DATASHEET - INTERCOM / PAGING SYSTEM " TELSON'

PAGE PARTY LINE TYPE INTERCOM / PAGING SYSTEM



DESCRIPTION

"TELSON" industrial intercom system is a "Page Party Line" communications system composed by indoor desktop, weather-proof and Explosion proof type intercom stations. A tough and robust Intercom system for Harsh Industrial Environments where reliability is a necessity. The system is designed to function within, but not limited to uncompromising environments, such as: Petrochemical and Energy Production.

The AII the intercom stations are connected in parallel on the same multi-pairs telephone cable. Each station is equipped with a built-in amplifier 30 Watt to driver a separate loudspeaker. AII the electronic circuits distributed in the intercom stations, so that no central exchange is necessary.

Any device can send a message for research of people (Paging) diffusing a voice message which will be heard on all the speakers of the system. Appropriate design features ensure no Larsen effect (acoustic feedback). The conversation took place on one of the four party telephone channels, where they can fit more equipment in the conference. The phones are equipped with LEDs to indicate channels busy / free.

Based on a module "Telephone + Amplifier + LoudSpeaker" repeated several times and connected on a simple multi-pair telephone cable.

FEATURES

- General Paging through loudspeaker, from any station.
- Possible to associate flashing light or (and)audio signal unit.
- •Conversations between two or more users on maxi 5 Party Lines
- All the stations are equipped with red/green LEDs to show the status of the Paging and Party Lines.

All "TELSON" call station can be handset model, or hands-free type as demande.

- •Each "TELSON" unit is powered from 24VDC or 110 230VAC power. Fed by centralized power or by several local power suppliers.
- Directly call to control room, via private channel.
- Possible to work together with centralize PA system.
- Interface with PABX, Alarm system etc.
- All the equipments are connected in parallel on one multipairs telphone cable.
- Amplifiers are mounted inside the intercom station, or inside of special "TELSON" louderspeaker.

SYSTEM FUNCTIONALITY

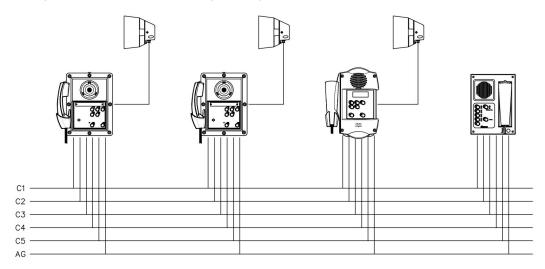
The "TELSON" system is equipped with a simplified keypad consisting of buttons for channel - C1, C2, C3, C4,C5 and AG button (General Call). Each "TELSON" station can page to all speakers on the system whilst ensuring there is no "Larsen Effect" (acoustic feedback), even when the conversation is initiated from one of the five party-line intercoms stations. Further speakers can be introduced to ensure zonal or plant wide conferencing can be heard. The telephones are equipped with LEDs to indicate channel availability and the unique technical construction ensures reliability without requirement for central governance or a switchboard, this reduces the risk of technical fault causing complete system to failure.

SYSTEM WIRING / INSTALLATION

Use telephone cable ϕ 0,9 m/m, paired, with global screen. Each "TELSON" unit is connected to the general network through the different junction box or directly to a central dispatcher by a 7 pairs cable.

The additional loudspeakers are connected to the amplifiers by a 2 conductors cable (2 x 1.5 m/m²)

The connection diagram is shown on the following drawing:





MAIN CONTACT: TELEPHONES LE LAS | ADDRESS: 34-36 RUE ROGER SALENGRO 94134 FONTENAY SOUS BOIS, FRANCE TEL: +33(0)148 76 62 62 | FAX: +33(0)148 76 83 04 | WEB: www.lelas.fr | E-Mail: jin.du@lelas.fr

HEADQUARTER: 99 RUE ALEXANDRE FOURNY / 94500 CHAMPIGNY - SUR-MARNE / FRANCE

DATASHEET - INTERCOM / PAGING SYSTEM " TELSON'

PAGE PARTY LINE TYPE INTERCOM / PAGING SYSTEM

SYSTEM MAIN EQUIPMENT



TLS161PH5GC4TES

INDOOR MASTER CALL STATION

Protected by metal enclosure
Handset with coiled cord
4 or 5 Party Lines buttons
With built in buzzer
With built in amplifier
With option to connect second ringer
Powered by 24VDC or 110 - 230VAC



