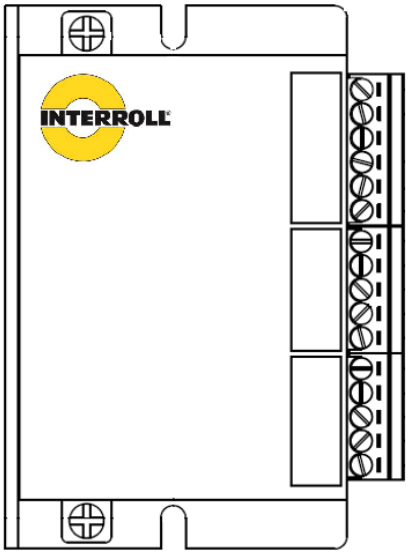

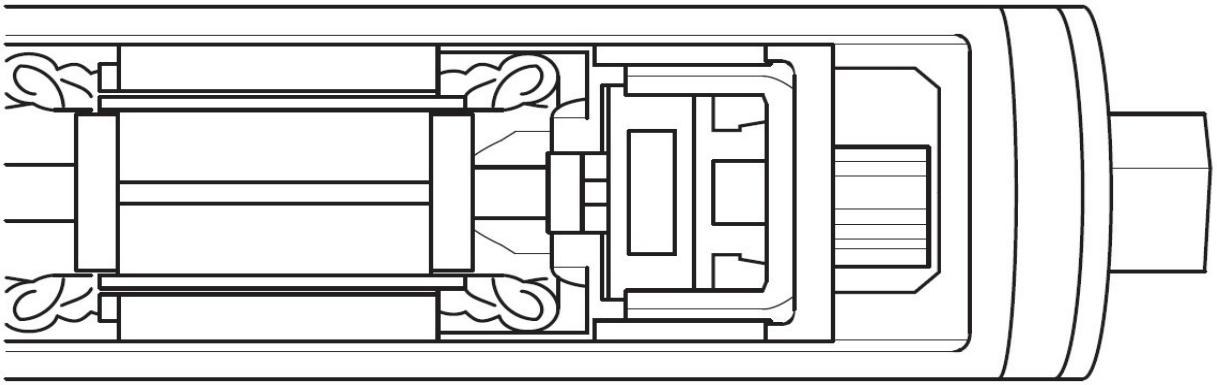

Interroll BLDC Belt Drive

User Manual

80 BLDC

113 BLDC

Controller board CO 6500

Version 2.0 (03/2026) EN Original operating instructions

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Contents

We strive for the information presented to be correct, up to date and complete. We have carefully developed the contents of this document. Nevertheless, errors and changes are expressly subject to change.

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Definitions

AI:	Analog Interface
BF:	Between Frames
BI:	Bus Interface
BLDC:	Brushless Direct Current
CC:	Center to Center
CoG:	Center of Gravity
EL = BF:	Between Frames dimensions
ESD:	Electrostatic Discharge
F_N	Rated belt pull of belt drive
Gs	Gear stages
I	Gear ratio
IP:	Ingress Protection
M_A	Rated torque of belt drive
MCP:	Modular Conveyor Platform
n_A	Rated revolutions of the shell
OBC:	Object Being Conveyed
P_N	Rated power
SI:	System Integrator
SL_{min}	Min. shell length
TE	Max. belt tension
ToB:	Top of Belt
TL:	Total Length of conveyor
TW:	Total Width
UI:	User Interface
V	Rated velocity of the shell
WEEE:	Waste of Electrical and Electronic Equipment
ZPA:	Zero Pressure Accumulation

Introduction

This manual is designed to provide comprehensive installation and operating instructions to ensure a seamless integration of the BLDC Belt Drive. Before proceeding with the setup and operation of the system, we advise reading this manual.

Warning Notices in This Document

The warning notices refer to risks which may arise while using the machine. They are available in four danger levels identified by the signal word.

