONFIGURATION	1	Tipologia Type	Unità wireless Wireless unit	CW <input checked="" type="checkbox"/>	
	2	Monitori Monitors	1	1 <input type="checkbox"/>	
			2	2 <input type="checkbox"/>	
			3	3 <input type="checkbox"/>	
		Più di tre monitori More than three monitors	N <input type="checkbox"/>	Specificare in Note il numero di monitori da controllare. Specify in Notes the number of monitors to be controlled.	
TRASMETTITORE TRANSMITTER	3	Area	Area Sicura – IP65 Safe Area – IP65	TS <input type="checkbox"/>	
			ATEX – Ex nA (Zone 2)	TA2 <input type="checkbox"/>	
	4	Comandi bocchello/lancia Controls nozzle/branchpipe	Pulsanti Push buttons	1P <input type="checkbox"/>	
Manipolatore Joystick			1J <input type="checkbox"/>		
RICEVITORE RECEIVER	5	Area	Area Sicura – IP65 Safe Area – IP65	RS <input type="checkbox"/>	
			ATEX – Ex d (Zone 2)	RA2 <input type="checkbox"/>	
			ATEX – Ex d (Zone 1)	RA1 <input type="checkbox"/>	
	6	Installazione Installation	Dentro Console Master Inside Master Console	M <input type="checkbox"/>	
			In campo, JB senza supporto In the field, JB without support	C <input type="checkbox"/>	
		In campo, JB con supporto altezza 3 m In the field, JB with support height 3 m	CS <input type="checkbox"/>		
OPZIONI OPTIONS	7	Batterie di riserva Spare Batteries	Batterie di riserva per trasmettente Spare Batteries for transmitter	B <input type="checkbox"/>	Compilare solo se richiesto. To be filled only if required.
	8	Cassetta Box	Cassetta in acciaio al carbonio per trasmettente e carica batterie Carbon steel box for transmitter and battery charger	C <input type="checkbox"/>	Compilare solo se richiesto. To be filled only if required.

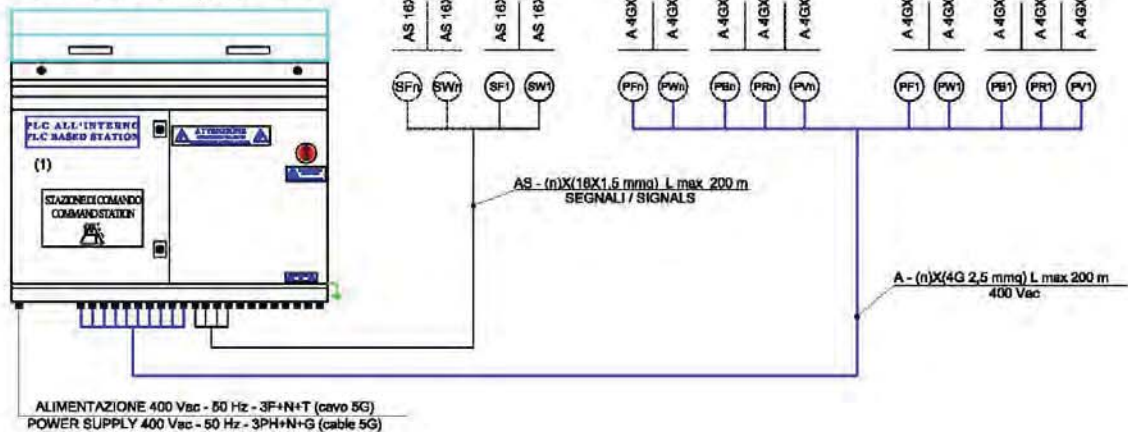
TIPO / TYPE No.1EO MONITORI ELETTRO-IDRAULICI ELECTRO-HYDRAULIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



AREA SICURA
SAFE AREA

STAZIONE DI COMANDO N.(n) MONITORI COMMAND STATION N.(n) MONITORS

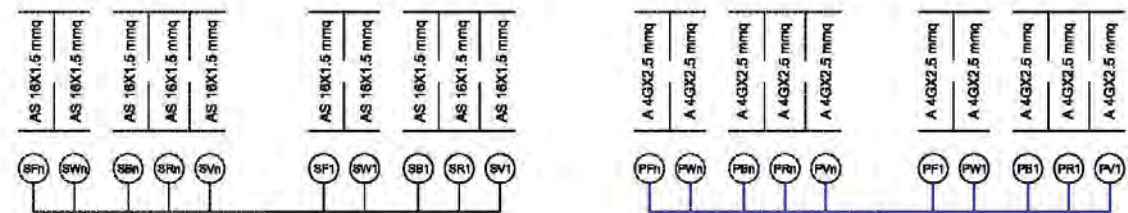
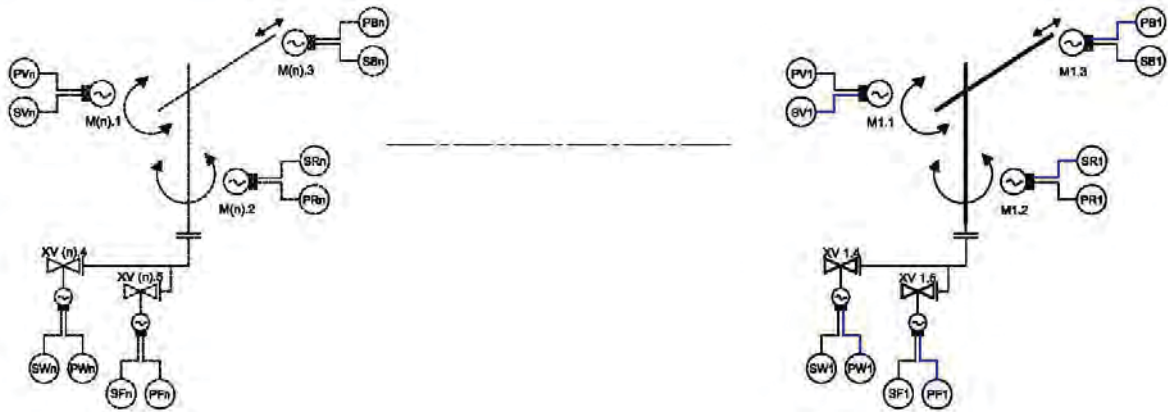


NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCELLO/DEPLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	1	DUE STAZIONI DI COMANDO DISPONIBILI CON SELETTORI PER SELEZIONARE 2 SU GLI (n) MONITORI INSTALLATI
XV(n).4	VALVOLA ACQUA / WATER VALVE		TWO COMMAND STATION AVAILABLE WITH SELECTORS CAPABLE TO CONTROL 2 AMONG (n) MONITORS INSTALLED
XV(n).5	VALVOLA SCHIUMOGEND / FOAM CONCENTRATE VALVE		

TIPO / TYPE No.1E MONITORI ELETTRICI ELECTRIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



STAZIONE DI COMANDO N.(n) MONITORI
COMMAND STATION N.(n) MONITORS



AREA SICURA
SAFE AREA

AS - (n)X(16X1,5 mmq) L max 200 m
SEGNALI / SIGNALS

A - (n)X(4X2,5 mmq) L max 200 m
400 V ac

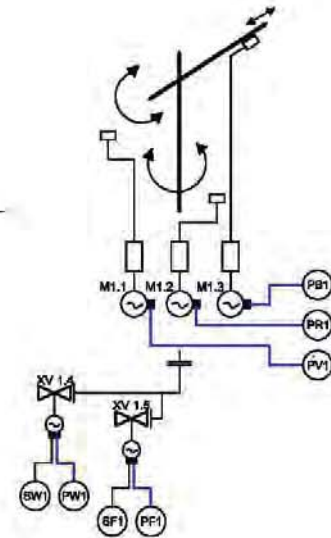
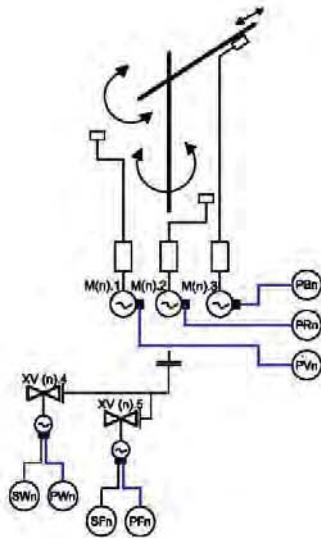
ALIMENTAZIONE 400 V ac - 50 Hz - 3F+N+T (cavo 5G)
POWER SUPPLY 400 V ac - 50 Hz - 3PH+N+G (cable 5G)

NOTE:

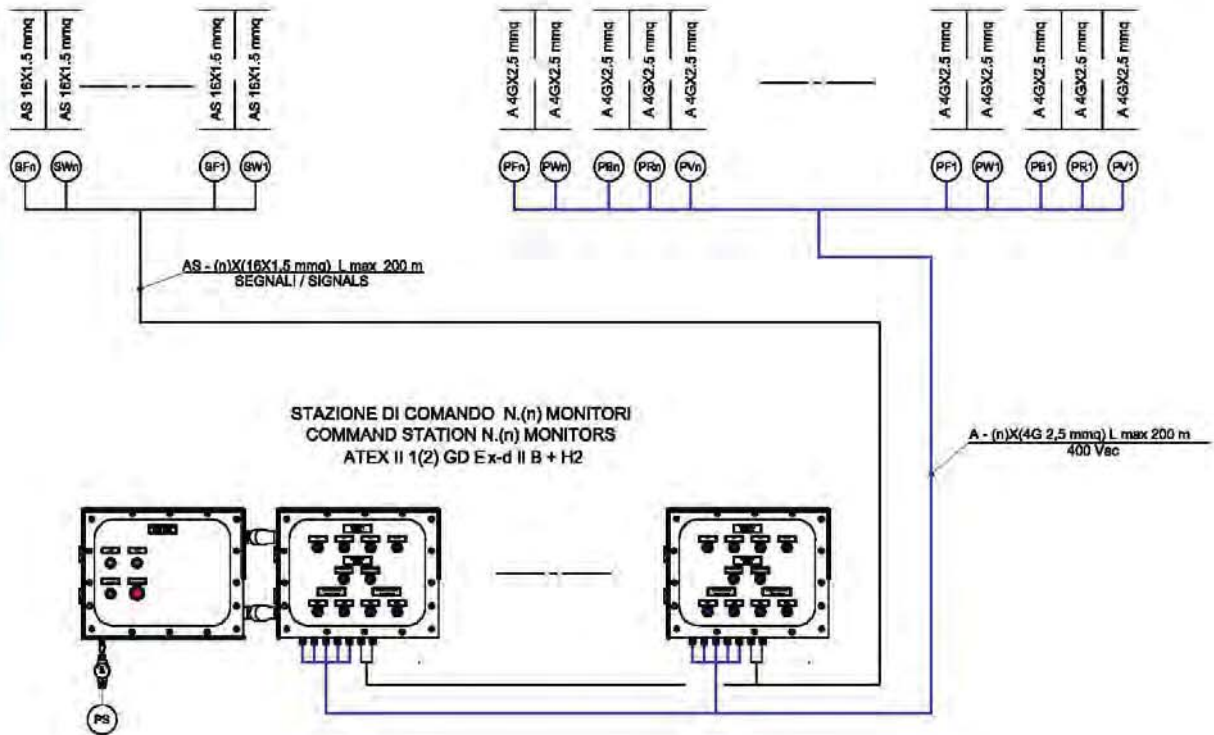
M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	1	DUE STAZIONI DI COMANDO DISPONIBILI CON SELETTORI PER SELEZIONARE 2 SU GLI (n) MONITORI INSTALLATI TWO COMMAND STATION AVAILABLE WITH SELECTORS CAPABLE TO CONTROL 2 AMONG (n) MONITORS INSTALLED
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.1E

TIPO / TYPE No. 2EO MONITORI ELETTRIDRAULICI ELECTRO-HYDRAULIC MONITORS



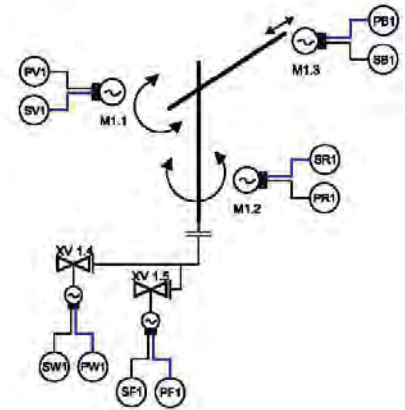
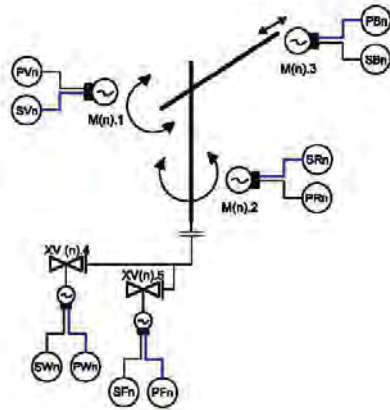
AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



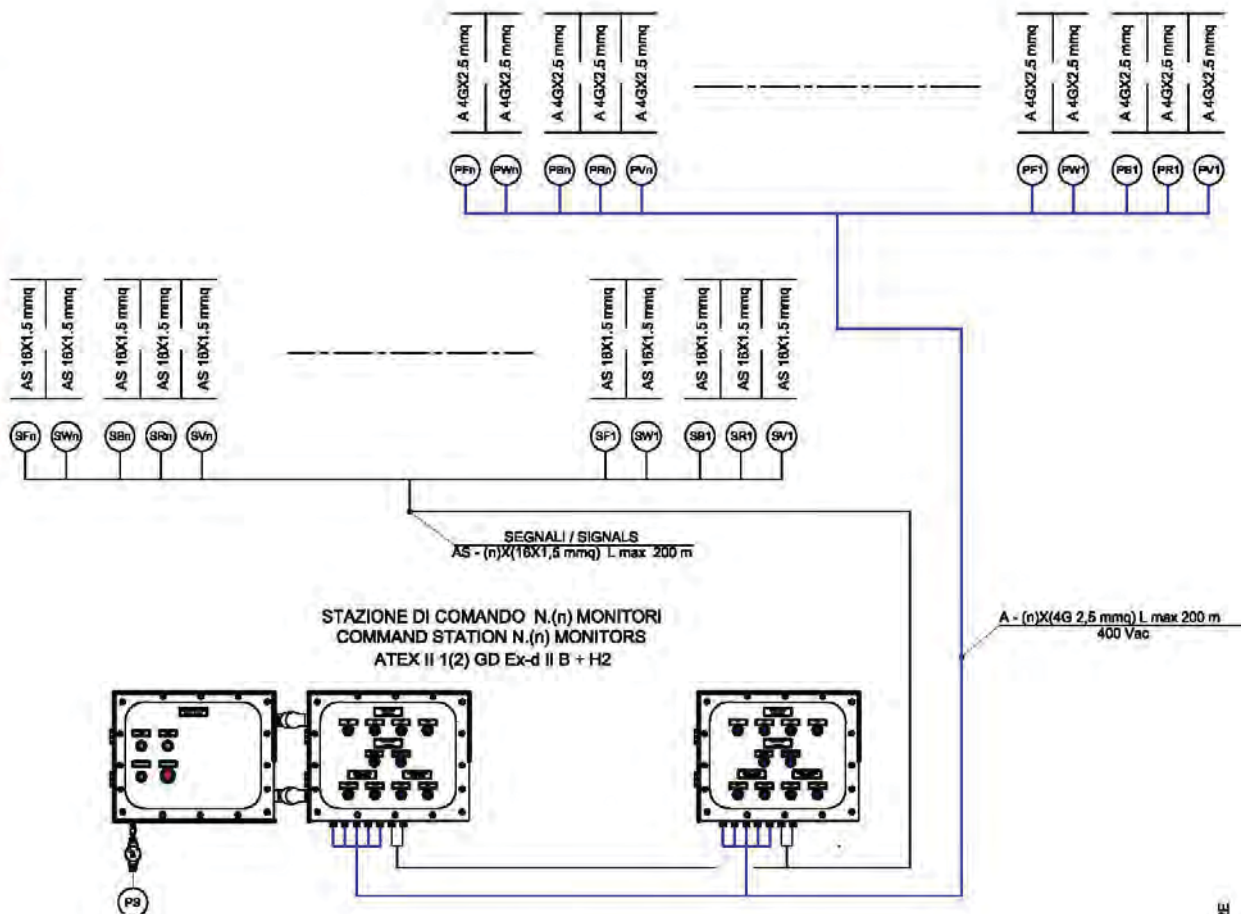
NOTE :

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHIELLO/DEFFLETORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