TLS410E2GC5TESCA

OUTDOOR IP66 WP CALL STATION

Weather proof IP66 station with Polestar carbon type body Handset with Stainless-steel cord 200kg resistance 4 or 5 Party Lines buttons and 1 All Paging button With 30W built in amplifier With built in 3-5W Speaker 1 Direct Call to Master Station Powered by 24VDC or 110 - 230VAC



TLS214A2GC5TES/TLS214A2HGCT5TES

EXPLOSION PROOF HANDSET STATION

ATEX Eex d T4 IIB (TLS214A2GC5TES) or IIB+H2 (TLS214A2HGC5TES)
Handset with Stainless steel cord
Aluminum body
1 or 5 Party Lines buttons
With 1 All Paging button
Work together with AMP226 type 30W amplifier box
Powered by 24VDC



LOUDSPEAKER FOR TELSON

Wide range of loudspeakers is available: from 15 to 35 Watt Aluminum body with built in Amplifier, powered at 24 VDC ATEX Eexd IIB+H2 or IIC for explosion proof type Weather proof IP66



DATASHEET - TLS161P2 INDOOR CALL STATION

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT







DESCRIPTION- TLS 161 P2 Range Indoor Call Station

The TLS 161 P2 type call station is design to be used in an office environment, or in the control room of one industrial project.

The desktop type TLS161P2 station with 2 models : 1 or 5 party line channels. With built-in 5W speaker and 30W amplifier.

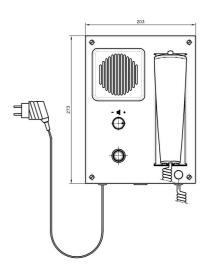
The TLS161P2 works through the built-in 5 watt speaker. It works also by connecting to 6W/8om ceiling speaker or wall mounting 15W/16ohm horn.

MECHANICAL DATA	Housing/Handset	Steel / Polyster carbon
	 Handset cord 	Spiral PVC-length 75 cm
	 Mounting 	Desktop
	 Diameter 	273L X 203WX 83H mm (Without handset)
	Cable Entry	2 Cable entries
	 Connection 	Inside screw connections
	 Weight 	Approx. 4.0 kg
	• Color	Black
ELECTRICAL DATA	 Direct current supply 	24 Vdc / 230 Vac
	 Consumption 	Maix 0.3 A (24Vdc) / 0.1 A (230Vac)
	Audio amplifier	30 Watt Rms
	Impedance off-hook	>10 Mohm
	 Transmission 	-5 db/600 ohm
	Built-in speaker	5W-adjustable
	 Hook 	Magnetic
	 Conversation mode 	By handset
	Function key	7 keys (Paging/Cancel/5 channels) or 1 key
ENVIRONMENT	Ambient temperature during operation	-20 °C to + 70 °C
	 Relative humidity (non -condensing) 	Max. 95 %
	Degree of protection	IP42
	Impact Rating (IK)	IK 10
ORDER NUMBER	DESCRIPTION	
TLS161P2GC1TESCA	Telson desk call station. 1 paging + 1 party line, power supply 230Vac	
TLS161P2GC5TESCA	Telson desk call station. 1 paging + 5 party line, power supply 230Vac	



DATASHEET - TLS161P2 INDOOR CALL STATION

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT



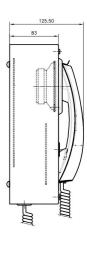


Fig. 1: Dimensional drawing TLS161P2

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - TLS 410 E2 OUTDOOR STATION

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT





DESCRIPTION- TLS410E2 Weather Proof Call Station

The TLS410E2 type call station is design for critical/ the worst environments and meets industrial and offshore requirements. The aluminum body and handset is designed to withstand most chemical and environmental hazards found on - or offshore.

The TLS410E2 with 2 models: 1 or 5 party line channels. With built-in amplifier 30W. It works by connecting to external speaker: 1 speaker 30W 80hm or 2 speakers each 15W 160hm.