Signal word	Meaning
DANGER	Identifies a danger with high risk that will result in death or severe injury if it is not avoided.
WARNING	Identifies a danger with medium risk that could result in death or severe injury if it is not avoided.
CAUTION	Identifies a danger with low risk that may result in minor or medium injury if it is not avoided
NOTICE	Identifies a danger that results in property damages.

Symbols

This symbol marks useful and important information.

Safety

General Safety Instructions

The 80-113 BLDC Belt Drive is designed according to the state of the art and is reliable in operation, once installed. However, risks may still arise:

- Danger or risk of physical injury to the user or bystanders.
- Adverse effects on the Drive installation and other negative consequences.

Disregarding the notices in these installation and operating instructions may cause life threatening injury.

- Always read the entire installation and operating instructions with the safety instructions before starting to work with the module and follow the notices.
- Only instructed and qualified people may work on the Belt Drive.
- Always keep these installation and operating instructions on hand when working with the Drive installation so that you can consult them if required.
- Always comply with relevant national safety regulations.
- If you have any questions after reading these installation and operating instructions, feel free to contact Interroll customer service: www.interroll.com/contact-us/

Interroll is not liable for any damage or injuries resulting from improper use.

Saefty attention Motor

- The motor and control wiring must be connected in the power-off state. Do not connect electrical wiring under power.
- According to the connection diagram, connect the power cord, motor winding wire, and Hall signal line correctly. Please pay attention to the order of U-V-W three-phase; it must be consistent.
- Do not disassemble the control at random to prevent damage.
- Do not touch the terminals on power-on state.
- Do not operate without cover.
- Impact of the control may cause damage.

Assembly and Installation

NOTICE

An improper approach to installing the motor and controls can cause property damage or reduce the service life. An improper approach to assembly and installation may also cause life-threatening injury, therefore the user is advised to read the safety instructions in the original operating manual.

- To preserve the interior of the motor and control parts, do not allow it to fall or be used improperly.
- Do not install the motor and control units above heat sources and ensure air circulation is maintained.
- Do not drill any additional mounting holes into the housing and do not enlarge existing holes.

Torque When tightening screws and nuts, always observe the standard tightening torque, unless specifically indicated otherwise. Standard screw lockers should be replaced as needed.

Grounding During the installation of the Belt Drive and control, its grounding must be observed. Check the connection diagram for proper grounding.

24 and 48V BLDC Belt Drive and Controller

We can now proudly introduce our 80/113mm BLDC Belt Drive and CO6500 BLDC Control. Background is a demand from market for a supplement to the existing Brush type DC Belt Drive. With this introduction we have extended our range of Belt Drives and Controllers in the field of Commercial applications.

Introduction

The 80/113 mm BLDC is a Belt Drive for light Industrial applications. It is a cost-effective drive based on Interroll's proven platform and technology and extends the existing 80/113 mm BTDC product to a long-lasting drive unit.

It comes in 24V or 48V version, combined with the proven and maintenance-free design, as well as a planetary gear box made of techno polymer. This results in a lightweight, low-noise solution for small to medium belt conveyor applications, infeed and transfer conveyors, packaging equipment, supermarket, and bottle recycling conveyors.

The 80/113mm BLDC Belt Drive comes with dedicated control, suited for both 24 and 48V. This control facilitates the motor and features speed control and adjustment, direction control, and motor overload protection.

Product range

The following tables give an overview of the possible motor versions. Choosing versions without exclamation marks will ensure the lowest cost and fastest delivery.

Note: Please refer to the Belt Drive catalogue for detailed information

Product Description

Description				
Applications	**Because of its strength, reliability and zero maintenance, this Belt Drive is perfect for Commercial Belt Conveyors applications.**			
	√	Small Light-duty conveyors	√	Supermarket Checkout conveyors
	√	Bottle recycling		
Characteristics	√	Brushless (BLDC) type 24V DC or 48V DC	√	Maintenance-free
	√	Techno-polymer planetary gearbox	√	Lifetime lubricated, Oil free
	√	Low noise	√	Reversible
	√	Lightweight		

Material Version

Material				
Component	**Version**	**Material**		
		Aluminium	**Mild Steel**	**Stainless Steel**
Shell	Crowned		√	√
	Cylindrical		√	√
End Housing	Standard	√		
Shaft cap	Standard	√		