TIPO / TYPE No. 2E MONITORI ELETTRICI ELECTRIC MONITORS



AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



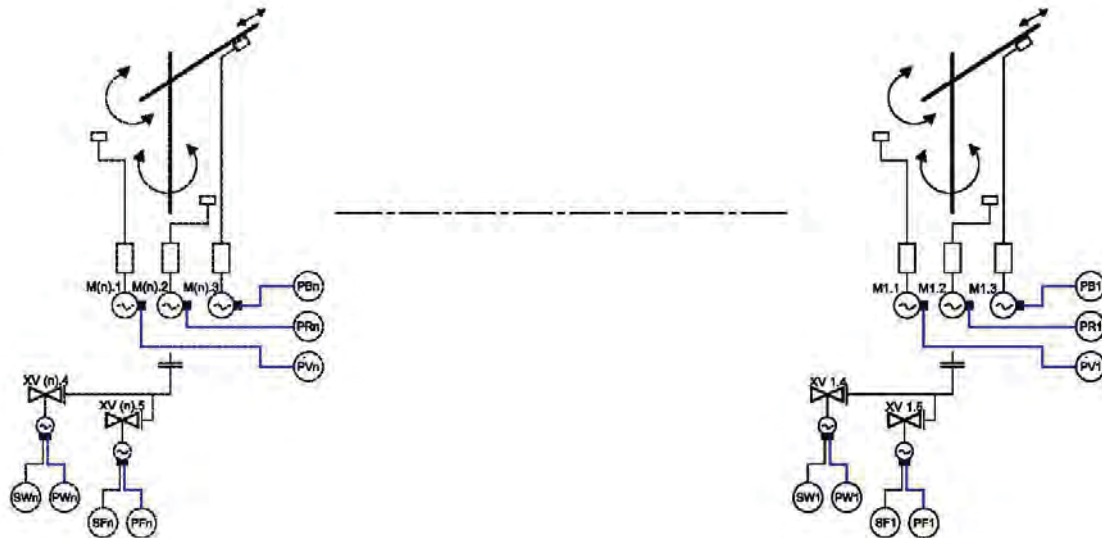
NOTE:

M(n),1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n),2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n),3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n),4	VALVOLA ACQUA / WATER VALVE		
XV(n),5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

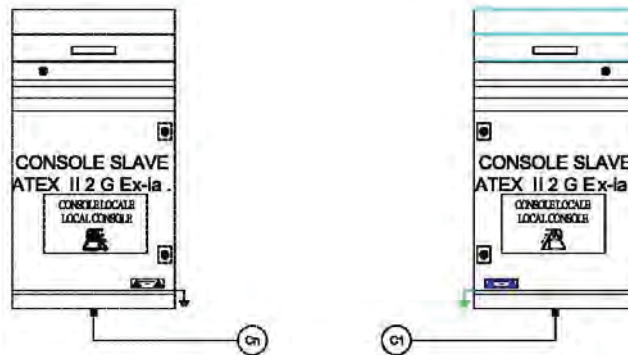
Doc No. B 40 10 10 R.00 / TYPE No.2E

TIPO / TYPE No. 3EO MONITORI ELETTRIDRAULICI ELECTRO-HYDRAULIC MONITORS

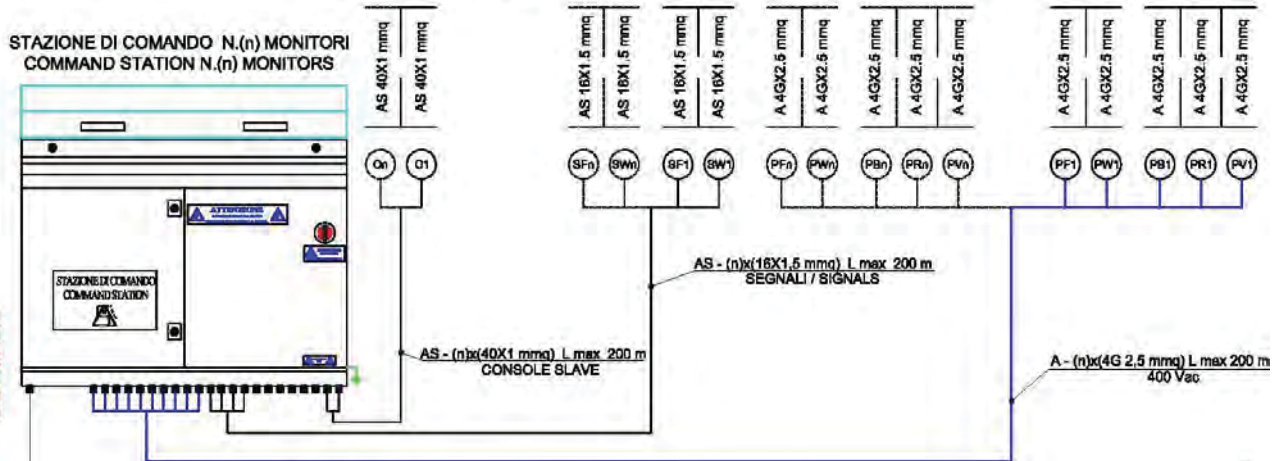
AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



AREA PERICOLOSA - ATEX ZONA 2
HAZARDOUS AREA - ATEX ZONE 2



AREA SICURA
SAFE AREA



ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G)
POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)

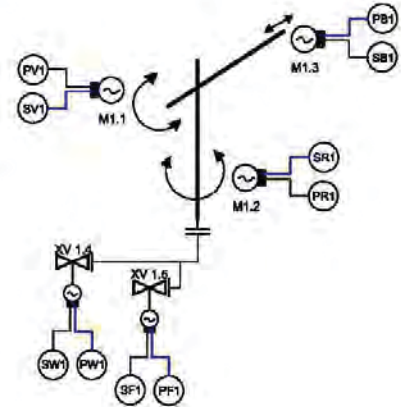
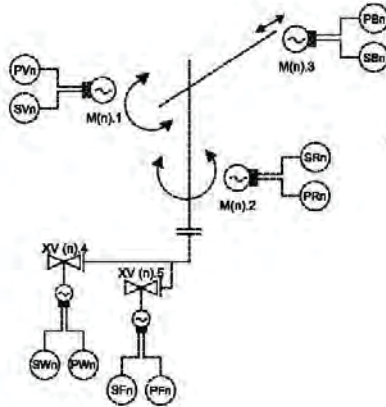
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG		
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

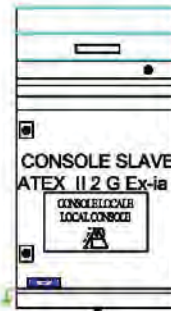
Doc No. B 40 10 10 R.00 / TYPE No.3EO

TIPO / TYPE No. 3E MONITORI ELETTRICI ELECTRIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2

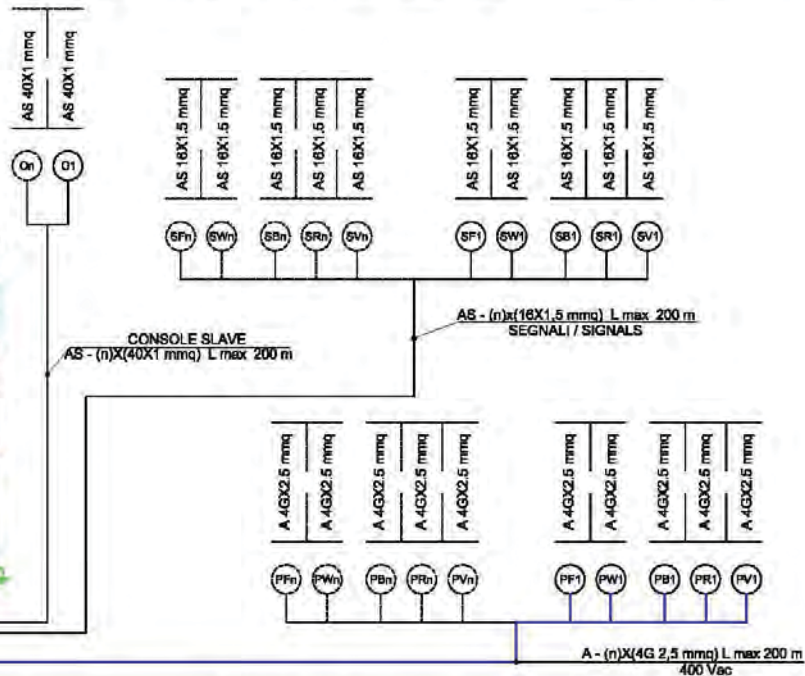
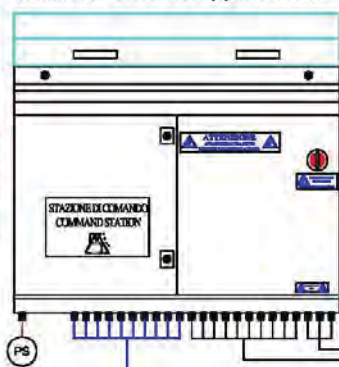


