

C1400-CI-VS-0S-YYY Servo Drives

Installation Guide

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1 Important Safety Instructions

1.1 List of Symbols

ISO 7000 graphical symbols for use on equipment.



ISO 7000-1641: Technical manual
Read carefully this manual before the installation of the product.



ISO 7000-0434B: Caution, general warning



ISO 7000-6042: Caution, risk of electric shock



ISO 7000-0535: Caution, transfer of heat

1.2 List of Units Conversion

Metric	Imperial
1 m	39.3701 in
1 mm	0.0393701 in
0.2 mm ²	AWG 24
1.5 mm ²	AWG 16
2.5 mm ²	AWG 14
4 mm ²	AWG 12
x °C	(1.8 * x + 32) °F
1 Nm	8.8507458 lbf in
1 kg	2.20462 lbs

1.3 For your personal safety



Disregarding the following safety measures can lead to severe injury to persons and damage to material.

- Only use the product as directed.
- Never commission the product in the event of visible damage.
- Never commission the product before assembly has been completed.
- Do not carry out any technical changes on the product.
- Safety of equipment may be impaired if the equipment is used in manner not specified by the manufacturer.
- Only LinMot personnel is allowed to service the product.
- Only use the accessories approved for the product.
- Only use original spare parts from LinMot.
- Observe all regulations for the prevention of accidents, directives and laws applicable on site.
- Transport, installation, commissioning and maintenance work must only be carried out by qualified personnel.
 - Observe IEC 364 and CENELEC HD 384 or DIN VDE 0100 and IEC report 664 or DIN VDE 0110 and all national regulations for the prevention of accidents.
 - According to the basic safety information, qualified, skilled personnel are persons who are familiar with the assembly, installation, commissioning, and operation of the product and who have the qualifications necessary for their occupation.
- Observe all specifications in this documentation.
 - This is the condition for safe and trouble-free operation and the achievement of the specified product features.
 - The procedural notes and circuit details described in this documentation are only proposals. It is up to the user to check whether they can be transferred to the particular applications. NTI AG / LinMot does not accept any liability for the suitability of the procedures and circuit proposals described.
- LinMot servo drives and the accessory components can include live and moving parts (depending on their type of protection) during operation. Surfaces can be hot.
 - Non-authorized removal of the required cover, inappropriate use, incorrect installation or operation create the risk of severe injury to persons or damage to material assets.
 - For more information, please see the documentation.
- High amounts of energy are produced in the drive. Therefore it is required to wear personal protective equipment (body protection, headgear, eye protection, hand guard).

1.4 Application as directed

- Drives are components which are designed for installation in electrical systems or machines. They are not to be used as domestic appliances, but only for industrial purposes according to EN 61000-3-2.
- When drives are installed into machines, commissioning (i.e. starting of the operation as directed) is prohibited until it is proven that the machine complies with the regulations of the EC Directive 2006/42/EG (Machinery Directive); EN 60204 must be observed.
- Commissioning (i.e. starting of the operation as directed) is only allowed when there is compliance with the EMC Directive (2014/30/EU).
- The technical data and supply conditions can be obtained from the nameplate and the documentation. They must be strictly observed.

1.5 Transport, storage

- Please observe the notes on transport, storage, and appropriate handling.

- Observe the climatic conditions according to the technical data.

1.6 Installation

- The drives must be installed and cooled according to the instructions given in the corresponding documentation.
- The ambient air must not exceed degree of pollution 2 according to EN 61800-5-1.
- Ensure proper handling and avoid excessive mechanical stress. Do not bend any components and do not change any insulation distances during transport or handling. Do not touch any electronic components and contacts.
- Drives contain electrostatic sensitive devices which can easily be damaged by inappropriate handling. Do not damage or destroy any electrical components since this might endanger your health!

1.7 Electrical connection

- When working on live drives, observe the applicable national regulations for the prevention of accidents.
- The electrical installation must be carried out according to the appropriate regulations (e.g. cable cross-sections, fuses, PE connection). Additional information can be obtained from the documentation.



This product can cause high-frequency interferences in non-industrial environments which can require measures for interference suppression.

1.8 Operation

- If necessary, systems including drives must be equipped with additional monitoring and protection devices according to the valid safety regulations (e.g. law on technical equipment, regulations for the prevention of accidents). The drives can be adapted to your application. Please observe the corresponding information given in the documentation.
- After the drive has been disconnected from the supply voltage, all live components and power connections must not be touched immediately because capacitors can still be charged. Please observe the corresponding stickers on the drive. All protection covers and doors must be shut during operation.

