

Installation manual

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Para información más detallada remitase al terminal.

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Este equipo no debe ser usado en ambientes explosivos.

Medidas de seguridad

Generales

- Compruebe que durante el transporte las cajas no hayan sufrido daños, si detecta cualquier anomalía, por favor, comuníquelo a su proveedor.
- Este producto cumple los requerimientos del artículo 4 de EMC de la directiva 89/336/EEC.
- No utilice este producto en ambientes explosivos.
- Cualquier suplemento, cambio o modificación del producto queda prohibida.
- Utilice únicamente recambios autorizados por el fabricante.
- Es muy importante que lea las instrucciones de usuario antes de utilizar el equipo.
- Este equipo debe ser manipulado únicamente por personal cualificado.

Durante la instalación

- El producto está contruido para ser utilizado en instalaciones estáticas.
- Instale el producto según las instrucciones que se acompañan.
- El equipo debe estar conectado a tierra tal como se describe en las instrucciones de instalación.
- La instalación debe ser realizada por personal cualificado.
- Los cables de alimentación, señal y alta tensión deben estar suficientemente separados.
- No monte el equipo en lugares donde reciba luz solar directa.

Durante el uso

- Mantenga limpio el equipo.
- Las paradas de emergencia y otras medidas de seguridad no deben ser controladas desde el terminal.
- No toque las teclas, pantalla, etc. con objetos punzantes.

Servicio y mantenimiento

- Aplíquese los terminos de la garantía validada.
- Limpie la pantalla y la superficie con paños suaves y detergentes no agresivos.
- Las reparaciones deben ser realizadas por personal cualificado.

Desmante y desguace

- Aplique las normas locales acerca del reciclaje de materiales.
- Por favor, recuerde que las baterías de litio, condensadores electrolíticos y la pantalla contienen sustancias peligrosas.

Introducción

Estas instrucciones describen el terminal E900/E910. Desde ahora en adelante nos referiremos al producto como el terminal.

El terminal es un panel de control gráfico de una familia de terminales desarrollados para satisfacer las necesidades de la comunicación entre operador y máquina. Las funciones incluidas en el terminal permiten la posibilidad de mostrar y controlar texto y gráficos, indicadores dinámicos, alarmas, mantenimiento de recetas y canales de tiempo.

Los terminales tienen una forma de trabajar básicamente orientada a objeto, lo cual facilita bastante su utilización. El terminal se programa directamente desde un ordenador personal con el paquete de software SW-MTA-WIN para Windows. De ahora en adelante nos referiremos al producto SW-MTW-WIN como 'el software del PC'. Todo el proyecto se almacena en el terminal.

Seleccione entre el modo de Operación según la siguiente tabla.

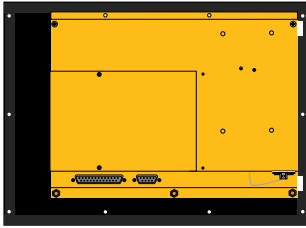
Terminal	Combinación clave
E900	[←] + [MAIN]
E910	El interruptor en la parte trasera del terminal en la posición 4.

Para información más detallada remitase al terminal.

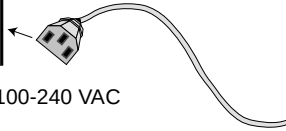
Instalación

Tensión de alimentación

E900T/E900VT/E910T



100-240 VAC

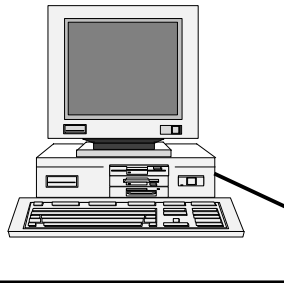
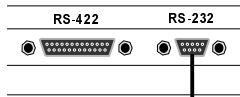


Cable table

Nombre	USA
Cable 1	MTA-PROG-C
Cable 2	MTA-D25-C
Cable 3	MTA-MINI-D25
Cable 4	-

Conexión a un ordenador personal

Ordenador personal

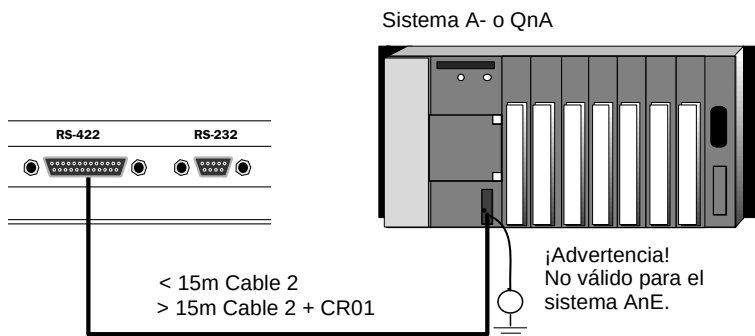


Cable 1

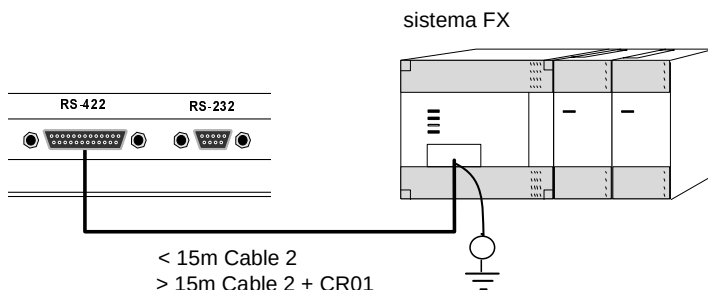
Para programar el terminal se recomienda el uso del software del PC. Para instalarlo consulte el manual específico del producto. Los parámetros en el terminal y en el software del PC deben ajustarse de la misma manera.

Conexión al puerto de la CPU del sistema PLC

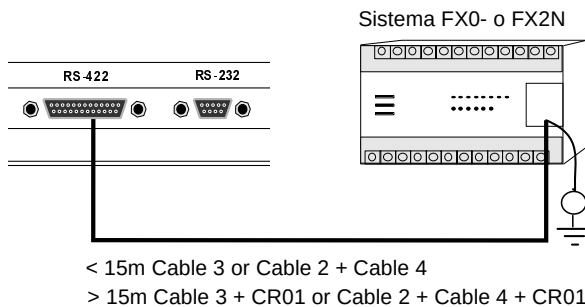
Sistema A o QnA



Sistema FX a



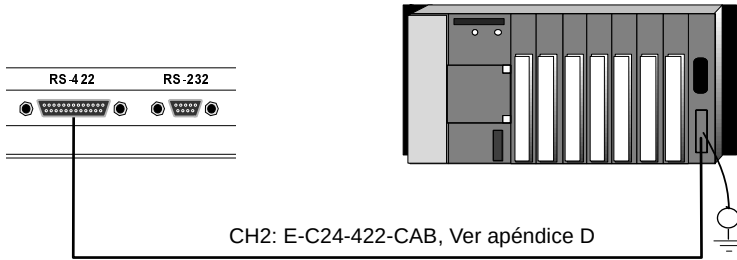
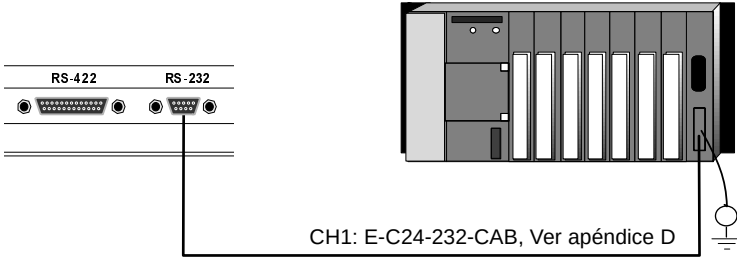
Sistema FX0 o FX2N



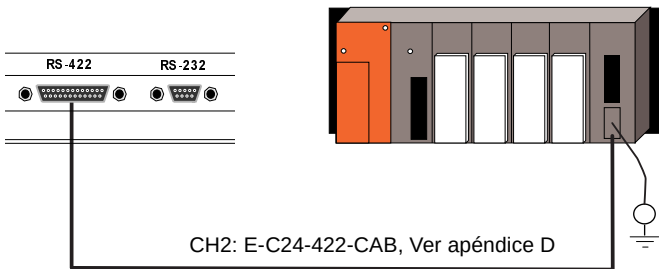
Conexión al módulo C24e

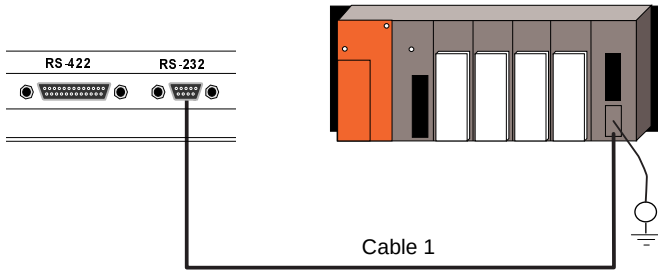
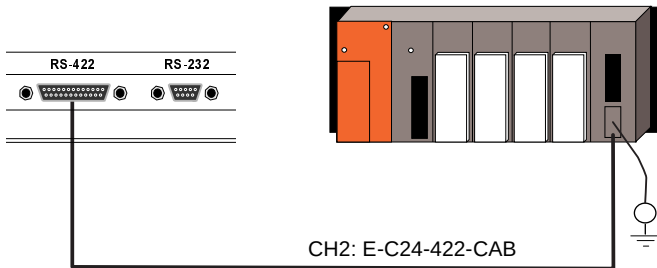
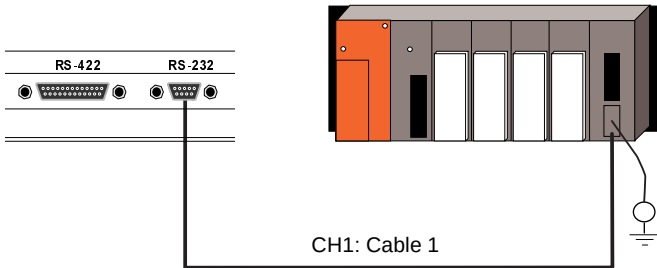
Ver apéndice A para la configuración del módulo C24

AJ71C24/AJ71UC24/AJ71QC24/AJ71QC24N

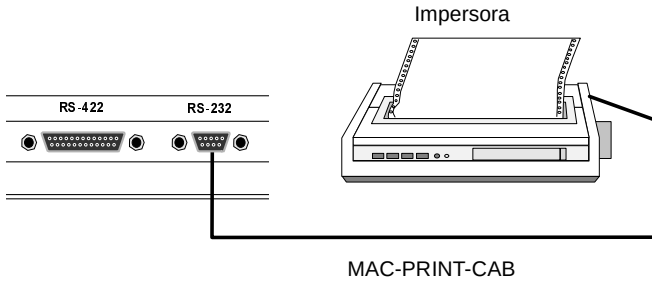


A1SJ71C24-R4/A1SJ71UC24-R4



A1SJ71C24-R2/A1SJ71UC24-R2/A1SJ71QC24-R2**A1SJ71QC24**

Conexión de una impresora



La impresora debe estar equipada de un interfaz serie y debe disponer del juego de caracteres IBM. Consulte el manual de la impresora para una correcta configuración. Si desea conectar el terminal a una impresora con un interfaz paralelo debe utilizar la tarjeta de expansión IFC PI. Ver el manual de la tarjeta para más información.