AREA PERICOLOSA - ATEX ZONA 2
HAZARDOUS AREA - ATEX ZONE 2



AREA SICURA
SAFE AREA

STAZIONE DI COMANDO N.(n) MONITORI
COMMAND STATION N.(n) MONITORS



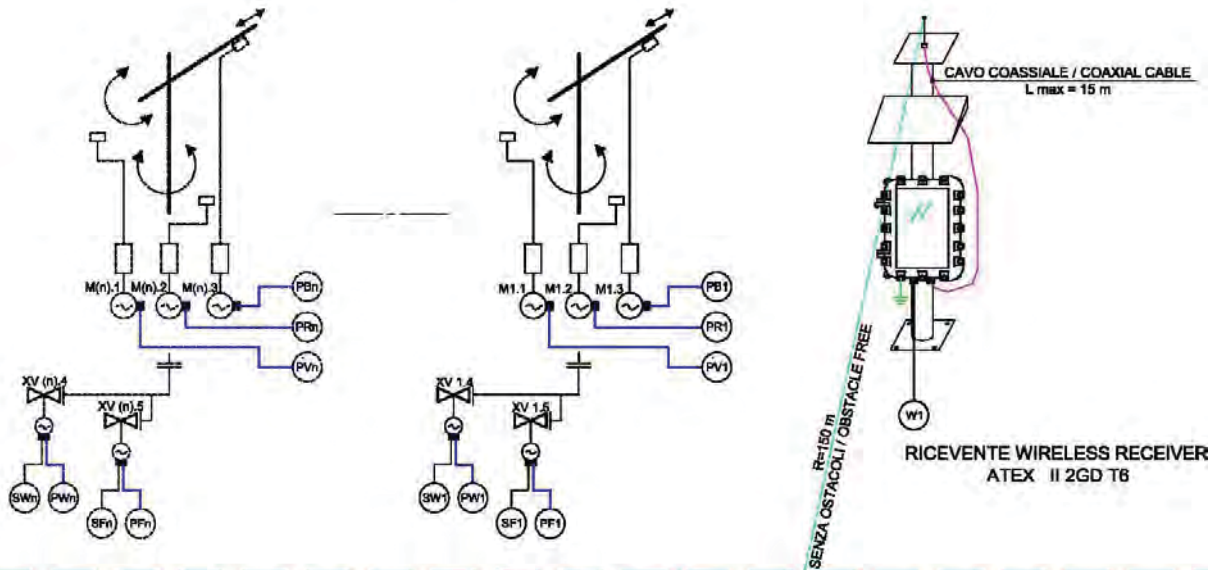
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

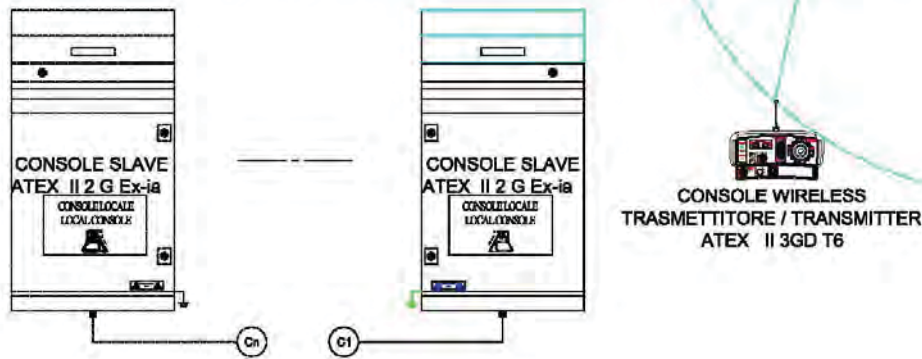
Doc No. B 40 10 10 R.00 / TYPE No.3E

TIPO / TYPE No. 4EO MONITORI ELETTRIDRAULICI ELECTRO-HYDRAULIC MONITORS

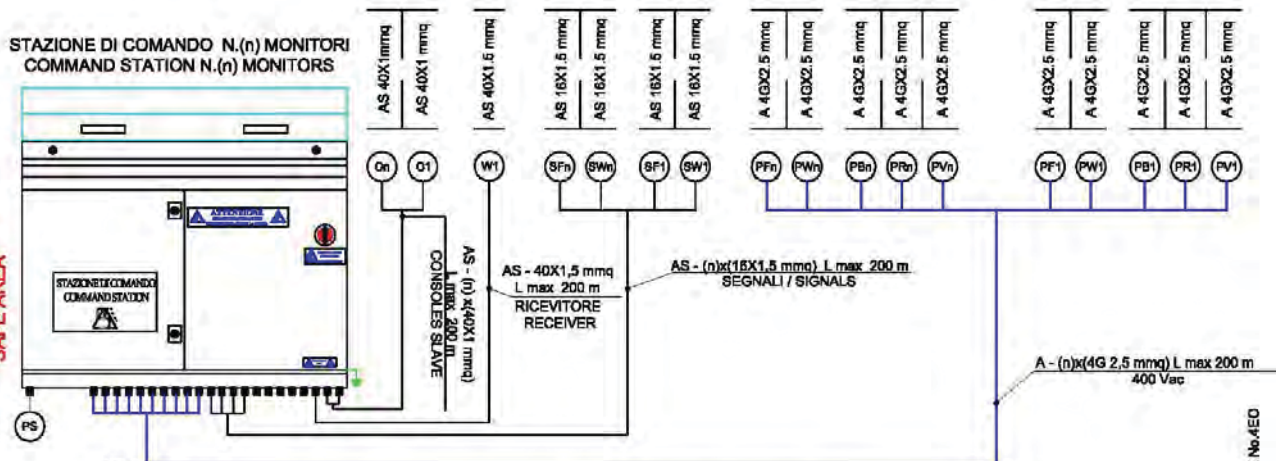
AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



AREA PERICOLOSA - ATEX ZONA 2
HAZARDOUS AREA - ATEX ZONE 2



AREA SICURA
SAFE AREA



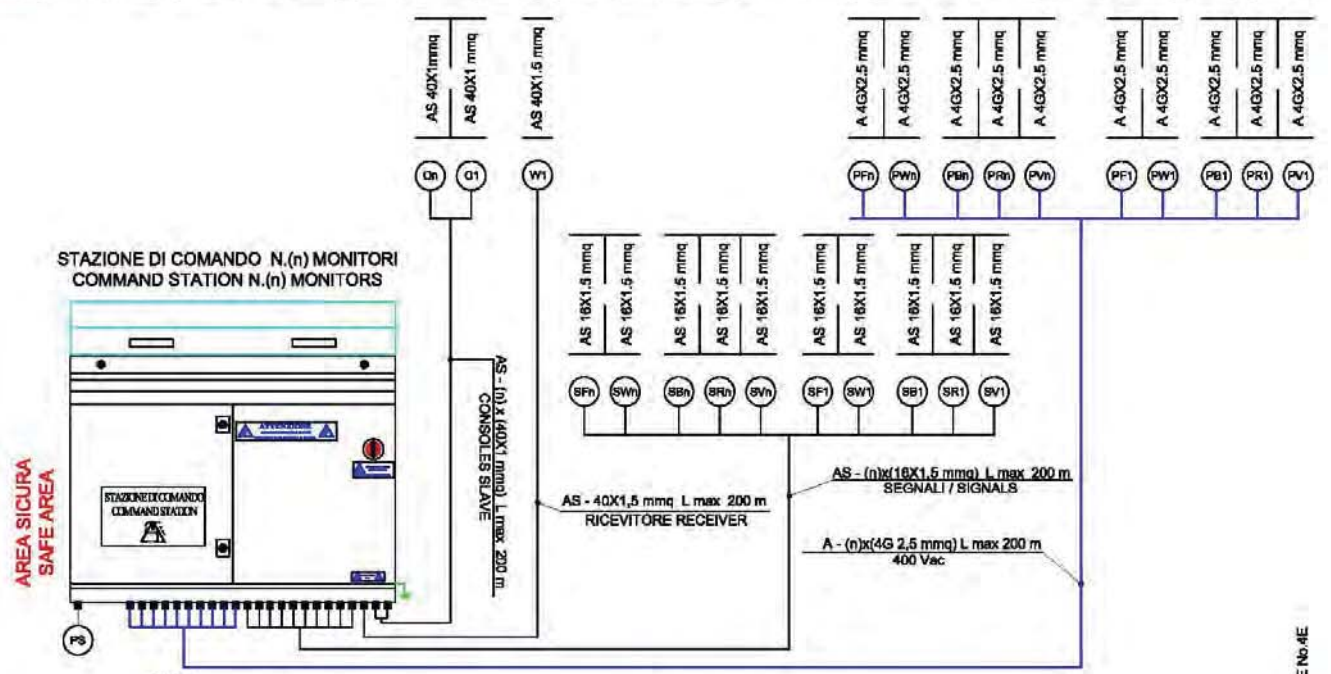
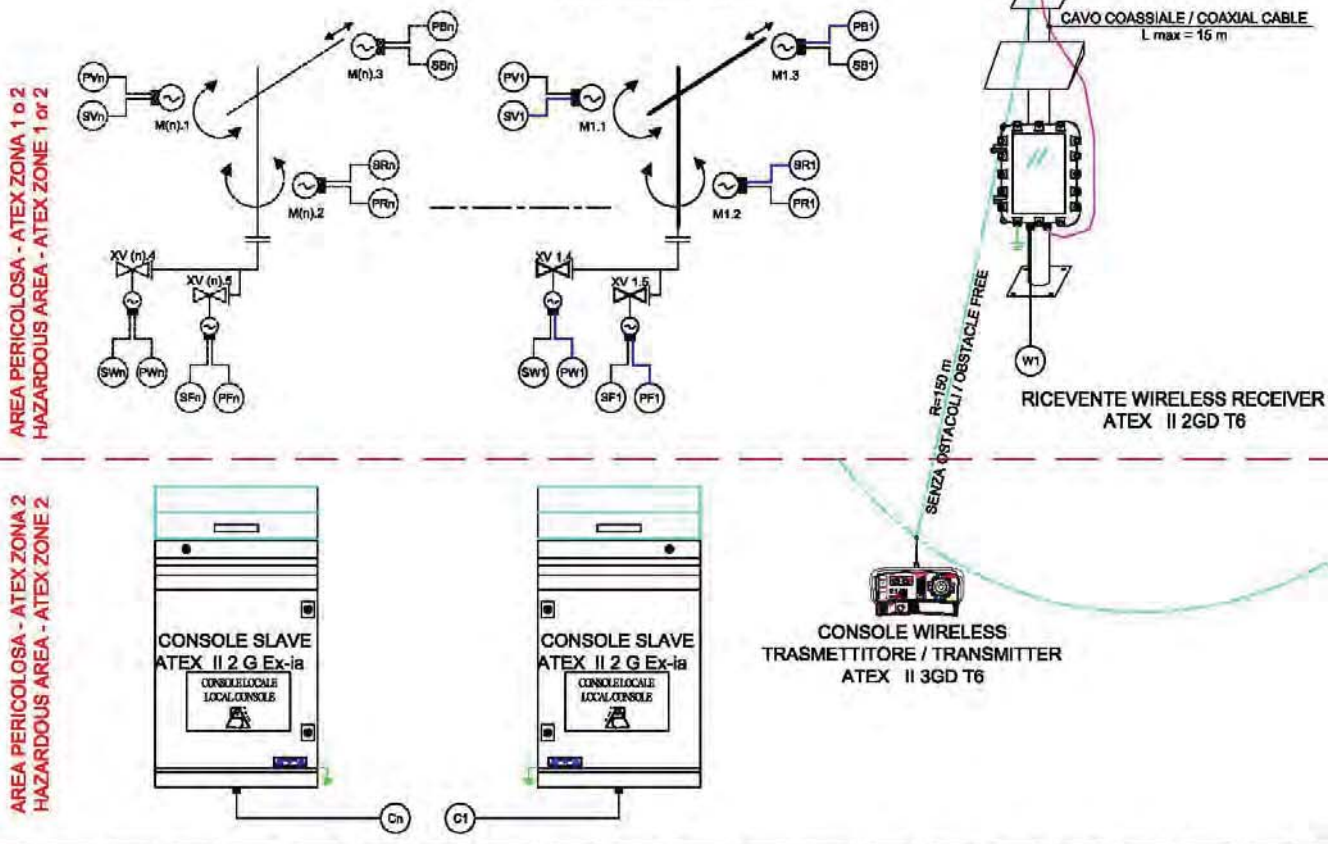
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.4EO

