

Technical Description



DEUTSCH

EtherCAT - Erweiterungskarte

ENGLISH

EtherCAT - Expansion Card

FRANÇAIS

EtherCAT - Carte d'Expansion

ITALIANO

EtherCAT - Scheda di Espansione

S300 & S600 Servo Amplifiers

Edition: March 2021



For safe and proper use, follow these instructions.
Keep them for future reference.

Contents



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Documents available from www.kollmorgen.com

- **Instructions Manual** (PDF format):
This manual provides instructions for installation and servo amplifier setup.
- **Accessories Manual** (PDF format):
It provides information for accessories like cables, filters, chokes and brake resistors.
- **CAN-BUS Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in CANopen applications.
- **DeviceNET Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in DeviceNET applications.
- **EtherCAT Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in EtherCAT applications.
- **PROFIBUS DP Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in PROFIBUS DP applications.
- **PROFINET Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in PROFINET applications.
- **sercos[®] 2 Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in sercos[®] applications.
- **SynqNet Fieldbus Interface** (PDF format):
Describes how to use your servo amplifier in SynqNet applications.
- **DRIVEGUI.EXE Online help** (CHMs format):
The online help includes the *ASCII Object Reference* which provides information for the parameters and commands used to setup the servo amplifier.

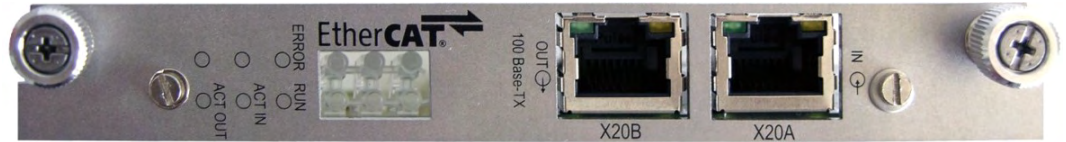
Technical changes which improve the performance of the device may be made without prior notice!

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1 Erweiterungskarte -EtherCAT-

Dieses Blatt beschreibt die Erweiterungskarte -EtherCAT-. Beschrieben werden nur die zusätzlichen Eigenschaften, die diese Erweiterungskarte dem Servoverstärker verleiht.

1.1 Frontansicht



1.2 Einbau

ACHTUNG

Schalten Sie die Geräte vor Beginn der Arbeiten spannungsfrei.

INFO

- Hebeln Sie die Abdeckung des Optionsschachtes mit einem geeigneten Schraubendreher heraus.
- Achten Sie darauf, dass keine Kleinteile (Schrauben o.ä.) in den geöffneten Optionsschacht fallen.
- Stecken Sie die Erweiterungskarte in den Schacht.
- Verschrauben Sie die Frontplatte der Erweiterungskarte mit den vorgesehenen Schrauben.

1.3 Leuchtdioden

LED	Funktion
ERROR	flackert = Boot Fehler blinkt ständig = Allgemeiner Konfigurationsfehler blinkt einmal = Unerlaubter Statuswechsel blinkt zweimal = Watchdog Timeout aus = kein aktueller Fehler
RUN	an = Gerät hat Status OPERATIONAL blinkt ständig = Gerät hat Status PRE-OPERATIONAL blinkt einmal = Gerät hat Status SAFE-OPERATIONAL aus = Gerät hat Status INIT
ACT IN	an = Verbunden, aber nicht aktiv an X20A (in) flackert = Verbunden und aktiv an X20A (in) aus = nicht verbunden an X20A (in)
ACT OUT	an = Verbunden, aber nicht aktiv an X20B (out) flackert = Verbunden und aktiv an X20B (out) aus = nicht verbunden an X20B (out)

1.4 EtherCAT Anschluss, Stecker X20A/B (RJ45)

Anschluss an das EtherCAT Netzwerk über RJ45 Stecker (IN und OUT Schnittstellen).

ACHTUNG

Beim SERVOSTAR 600 müssen zusätzlich AGND und DGND (Stecker X3) gebrückt werden!

2 Expansion card -EtherCAT-

This leaflet describes the -EtherCAT- expansion card. Only the additional properties that this expansion card gives the servo amplifier are described.

2.1 Front view



2.2 Installation

NOTICE

Before starting work, switch off the power to the device

NOTE

- Use a suitable screwdriver to lever off the cover of the option slot.
- Take care that no small items (such as screws) fall into the open option slot.
- Push the expansion card into the slot.
- Use the screws provided to fasten the front plate of the expansion card in place.