Datos técnicos

Parameter	E900T	E900VT	E910T
Panel frontal, Ancho x Alto x Profundo, mm.	367 x 276 x 6.0	335 x 430 x 6.0	290 x 247 x 5.0
Profundidad de montaje, mm	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 109 Incl. D-sub 130
Panel exterior, Vea el dibujo	S3-03028	S3-03107	S3-03142
Resistencia panel frontal	IP 65, NEMA 4		
Resistencia panel trasero	IP 20		
Material del teclado	Teclado de membrana con discos resorte de polyester. Recubrimiento Autotex 2 F200 con impresión posterior. 1 millones de operaciones. Ver <i>Apéndice B</i> .		
Material parte posterior	Chapa de acero cromada en amarillo.		
Peso, Excl. conector D-sub	3.5 Kg	4.0 kg	3.3 Kg
Puerto serie RS-422	Conector hembra D-sub de 25-pin, montado sobre el chasis con tornillos de sujeción estándar 4-40 UNC.		
Puerto serie RS-232	Conector macho D-sub de 9-pin, montado sobre el chasis con tornillos de sujeción estándar 4-40 UNC.		
Slots de expansión	2 slots de expansión incorporados.	1 slots de expansión incorporados.	2 slots de expansión incorporados.
Memoria flash para la aplicación	2 Mb		
Reloj de tiempo real	±10 PPM + error debido a la temperatura ambiente y tensión de alimentación. Error máx. total 1 min/mes= 12min/año. Vida mínima de la batería del reloj: 10 años.		
Consumo a la tensión nominal	Máxima: 0.35 A		

Parameter	E900T	E900VT	E910T
Pantalla	Pantalla TFT, 640x480 pixel, 256 colores, grafico y text. Retroiluminación: vida 25000 h en temperature ambiente +25°C. Tensión de alimentación 100-240 VAC Temperatura ambiente +0° a +50°C Temperatura de almacenamiento -20° a +70°C Humedad relativa Máx 85% sin condensación. Tests EMC en el terminal El terminal cumple las normas funddamentales del artículo ouarto de la directiva 89/336/EEC. Probado según las normas: EN50081-2 Emisión y EN50082-2 inmunidad.		
	Pantalla TFT, 640x480 pixel, 256 colores, grafico y text. Retroiluminación: vida 25000 h en temperature ambiente +25°C. Pantalla táchi		

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Pour informations plus détaillées reportez-vous s'il vous plaît au manuel technique de l'appareil.

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Mitsubishi Electric Automation USA se dégage de toutes responsabilités si ces exemples sont utilisés en applications réelles. A cause de la grande variété d'applications de cet équipement, l'utilisateur doit lui-même acquérir les connaissances nécessaires pour utiliser correctement ces produits pour les applications particulières.

Mitsubishi Electric Automation USA se dégage de toutes responsabilités pour tous les dommages éventuels, techniques et corporels, qui pourraient apparaître durant l'installation ou l'utilisation de ce produit.

Mitsubishi Electric Automation se dégage de toutes responsabilités pour toutes modifications apportées à l'équipement. Les pièces d'origines et les accessoires fabriqués selon les spécifications de Mitsubishi Electric Automation USA devront être uniquement utilisés sur ces équipements.

Ces équipements ne devront être en aucun cas utilisés en atmosphère.

Précautions d'utilisations

En général:

- Vérifiez l'appareillage dès la réception de celui-ci pour déceler les éventuels dommages liés au transport. Si une détérioration est décelée, avisez votre fournisseur +.
- Le produit est conforme aux directives de l'article de la directive EMC 89/336/EEC.
- N'utilisez pas le produit en atmosphère explosive.
- Toutes les modifications sur le produit sont interdites.
- Utilisez seulement les pièces de rechanges d'origines fournisseur.
- Rédigez toutes les instructions d'utilisation avant la mise en oeuvre.
- L'utilisation de cet équipement devra être confiée exclusivement à du personnel qualifié.

A l'installation:

- Le produit est fabriqué pour une utilisation en poste fixe.
- installez le produit selon les instructions de montage fournies avec celui-ci.
- Cet équipement doit être installé exclusivement par du personnel qualifié.
- Les câbles haute tension et les câbles véhiculant un signal ou une alimentation basse tension doivent être séparés.
- Le produit ne doit pas être monté sous un éclairage direct.

En utilisation:

- Conservez l'équipement dans un état de propreté compatible avec le fonctionnement.
- Les fonctions de sécurité et d'arrêt d'urgence ne devront pas être contrôlées par le terminal.
- L'écran, les touches de commande ne devront pas être manipulés avec des objets pointus et tranchants.

Services et maintenance:

- La garantie agréée sera appliquée.
- Nettoyez l'écran et la face avant avec un chiffon doux et un détergent léger.
- Les réparations devront être effectuées par un personnel qualifié.

Démontage et destruction:

- Les règles locales devront être appliquées concernant le réglage de tout ou partie du produit.
- Notez que la batterie au lithium, l'écran et l'électrolyte des condensateurs contiennent des substances dangereuses.

Introduction

Dans ce manuel nous décrivons les terminaux E900 et E910. Dans les paragraphes suivants, ces deux produits seront désignés sous le nom de terminal.

Le terminal est une unité de contrôle et de commande, développée pour satisfaire aux demandes de communication homme machine. Le terminal a possibilité de visualiser et de contrôler des textes, des graphiques avec des variables dynamiques, des alarmes, des rapports, des canaux horodateurs.

Le terminal est programmé directement par un PC avec le logiciel de programmation SW-MTA-WIN pour windows. Dans les paragraphes suivants ce produit sera désigné comme le logiciel PC.

Le projet de programme est entièrement stocké dans le terminal.

Le terminal possède pour la plupart de ces fonctions un mode opératoire qui en facilite son utilisation.

Basculez du mode opération en suivant le tableau ci après.

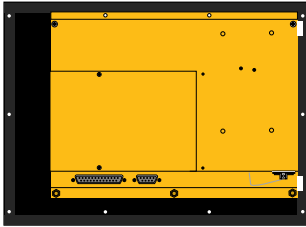
Terminal	Combinaison de touches
E900	[←] + [MAIN]
E910	L'interrupteur à l'arrière du terminal, en position 4.

Pour informations plus détaillées reportez-vous s'il vous plaît au manuel technique de l'appareil.

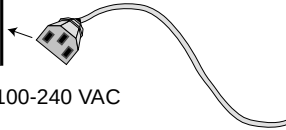
Installation

Alimentation

E900T/E900VT/E910T



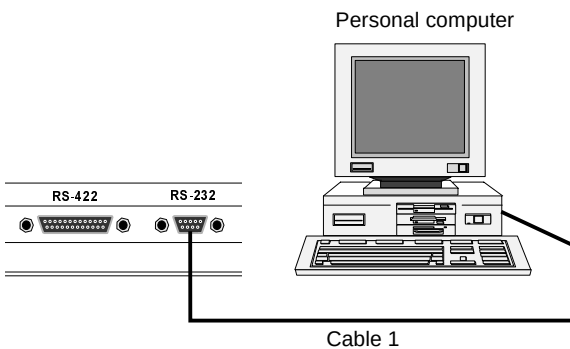
100-240 VAC



Cable table

Nom	USA
Cable 1	MTA-PROG-C
Cable 2	MTA-D25-C
Cable 3	MTA-MINI-D25
Cable 4	-

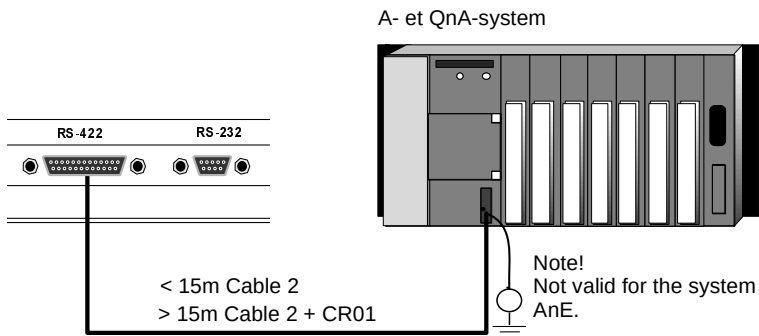
Raccordement à un PC



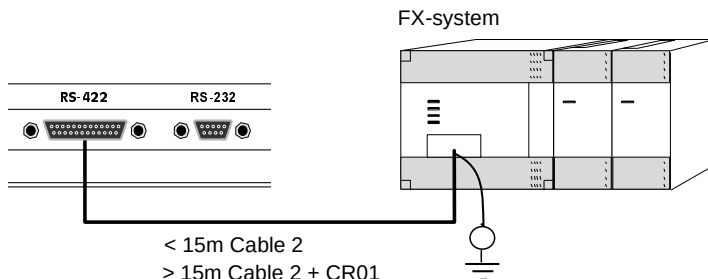
Pour programmer le terminal, il est recommandé d'utiliser le logiciel PC. Pour installer le logiciel PC référez-vous au manuel de ce produit. Il faut le paramétrage du logiciel PC et du terminal soient les mêmes.

Connexion sur le port CPU de l'automate programmable

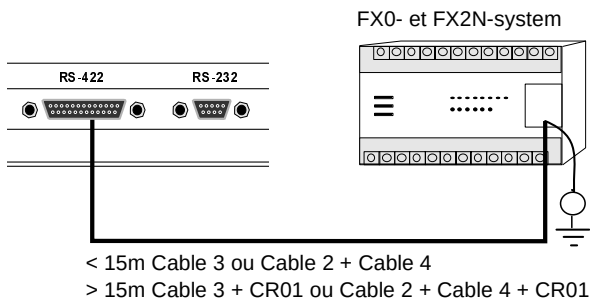
A et QnA series



FX series



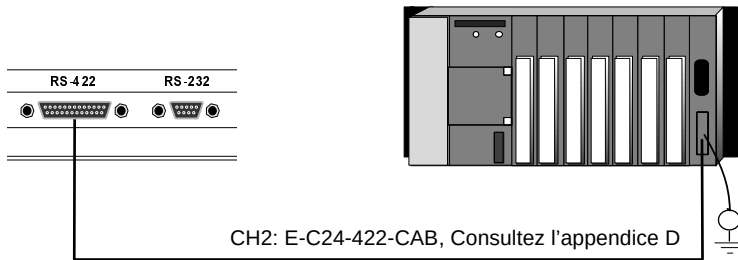
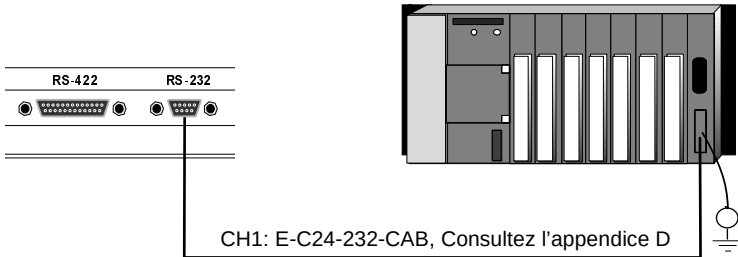
FX0 et FX2N series



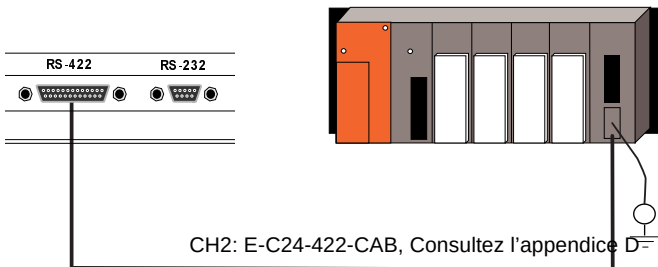
Raccordement aux cartes C24

Consultez l'appendice A pour la configuration du module C24.

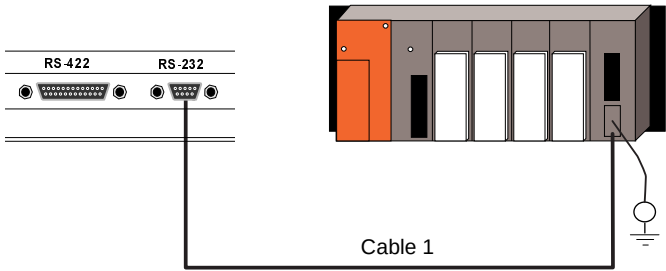
AJ71C24/AJ71UC24/AJ71QC24/AJ71QC24N



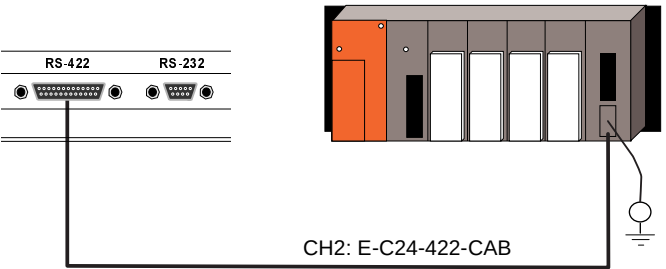
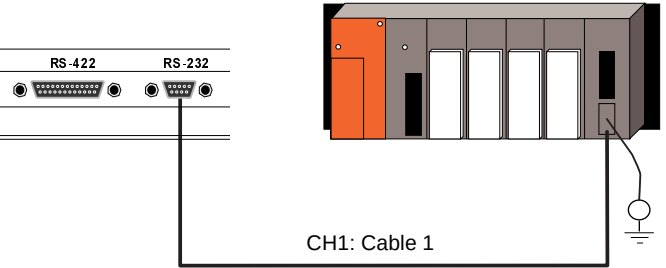
A1SJ71C24-R4/A1SJ71UC24-R4



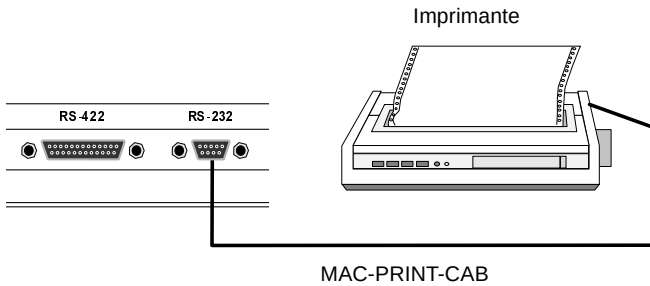
A1SJ71C24-R2/A1SJ71UC24-R2/A1SJ71QC24-R2



A1SJ71QC24



Raccordement à une imprimante



L'imprimante devra posséder un interface série et être équipée avec un ensemble de caractère IBM. Se référer au manuel de l'imprimante pour une configuration correcte. Si vous voulez connecter le pupitre à l'imprimante avec une uaison parallelee vous devez utiliser la carte d'extension IFC PI. Consultez le manuel pour le IFC PI pour plus d'informations.