TIPO / TYPE No. 4E

MONITORI ELETTRICI ELECTRIC MONITORS



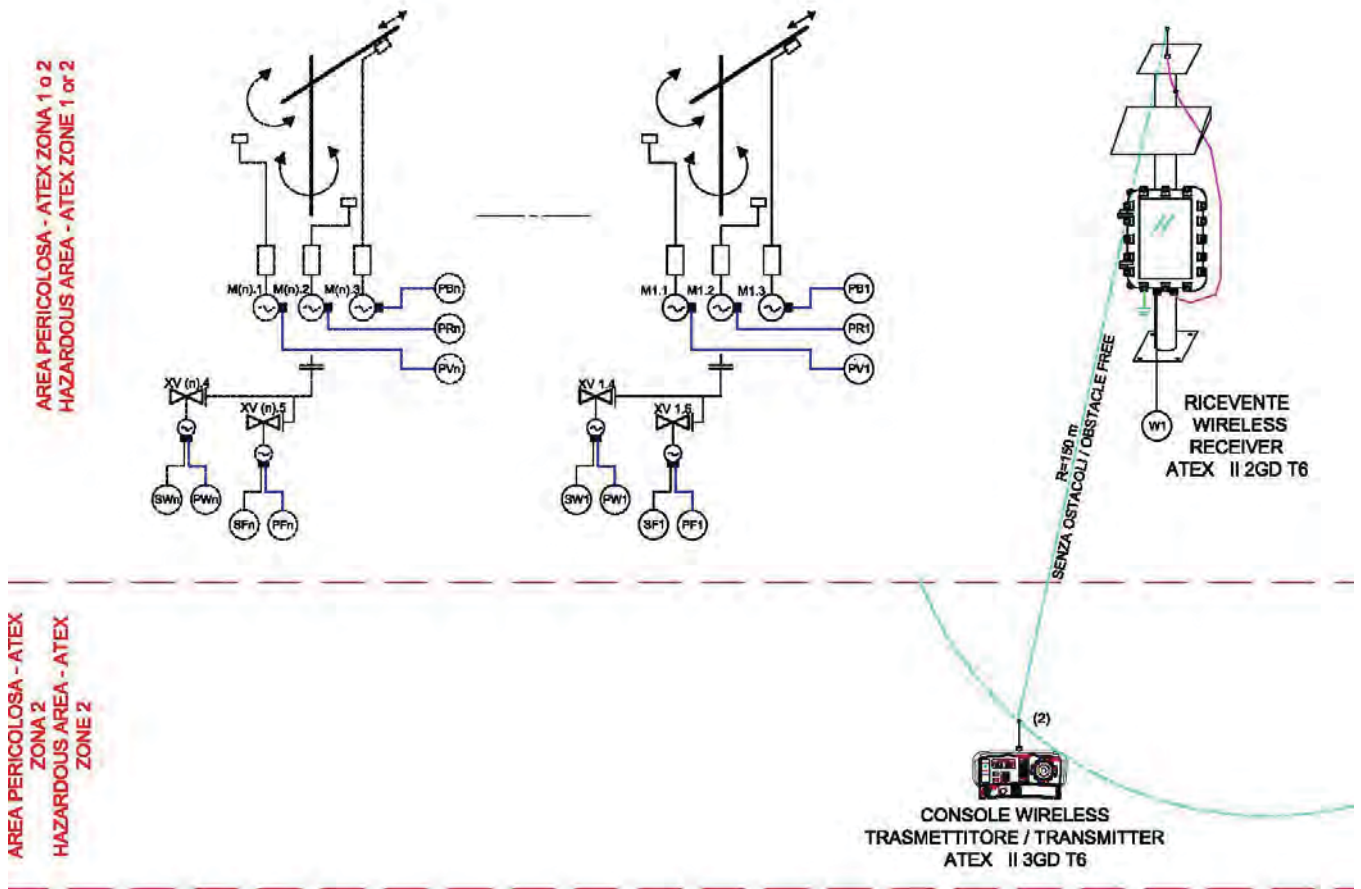
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFFETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).6	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.4E

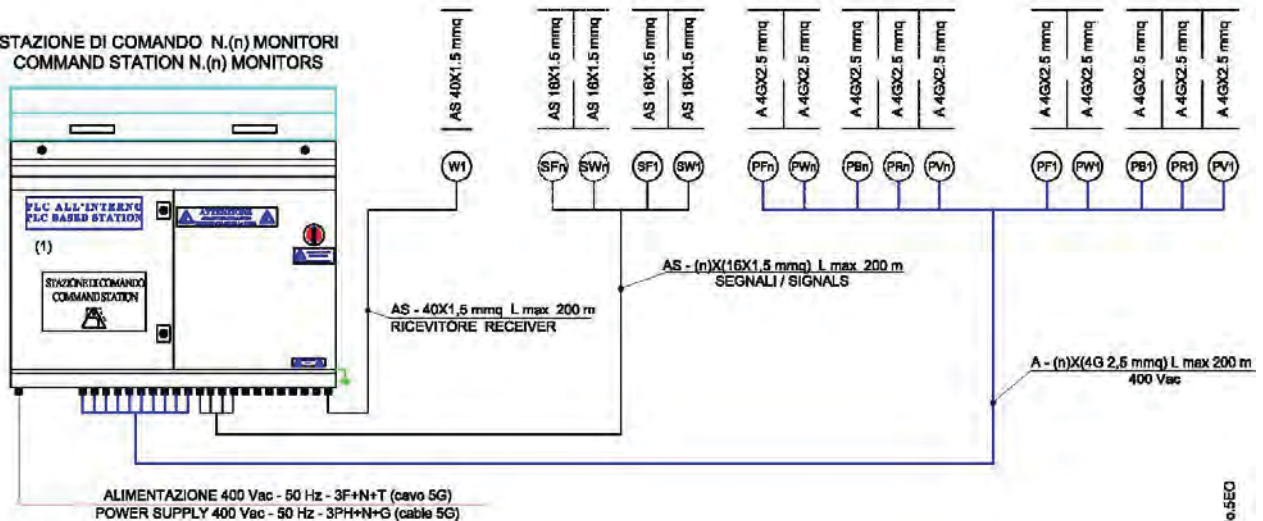
I particolari di questo foglio tecnico, sebbene esatti al tempo della pubblicazione, potrebbero essere soggetti a modifiche senza preavviso. - The data shown on this data sheet, although correct at the time of publication, may be varied without notice.