1.9 Protection of persons



Before working on the drive, check that no voltage is applied to the power terminals L, N, U, V, W, RR+ and RR-. These power terminals remain live when the motor is stopped and for at least 5 minutes after disconnecting from mains.

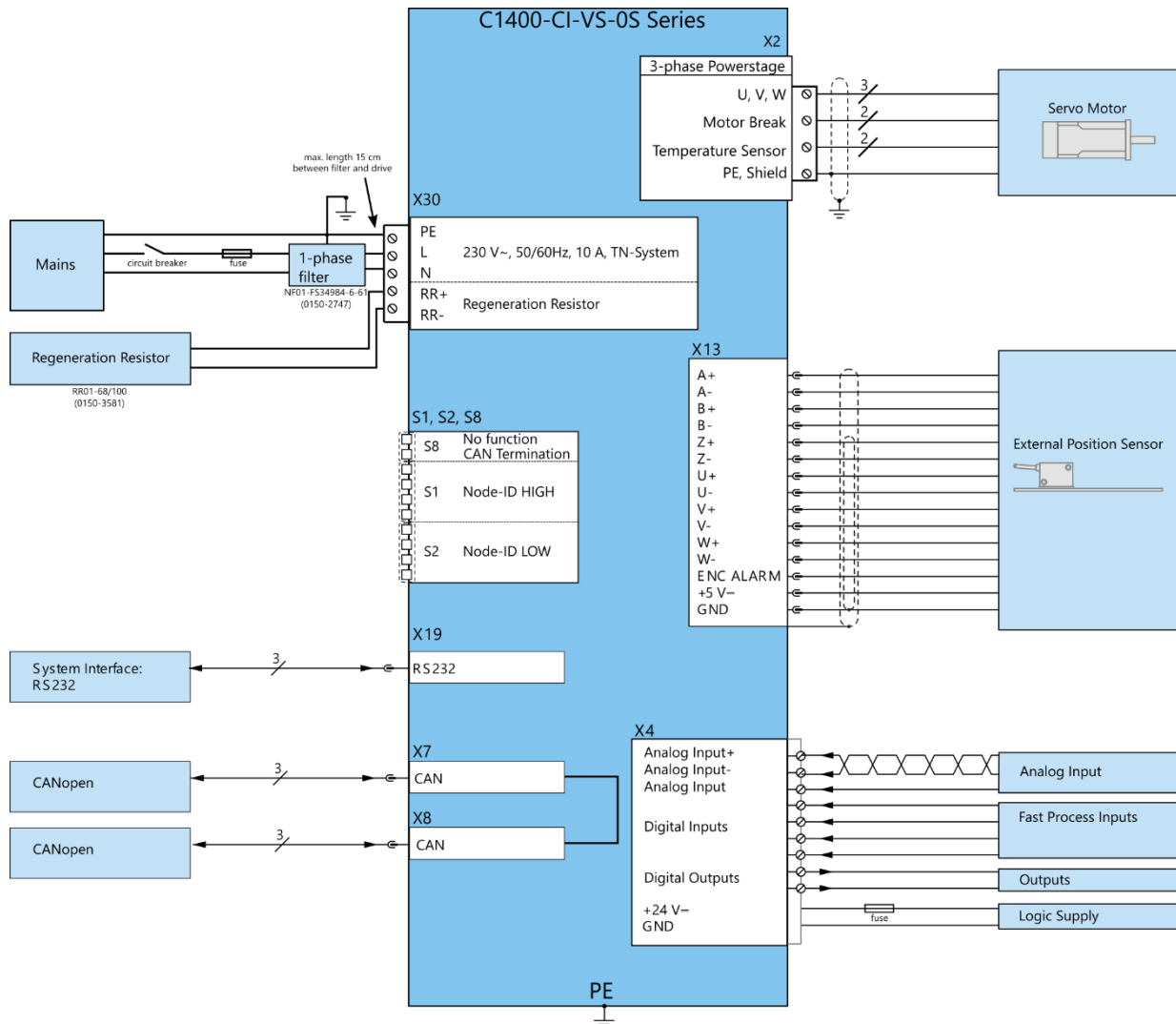


The leakage current to earth (PE) is >3.5 mA. According to EN 50178 a fixed installation is required and a double PE connection is required.



The heat sink of the drive has an operating temperature of > 80 °C: Contact with the heat sink results in burns.

2 System Overview



Typical Servo System C1400-CI-VS-0S: Servo Drive, Motor, and Power Supply.