Caractéristiques techniques

Paramétrage	E900T	E900VT	E910T
Dimensions face avant, Largeur x hauteur x profondeur, mm.	367 x 274 x 6,0	335 x 430 x 6,0	290 x 247 x 5,0
Profondeur d'encombrement, mm	Sans le connecteur D-sub: 90. Avec le connecteur D-sub: 110.	Sans le connecteur D-sub: 90. Avec le connecteur D-sub: 110.	Sans le connecteur D-sub: 109. Avec le connecteur D-sub: 130.
Découpe pour face avant. Voir schéma	S3-03028	S3-03107	S3-03142
Protection de la face avant du terminal	IP 65, NEMA 4		
Protection du bornier arrière	IP 20		
Caractéristiques du clavier	Membranes de clavier avec disque de pression polyester protégés par un film d'Autotex 2F200 imprimé sur la face arrière - Durée de vie 1 millions d'opérations. See <i>Appendix B</i> .		
Face arrière du terminal	Acier bichromate jaune.		
Poids Sans le connecteur D-sub	3,5 kg	4,0 kg	3,3 kg
Port série RS-422	Connecteur à 25 broches femelle D-sub avec fixation standard par vis 4-40 UNC.		
Port série RS-232	Connecteur à 9 broches mâle D-sub avec fixation standard par vis 4-40 UNC.		
Réservation pour extension	2	1	2
Mémoire flash pour l'application	2 Mb		
Horloge temps réel	±10 PPM + erreur due aux variations de la température ambiante et de la tension d'alimentation. Erreur totale maximale 1 min./mois = 12 min./an. Durée de vie: 10 ans de la batterie pour l'horloge de temps réels.		



Paramétrage	E900T	E900VT	E910T
Consommation nominale a tension fixe	Charge: 0,35 A.		
Écran	Écran à TFT 640 x 480 pixel 256 couleurs, graphique et texte. Rétro éclairage : durée de vis 25000h a temperature +25°C.		Écran à TFT 640 x 480 pixel 256 couleurs, graphique et texte. Rétro éclairage : durée de vis 25000h a temperature +25°C. Touch screen
Alimentation	100-240 VAC		
Température de fonctionnement	+0° – +50°C		
Température de stockage	-20° – +70°C		
Humidité relative	85% maximum sans condensation.		
Test EMC sur le terminal	Le terminal est conforme avec l'essentiel des protections demandées dans l'article 4 de la directive 89/336/EEC. Testé en accord avec:EN50081-2 emission et EN50082-2 immunité.		



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For more detailed information please see the Manual for the terminal.

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Because of the great many application areas for this equipment, the user himself must acquire the appropriate knowledge needed to use the equipment correctly for particular applications. Mitsubishi Electric Automation USA absolves itself of all responsibilities for damage and injuries that may occur during installation or use of this equipment.

Mitsubishi Electric Automation USA absolves itself of all responsibilities for any type of modification made to the equipment. Only approved spare parts and accessories manufactured according to specifications of Mitsubishi Electric Automation USA should be used.

The equipment must not be used in an explosive environment.

Safety precautions

General

- Check the delivery for transport damage. If damage is found, advise your supplier.
- The product fulfils the requirements of article 4 of EMC directive 89/336/EEC.
- Do not use the product in an explosive environment.
- Modifications, changes and additions to the product are forbidden.
- Use only spare parts approved by the manufacture.
- Read the user instructions carefully before use.
- This equipment should only be operated by qualified personnel.

At installation

- The product is constructed for stationary installation.
- Install the product according to the accompanying installation instructions.
- The product must be grounded according to the accompanying installation instructions.
- This equipment must be installed by qualified personnel.
- High voltage, signal and supply cables must be separated.
- The product should not be mounted in direct sunlight.

In use

- Keep the equipment clean.
- Emergency stop and other safety functions should not be controlled from the terminal.
- Do not touch the keys, displays, etc. with sharp objects.

Service and maintenance

- The agreed warrenty applies.
- Clean the display and face with a soft cloth and mild detergent.
- Repairs should be made by qualified personnel.

At disassembly and scrapping

- Local regulations apply concerning recycling of products or part.
- Please note that the lithium battery, electrolyte condenser and display contain hazardous substances.

Introduction

This instruction describes the terminals E900 and E910. Hereafter the products is referred to as the terminal.

The terminal is a graphical operator panel in a family of terminals developed to satisfy the demands made for human-machine communication. The built-in functions in the terminal include the possibility to display and control text and graphics, dynamic indication, alarm, recipe handling and time channels.

The terminal have, for the most part, an object- oriented way of working, which makes them easy to use. The terminal can be programmed directly from the terminal or from a personal computer with the software package SW-MTA-WIN for Windows. Hereafter the product SW-MTA-WIN is referred to as the PC software. The whole programmed project is transferred to the terminal and stored in the terminal.

Change operation mode according to the following table.

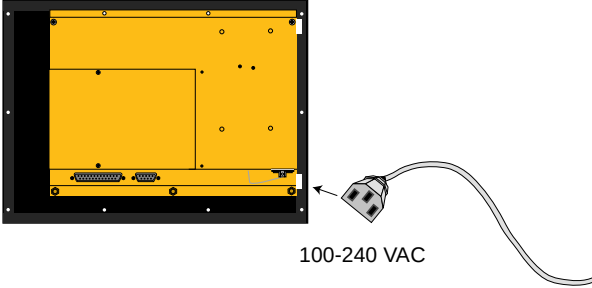
Terminal	Key combination
E900	[←] + [MAIN]
E910	The switch on the back of the terminal in position number 4.

For more detailed information please see the Manual for the terminal.

Installation

Voltage requirement

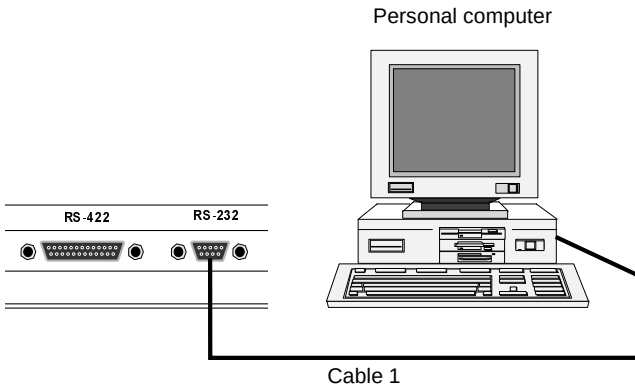
E900T/E900VT/E910T



Cable table

Name	USA
Cable 1	MTA-PROG-C
Cable 2	MTA-D25-C
Cable 3	MTA-MINI-D25
Cable 4	-

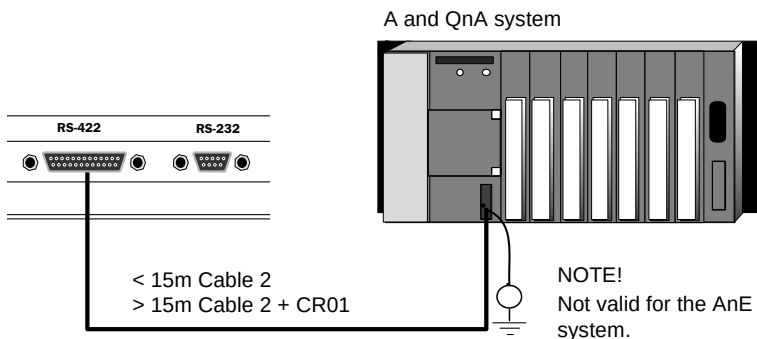
Connection to a personal computer



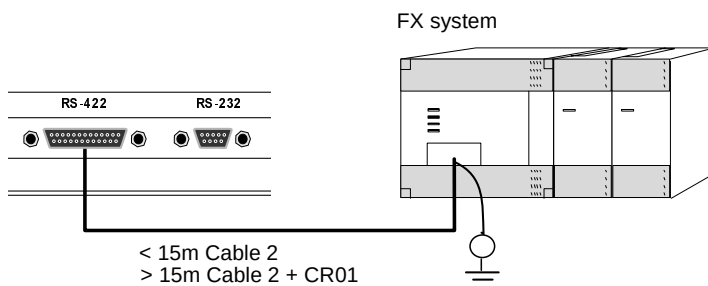
To program the terminal it is recommended that the PC software is used. To install the PC software see the manual for this product. The communication parameters in the terminal and in the PC software should be set in the same way.

Connection to the MELSEC PLC system's CPU-port

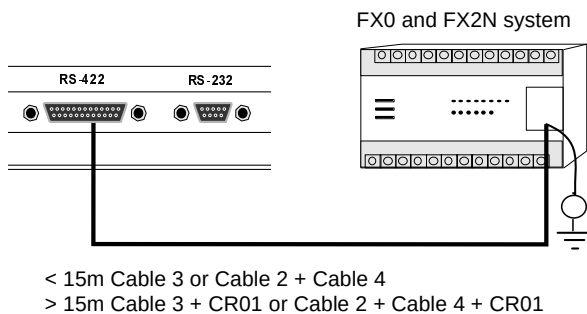
A and QnA series



FX series



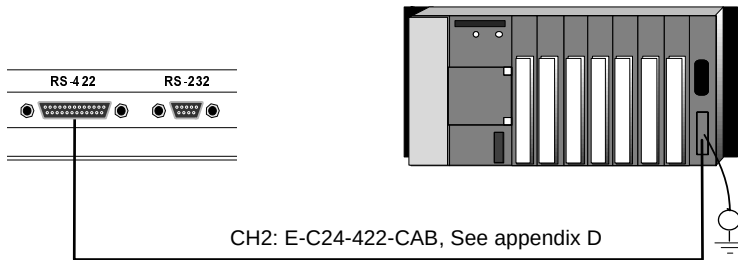
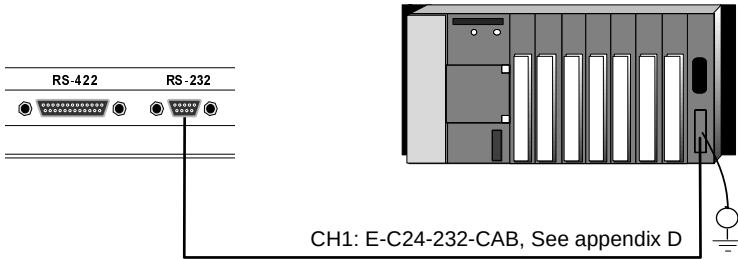
FX0 series and FX2N series



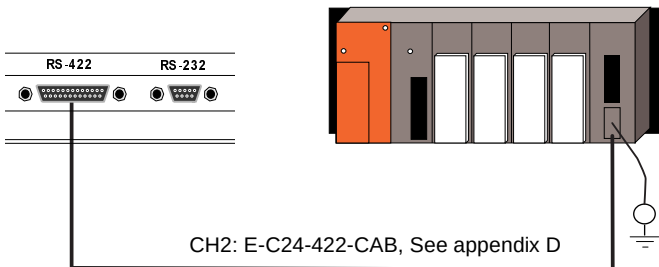
Connection to an C24 module in the MELSEC PLC system

See Appendix A for settings on an C24 module.