Options

- Rubber Lagging
- Low temperature grease
- Non-horizontal mounting (more than ± 5°)

Accessories

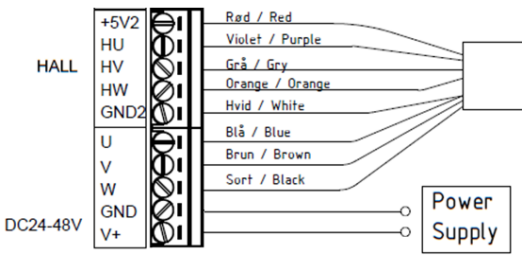
- Anti-vibration bracket
- Idler pulleys
- Conveyor rollers

General technical data

Technical data	
Motor type	Brushless (BLDC) type 24 V DC or 48 V DC
Insulation class of motor windings	Class B, IEC 34 (VDE 0530)
Power	24Vdc / 60W 48Vdc / 60W
Voltage	24Vdc (+/- 10%) 48Vdc (+/-10%)
Current	24Vdc / 3,6VA 48 Vdc /1.8A
Speed - No load - Rated load	See speed data
Torque/Belt pull full load	See Torque/Belt pull data
Cable, fixed	3m, Ø7mm, 9 leads (1 blind-grn/yl), 0.50mm^2 halogen free, minimum 2.6m outside shaft
Internal shaft sealing system	Double-lipped, NBR
External shaft sealing system	Deflection seal, NBR
Shell	Crowned for belt tracking; Improved roll-formed shell
End housing, Shaft caps	Aluminium
Shaft caps dimensions	Dia. Ø35 mm/flat width 21 mm/flat length 20 mm
Protection rate	IP66
Ambient temperature	+10 to +40 °C
EMC	Pending
Standard/Norm	CE decl. Of incorporation acc. To EC-Machine Dir. 2006/42/EG, Annex II 1 B

Internal Electrical Motor Data

Electrical data			
Nominal voltage	V DC	24	48
Number of poles		4	4
Nominal current	A	3,6	1,8
Nominal torque	Ncm	20	20
Nominal speed	rpm	2850	2850
Friction torque at no load	Ncm	2,5	2,5
Peak stall torque	Ncm	95	102
Peak current	A	9	4,5
No load speed	rpm	3700	3700
Nominal power	W	60	60
Torque constant	Vcm/A	6	12
Terminal resistance	Ohm	0,8	3,06
Terminal inductance	mH	1.76	7,05
Rotor inertia	gcm^2	147,9	147,9
Pos Feedback	Hall, SSI, EMF	Hall	Hall
Hall effect sensor voltage	V DC	5	5



Product Identification

Belt Drive 80 BLDC

24 V, 48 V, 60 W, ø80 mm direct current brushless drive

The 80 mm BLDC Belt Drive is a cost-effective belt drive based on Interroll's proven platform and technology and extends the existing 80 mm BTDC product.
BLDC technology provides technology that gives longer operating lifetime.

It is available in 24 V or 48 V versions, combined with the proven and maintenance-free design, as well as a planetary gear box made of techno polymer. This results in a lightweight, low-noise solution for small to medium belt conveyor applications, infeed and transfer conveyors, packaging equipment, supermarket and bottle recycling conveyors.

The 80 mm BLDC Belt Drive is launched with a dedicated motor controller, suited for both 24 and 48V. This controller facilitates the motor, and features speed control, direction control, and motor overload protection.

CO 6500 Controller is a high-tech product for the field of medium power motor drive.

Application Area

Small to medium belt conveyors for packaging, supermarkets, and bottle recycling. As well used as infeed or transfer conveyors.

Characteristics

The Belt Drive 80BLDC is a cost-effective belt drive in 24 V or 48 V versions with techno polymer planetary gearbox and maintenance-free design. It is oil-free, and lifetime lubricated. The lightweight and low-noise drive offers long service life.
The 80BLDC is available with a motor controller C0 6500 for speed and direction control.