2.3 LEDs

LED	Function
ERROR	flickers = boot error flashes continuously = general configuration error flashes once = unauthorized status change flashes twice = watchdog timeout off = no current error
RUN	on = device has status OPERATIONAL Flashes continuously = device has PRE-OPERATIONAL status flashes once = device has status SAFE-OPERATIONAL off = device has status INIT
ACT IN	on = connected, but not active on X20A (in) flickers = connected and active at X20A (in) off = not connected to X20A (in)
ACT OUT	on = connected, but not active on X20B (out) flickers = connected and active at X20B (out) off = not connected to X20B (out)

2.4 EtherCAT connection, connector X20A/B (RJ-45)

Connection to the EtherCAT network via RJ-45 connectors (IN and OUT ports)

NOTICE

With SERVOSTAR 600 terminals AGND and DGND (connector X3) must be joined together !

3 Carte d'expansion -EtherCAT-

Ce dépliant décrit la carte d'extension -EtherCAT-. Seules les propriétés supplémentaires que cette carte d'extension confère au servoamplificateur sont décrites.

3.1 Vue de face



3.2 Montage

AVIS

Avant de commencer le travail, mettez l'appareil hors tension.

INFORMATION

- Soulever le couvercle de l'emplacement des options à l'aide d'un tournevis approprié.
- S'assurer qu'aucune petite pièce (vis ou autres) ne chute dans l'emplacement ouvert.
- Enfichez la carte d'expansion dans le port.
- Vissez la face avant de la carte d'expansion à l'aide des vis prévues à cet effet.

3.3 Diodes électroluminescentes

DEL	Fonction
ERROR	scintille = erreur de démarrage clignote en continu = erreur de configuration générale clignote une fois = changement d'état non autorisé clignote deux fois = timeout du chien de garde off = pas d'erreur actuelle
RUN	on = l'appareil a l'état OPÉRATIONNEL Clignote en continu = l'appareil a l'état PRE-OPERATIONAL clignote une fois = l'appareil a l'état SAFE-OPERATIONAL off = l'appareil a le statut INIT
ACT IN	on = connecté, mais pas actif sur X20A (in) scintille = connecté et actif à X20A (in) off = non connecté à X20A (in)
ACT OUT	on = connecté, mais pas actif sur X20B (sortie) scintille = connecté et actif sur X20B (sortie) off = non connecté à X20B (sortie)

3.4 Connexion EtherCAT, connecteur X20A/B (RJ45)

Connexion au réseau EtherCAT via des connecteurs RJ45 (interfaces IN et OUT).

AVIS

Avec SERVOSTAR 600 AGND et DGND (connecteur X3) doivent être strappés !

4 Scheda di espansione -EtherCAT-

Questo opuscolo descrive la scheda di espansione -EtherCAT-. Vengono descritte solo le proprietà aggiuntive che questa scheda di espansione fornisce al servoamplificatore.

4.1 Vista frontale



4.2 Montaggio

AVVISO

Prima di iniziare il lavoro, spegnere il dispositivo.

INFORMAZIONI

- Utilizzare un cacciavite adatto per rimuovere il coperchio dello slot opzionale.
- Fare attenzione che nessun piccolo oggetto (come le viti) cada nello slot opzionale aperto.
- Inserire la scheda di espansione nello slot.
- Avvitare la piastra frontale della scheda di espansione con le viti in dotazione.

4.3 Diodi luminosi

LED	Funzione
ERROR	sfarfallio = errore di avvio lampeggia in modo continuo = errore di configurazione generale lampeggia una volta = cambio di stato non autorizzato lampeggia due volte = timeout watchdog off = nessun errore corrente
RUN	on = il dispositivo ha lo stato OPERATIVO Lampeggia continuamente = il dispositivo ha lo stato PRE-OPERATIVO lampeggia una volta = il dispositivo è in stato SICURO-OPERATIVO off = il dispositivo ha lo stato INIT
ACT IN	on = connesso, ma non attivo su X20A (in) sfarfallio = connesso e attivo su X20A (in) off = non connesso a X20A (in)
ACT OUT	on = connesso, ma non attivo su X20B (out) sfarfallio = connesso e attivo su X20B (out) off = non connesso a X20B (out)

4.4 Collegamento EtherCAT, connettore X20A/B (RJ45)

Collegamento alla rete EtherCAT tramite connettori RJ45 (interfacce IN e OUT).

AVVISO

Con il SERVOSTAR 600 è necessario ponticellare anche AGND e DGND (connettore X3)!

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Service

Kollmorgen bietet seinen Kunden einen umfassenden Kundendienst.



Besuchen Sie das [Kollmorgen Developer Network](#). Stellen Sie Fragen an die Community, durchsuchen Sie die "Knowledge Base", laden Sie Dateien herunter und schlagen Sie Verbesserungen vor.



Europa

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