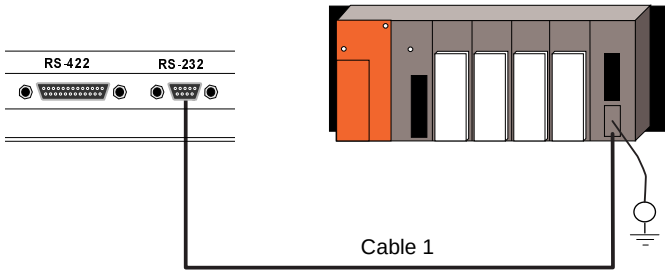
AJ71C24/AJ71UC24/AJ71QC24/AJ71QC24N



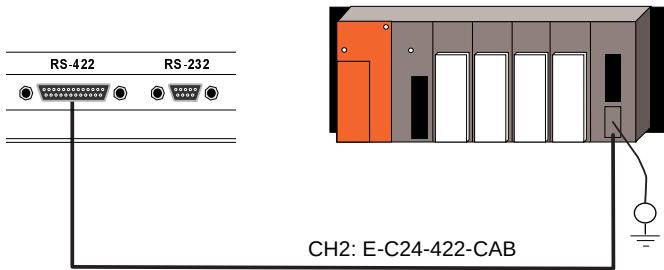
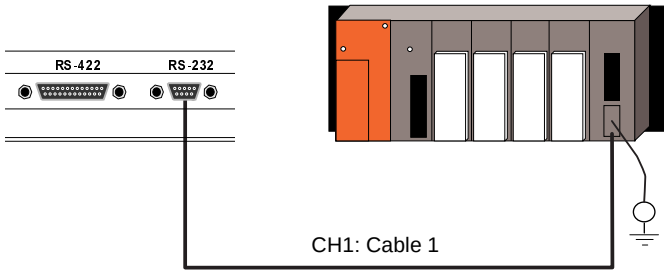
A1SJ71C24-R4/A1SJ71UC24-R4



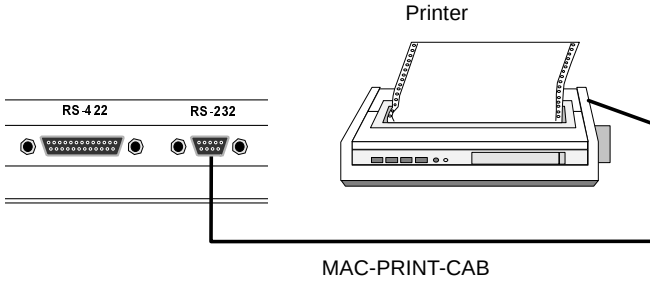
A1SJ71C24-R2/A1SJ71UC24-R2/A1SJ71QC24-R2



A1SJ71QC24



Connection to a printer



The printer should have a serial interface and be equipped with IBM character set. Refer to the printer manual for the correct configuration. If you want to connect the terminal to a printer with a parallel interface you have to use the expansion card IFC PI. See the manual for IFC PI for further information.

Technical data

Parameter	E900T	E900VT	E910T
Front panel, BxHxD, mm	367 x 274 x 6.0	335 x 430 x 6.0	290 x 247 x 5.0
Mounting depth, mm	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 109 Incl. D-sub 130
Panel cut out, see drawing	S3-03028	S3-03107	S3-03142
Front panel seal	IP 65, NEMA 4		
Rear panel seal	IP 20		
Keyboard material	Membrane keyboard with polyester snap discs. Overlay film of Autotex 2 F200 with print on reverse side. 1 million operations. See <i>Appendix B</i> .		
Reverse side material	Yellow-chromated steel plate.		
Weight, Excl. D-sub	3.5 kg	4.0 kg	3.3 kg
Serial port RS-422	25-pin D-sub contact, chassis mounted female with standard locking screws 4-40 UNC.		
Serial port RS-232	9-pin D-sub contact, chassis mounted male with standard locking screws 4-40 UNC.		
Expansion slot	2	1	2
Flash memory for application	2 Mb		
Real time clock	±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12min/year. Minimum life: 10 years of the battery for the real time clock.		
Current consumption at rated voltage	Max: 0.35 A		

Parameter	E900T	E900VT	E910T
Display	TFT display, 640x480 pixel, 256 colors, graphic and text. Back light: life 25000 h at the ambient temperature of +25°C.		
Supply voltage	100-240 VAC		
Ambient temperature	0° to +50°C		
Storage temperature	-20° to +70°C		
Relative humidity	Max 85% non-condensing.		
EMC tests on the terminal	Noise tested according to: EN50081-2 emission and EN50082-2 immunity. The terminal conforms with the essential protection requirements in article four of the directive 89/336/EEC.		

Conteúdo

Precauções de segurança	2
Introdução	3
Instalação.....	4
Dados Técnicos	9
Settings for the C24 module on MELSEC PLC systems	A-1
Front data.....	B-1
Terminal drawing	C-1
Cable drawing.....	D-1

Para informação mais detalhada ver por favor o manual específico do terminal.

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A Mitsubishi Electric Automation USA não se responsabiliza por nenhum tipo de modificações levadas a cabo no equipamento. Devem utilizar-se exclusivamente peças e acessórios fabricados de acordo com as especificações da Mitsubishi Electric Automation USA.

O equipamento não deve ser usado em ambiente explosivo.

Precauções de segurança

Gerais

- Verifique se ocorreu algum dano causado pelo transporte e nesse caso avise o seu fornecedor.
- O produto preenche os requisitos do artigo 4 da directiva EMC 89/336/EEC.
- Não utilize o produto num ambiente explosivo.
- Não são permitidas modificações e alterações ao produto.
- Use only spare parts approved by the manufacture.
- Leia cuidadosamente as instruções antes da utilização.
- Este equipamento deve ser utilizado somente por pessoal qualificado.

Na instalação

- O produto é concebido para instalações estacionárias.
- Instale o produto de acordo com as instruções de instalação que acompanham o equipamento.
- Deve ser estabelecida a ligação à terra conforme as instruções.
- Este equipamento deve ser instalado por pessoal qualificado.
- Os cabos de sinal e alimentação devem ser separados.
- O produto não deve ser exposto directamente ao sol.

Na utilização

- Mantenha o equipamento limpo.
- Paragem de emergência e outras funções de segurança não devem ser controladas a partir do terminal.
- Não toque as teclas, o ecran, etc com objectos afiados.

Serviço e manutenção

- São aplicáveis as garantias acordadas.
- Limpe o ecran e toda a parte frontal com um pano macio e detergente suave.
- As reparações devem ser feitas por pessoal qualificado.

Desmontagem e reparação

- A reciclagem de produtos ou peças deve estar de acordo com os regulamentos legais.
- Tenha em atenção que a bateria de lítio, condensador electrolítico e ecran contêm substâncias perigosas.

Introdução

Este manual descreve o terminal E900/E910. Este produto será posteriormente referido como terminal.

O terminal é um operador de painel gráfico numa família de terminais desenvolvidos para satisfazer as exigências surgidas na comunicação homem-máquina. As funções construídas no terminal incluem a possibilidade de utilizar e controlar texto e gráficos, indicação dinâmica, alarmes, receitas e canais de tempo.

Os terminais possuem uma metodologia de programação orientada por objectos que os torna fáceis de usar. O terminal é programado directamente do PC com o programa SW-MTA-WIN para Windows. Posteriormente o programa SW-MTW-WIN é referido como "software". Todo o projecto programado é memorizado no terminal.

Change operation mode according to the following table.

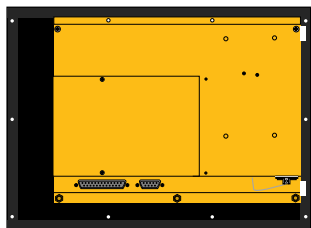
Terminal	Key combination
E900	[←] + [MAIN]
E910	The switch on the back of the terminal in position number 4.

Para informação mais detalhada ver por favor o manual específico do terminal.

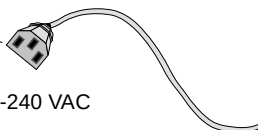
Instalação

Tensão de alimentação necessária

E900T/E900VT/E910T



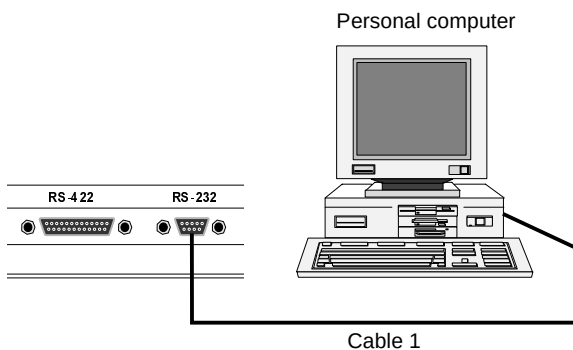
100-240 VAC



Cable table

Name	USA
Cable 1	MTA-PROG-C
Cable 2	MTA-D25-C
Cable 3	MTA-MINI-D25
Cable 4	-

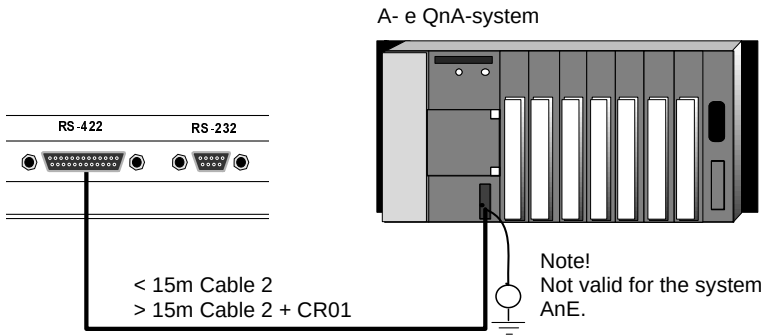
Ligação a um computador pessoal



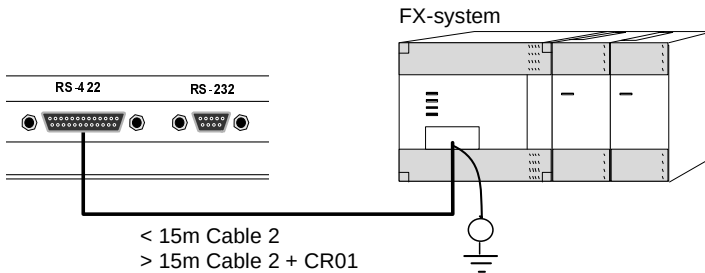
É recomendado software para PC na programação do terminal. Para instalar o software consultar o manual do produto. The communication parameters in the terminal and in the PC software should be set in the same way.

Ligação à porta CPU do sistema PLC

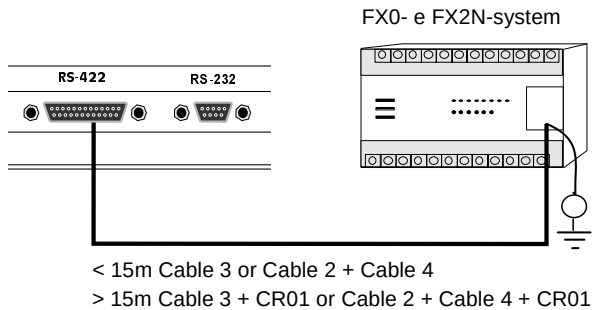
Série A e QnA



Série FX



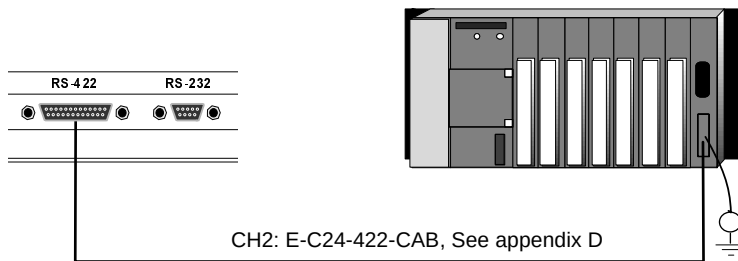
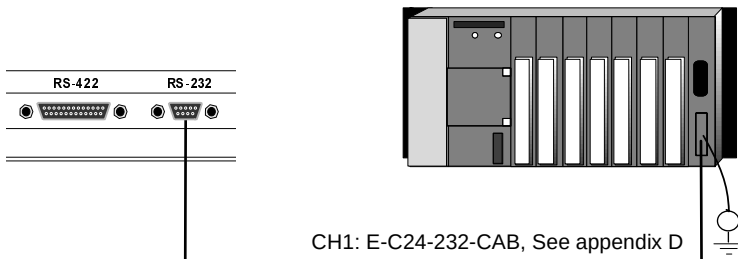
Série FX0 e FX2N



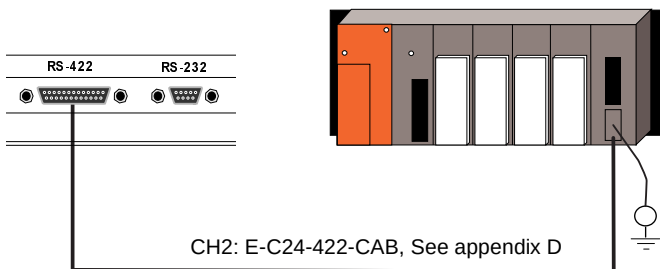
Ligação ao módulo C24

See Appendix A for settings on an C24 module.

