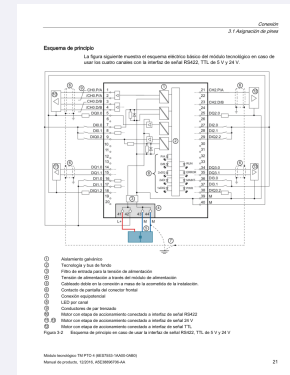


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Siemens 6ES7553-1AA00-0AB0

TM PTO 4 stepper-drive interface module



PRODUCT	6ES7553-1AA00-0AB0
FAMILY	SIMATIC S7-1500 / ET 200MP
FUNCTION	TM PTO 4 stepper-drive interface module
STATUS	Verify exact configuration

Prepared by Amikon Limited from Siemens A5E38896706-AA, 12/2016, section 3.1. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Axis channels	4 individually configurable pulse-output channels
Load supply L+	24 V DC; permitted range 19.2 to 28.8 V DC
Pulse interface ratings	RS422: 1 MHz; TTL 5 V and 24 V: 200 kHz maximum
Signal formats	Pulse/direction, up/down or A/B quadrature, including quadruple
Auxiliary inputs	DI0 and DI1 per channel; shared DIQ2 configurable as input/output
Digital output loads	DQn.0 / DQn.1: 0.1 A; DIQn.2: 0.5 A rated
Process address space	18 input bytes and 10 output bytes per channel

02 MOUNTING AND CONNECTION

- Qualified personnel must isolate the station supply and secure connected machinery before wiring.
- Use the S7-1500 rail and 40-pin front connector; do not fit potential jumpers to that connector.
- Supply terminal 41 with 24 V DC. Run separate ground wires from terminals 43 and 44 to the central supply ground.
- Select RS422, TTL or 24 V deliberately: use CHn.P/A and CHn.D/B for RS422/TTL, DQn.0 and DQn.1 for 24 V.
- Terminate twisted RS422 pairs with 100 ohms. For TTL, fit 220 ohms to 1 kohm from each P/A and D/B signal to M.

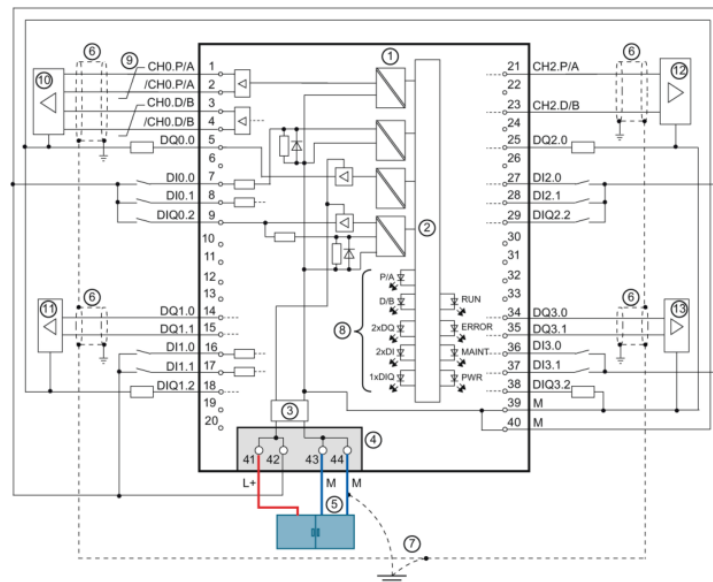
OFFICIAL INSTALLATION REFERENCE

Conexión

3.1 Asignación de pines

Esquema de principio

La figura siguiente muestra el esquema eléctrico básico del módulo tecnológico en caso de usar los cuatro canales con la interfaz de señal RS422, TTL de 5 V y 24 V.



- ① Aislamiento galvánico
- ② Tecnología y bus de fondo
- ③ Filtro de entrada para la tensión de alimentación
- ④ Tensión de alimentación a través del módulo de alimentación
- ⑤ Cableado doble en la conexión a masa de la acometida de la instalación.
- ⑥ Contacto de pantalla del conector frontal
- ⑦ Conexión equipotencial
- ⑧ LED por canal
- ⑨ Conductores de par trenzado
- ⑩ Motor con etapa de accionamiento conectado a interfaz de señal RS422
- ⑪, ⑬ Motor con etapa de accionamiento conectado a interfaz de señal 24 V
- ⑫ Motor con etapa de accionamiento conectado a interfaz de señal TTL

Figura 3-2 Esquema de principio en caso de usar la interfaz de señal RS422, TTL de 5 V y 24 V

Módulo tecnológico TM PTO 4 (6ES7553-1AA00-0AB0)
Manual de producto, 12/2016, A5E38896706-AA

Official manufacturer reference reproduced from Siemens A5E38896706-AA, 12/2016, section 3.1. Use the current source document and all referenced drawings and notes for installation.

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CABLE ROUTING AND CONNECTION

- Use the S7-1500 rail and 40-pin front connector; do not fit potential jumpers to that connector.
- Supply terminal 41 with 24 V DC. Run separate ground wires from terminals 43 and 44 to the central supply ground.
- Select RS422, TTL or 24 V deliberately: use CHn.P/A and CHn.D/B for RS422/TTL, DQn.0 and DQn.1 for 24 V.
- Terminate twisted RS422 pairs with 100 ohms. For TTL, fit 220 ohms to 1 kohm from each P/A and D/B signal to M.
- Restore channel and axis settings; verify direction, reference/ready signals, drive enable and CPU STOP response.

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INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Confirm channel diagnostics, drive enable, direction and CPU STOP response before service.
- Record the installed order number and baseline operating condition.

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CONTROLLED DOCUMENTS

Official source	Siemens A5E38896706-AA, 12/2016, section 3.1
Product record	6ES7553-1AA00-0AB0
Manufacturer	Siemens
Support	INFO@AMIKON.CN