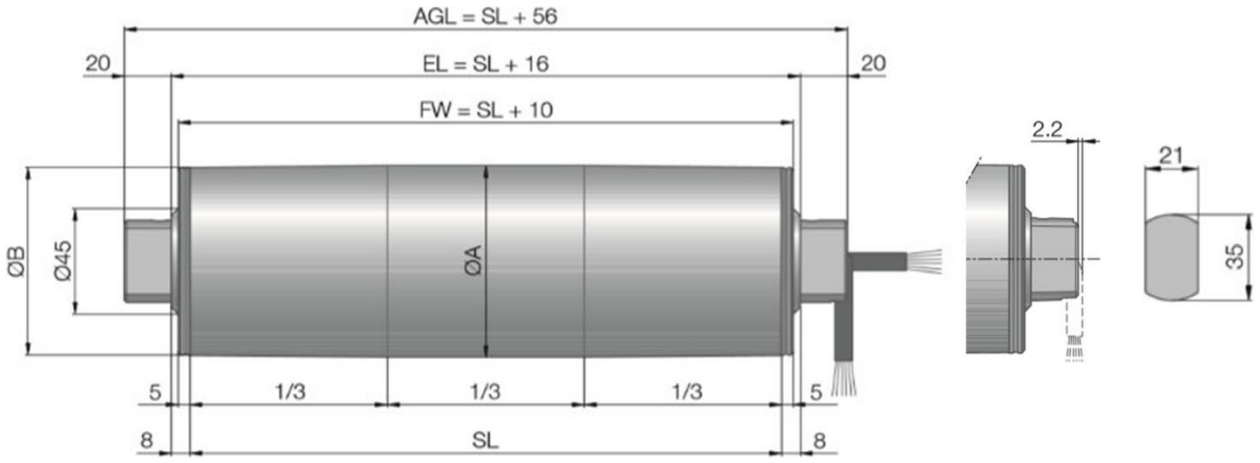
Product range 80 BLDC

The following tables give an overview of the possible motor versions. Choosing versions without exclamation marks will ensure the lowest cost and fastest delivery. When ordering, please specify the version in

Motor variants

Motor versions									
PN	gs	i	V full load	V no load	$n_{A\ full\ load}$	M_A	F_N	TE	SLmin
kW			m/s	m/s	min^{-1}	Nm	N	N	mm
0,06	3	115,2	0,10	0,14	24	19,9	498	2000	265
		96,0	0,12	0,17	29	16,6	415		
		78,5	0,15	0,20	36	13,6	340		
		71,5	0,17	0,22	41	12,4	310		
		63,5	0,19	0,25	45	11,0	275		
		52,9	0,23	0,30	55	9,2	229		
		48,8	0,24	0,33	57	8,4	211		
		43,3	0,28	0,37	67	7,5	187		
	2	19,2	0,62	0,83	148	3,5	88	1500	
		16,0	0,75	0,99	179	2,9	73		
		13,1	0,91	1,21	217	2,4	60		

Dimensions Belt Drive



Type	Ø A mm	Ø B mm
80BLDC crowned shell	81,5	80,0
80BLDC cylindrical shell	80,5	80,5

Crowned Shell FW295 – 612: 81,5/80mm; 613 – 962: 82,7/81mm

Cylindrical shell FW295 - 612: 80,5mm; 613-962: 82,7mm

Belt Drive 113 BLDC

The 113 mm BLDC Belt Drive is a cost-effective belt drive based on Interroll's proven platform and technology and extends the existing 113 mm BTDC product. BLDC technology provides technology that gives longer operating lifetime.

It is available in 24V or 48V versions, combined with the proven and maintenance-free design, as well as a planetary gear box made of technopolymer. This results in a lightweight, low-noise solution for small to medium belt conveyor applications, infeed and transfer conveyors, packaging equipment, supermarket, and bottle recycling conveyors.

The 113 mm BLDC Belt Drive is launched with a dedicated motor controller, suited for both 24 and 48V. This controller facilitates the motor, and features speed control, direction control, and motor overload protection.