3 Functionality and Interfaces

C1400-CI-VS-0S	
Supply Voltage	
Motor Supply 230 V~ (±10 %), 50/60 Hz, 10 A	•
Logic Supply 24 V ⁼⁼ , 2.8 A	•
Motor Phase Current	
15 A _{rms peak} (0-599 Hz)	•
7.5 A _{rms continuous} (0-599 Hz) ¹	•
Controllable Motors	
LinMot P10-70x...(Motor Link C)	Not supported
Selected motors (contact support)	•
Command Interface	
CANopen (isolated)	•
Programmable Motion Profiles (Curves)	
Up to 100 Motion Profiles Up to 16302 Curve Points	•
Programmable Command Table	
Command Table with up to 255 entries	•
External Position Sensor	
Incremental (RS422 up to 25 M counts/s)	•
Absolute (SSI, BiSS-B ² , BiSS-C ² , EnDat2.1 ³ , EnDat2.2 ³)	•
Configuration Interface	
RS232	•

¹ Additional cooling and/or heat sink may be required to achieve rated performance.

² Supported from firmware version 6.6.

³ Supported from firmware version 6.7.

4 Power Supply and Grounding



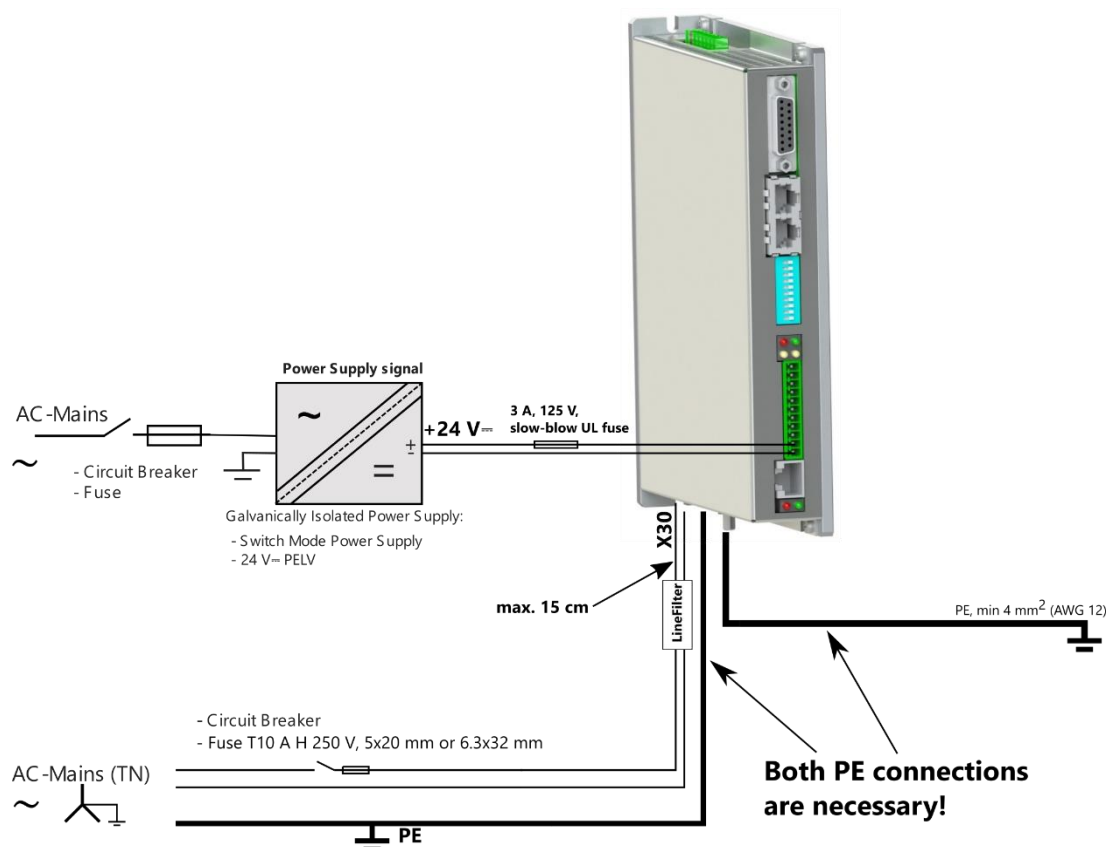
In order to assure a safe and error free operation, and to avoid severe damage to system components, **all system components must be well grounded to protective earth PE**. This includes both LinMot and all other control system components on the same ground bus.



The leakage current to earth (PE) is >3.5 mA. According to EN 50178 a fixed installation is required and **a double PE connection is required**. One PE connection is on X30, the second one is an M5 bolt on top of the housing.