TIPO / TYPE No. 5EO MONITORI ELETTRO-IDRAULICI ELECTRO-HYDRAULIC MONITORS



STAZIONE DI COMANDO N.(n) MONITORI COMMAND STATION N.(n) MONITORS

AREA SICURA
SAFE AREA



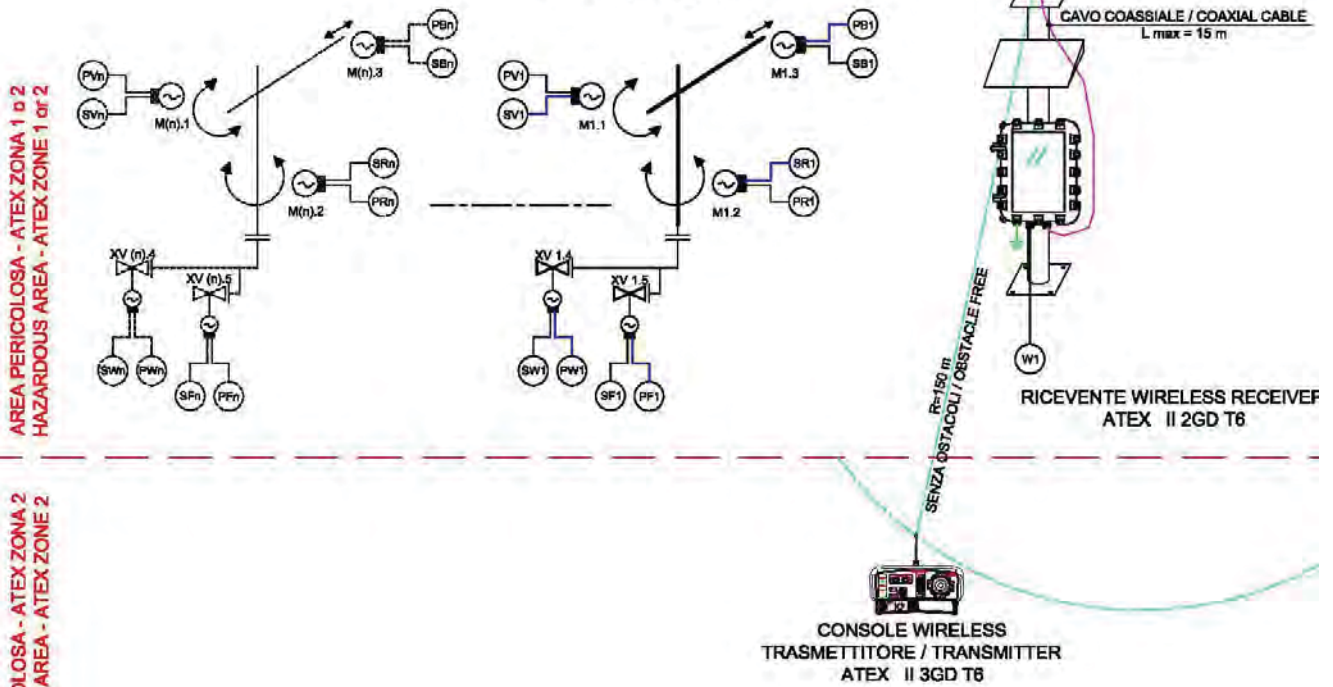
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	1	DUE STAZIONI DI COMANDO DISPONIBILI CON SELETTORI PER SELEZIONARE 2 SU GLI (n) MONITORI INSTALLATI TWO COMMAND STATION AVAILABLE WITH SELECTORS CAPABLE TO CONTROL 2 AMONG (n) MONITORS INSTALLED
XV(n).4	VALVOLA ACQUA / WATER VALVE	2	MONITORI GOVERNABILI UNO PER VOLTA TRAMITE SELETTORE MONITORS CONTROLLED ONE AT THE TIME USING A SELECTOR
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.5EO

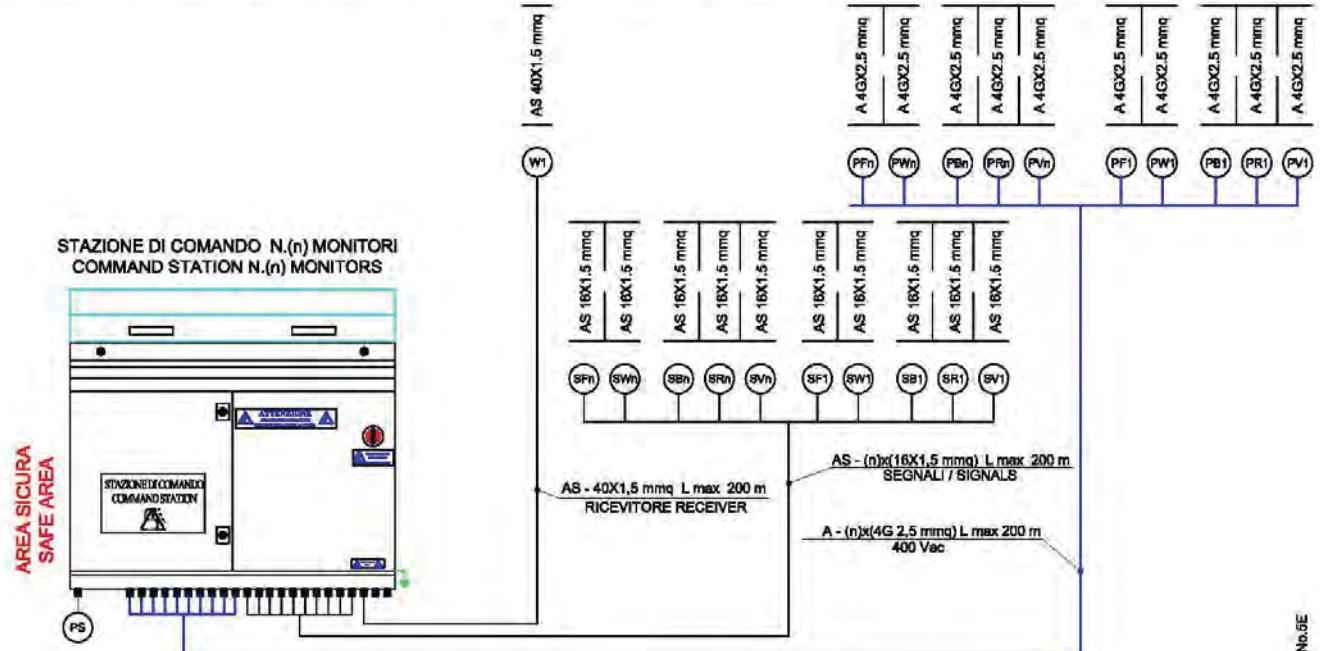
TIPO / TYPE No. 5E

MONITORI ELETTRICI ELECTRIC MONITORS



AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2

AREA PERICOLOSA - ATEX ZONA 2
HAZARDOUS AREA - ATEX ZONE 2



NOTE:

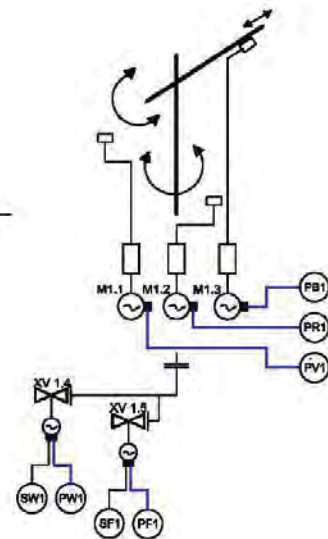
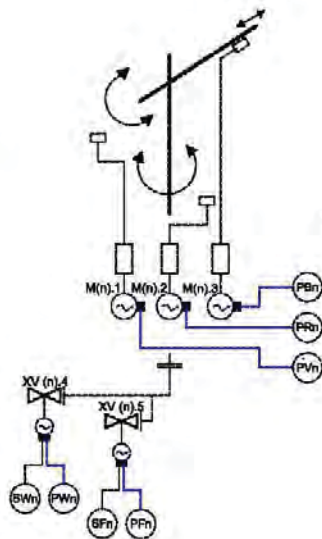
M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARD&LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.5E

I particolari di questo foglio tecnico, sebbene esatti al tempo della pubblicazione, potrebbero essere soggetti a modifiche senza preavviso. - The data shown on this data sheet, although correct at the time of publication, may be varied without notice.