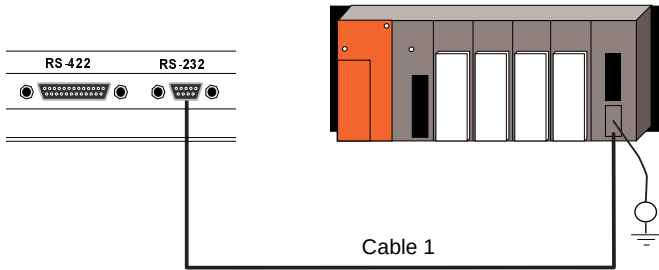
AJ71C24/AJ71UC24/AJ71QC24/AJ71QC24N



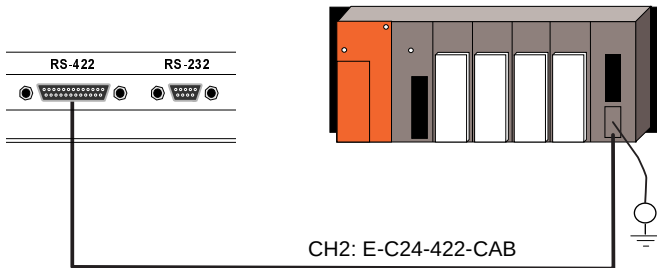
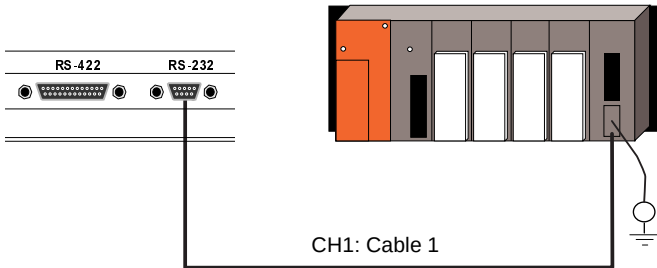
A1SJ71C24-R4/A1SJ71UC24-R4



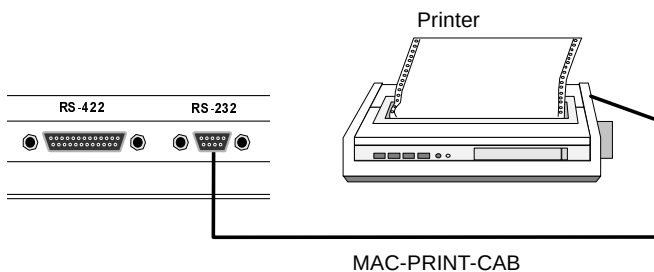
A1SJ71C24-R2/A1SJ71UC24-R2/A1SJ71QC24-R2



A1SJ71QC24



Ligação a uma impressora



A impressora deve possuir uma interface série e estar equipada com a configuração de character IBM. Recorra ao manual da impressora para uma correcta configuração. *If you want to connect the terminal to a printer with a parallel interface you have to use the expansion card IFC PI. See the manual for IFC PI for further information.*

Dados técnicos

Parameter	E900T	E900VT	E910T
Painel frontal, BxHxD, mm	367 x 274 x 6.0	335 x 430 x 6.0	290 x 247 x 5.0
Profundidade de encaixe, mm	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 90 Incl. D-sub 110	Excl. D-sub 109 Incl. D-sub 130
Encaixe no painel. Ver esquema	S3-03028	S3-03107	S3-03142
Estanquicidade do painel frontal	IP 65, NEMA 4		
Estanquicidade do painel traseiro	IP 20		
Material do teclado	Membrana de teclado com discos de poliéster. Filme com revestimento Autotex 2 F200 passível de ser impresso dos dois lados. See <i>Appendix B</i> .		
Material da parte traseira	Placa de aço amarelo cromado.		
Peso, Excl. D-sub	3.5 kg	4.0 kg	3.3 kg
Porta de série RS-422	Ficha fêmea 25-pin D-sub, com parafusos 4-40 UNC.		
Porta de série RS-232	Ficha macho 9-pin D-sub, com parafusos 4-40 UNC.		
Aberturas de expansão	2	1	2
Memória rápida for application	2 Mb		
Relógio de tempo real	±10 PPM + erro devido à temperatura ambiente e à tensão de alimentação. Erro total máximo 1 min/mês= 12min/ano. Duração mínima: 10 anos de bateria para o relógio de tempo real.		
Consumo de corrente numa tensão rated voltage	Máxima: 0.35 A.		

Parameter	E900T	E900VT	E910T
Ecran	Ecran TFT, 640x480 pixels, 256 cores, gráficos e texto. Luz de contraste: duração 25000 h at the ambient temperature of +25°C.		
Tensão de alimentação	100-240 VAC		
Temperatura ambiente	0° to +50°C		
Temperatura de armazenamento	-20° to +70°C		
Humidade relativa	Máx 85% sem condensação.		
Testes EMC ao terminal	Teste de ruído de acordo com: EN50081-2 emissão e EN50082-2 imunidade. Este terminal está em conformidade com os requisitos essenciais do artigo quatro da directiva 89/336/EEC.		

Settings on the C24 module in the MELSEC PLC system

AJ71C24

Station number:

When communicating with the E900/E910: 0

Mode setting:

When communicating with the E900/E910: A

Setting of the switches:

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW11	ON	Main channel settings	RS-422	RS-232C	Valid for modes A to D
SW12	ON	Data length	8 bits	7 bits	–
SW13	OFF	Transmission speed setting	Refer to the table below		–
SW14	ON				
SW15	ON				
SW16	OFF	Parity check	Enabled	Disabled	–
SW17	OFF	Parity setting	Even	Odd	Valid only when SW16 is ON
SW18	OFF	Stop bit	2 bits	1 bit	–
SW21	ON	Sum check	Enabled	Disabled	For dedicated protocol
SW22	ON	Write during RUN	Enabled	Disabled	

AJ71C24

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW23	OFF	Send area terminal resistance	Present	Absent	Valid only when SW11 is ON
SW24	OFF	Receive area terminal resistance	Present	Absent	

AJ71UC24

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW23	ON	Computer link/Multidrop	Computer link	Multidrop link	Must be ON
SW24	OFF	Multi drop settings	Master station	Local station	Valid only when SW23 is OFF

Baudrate	300	600	1200	2400	4800	9600	19200	Un-usable
SW13	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW14	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW15	OFF	OFF	OFF	OFF	ON	ON	ON	ON

The settings of the switches must correspond with the communication settings in SW-MTA-WIN and in the terminal.

For more detailed information see the manual to the module.

AJ71C24-R4/A1SJ71UC24-R4/A1SJ71C24-R2/A1SJ71UC24-R2

Station number:

When communicating with the E900/E910: 0

Mode setting:

When communicating with the E900/E910: A1SJ71C24-R4/A1SJ71UC24-R4: 5

A1SJ71C24-R2/A1SJ71UC24-R2: 1

Setting of the switches:

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW01 Only -R4	OFF	Main drop settings	Master station	Local station	Valid only when SW2 is OFF
SW02 Only -R4	ON	Computer link/ Multidrop	Computer link	Multidrop link	Must be ON
SW03	OFF	Unused	—	—	—
SW04	ON	Write during RUN	Enabled	Disabled	For dedicated protocol
SW05	OFF	Transmission speed setting	Refer to the table below		—
SW06	ON				
SW07	ON				
SW08	ON	Data length	8 bits	7 bits	—
SW09	OFF	Parity check	Enabled	Disabled	—
SW10	OFF	Parity setting	Even	Odd	Valid only when SW09 is ON
SW11	OFF	Stop bit	2 bits	1 bit	—
SW12	ON	Sum check	Enabled	Disabled	For dedicated protocol

Baudrate	300	600	1200	2400	4800	9600	19200	Un-usable
SW13	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW14	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW15	OFF	OFF	OFF	OFF	ON	ON	ON	ON

The settings of the switches must correspond with the communication settings in SW-MTA-WIN and in the terminal.

For more detailed information see the manual to the module.

AJ71QC24/AJ71QC24N/A1SJ71QC24/A1SJ71QC24-R2

Station number:

When communicating with the E900/E910: 00

Mode setting:

When communicating with the E900/E910: 5

Setting of the switches:

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW01	OFF	Operation setting	Interlocking	Independent	CH1 always OFF
SW02	ON	Data length	8 bits	7 bits	—
SW03	OFF	Parity check	Enabled	Disabled	—
SW04	OFF	Parity setting	Even	Odd	Valid only when SW03 is ON
SW05	OFF	Stop bit	2 bits	1 bit	—
SW06	ON	Sum check	Enabled	Disabled	For dedicated protocol
SW07	ON	Write during RUN	Enabled	Disabled	

Switch	Default comm. settings in software to E900/E910	Setting items	Position of Setting Switch		Notes
			ON	OFF	
SW08	OFF	Setting change	Allow	Prohibit	–
SW09	OFF	Transmission speed setting	Refer to the teable below		–
SW10	ON				
SW11	ON				
SW12	OFF				
SW13-15	OFF	–	Set all to OFF		Placed on the left side of the AJ71QC24(N)

Transmission speed setting AJ71QC24/A1SJ71QC24/A1SJ71QC24-R2

Baudrate	300	600	1200	2400	4800	9600	19200
SW09	OFF	ON	OFF	ON	OFF	ON	OFF
SW10	OFF	OFF	ON	ON	OFF	OFF	ON
SW11	OFF	OFF	OFF	OFF	ON	ON	ON
SW12	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Transmission speed setting AJ71QC24N

Baudrate	300	600	1200	2400	4800	9600
SW09	OFF	ON	OFF	ON	OFF	ON
SW10	OFF	OFF	ON	ON	OFF	OFF
SW11	OFF	OFF	OFF	OFF	ON	ON
SW12	OFF	OFF	OFF	OFF	OFF	OFF
Baudrate	19200	38400	14400	28800	57600	115200
SW09	OFF	ON	OFF	ON	OFF	ON
SW10	ON	ON	OFF	OFF	ON	ON

Baudrate	300	600	1200	2400	4800	9600
SW11	ON	ON	OFF	OFF	OFF	OFF
SW12	OFF	OFF	ON	ON	ON	ON

The total of CH1 and CH2 must be within 115200 BPS.

The settings of the switches must correspond with the communication settings in SW-MTA-WIN and in the terminal.

For more detailed information see the manual to the module.

Membrane keyboard

Solvent resistance and enviromental data for Autotex 2

Autotex 2 withstands exposure of more than 24 hours duration under DIN 42 115 Part 2 to the following chemicals without visible change:

Ethanol	Formaldehyde 37%-42%	1.1.1. Trichloroethane (Genklene)
Cyclohexanol	Acetaldehyde	Ethylacetate
Diacetone alcohol	Aliphatic hydrocarbons	Diethyl ether
Glycol	Toluene	N-Butyl acetate
Isopropanol	Xylene	Amylacetate
Glycerine	White spirit	Butycellosolve
Methanol	Fromic acid <50%	Ether
Triacetin	Acetic acid <50%	Sodium hypchlorite <20% (Bleach)
Dowanol DRM/PM	Phosphoric acid <30%	Hydrogen peroxide <25%
Acetone	Hydrochloric acid <36%	Potassium carbonate
Metyl ethyl ketone	Nitric acid <10%	Washing powders
Dioxan	Trichloroacetic acid <50%	Fabric conditioner
Cyclohexanone	Sulphuric acid <10%	Ferric chloride
MIBK	Cutting oil	Ferrous chloride
Isophorone	Diesel oil	Dibutyl Phthalate
Ammonia <40%	Linseed oil	Dioctyl Phthalate
Caustic soda <40%	Paraffin oil	Sodium carbonate
Potassium hydroxide <30%	Blown castor oil	
Alkalicarbonat	Silicone oil	

Bichromate	Turpentine substitute	
Potassium ferrocyanide/ferricyanide	Universal brake fluid	
Acetonitrile	Decon	
Sodium bisulphate	Aviation fuel	
	Petrol	
	Teepol	
	Water	
	Sea water	

Autotex withstands DIN 42 115 Part 2 exposure of <1 hour duration to glacial acetic acid without visible change.