Each system component should be tied directly to the ground bus (**star pattern**), rather than daisy chaining from component to component. (LinMot motors are properly grounded through their power cables when connected to LinMot drives.)

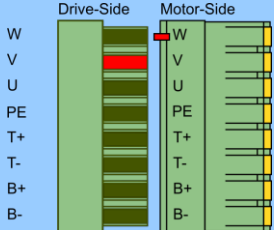



5 Description of the connectors / Interfaces

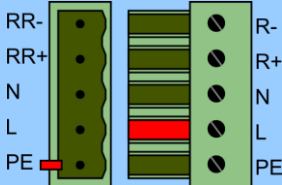
5.1 PE

PE	Protective Earth
PE	<ul style="list-style-type: none"> • Use min. 4 mm² • Tightening torque: 2 Nm

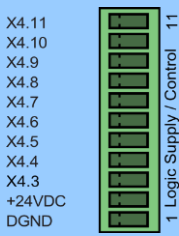
5.2 X2

X2	Motor Phases
	<p>W: Motor Phase W V: Motor Phase V U: Motor Phase U PE: Protective Earth T+: Temperature Sensor T+ T-: Temperature Sensor T- B+: Motor Brake+ B-: Motor Brake-</p> <p> The coding and pin assignment of this connector has changed! Please check carefully your cables!</p>
Spring Cage Connector	<p>Important Notices:</p> <ul style="list-style-type: none"> • The Shield of the motor cable has to be mounted with a surface as large as possible (low ohm, low impedance). Use an EMC shield clamp mounting (LinMot MC10-EMV/14-D / Art. Nr. 0150-3631). • Max. cable length: 20 m (may be limited by motor) • Screw Terminals: <ul style="list-style-type: none"> - Spring-cage connector - Use 75 °C copper conductors only - Conductor cross-section: 0.2 – 2.5 mm² (depends on Motor current) - Stripping length 10 mm <p>Temperature sensors (thermistor) of the following types are supported:</p> <ul style="list-style-type: none"> - KTY 83/84 - PT1000 - PTC (digital) <p>Attention: An isolated thermistor is necessary!</p> <ul style="list-style-type: none"> • Only use the following type of connector: LinMot MC10-B/m (Art. Nr. 0150-3605)

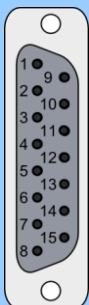
5.3 X30

X30 Motor Supply Mains / Regeneration	
	<p>RR- Regeneration Resistor¹ RR+ Regeneration Resistor¹ N: Neutral (TN system with grounded Neutral) L1: Line 1 (230 V~ (±10 %) 50/60 Hz, 10 A)^{2,3,4,5} PE: PE, Protective Earth</p> <p>¹ For regeneration resistor use only LinMot RR01-68/100 (Art. Nr. 0150-3581). No other type of resistor is allowed ² External fuse: T10 A H 250 V, 5x20 mm or 6.3x32 mm ³ Line filter LinMot NF01-FS34984-6-61 (Art. Nr. 0150-2747) must be used ⁴ Max. distance between line filter and drive is 15 cm ⁵ No circuit breaker is allowed between line filter and drive</p>
Screw connector	<p>Screw Terminals:</p> <ul style="list-style-type: none"> - Tightening torque: 0.5 - 0.6 Nm - Screws: M3 - Use 75 °C copper conductors only - Conductor cross-section: 2.5 mm² - Stripping length 7 mm <p>Only use the following type of connector: LinMot DC01-C1400/X30 (Art. Nr. 0150-3607)</p>

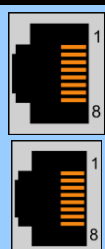
5.4 X4

X4 Logic Supply / IO Connection				
	11 10 9 8 7 6 5 4 3 2 1	AnIn- X4.11 AnIn+ X4.10 AnIn X4.9 In X4.8 In X4.7 In X4.6 In X4.5 Out X4.4 Out X4.3 +24 V \equiv Supply GND Supply	Configurable Analog Input differentiell (with X4.10) Configurable Analog Input differentiell (with X4.11) Configurable Analog Input single ended Configurable Input Configurable Input Configurable Input Configurable Input Configurable Output Configurable Output Logic Supply 22-26 V \equiv Ground	
Spring cage connector	<p>Inputs (X4.5 .. X4.8): 24 V / 5mA (Low Level: -0.5 to 5 V, High Level: 15 to 30 V) Outputs (X4.3 .. X4.4): 24 V / max.100 mA, peak 400 mA (will shut down if exceeded) Analog Inputs: 12 bit A/D converted X4.9: Single ended analog input to GND, 0..10 V, Input Resistance 51 kOhm to GND X4.10/X4.11: Differential analog input, +/-10 V, Common mode range +/- 5 V to GND Input resistance 11.4 kOhm for each signal to GND.</p> <ul style="list-style-type: none"> - Use 60/75°C copper conductors only - Conductor cross-section max. 1.5 mm² - Stripping length: 10 mm - The 24 V\equiv supply for the control circuit (X4.2) must be protected with an external fuse (3 A, 125 V, slow blow UL fuse) <p>Only use the following type of connector: LinMot DC01-Signal/X4 (Art. Nr. 0150-3447)</p>			