TIPO / TYPE No. 6EO MONITORI ELETTRIDRAULICI ELECTRO-HYDRAULIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



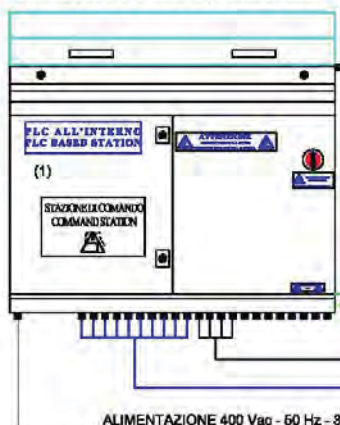
AREA PERICOLOSA - ATEX
ZONA 2
HAZARDOUS AREA - ATEX
ZONE 2



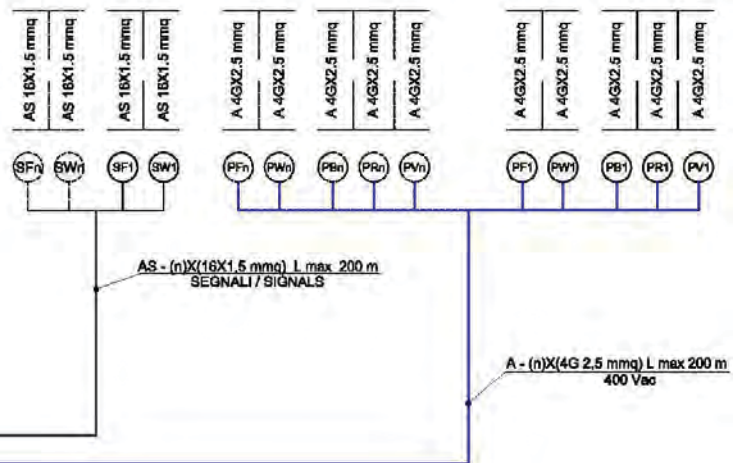
CONSOLE WIRELESS
TRASMETTITORE / TRANSMITTER
ATEX II 3GD T6

AREA SICURA
SAFE AREA

STAZIONE DI COMANDO N.(n) MONITORI
COMMAND STATION N.(n) MONITORS



RICEVENTE WIRELESS
RECEIVER



ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G)
POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)

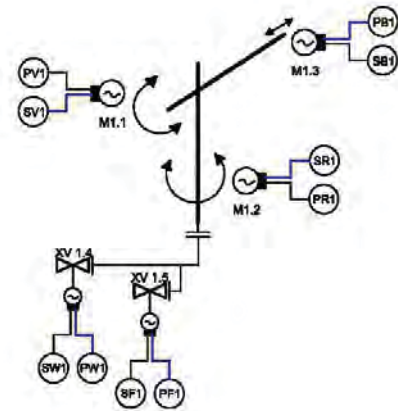
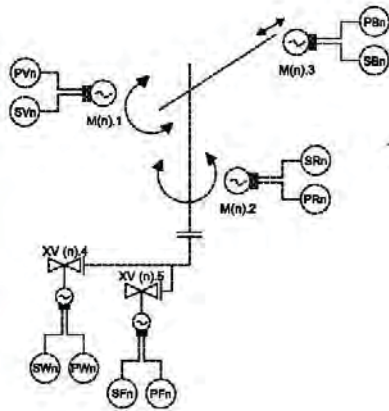
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	1	DUE STAZIONI DI COMANDO DISPONIBILI CON SELETTORI PER SELEZIONARE 2 SU GLI (n) MONITORI INSTALLATI
XV(n).4	VALVOLA ACQUA / WATER VALVE	1	TWO COMMAND STATION AVAILABLE WITH SELECTORS CAPABLE TO CONTROL 2 AMONG (n) MONITORS INSTALLED
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE	2	MONITORI GOVERNABILI UNO PER VOLTA TRAMITE SELETTORE MONITORS CONTROLLED ONE AT THE TIME USING A SELECTOR

Doc No. B 40 10 10 R.00 / TYPE No.6EO

TIPO / TYPE No. 6E MONITORI ELETTRICI ELECTRIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2



AREA PERICOLOSA - ATEX ZONA 2
HAZARDOUS AREA - ATEX ZONE 2

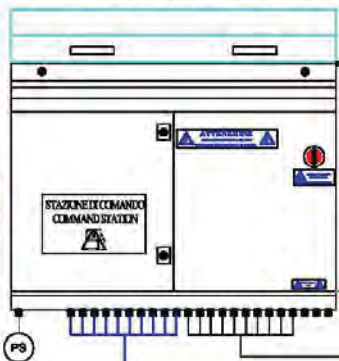


CONSOLE WIRELESS
TRASMETTITORE / TRANSMITTER
ATEX II 3GD T6

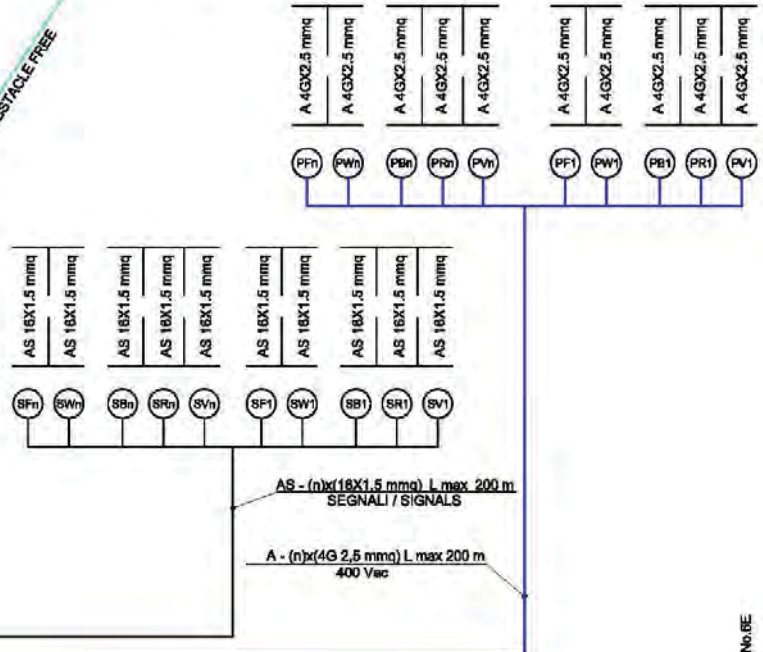
SENZA OSTACOLI / OBSTACLE FREE

AREA SICURA
SAFE AREA

STAZIONE DI COMANDO N.(n) MONITORI
COMMAND STATION N.(n) MONITORS



RICEVENTE
WIRELESS
RECEIVER



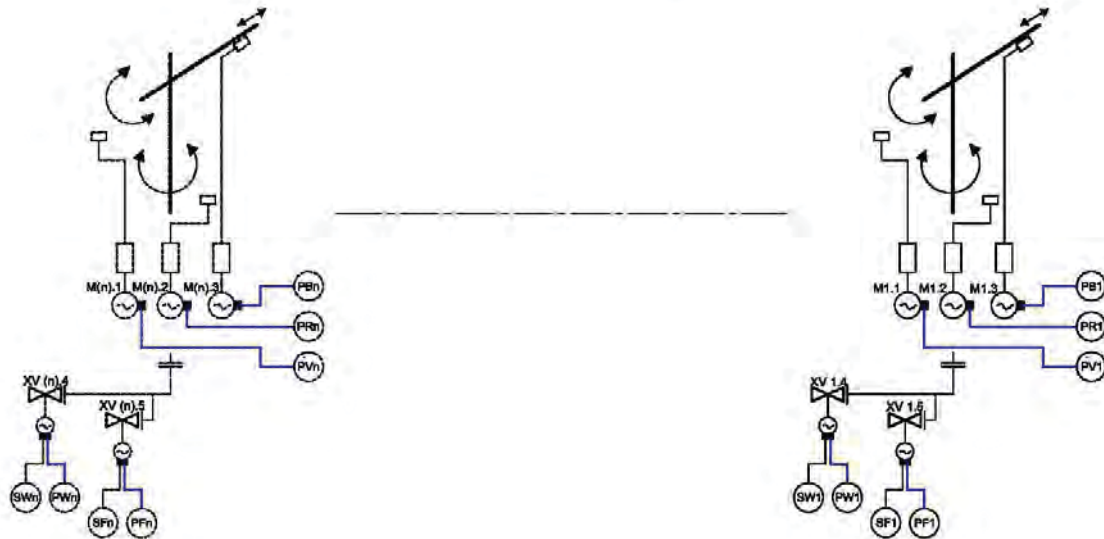
NOTE :

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFFLETORE JET FOG - NOZZLE/SPREADER.JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc.No. B 40 10 10 R.00 / TYPE No.6E