MECHANICAL DATA	Housing/Handset	Aluminum
	Handset cord:	Stainless steel 200kg resistance
	Mounting:	Wall or Pole
	 Diameter 	210 x 240 x 117 mm
	Cable Entry	3 x Weather proof cable Ø 8-13mm
	 Connection 	Inside screw connections
	Weight	Approx. 3.6 kg
	• Color	Front panel RAL 2003 (Orange), black for ba
ELECTRICAL DATA	Direct current supply:	24 Vdc / 230 Vac
	Consumption:	Maxi 1.5 A (24Vdc) / 0.2 A (230Vac)
	Audio amplifier	30 Watt Rms
	Impendence off-hook	>10 Mohm
	• Transmission:	-5 dB / 600 ohm
	Hook:	Magnetic
	Conversation Mode:	By handset
	Noise cancelling:	Noise cancelling circuit
	Function key	7 keys (Paging/Cancel/5 channels) or 1 key
ENVIRONMENT	Ambient temperature during operation	-40 °C to + 70 °C
	 Relative humidity (non -condensing) 	Max. 95 %
	Degree of protection	IP66
	Impact Rating (IK)	IK 10
ORDER NUMBER	DESCRIPTION	
TLS410E2GC1TESCA	Telson call station. 1 paging + 1 party line, power supply 230Vac	



TLS410E2GC5TESCA

Telson call station. 1 paging + 5 party line, power supply 230Vac

DATASHEET - TLS 410 E2 OUTDOOR STATION

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT

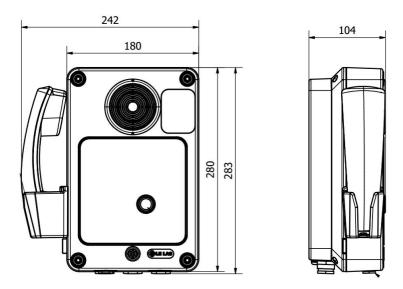


Fig. 1: Dimensional drawing TLS410E2

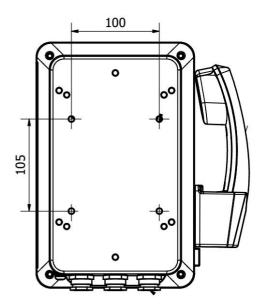


Fig. 2: Mounting detail from back view TLS410E2

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - TLS 402 E2 OUTDOOR STATION

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT





DESCRIPTION- TLS402E2 Weather Proof Call Station

The TLS402E2 type call station is design for critical/ the worst environments and meets industrial and offshore requirements. The Polyester body and handset is designed to withstand most chemical and environmental hazards found on - or offshore.

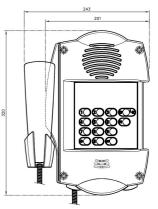
The TLS402E2 with 2 models: 1 or 5 party line channels. With built-in amplifier 30W. It works by connecting to external speaker: 1 speaker 30W 8ohm or 2 speakers each 15W 16ohm.

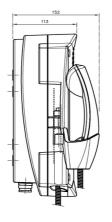
MECHANICAL DATA	Housing/Handset	GRP / Polyester carbon
	Handset cord:	Stainless steel 200kg resistance
	Mounting:	Wall or Pole
	 Diameter 	201 x 320 x 113 mm
	Cable Entry	2 x weather proof plastic cable \varnothing 5-12mm
	 Connection 	Inside screw connections
	 Weight 	Approx. 2.3 kg
	• Color	Front panel RAL 2003 (Orange), black for back
ELECTRICAL DATA	 Direct current supply: 	24 Vdc / 230 Vac
	Consumption:	Maxi 1.5 A (24Vdc) / 0.2 A (230Vac)
	Audio amplifier	30 Watt Rms
	Impendence off-hook	>10 Mohm
	Transmission:	-5 dB / 600 ohm
	Hook:	Magnetic
	Conversation Mode:	By handset
	Noise cancelling:	Noise cancelling circuit
	Function key	7 keys (Paging/Cancel/5 channels) or 1 key
ENVIRONMENT	 Ambient temperature during operation 	-40 °C to + 70 °C
	 Relative humidity (non -condensing) 	Max. 95 %
	Degree of protection	IP66
	Impact Rating (IK)	IK 10
ORDER NUMBER D	ESCRIPTION	
TLS402E2GC1TESCA	Telson call station. 1 paging + 1 party line, power supply 230Vac	
TLS402E2GC5TESCA	A Telson call station. 1 paging + 5 party line, power supply 230Vac	