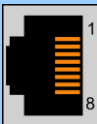
5.5 X13

X13 External Position Sensor Differential Hall Switches			
		ABZ with Hall Switches	SSI / BiSS-B / BiSS-C / EnDat2.1 / EnDat2.2
	1 2 3 4 5 6 7 8 case	9 10 11 12 13 14 15 Shield	+5 V ₊ A+ (optional) A- (optional) B+ (optional) B- (optional) Data+ Data- Encoder Alarm (optional) GND nc nc nc nc Clk+ Clk- Shield
DSUB-15 (f)	<p><u>Position Encoder Inputs (RS422):</u> Max Input Frequency: 25 Mcounts/s with quadrature decoding, 40 ns edge separation</p> <p><u>Encoder Simulation Outputs (RS422):</u> Max Output Frequency: 4 Mcounts/s with quadrature decoding, 250 ns edge separation</p> <p><u>Differential Hall Switch Inputs (RS422):</u> Input Frequency: <1 kHz</p> <p><u>Enc. Alarm In:</u> 5 V / 1 mA</p> <p><u>Sensor Supply:</u> 5 V₊ max. 100 mA / 5 V₊ max. 300 mA (since firmware version 6.7)</p>		



5.6 X7 - X8

X7 - X8 CMD CAN		
 (shielded)	1 2 3 4 5 6 7 8	Do not connect Do not connect Do not connect isolated GND isolated GND Do not connect isolated CAN high isolated CAN low Optically isolated CAN Bus
RJ45 (shilded)		Use shielded twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring. The built-in CAN terminations can be activated by S8.9 X7 is internally connected to X8 (pins 4, 5, 7, and 8).



5.7 X19

X19	System	
 (unshielded)	1 2 3 4 5 6 7 8	Do not connect Do not connect RS232 Rx GND GND RS232 Tx Do not connect Do not connect
RJ-45 (unshielded)	Use isolated LinMot USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232.	

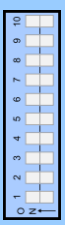
5.8 LEDs

LEDs	State Display		
Error  24VOK Warn  EN	Signal: 24VOK EN Warn Error	Color: Green Yellow Yellow Red	Description: 24 V \Rightarrow Logic Supply OK Motor Enabled / Error Code Low Nibble Warning / Error Code High Nibble Error

5.9 RT BUS LEDs

RT Bus LEDs	RT Bus State Display		
RT BUS  OK ERROR 	Signal: OK RT BUS ERROR	Color: Green Red	Description: OK Error
The use of these LEDs depends on the type of fieldbus which is used. Please see the corresponding manual for further information.			

5.10 S1 - S2 - S8

S1 - S2 - S8	Address Selectors	
	S8 (10) S8 (9) S1 (5..8) S2 (1..4)	No function CAN termination on CMD X7/X8 (120 Ohm between pin 7 and pin 8) on/off. Bus ID High (0 ... F). Bit 5 is the LSB, bit 8 the MSB. Bus ID Low (0 ... F). Bit 1 is the LSB, bit 4 the MSB.
The use of these switches depends on the type of fieldbus which is used. Please see the corresponding manual for further information.		