TIPO / TYPE No. 7EO MONITORI ELETTRIDRAULICI ELECTRO-HYDRAULIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2

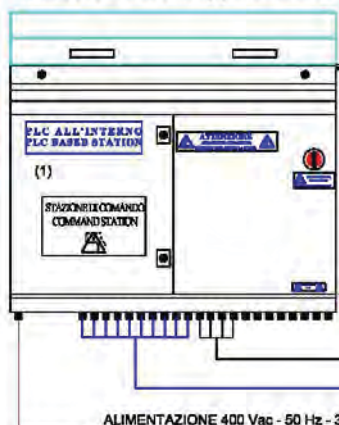


CONSOLE WIRELESS TRASMETTITORE / TRANSMITTER

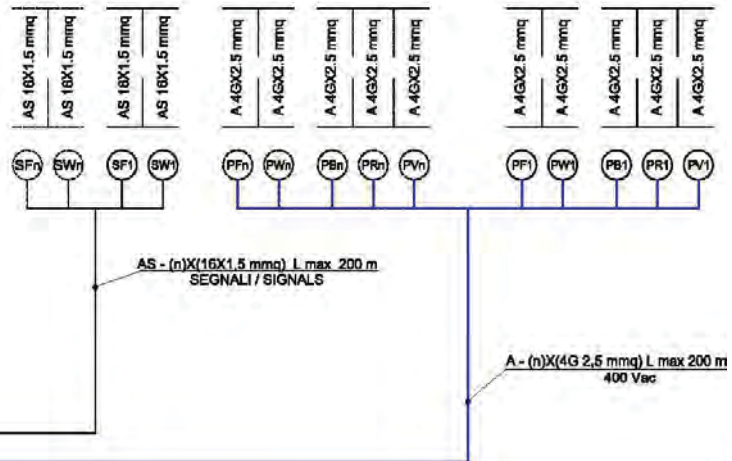


STAZIONE DI COMANDO N.(n) MONITORI COMMAND STATION N.(n) MONITORS

AREA SICURA
SAFE AREA



RICEVENTE
WIRELESS
RECEIVER



ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G)
POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)

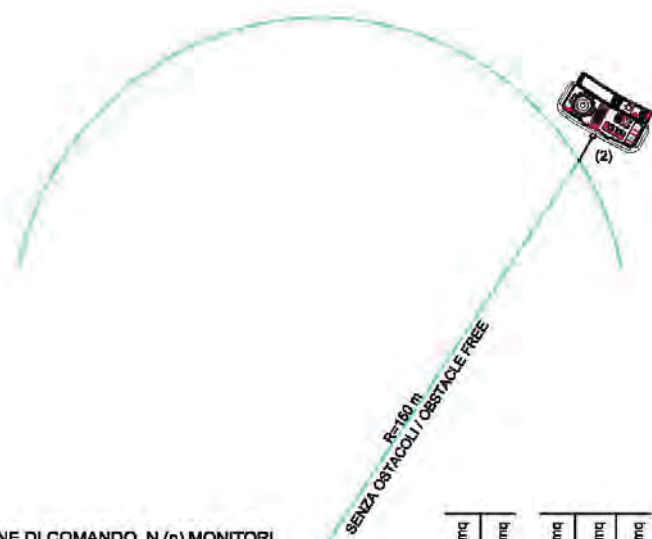
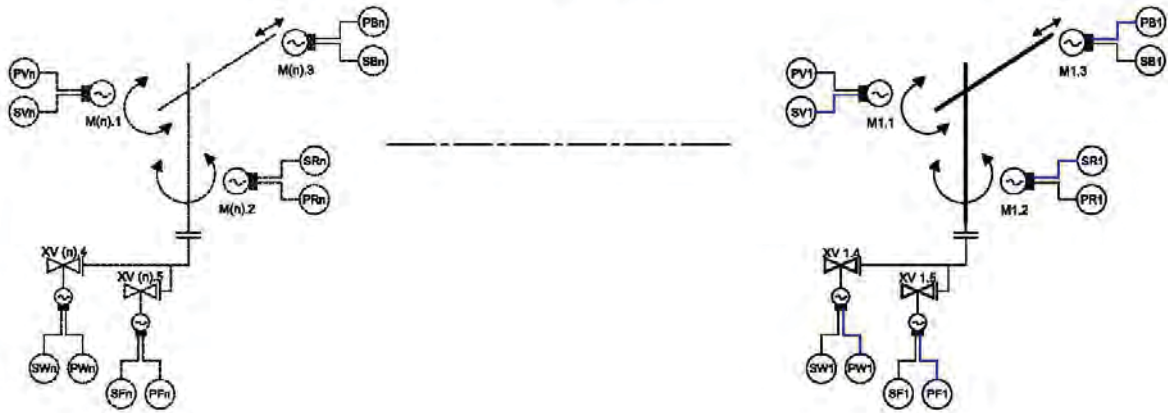
NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFFLETORE JET FOG - NOZZLE/SPREADER JET/FOG	1	DUE STAZIONI DI COMANDO DISPONIBILI CON SELETTORI PER SELEZIONARE 2 SU GLI (n) MONITORI INSTALLATI
XV(n).4	VALVOLA ACQUA / WATER VALVE	1	TWO COMMAND STATION AVAILABLE WITH SELECTORS CAPABLE TO CONTROL 2 AMONG (n) MONITORS INSTALLED
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE	2	MONITORI GOVERNABILI UNO PER VOLTA TRAMITE SELETORE MONITORS CONTROLLED ONE AT THE TIME USING A SELECTOR

Doc No. B 40 10 10 R.00 / TYPE No.7EO

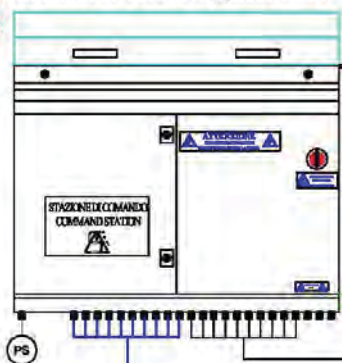
TIPO / TYPE No. 7E MONITORI ELETTRICI ELECTRIC MONITORS

AREA PERICOLOSA - ATEX ZONA 1 o 2
HAZARDOUS AREA - ATEX ZONE 1 or 2

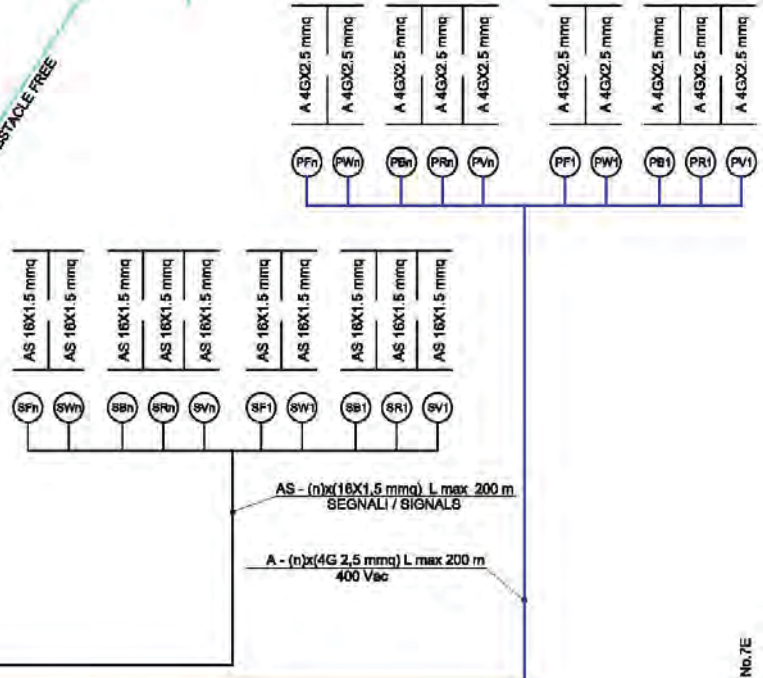


AREA SICURA
SAFE AREA

STAZIONE DI COMANDO N.(n) MONITORI
COMMAND STATION N.(n) MONITORS



RICEVENTE WIRELESS
RECEIVER



NOTE:

M(n).1	ALTO/BASSO - UPWARDS/DOWNWARDS	A	CAVO ARMATO / ARMORED CABLE
M(n).2	DESTRA/SINISTRA - RIGHTWARDS/LEFTWARDS	AS	CAVO ARMATO E SCHERMATO / ARMORED AND SHIELDED CABLE
M(n).3	BOCCHELLO/DEFLETTORE JET FOG - NOZZLE/SPREADER JET/FOG	PS	ALIMENTAZIONE 400 Vac - 50 Hz - 3F+N+T (cavo 5G) POWER SUPPLY 400 Vac - 50 Hz - 3PH+N+G (cable 5G)
XV(n).4	VALVOLA ACQUA / WATER VALVE		
XV(n).5	VALVOLA SCHIUMOGENO / FOAM CONCENTRATE VALVE		

Doc No. B 40 10 10 R.00 / TYPE No.7E

Dräger Nederland B.V.

Marine & Offshore
Beurtschipperstraat 1
3194 DK Hoogvliet
The Netherlands
Tel: +31 (0)10 295 2740
sales-mo.sd.nl@draeger.com

Service Center
Koperslagersweg 14F
1786 RA Den Helder
The Netherlands
Tel: +31 (0)223 787 007
denhelder-mo.sd.nl@draeger.com



www.draeger-mo.com