DATASHEET - TLS 402 E2 OUTDOOR STATION

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT





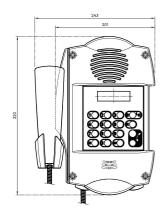


Fig. 1: Dimensional drawing TLS 402E2

Fig. 2: Dimensional drawing TLS 402E2

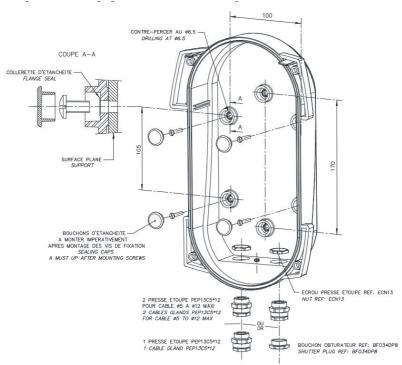


Fig. 3: Mounting drawing TLS402E2 type

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - TLS 214AH EX TYPE CALL STATION

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT



DESCRIPTION- TLS214AH Explosion Proof Call Station

The TLS214AH call station is design for critical/ the worst environments and meets industrial and offshore requirements. The aluminum body and handset is designed to withstand most chemical and environmental hazards found on - or offshore.

The TLS214AH with 2 models :1 or 5 party line channels. It works by connecting to AMP226A type amplifier box.

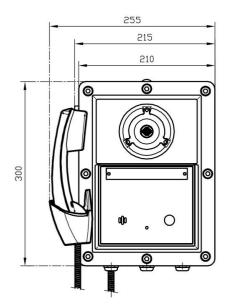


MECHANICAL DATA	Housing/Handset	Aluminum
MESTATIONE BATTA	Handset cord:	Stainless steel 200kg resistance
	Mounting:	Wall or Pole
	Diameter	215 x 300 x 190 mm
	Cable Entry	2 x 3/4" NPT For cable on sheath Ø7-12mr
	Connection	Inside screw connections
	Weight	Approx. 9 kg
	• Color	RAL 2003 (Orange). Other color as option
ELECTRICAL DATA	Direct current supply:	24 Vdc
	Consumption:	Maxi 0.1 A
	Impendence off-hook	>10 Mohm
	Transmission:	0dB / 600 ohm
	Hook:	Magnetic
	Conversation Mode:	By handset
	Noise cancelling:	Noise cancelling circuit
	Function key	7 keys (Paging/Cancel/5 channels) or 1 key
ENVIRONMENT	Ambient temperature during operation	-40 °C to + 60 °C
	 Relative humidity (non -condensing) 	Max. 95 %
	Degree of protection	IP55 or IP66
	Certification	ATEX II2GD (EEx d IIB or IIB+H2 T4) ATEX Number:INERIS 03ATEX0238X,
ORDER NUMBER	DESCRIPTION	
TLS214AH2GC1TES	Telson call station. 1 paging + 1 party line, power supply 24Vdc. Eex dIIB+H2 T6	
TLS214AH2GC5TES	Telson call station. 1 paging + 5 party line, power supply 24Vdc. Eex dIIB+H2 T6	



DATASHEET - TLS 214AH EX TYPE CALL STATION

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT



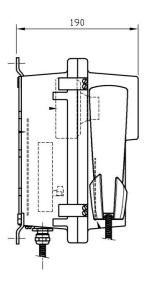


Fig. 1: Dimensional drawing TLS214AH

BETWEEN HOLES FOR MOUNTING

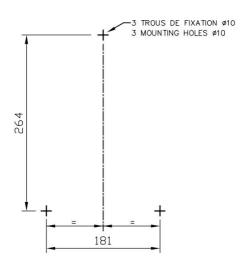


Fig. 2: Mounting detail for TLS214AH

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - TLS 214A2 EX TYPE CALL STATION

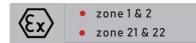
TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT



DESCRIPTION- TLS214A2 Explosion Proof Call Station

The TLS214A2 call station is design for critical/ the worst environments and meets industrial and offshore requirements. The aluminum body and handset is designed to withstand most chemical and environmental hazards found on - or offshore.

The TLS214A2 with 2 models :1 or 5 party line channels. It works by connecting to AMP226A type amplifier box.