5.11 S5

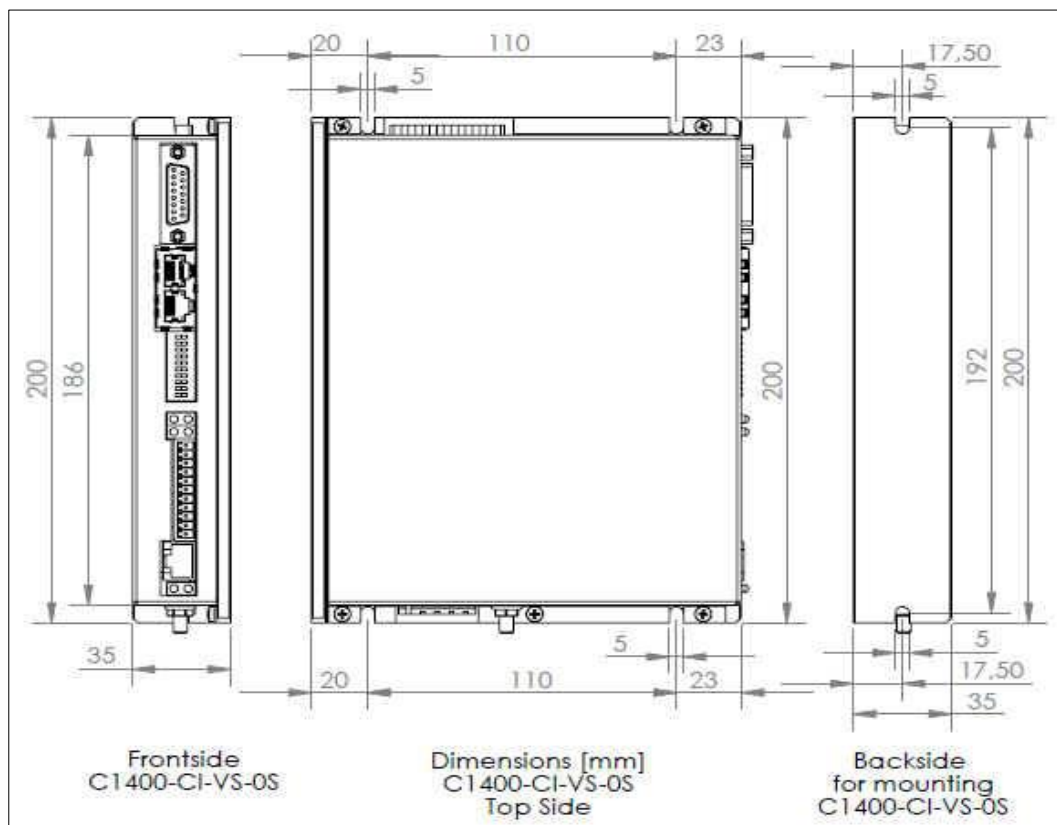
S5	Bootstrap
	This switch is used for initial programming. Make sure the switch is in position "off". Otherwise the drive will not start up.

6 Error Codes

The meaning of the error codes can be found in the "0185-1093-E_xVx_MA_MotionCtrlSW-SG5-SG7.pdf" and the user manual of the installed interface software. These documents are provided together with LinMot-Talk configuration software and can be downloaded from www.linmot.com.

Error Codes			
<div> <div>Error</div> <div>Warn</div> <div>24VOK</div> <div>EN</div> </div>			
Error	Warn	EN	Description
Off	Warning	Operation Enabled	Normal Operation: Warnings and operation enabled are displayed.
On	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code High Nibble 	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code Low Nibble 	Error: The error code is shown by a blink code with "WARN" and "EN". The error byte is divided into low and high nibble (= 4 bit). "WARN" and "EN" are blinking together. The error can be acknowledged. (e.g.: WARN blinks 3x, EN blinks 2x; Error Code = 32h)
• ~ 2Hz	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code High Nibble 	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code Low Nibble 	Fatal Error: The error code is shown by a blink code with "WARN" and "EN". The error byte is divided into low and high nibble. "WARN" and "EN" are blinking together. Fatal errors can only be acknowledged by a reset or power cycle. (e.g.: WARN blinks 3x, EN blinks 2x; Error Code = 32h)
• ~4 Hz	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code High Nibble 	<ul style="list-style-type: none"> • ~2 Hz 0..15 x Error Code Low Nibble 	System Error: Please reinstall firmware or contact support.
• ~0.5 Hz	• ~0.5 Hz	On	Signal Supply 24 V$\overline{\text{--}}$ too low: The error and warn LEDs blink alternating if the signal supply +24 V $\overline{\text{--}}$ (X4.2) is less than 18 V $\overline{\text{--}}$.
Off	*•••	•*••	Plug&Play Communication Active This sequence (Warn on, then En on, then both off, complete sequence of the 4 states ca. 1 s) signals the state when the plug and play parameters are being read from the motor.
• ~4 Hz	• ~4 Hz	Off	Waiting for Defaulting Parameters When ID (S1, S2) is set to 0xFF, the drive starts up in a special mode and the Error and Warn LED blink alternating ~4 Hz. When the ID is set to 0x00, all parameters will be set to their default value. To leave this state, power down the drive and change the ID. Also see in the Usermanual_LinMot-Talk under chapter trouble shooting.
Off	*• ~2 Hz	*• ~2 Hz	Defaulting Parameters Done When the parameters have set to their default values (initiated via S1/S2 on power up) the Warn and En LEDs blink together at ~2 Hz. To leave this state, power down the drive. Also see in the Usermanual_LinMot-Talk under chapter trouble shooting.
On	On	On	Bootstrap If also both RT LEDs are on, the drive is in the bootstrap mode. Set S5 to off.