CO 6500 Controller is a high-tech product for the field of medium power motor drive.

Application Area

Small to medium belt conveyors for packaging, supermarkets, and bottle recycling. As well used as infeed or transfer conveyors.

Characteristics

The Belt Drive 113BLDC is a cost-effective belt drive in 24 V or 48 V versions with technopolymer planetary gearbox and maintenance-free design. It is oil free, and lifetime lubricated. The lightweight and low-noise drive offers long service life. The 113BLDC is available with a motor controller C0 6500 for speed and direction control.

Product range 113 BLDC

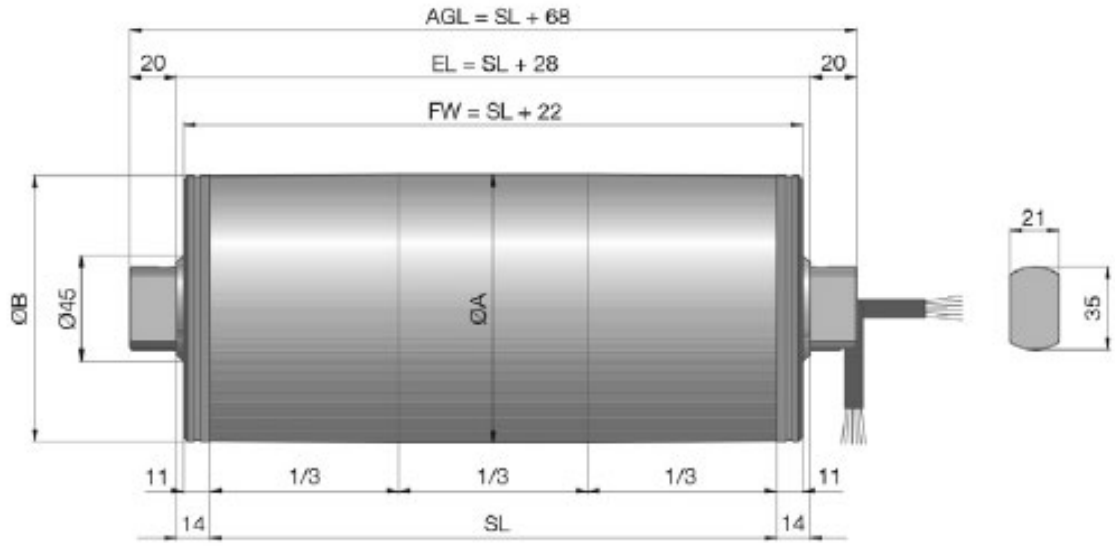
The following tables give an overview of the possible motor versions. Choosing versions without exclamation marks will ensure the lowest cost and fastest delivery. When ordering, please specify the version in

Motor variants

Motor versions									
PN	gs	i	V full load	V no load	$n_{A\ full\ load}$	M_A	F_N	TE	SLmin
kW			m/s	m/s	min^{-1}	Nm	N	N	mm
0,06	3	115,2	0,15	0,19	24	14,1	353	2000	253
		96,0	0,18	0,23	29	11,8	294		
		78,5	0,21	0,29	36	9,6	241		
		71,5	0,24	0,31	41	8,8	219		
		63,5	0,27	0,35	45	7,8	194		
		52,9	0,32	0,42	55	6,5	162		
		48,8	0,35	0,46	57	6,0	149		
		43,3	0,39	0,52	67	5,3	133		
	2	19,2	0,88	1,17	148	2,5	62	1500	
		16,0	1,05	1,40	179	2,1	52		
		13,1	1,29	1,71	217	1,7	42		

Dimensions Belt Drive

Type	Ø A mm	Ø B mm
113BLDC crowned shell	113,3	112,3
113BLDC cylindrical shell	113,0	113,0



Control for Brushless DC Belt Drive

Product Description

Control CO 6500 is a high-tech product for the field of medium power brushless Belt Drive. This product uses a large-scale integrated circuit to replace the original hardware. It has higher anti-jamming and fast response ability.