Autotex is **not** resistant to the following chemicals:

Concentrated mineral acids
Concentrated caustic solution
High pressure steam at over 100°C
Benzyl alcohol
Methylene chloride

Autotex withstands 24 hours exposure to the following reagents at 50°C without visible staining:

Top Job	Grape Juice	Ariel	Ajax
Jet Dry	Milk	Persil	Vim
Gumtion	Coffee	Wisk	Domestos
Fantastic		Lenor	Vortex
Formula 409		Downey	Windex

Very slight discoloration was noted under critical viewing conditions with the following materials:

Tomato juice
Tomato ketchup
Lemon juice
Mustard

Enviromental data

Minimum use temperature

Tactile embossed Autotex has been tested to 0.5 million switch operation at -40°C (-40°F) without loss of function.

Maximum use temperature

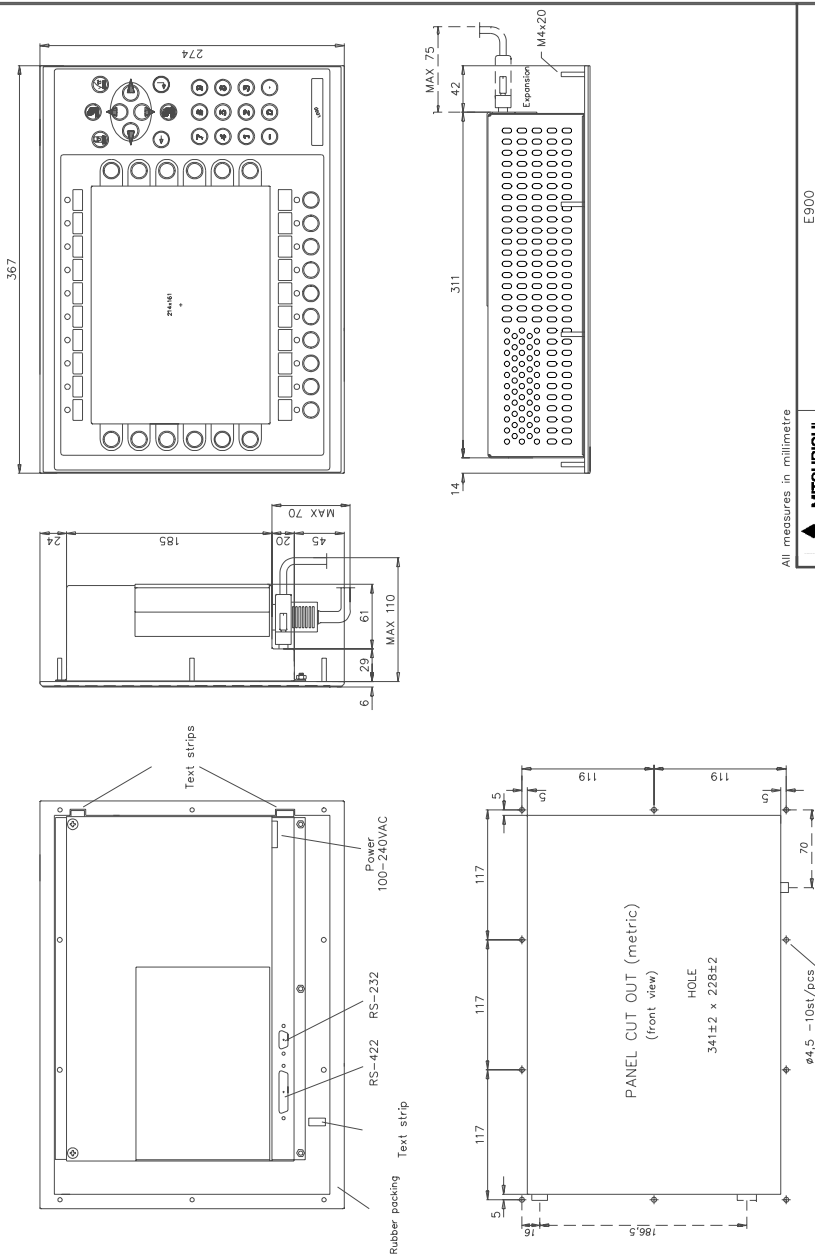
Low moderate humidity: 85°C

High humidity (>90% RH): 40°C

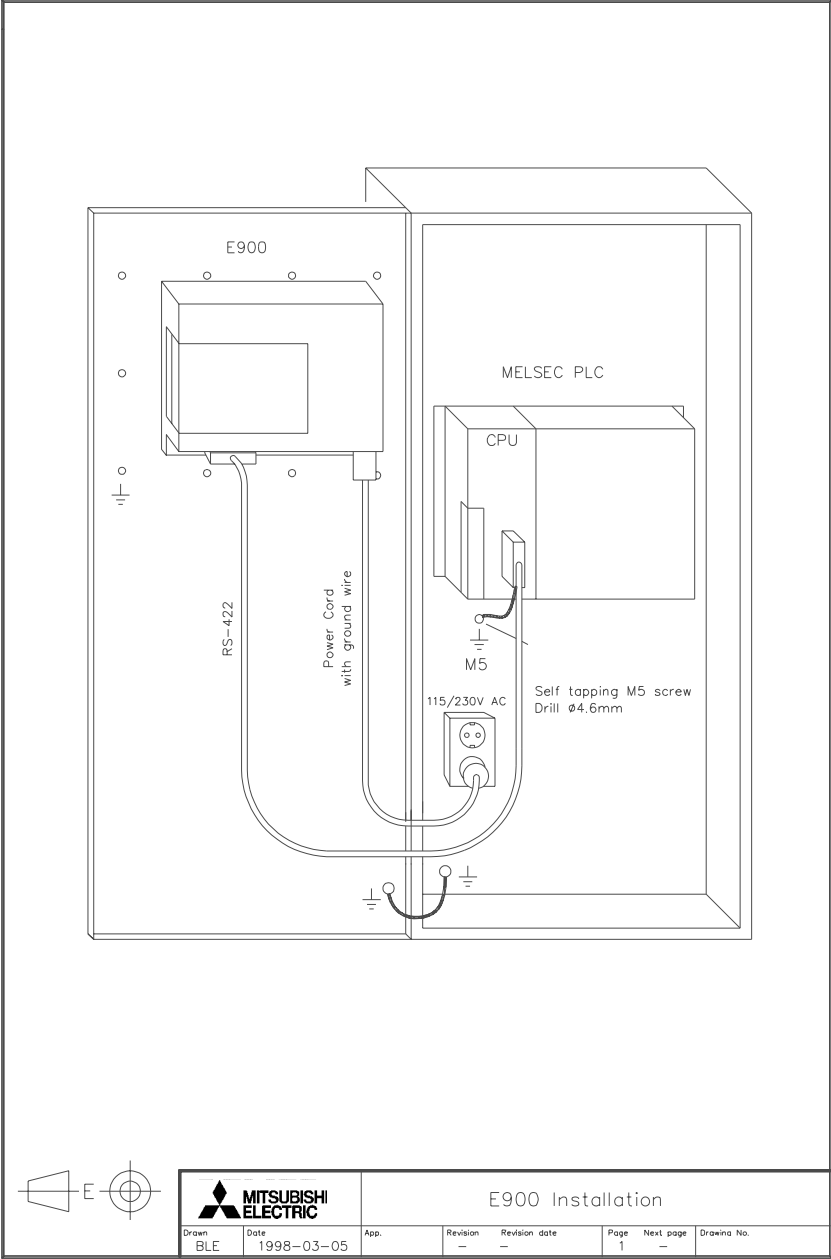
Outdoor use

In common with all polyester based films Autotex is not suitable for use in conditions of long term exposure to direct sunlight.