7 Physical Dimensions



C1400 Series single axis drive		C1400-CI-VS-0S
Width	mm	35
Height	mm	200
Depth	mm	153
Weight	kg	1.1
Mounting		Backside 2x M4 or Bottom Side 4x M4
Case	IP	20
Storage Temperature	°C	-25...40
Transport Temperature	°C	-25...70
Operating Temperature	°C	0...40
Relative humidity (non-condensing)	%	95
Pollution degree	IEC/EN 60664-1	2
Site altitude	m amsl	2000
Max. Case Temperature	°C	90
Max. Power Dissipation	W	100
Mounting place		In the control cabinet
Mounting position		vertical ¹
Distance between drives	mm	≥ 200 (8) top / bottom
Overvoltage category indication		II

¹ For other mounting position ask LinMot support.

8 Power Supply Requirements

8.1 Motor Power Supply

Direct AC mains connection: 1/PE AC 230 V~ ($\pm 10\%$), 50/60 Hz, 10 A, TN System



Only 1-phase supply is supported! The mains must be a symmetrical four-wire system with grounded neutral.

DC Supply (for example 72 V $\overline{\text{--}}$) for initial test setups can be supplied through the 1-phase supply connector.

Use a circuit breaker C16 and conductor cross section of 2.5 mm² for mains connections!

The LinMot line filter NF01-FS34984-6-61 (Art. Nr. 0150-2747) must be connected close to the supply connector of the drive to conform to the EMC and EMI requirements of CE. The maximum distance between drive and filter is 15 cm. One filter for each drive must be used.

Max. motor cable length: see 5.2

8.2 Logic Power Supply

The logic control circuit needs a regulated power supply with a nominal voltage of 24 V $\overline{\text{--}}$. The voltage must be between 22 and 26 V $\overline{\text{--}}$.

Current to be provided from the logic power supply:

min.	1 A	(no load on the outputs)
typ.	1.2 A	(both dig. outputs "on" with 100 mA load, break with no load)
max.	2.8 A	(both dig. outputs "on" with 400 mA load, break with 1 A load)

The control circuit must be protected with an external fuse (3 A, 125 V, slow blow UL fuse).

9 Regeneration of Power / Regeneration Resistor

For regeneration use only the following type of resistor (no other type is allowed):

Item	Description	Art. No.
Regeneration Resistor	RR01-68/100 (68 Ohm, 100 W, 1000 V) for C1400	0150-3581

10 Ordering Information

Item	Description	Art. No.
C1400-CI-VS-0S-I03	CANopen Drive (230 V~ (±10 %), 50/60 Hz, 10 A) OEM only	0150-2637
C1400-CI-VS-0S-I04	CANopen Drive (230 V~ (±10 %), 50/60 Hz, 10 A) OEM only	0150-2980
Accessories	Description	Art. No.
USB-RS232 Converter (isolated)	for C1100, C1200, C1400, E1200, E1400 drives	0150-2473
RR01-68/100	Regeneration resistor 100W for C1400	0150-3581
NF01-FS34984-6-61	Line filter for Drives Series C1400	0150-2747
DC01-C1400/X4/X30	Drive Connector Set for C1400-0S	0150-3676
DC01-C1400/X2	Connector power C1400/X2	0150-3605
DC01-E1400/X4	Drive Connector 24VDC & Logic	0150-3447
DC01-C1400/X30	Drive Connector 230VAC Supply	0150-3607
MC10-EMV/14-D	Shield clamp for P10 motor power cable	0150-3631



Bold items are strongly recommended accessories!



The connectors must be ordered separately and are not included with the drive!

Use the isolated USB RS232 converter (Art. Nr. 0150-2473) for configuration!