It is suitable for all the three-phase brushless DC drives with low voltage DC18V-50V (boards show DC24V-48V) and peak current below 5A. Even if working with large current, it is still in low temperature. Used for Interroll 80 BLDC and 113 BLDC Belt Drive.

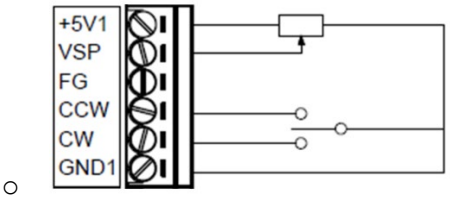
This control type beside from being used with BLDC Belt Drives are widely used in knitting equipment, medical equipment, food packaging machinery, power tools and a series of areas of electrical automation and control.

Application Area

Control of the Belt Drives 80 and 113BLDC with multiple functions for a wide range of applications within light duty conveying.

Functions

- BLDC motor controller for BLDC motor with Hall effect sensors.
- Variable speed control, analog range 0-5V DC
- Smooth operation at low speed
- Output for tachometer pulse.
- With pulse velocity output, motor rotational speed can be observed anytime.
- Protection functions: over-current, overvoltage, under voltage and motor stalling.
- It has double speed closed current design with low-speed torque and smooth operation
- It has over-current, overvoltage, under voltage, motor stalling, and other protection functions
- High speed output with a maximum speed of 10000rpm / min.
- EN, DIR signal control side
- External control for direction of rotation CW/CCW and start/stop
- Operation CW or CCW by connection either CW or CCW to GND1.
- Incoming current: 0-5 Amp
- Operation Voltage: 24-48V DC
- Dimension (L x W x H): (95,8 x 61,5 x 27,5)
- Power up to 240W (controller only)



Function Overview

- Function as following: (default setting mode: Square wave, Hall, Open loop)
- Run model: square wave, with hall sensor, open loop speed
- Run model: square wave, without hall sensor, open loop speed
- Run model: constant-torque device, open loop speed (Don't run for long time with overloading)
- On the basis of our upper computer software and hand debugger, all the above functions can be set by yourself

Electrical Specifications

Electrical Specifications	
Power supply	DC18V～50V direct current (Capacity according to motor power selection)
The maximum input current	Not greater than 5A (according to motor and rated load)
The maximum power	The maximum is 240W (overpower motors are prohibited)
Adaptable motor	Rated and evaluated for use with Interroll 80-113 BLDC. Adaptable output power ≤150W motor
Insulation resistance	General temperature > 500MΩ
Insulation strength	General temperature and pressure 0,5KV, 1minute

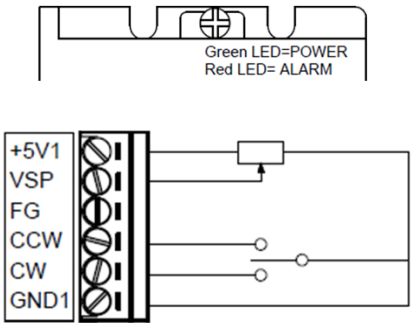
Environmental Parameters

Environmental Parameter		
Cooling method		Natural air cooling (forced air cooling is recommended)
Environment	Condition	Avoid dust, oil mist and corrosive gases
	Reserved temperature	10℃～+40℃
	Humidity	﹤80%RH, no condensation, no frost
	Vibration	﹤0.5G（4.9m/s^2）10Hz-60Hz (non-continuous operation)
Size		96mm X 61,5mm X 27,5mm
Weight		About 0,15Kg

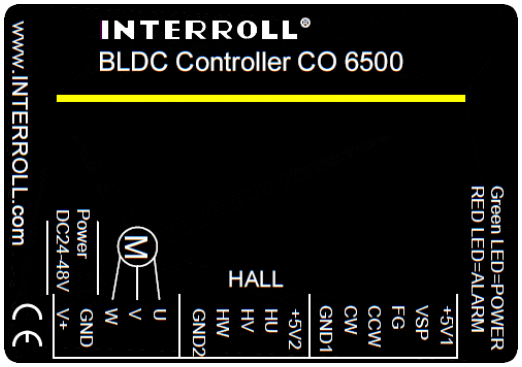
Note: Due to dramatic changes in the temperature of the storage environment, it is easy to form condensation or frost. In this case, the drive should be left unused for 12 hours or more, until the drive temperature and ambient temperature is equivalent. Then it can be on powered up.