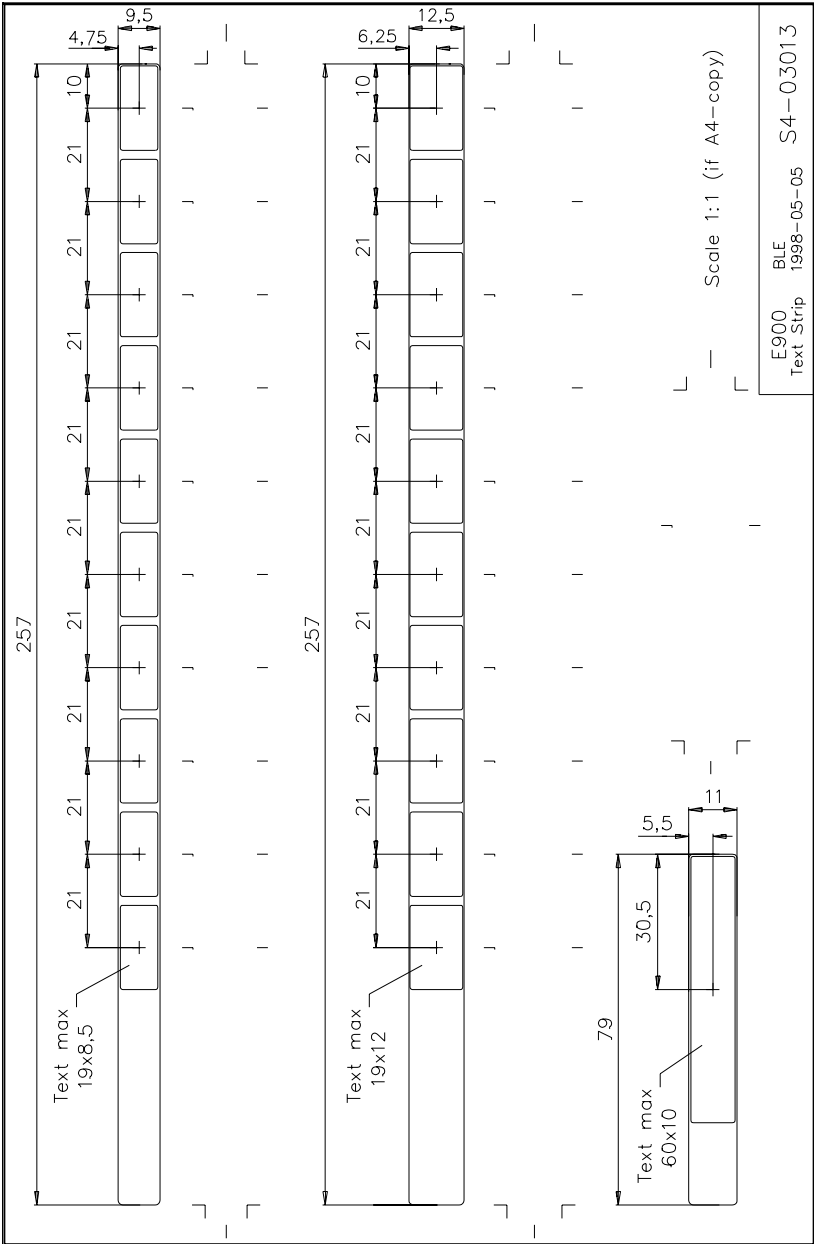
E900 Outline



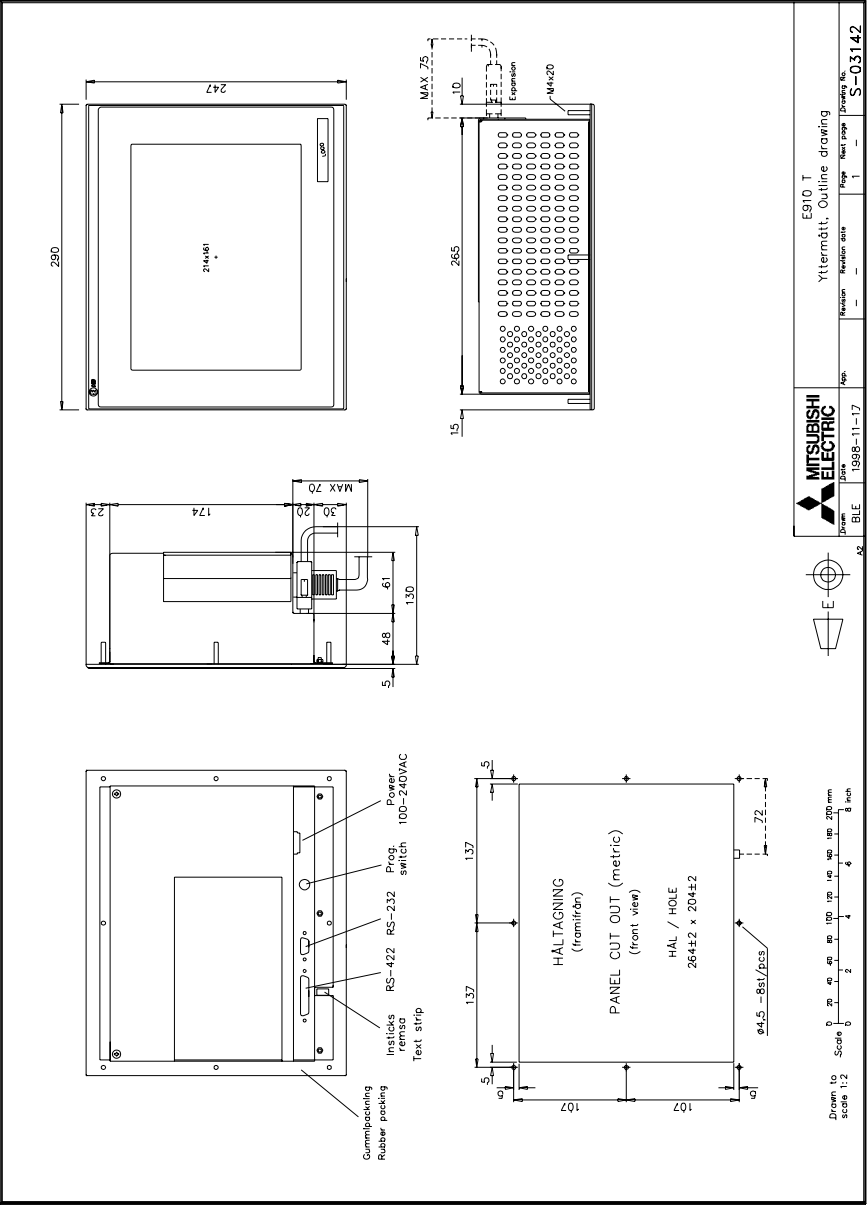
E900 Installation



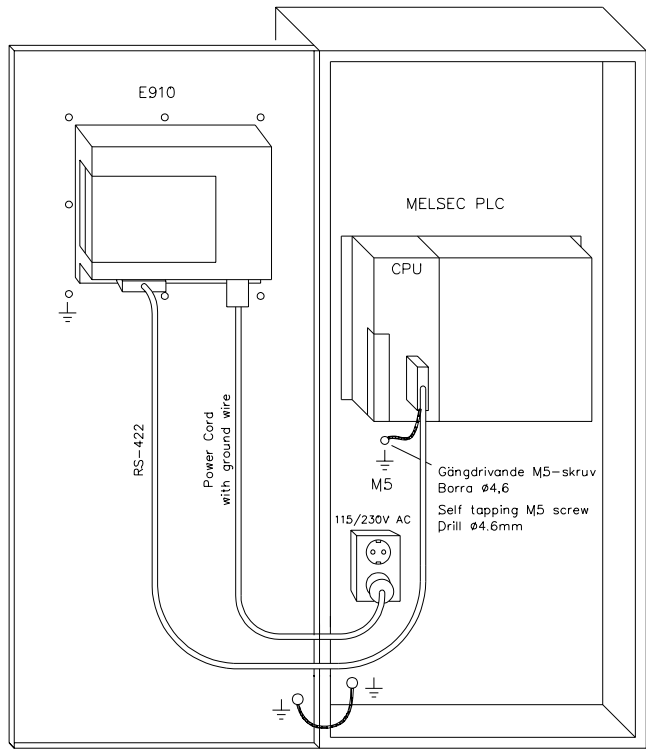
E900 Text strip



E910 Outline

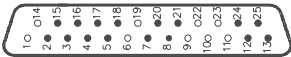


E910 Installation



 MITSUBISHI ELECTRIC		E910 Installation					
Drawn BLE	Date 1998-11-16	App.	Revision -	Revision date -	Page 1	Next page -	Drawing No. S-03143

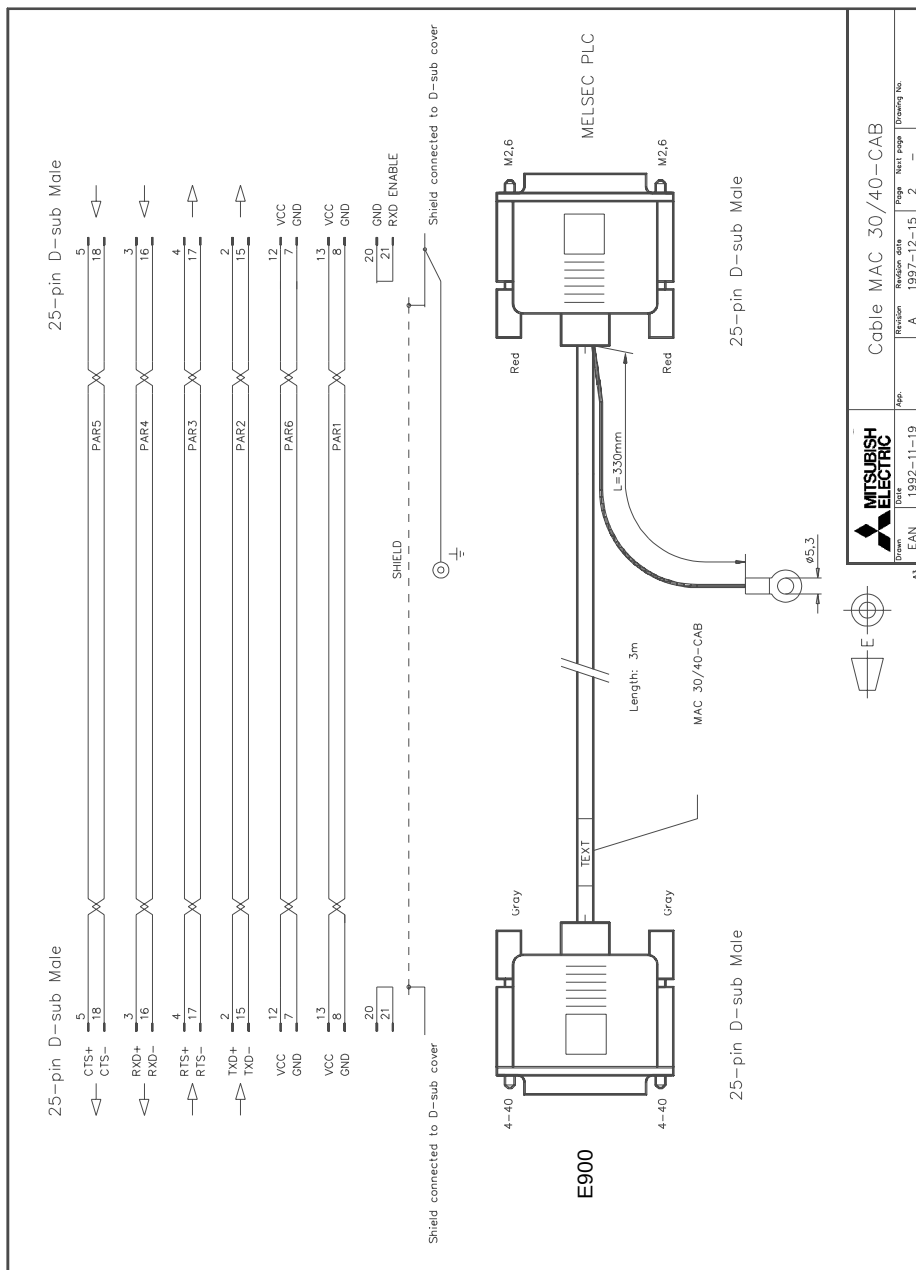
RS-232 E900			
		Signal direction MAC ↔ XXX	
Pin no	Name		
2	TxD	→	
3	RxD	←	
5	OV		
7	CTS	←	
8	RTS	→	
9			
D-sub 9-pin Male			

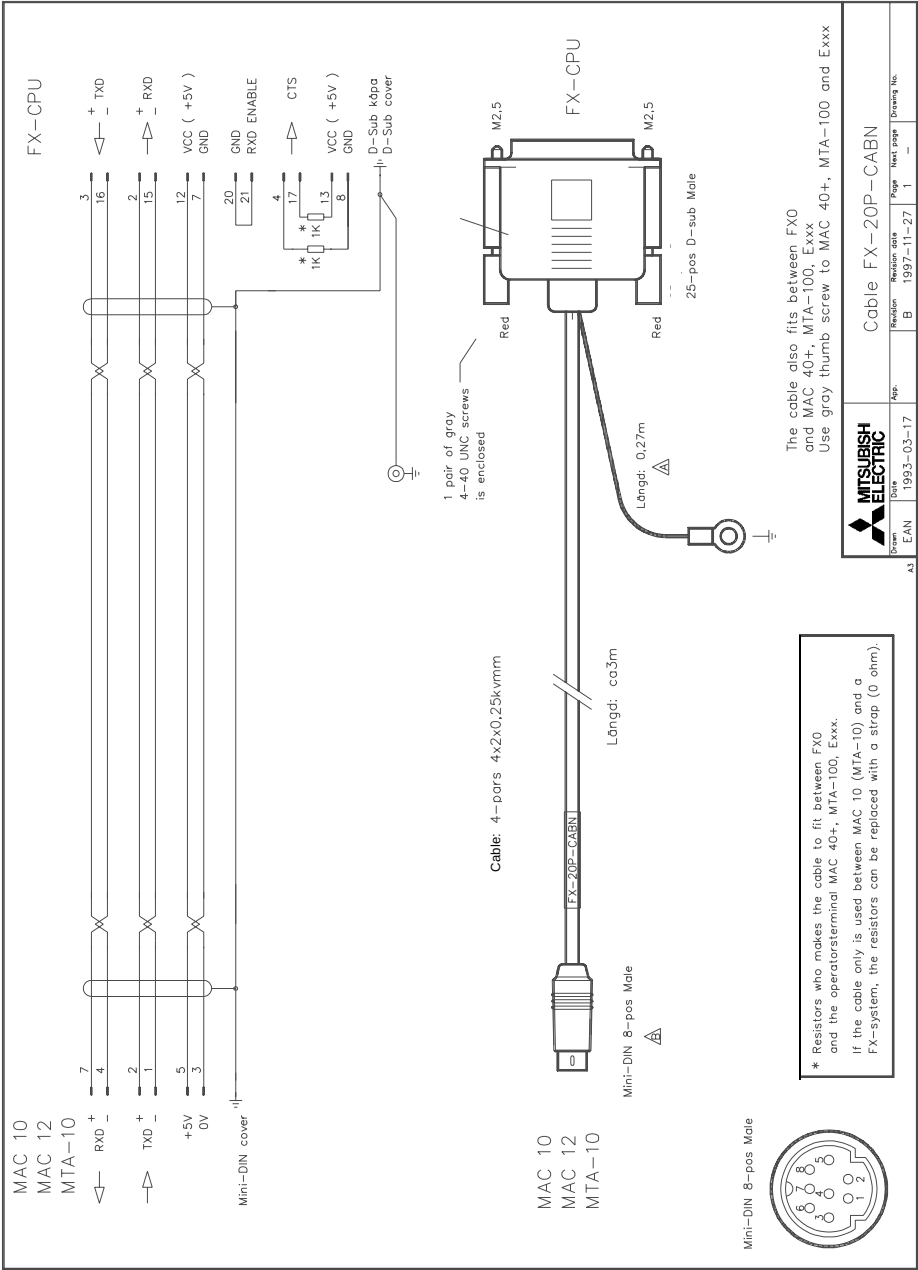
RS-422 E900			
		Signal direction MAC ↔ XXX	
Pin no	Name		
2	+ TxD		→
15	- TxD		
3	+ RxD		←
16	- RxD		
4	+ RTS		→
17	- RTS		
5	+ CTS		←
18	- CTS		
20	**		
21	**		
7,8	OV		
12,13			
24,25			
D-sub 25-pin Female			