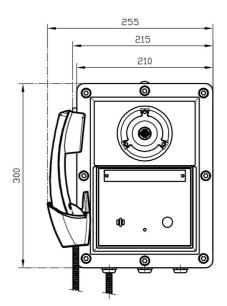


MECHANICAL DATA	Housing/Handset	Aluminum	
	Handset cord:	Stainless steel 200kg resistance	
	Mounting:	Wall or Pole	
	 Diameter 	215 x 300 x 190 mm	
	Cable Entry	2 x 3/4" NPT For cable on sheath Ø7-12mn	
	 Connection 	Inside screw connections	
	 Weight 	Approx. 9 kg	
	• Color	RAL 2003 (Orange). Other color as option	
ELECTRICAL DATA	 Direct current supply: 	24 Vdc	
	Consumption:	Maxi 0.1 A	
	Impendence off-hook	>10 Mohm	
	Transmission:	0dB / 600 ohm	
	Hook:	Magnetic	
	Conversation Mode:	By handset	
	Noise cancelling:	Noise cancelling circuit	
	Function key	7 keys (Paging/Cancel/5 channels) or 1 key	
ENVIRONMENT	Ambient temperature during operation	-20 °C to + 50 °C	
	 Relative humidity (non -condensing) 	Max. 95 %	
	Degree of protection	IP55 or IP66	
	Certification	ATEX II2GD (EEx d IIB T4) ATEX Number:IECEx INE 20.0071X	
ORDER NUMBER	DESCRIPTION		
TLS214A2GC1TES	Telson call station. 1 paging + 1 party lir	Telson call station. 1 paging + 1 party line, power supply 24Vdc. Eex dIIB T4	
TLS214A2GC5TES	Telson call station. 1 paging + 5 party line, power supply 24Vdc. Eex dIIB T4		



DATASHEET - TLS 214A2 EX TYPE CALL STATION

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT



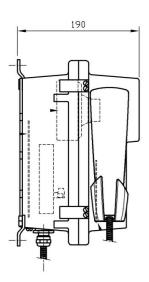


Fig. 1: Dimensional drawing TLS214A2

BETWEEN HOLES FOR MOUNTING

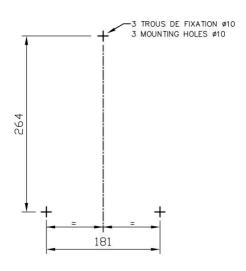


Fig. 2: Mounting detail for TLS214A2

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - AMP 410E2 OUTDOOR AMPLIFIER BOX

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT



DESCRIPTION- AMP410E2 Weather Amplifier Box

The AMP410E2 type amplifier box is design for critical/ the worst environments and meets industrial and offshore requirements. The aluminum body is designed to withstand most chemical and environmental hazards found on - or offshore.

The AMP410E2 with 30W amplifier, It works by connecting to external speaker: 1 speaker 30W/8ohm or 2 speakers each 15W/16ohm.

MECHANICAL DATA	Housing	Aluminum
	 Mounting 	Wall or Pole
	Diameter	210 x 240 x 117 mm
	Cable Entry	3 x Weather proof cable Ø 8-13mm
	 Connection 	Inside screw connections
	 Weight 	Approx. 3.6 kg
	• Color	Front panel RAL 2003 (Orange), black for bac
ELECTRICAL DATA	Direct current supply	24 Vdc / 230 Vac
	 Consumption 	Maxi 1.5 A (24Vdc) / 0.2 A (230Vac)
	Audio amplifier	30 Watt Rms
	 Transmission 	-5 dB / 600 ohm

ENVIRONMENT	 Ambient temperature during operation 	-40 °C to + 70 °C
	 Relative humidity (non -condensing) 	Max. 95 %
	Degree of protection	IP66
	Impact Rating (IK)	IK 10

ORDER NUMBER	DESCRIPTION
AMP410E2GCTESCA	Telson amplifier box. 30W, power supply 24Vdc/230Vac



DATASHEET - AMP 410E2 OUTDOOR AMPLIFIER BOX

TELSON PAGE & PARTY LINE SYSTEM EQUIPMENT

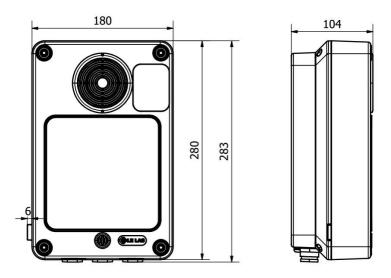


Fig. 1: Dimensional drawing AMP410E2

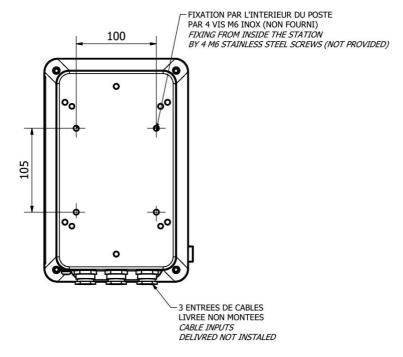


Fig. 2: Mounting detail from back view AMP410E2

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - AMP 226A EX TYPE AMPLIFIER BOX

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT







DESCRIPTION - AMP226A Explosion Proof Amplifier Box

The AMP226A type amplifier box is design for critical/ the worst environments and meets industrial and offshore requirements. The aluminum body is designed to withstand most chemical and environmental hazards found on - or offshore.