Terminal interface description

Terminal interface description		
Function	**Mark**	**Description**
Indicator light	POWER	If the green power indicator is lightened, it shows that power is normal.
	ALM	If the red status indicator is slow flash, it means waiting; Quick flash means operation; It always lights meaning faults or off-line
Control signal port	+5V1	Positive control signal 1 (internal voltage output)
	VSP	External speed control signal
	FG	Motor speed pulse output. Can be converted to the actual motor speed (see below).
	CCW	Direction of rotation is controlled by high and low electrical levels on the CW/CCW terminals. Connect to +5V1/no connection = high. Connect to GND1 = low
	CW	See above
	EN	Connected EN with GND1, motor can work (online status); without connected or high electrical level, motor cannot work (offline status and the red light keep working)
	GND1	Control signal's power supply
Hall control port	+5V2	Positive control signal 2 (internal voltage output)
	HU	Hall sensors signal U phase input
	HV	Hall sensor signal V phase input
	HW	Hall sensor signal W phase input
	GND2	Ground for control signal 2
Power input and motor windings	U, V, W	The motor's three-phase output signal
	GND, V+	Power input from supply. Connect GND to the supply's negative terminal and V+ to positive. The input voltage is 18VDC～50VDC. (Boards show 24VDC-48VDC)



Connection diagram



Function and method

Speed mode (VSP/PWM)	Control mode 1 (VSP): Connect +5V1 and GND1 to a potentiometer's (5-10kΩ) Vcc and GND terminals. Connect the VSP terminal with the output terminal (wiper) of the potentiometer, to adjust the motor speed 0 ~ 100%. The range is 0-5V. Control mode 2 (PWM): Connect the positive terminal with the VSP terminal, and negative terminal with GND1. Change the duty cycle to adjust speed. The range is 100-100k Hz.
Speed signal output (FG)	The Controller can make an output pulse signal, which is proportional to the motor speed. The motor shaft speed (RPM) = (F ÷ N) × 60 F = Measured frequency of the FG output. N = Pole number. 2-pole motor, N = 2; 4-pole motor, N = 4 Example: If you have a 4-pole motor and measure the output FG signal to 200Hz, the motor speed = (200 ÷ 4) × 60 = 3000 rpm on the shaft.
The motor positive and negative signal (DIR)	By controlling high low-level of DIR to control the motor's positive and reverse turn. Noticed: Swerved suddenly when motor is at high speed, to avoid the damage of motor and Clockwise rotation: CCW = high and CW = low. Counterclockwise rotation: CCW = low and CW = high. NB: The motor will not start if both terminals are set to either high or low simultaneously. This parameter can be used as a start/stop function.
Start/Stop signal (EN)	By controlling high low-level of EN to control the motor's stop and run. When EN is low level, motor runs; when EN is high level or non-connect, the motor stops working, and the red light keeps working. Power consumption is less than or equal to 30mA. Fault Value: short circuit with EN and GND1.
Installation	It is required that if multiple control cards are placed in close proximity, the distance between them must be observed. If placed in close proximity or in an enclosure, the operational temperature must not exceed 40C.

Safety Attention

- The motor and drive wiring must be connected in the power-off state. Do not connect electrical wiring under power.
- According to the illustrated method, connect the power cord, motor winding wire, and Hall signal line correctly. Please pay attention to the order of UVW three-phase must be consistent.
- Do not disassemble the drive at random to prevent damage.
- Do not touch all terminals on power-on state.
- Do not drive without shell operation
- Impact of the drive may cause damage.