11 International Certifications

Certifications	
Europe 	See chapter "12 EC Declaration of Conformity CE-Marking"
IECEE CB SCHEME	See chapter "13 CB Test Certificate" Ref. Certif. No. NO104093 IEC 61010-1:2010
USA and Canada 	See chapter "14 Certificate of Compliance" Certification Number: NA201810976 UL Std. No. 61010-1 3 rd Edition – Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements CAN/CSA-C22.2 No. 61010-1-12 Third Edition - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

12 EC Declaration of Conformity CE-Marking

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8957 Spreitenbach
Switzerland
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Fax: +41 (0)56 419 91 92

declares under sole responsibility the compliance of the products:

Servo Drives of the Series C1400-CI-VS-0S-xxx

with the

Low Voltage Directive 2014/35/EU

Applied harmonized standard:

EN 61800-5-1: 2007

Year of affixing the CE marking in accordance with the EC Low Voltage Directive:

2014

EMC Directive 2014/30/EU

Applied harmonized standards:

EN 61000-6-2: 2005 (Immunity for industrial environments)

EN 61000-6-4: 2007 + A1:2011 (Emission for industrial environments)

EN 61326-3-1: 2008 (Functional safety)

According to the EMC directive, the listed devices are not independently operable products.

Compliance of the directive requires the correct installation of the product, the observance of specific installation guides and product documentation. This was tested on specific system configurations.

The safety instructions of the manuals are to be considered.

These products are intended for installation in machines. Operation is prohibited until it has been determined that the machines in which these products are to be installed, conforms to the above mentioned EC directive.

The product must be mounted and used in strict accordance with the installation instructions contained within the installation guide, a copy of which may be obtained from NTI AG.

Company: NTI AG
Spreitenbach, 11.04.2016



Dr. Ronald Rohner / CEO NTI AG



Dr. Marco Hitz / Responsible for documentation

13 CB Test Certificate

		Ref. Certif. No. NO106065
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS DESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC		
CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC		
Product Produit Name and address of the applicant Nom et adresse du demandeur Name and address of the manufacturer Nom et adresse du fabricant Name and address of the factory Nom et adresse de l'usine Note: When more than one factory, please report on page 2 Note: Lorsque il y plus d'une usine, veuillez utiliser la deuxième page Ratings and principal characteristics Valeurs nominales et caractéristiques principales Trademark (if any) Marque de fabrique (si elle existe) Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur Model / Type Ref. Ref. De type Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire, peuvent être indiqués sur la deuxième page) A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport desais numéro de référence qui constitue partie de ce Certificat This CB Test Certificate is issued by the National Certification Body Ce Certificat desai OC est établi par l'Organisme National de Certification	Motor driver NTI AG LinMot & MagSpring Bodenaeckerstrasse 2 CH-8957 Spreitenbach Switzerland NTI AG LinMot & MagSpring Bodenaeckerstrasse 2 CH-8957 Spreitenbach Switzerland Bebro electronic s.r.o. K Prádlu 858 73535 Horni Suchá Czech Republic <input type="checkbox"/> Additional information on page 2 Power: 230 V~, 50/60 Hz, 10 A Logic: 24 Vdc, 2.8 A Equipment for building-in with CI. I construction, not directly connected to the mains  LinMot C1400-CI-VS-0S-xxx In the speaking code xxx can assume any alphanumeric value not relevant for safety. See report for details. <input type="checkbox"/> Additional information on page 2 IEC 61010-1:2010 370865	
 Gaustadalléen 30 NO-0373 Oslo, Norway Date: 02-04-2019  Signature: Juan Z. Saussey Certification Department		

Issued 2007-04

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14 Certificate of Compliance



Certificate of Compliance

Certificate: NA201810976

Date Issued: April 15, 2019

Project: 370865-5.1

Issued to: NTI AG LinMot & MagSpring
Bodenaeckerstrasse 2
CH-8957 Spreitenbach
Switzerland

The products listed below have been certified as being compliant with all applicable requirements of the specifications listed and are eligible to bear the following certification mark



Authorized by:

S.C. Beck, Director of Certification

PRODUCTS

MEASUREMENT, CONTROL, OR LABORATORY EQUIPMENT - Certified to US and Canada Standards

Product: Motor driver**Model:** C1400-CI-VS-0S-xxx (Where "xxx" can assume any alphanumeric value, "xxx" indicates non-safety relevant characteristic, e.g. customer, firmware version, etc.).**Ratings:** Power: 230 V~, 50/60 Hz, 10 A; Logic: 24 Vdc, 2.8 A; Equipment for building-in with Class I construction**APPLICABLE REQUIREMENTS**

UL Std. No. 61010-1 3rd Edition -Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

CAN/CSA-C22.2 No. 61010-1-12 Third Edition – Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

This certificate is issued on condition that the holder complies and will continue to comply with the requirements of the above mentioned specifications and pursuant to the terms and conditions specified in the Certification Agreement.



15 Contact Addresses

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Please visit <http://www.linmot.com/> to find the distributor closest to you.

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