The AMP226A with 30W amplifier, It works by connecting to external speaker: 1 speaker 30W 18ohm or 2 speakers 15W 16ohm.

MECHANICAL DATA

 Housing 	Aluminum
 Mounting 	Wall or Pole
 Diameter 	215 x 300 x 160 mm
Cable Entry	4 x 3/4" NPT For cable on sheath \varnothing 7-12mm
 Connection 	Inside screw connections
 Weight 	Approx. 7.2 kg
• Color	RAL 2003 (Orange). Other color as option

ELECTRICAL DATA

Direct current supply	24 Vdc / 230 Vac
 Consumption 	Maxi 1.5 A (24Vdc) / 0.2 A (230Vac)
Audio amplifier	30 Watt Rms
Transmission	-5 dB / 600 ohm

ENVIRONMENT

 Ambient temperature during operation 	-40 °C to + 60 °C
 Relative humidity (non -condensing) 	Max. 95 %
Degree of protection	IP55 or IP66
Certification	ExdbIIBT6Gb or ExdbIIB+H2T6Gb/ExtbIIICT85°CDb

ORDER NUMBER	DESCRIPTION
AMP226A2TESCA	Telson amplifier box with window. 30W, power 24Vdc/230Vac. Eex dIIB/IIB+H2 ,work with Telson handset
AMP226A2HPCA	Telson amplifier box. 30W, power supply 24Vdc/230Vac. Eex dIIB/IIB+H2 , for work with speaker



DATASHEET - AMP 226A EX TYPE AMPLIFIER BOX

TELSON & PAGE PARTY LINE SYSTEM EQUIPMENT

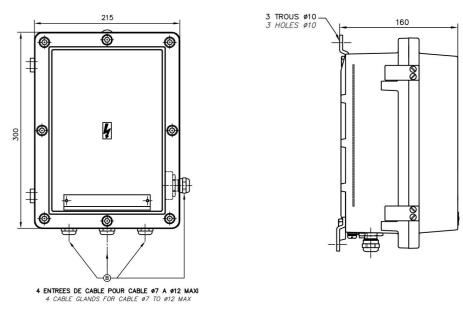


Fig. 1: Dimensional drawing AMP226A

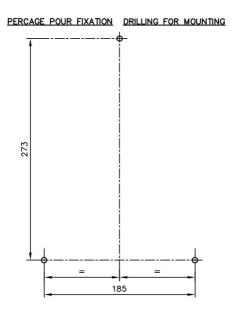


Fig. 2: Mounting detail for AMP226A

Installation, Operation and Maintenance Procedures

- Open the pivoting front panel removing the four screws
- Pass the cables through the cableglands being sure that the cable fit with the rubber gasket.
- Connect the telephone wires at the screw terminals
- Close the front panel in conformity to the safety rules for classified areas



DATASHEET - RCT900PV1AXSDT02 TELSON INTERFACE

PA&GA / INTERCOM NETWORK SYSTEM EQUIPMENT



DESCRIPTION

RCT900PV1AXSDT02 Telson Interface Module

RCT900PV1AXSDT02 is designed to connect the TELSON Interplant system broadcast function to Lelas's PAGA system. With this interface, the TELSON systems and equipment can be added to the existing PAGA system. The RCT900PV1AXSDT02 interface includes 2 independent audio monitoring and resistance balance channels, allowing the PAGA system to send broadcasts, alarms or background music to the TELSON system speakers. Or the TELSON system call station can make general broadcasts to the speakers in the PAGA system.

FEATURES

- Interfaces Telson call stations to existing DIGICOM3K PAGA system
- ➤ 2 audio channels turned on / off automatically
- ➤ The audio signal resistance is automatically balanced and matched
- ➤ Simple configuration via Software of PAGA system

GENERAL

Mount location : Rail installation in cabinet

➤ Temperature range: -30°C to 60°C

ELECTRICAL RATINGS

Supply Voltage: 24 Vdc