** Pin no 20 connected to pin no 21 internal in E900

	Part no	930907	Model	BLE	Comment	E900
	Rev	380109	Sign			RS-232/RS-422
	Manufacturer		Site	1	Form	Revision

Cable drawings





Mini-DIN 8-pos Male



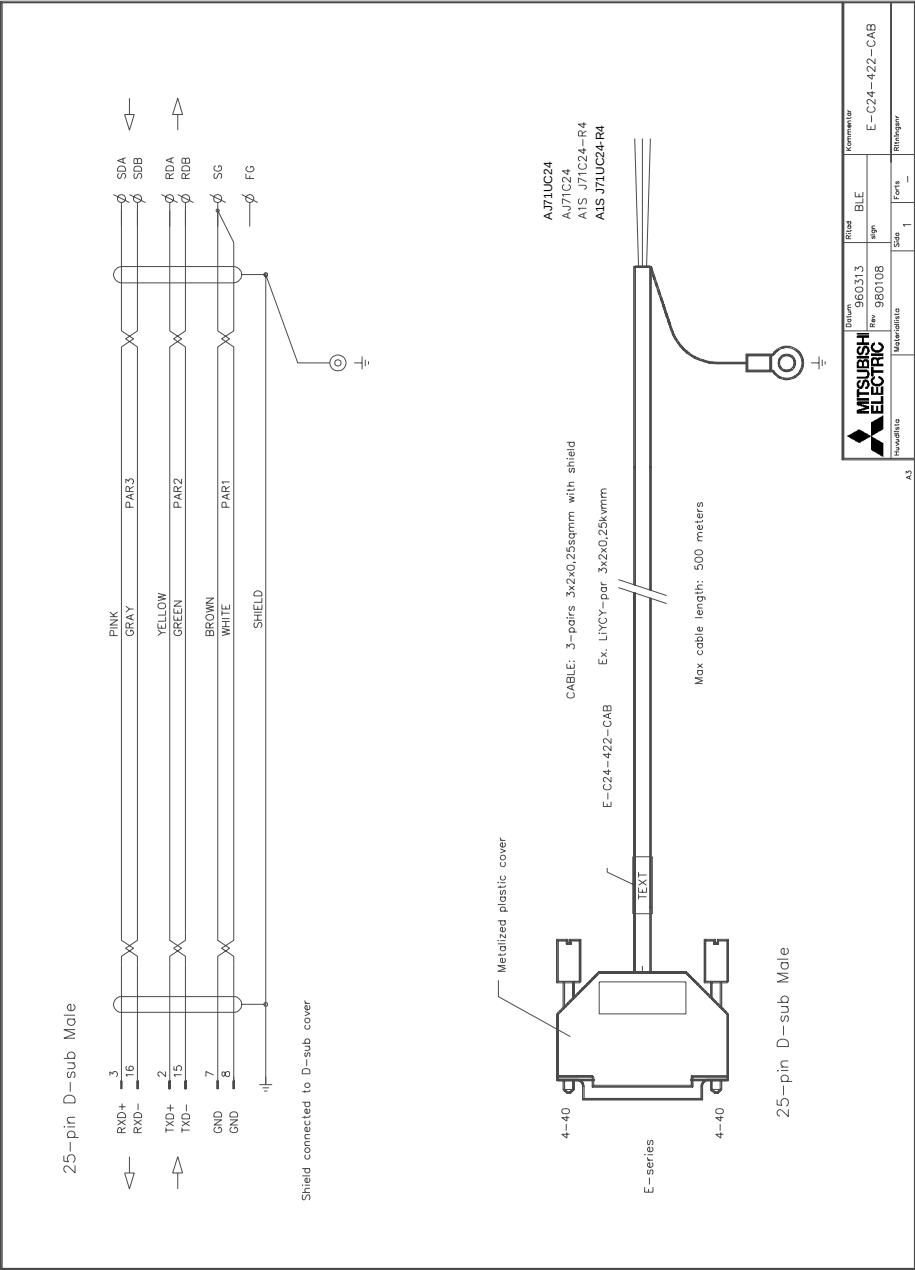
The cable also fits between FX0
and MAC 40+, MTA-100, Exxx
Use gray thumb screw to MAC 40+, MTA-100 and Exxx

* Resistors who makes the cable to fit between FX0
and the operatorterminal MAC 40+, MTA-100, Exxx.
If the cable only is used between MAC 10 (MTA-10) and a
FX-system, the resistors can be replaced with a strap (0 ohm).

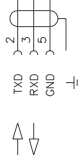
 **MITSUBISHI
ELECTRIC**

Cable FX-20P-CABN

A3

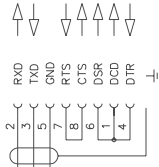


9-pin D-sub Female

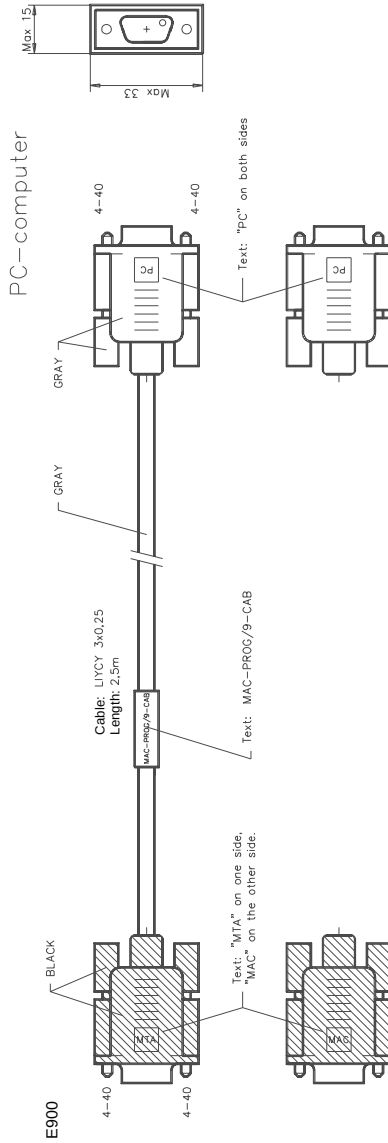


Shield connected to D-sub cover

9-pin D-sub Female



Shield connected to D-sub cover

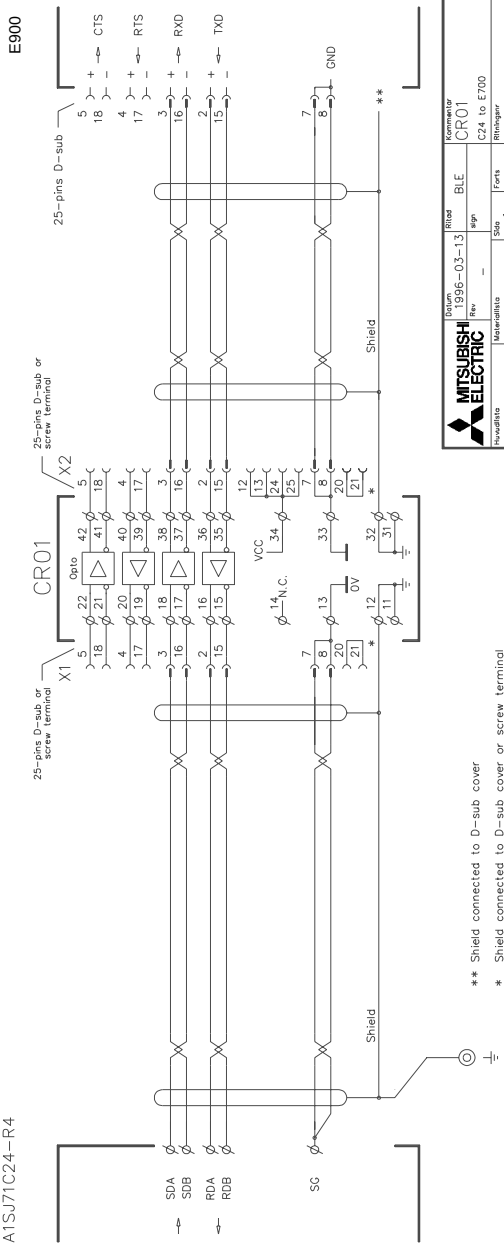
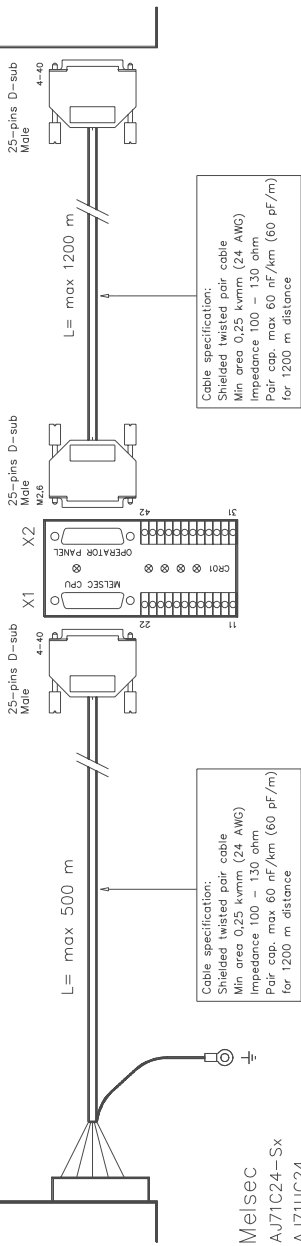


Cable MAC-PROG/9-CAB

MAC-programmer kabel med 9-pol D-sub kontakt till PC

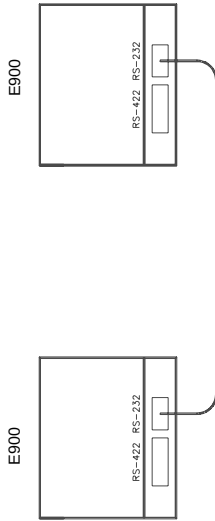
Drawn	Date	App.	Revision	Revision date	Page	Next page	Drawing No.
EAN	1994-09-20		A	1997-12-16	1	-	

Standard cable with D-sub connectors:
MAC30/40-CAB, 3 m (drawing -00757)



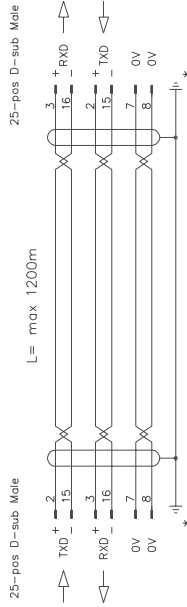
 MITSUBISHI ELECTRIC	Datum	Ritad	Kommentar	
	Rev	align		
	1996-03-13		CR01	
	—		C24 to E700	
Materialista	Sida	1	Ritningsnr	
			Forts	
			—	

RS-232



* Connect the shield to the D-sub cover or to the metal frame of the D-sub

RS-422



* Connect the shield to the D-sub cover or to the metal frame of the D-sub

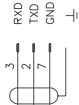
	Order	960312	Rated	BLE	Kommutator	
	Rev		Sign		Transparent mode	
	Material		Size	I	Form	—
A3		Rohrleger				

9-pin D-sub Female

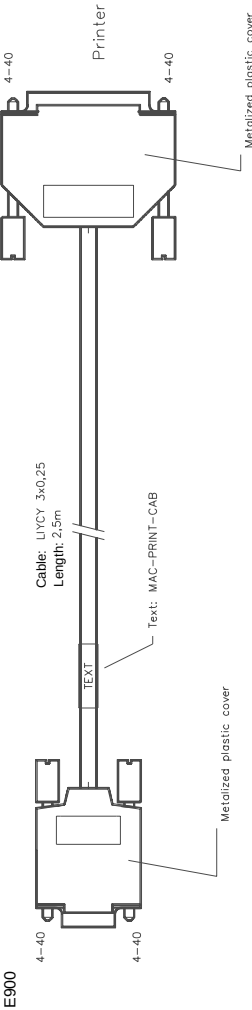


Shield connected to D-sub cover

25-pin D-sub Male



Shield connected to D-sub cover



	Drawing No.		301116	Revised		E.A.		Kommentar	
	Rev.		960313	Sign.				MAC-PRINT-CAB	
	Material			Size		1		Form	