Questions and answers

1. How can you get it started as soon as possible when you first use the drive?

- After you correctly connect the power cord, the motor line, the Hall line, the external potentiometer slowly accelerates.
- After the motor is turned correctly, you can assess the enable, direction and other functions. If you are unfamiliar with the product, the initial use should be done after the test. And then it can be installed to the actual use.

2. What will happen if power supply is reversed?

- It will immediately burn the drive.

3. What is the maximum of the upper control signal voltage?

- The maximum voltage of the speed regulation signal is 5V. Exceeding this voltage will cause the driver to burn.

4. After the driver has been working for a long time, the shell is hot. Is it normal?

- Yes, it is. At room temperature, after long working hours, it is up to 90 degrees. And it will not affect the performance.

5. The power indicator is light, but the motor does not turn and shift, what is the reason?

- There may be a mistake in the phase line and the Hall line. Please re-energize the wiring according to the motor manual.

6. Can my motor speed transfer to 6000 with this drive?

- The maximum speed of the brushless motor is determined by the parameters of the motor itself. The driver can control the motor speed from 0 to the highest speed.

7. I already have a motor and how do I install this drive after wiring?

- You must first determine the motor phase and the definition of the Hall line, and then you can connect it with wires. If you are not sure, you need to ask the motor manufacturers. Incorrect wiring can cause damage to the driver.

8. Can I add some features on this drive or do new product development?

- Yes, please contact us.

Startup and operation

WARNING

Risk of injury due to incorrect handling

- Remove items that do not belong to the Belt Drive installation
- Ensure that unauthorized people are not in the hazard zones.
- Wear safety shoes and suitable work clothes.
- Ensure that the Belt Drive and control are correct connected and all rotating parts have been fitted with the corresponding protective devices and guards.

- Ensure that the Belt Drive type plate matches the version ordered.
- Ensure that there are no additional hazard zones caused by interfaces to other components.
- Ensure that the wiring is in accordance with the specifications, diagram and legal requirements.
- Check all protective devices.
- Ensure that no people are in hazard zones near the Belt Drive, control and conveyor.
- Ensure that the belt is installed with the correct tension. For elastic belts use max. K1% of 8N/mm and 0.2-0.4% belt elongation.

Cleaning

NOTICE

Risk of damage to the Belt Drive and control due to improper cleaning

- Observe the protection class IP 20, 64 or 66.

Cleaning the Belt Drive

- Remove or wipe off foreign matters.
- Only use suitable cleaning agents.
- Perform maintenance work only after switching off the power. Ensure that the Drive system cannot be turned on accidentally.

Decommissioning and disposal

Decommissioning

CAUTION

Risk of Injury Due to Incorrect Handling

- Qualified and authorized people may only perform shutdowns.
- Only decommission the module after disconnecting the power. Ensure that the belt drive cannot be turned on accidentally when decommissioning.

Disposal

NOTICE

Information concerning the designation and collection of waste electrical and electronic equipment.

- To protect the environment, recycle the packaging.
- The operator is responsible for the proper disposal of the Drive components.
- In doing so, industry-specific, and local regulations for disposal of electrical and electronic equipment and its packaging must be observed.
- The packaging must be recycled to protect the environment.
- Risk of injury due to incorrect handling.

WARNING

The symbol placed on the product, or its packaging indicates collection of selected electrical and electronic waste. The product is covered by WEEE Directive 2012/19/EU. The product must not be disposed of with unsorted household waste. Return to local WEEE-collection locations or to Interroll upon agreement. Ensure that all local and industry specific regulations are met.

Appendix

Warranty for Interroll Belt Drives and Conveyor Systems

Interroll provides a 2-year warranty covering their range of belt drives and conveyor systems against faulty workmanship and/or materials from the date of delivery or collection from the factory. The warranty period is based on regular operation of the product eight hours per day, provided no written agreement to the contrary is in effect.

As part of this warranty, Interroll repairs or replaces any defective product free of charge that is returned to the factory before the warranty period expires. The warranty period shall not be extended by repairs performed in the context of the warranty.

Restrictions

Interroll and its dealers do not assume any liability for shutdowns or damage to the product due to the following causes:

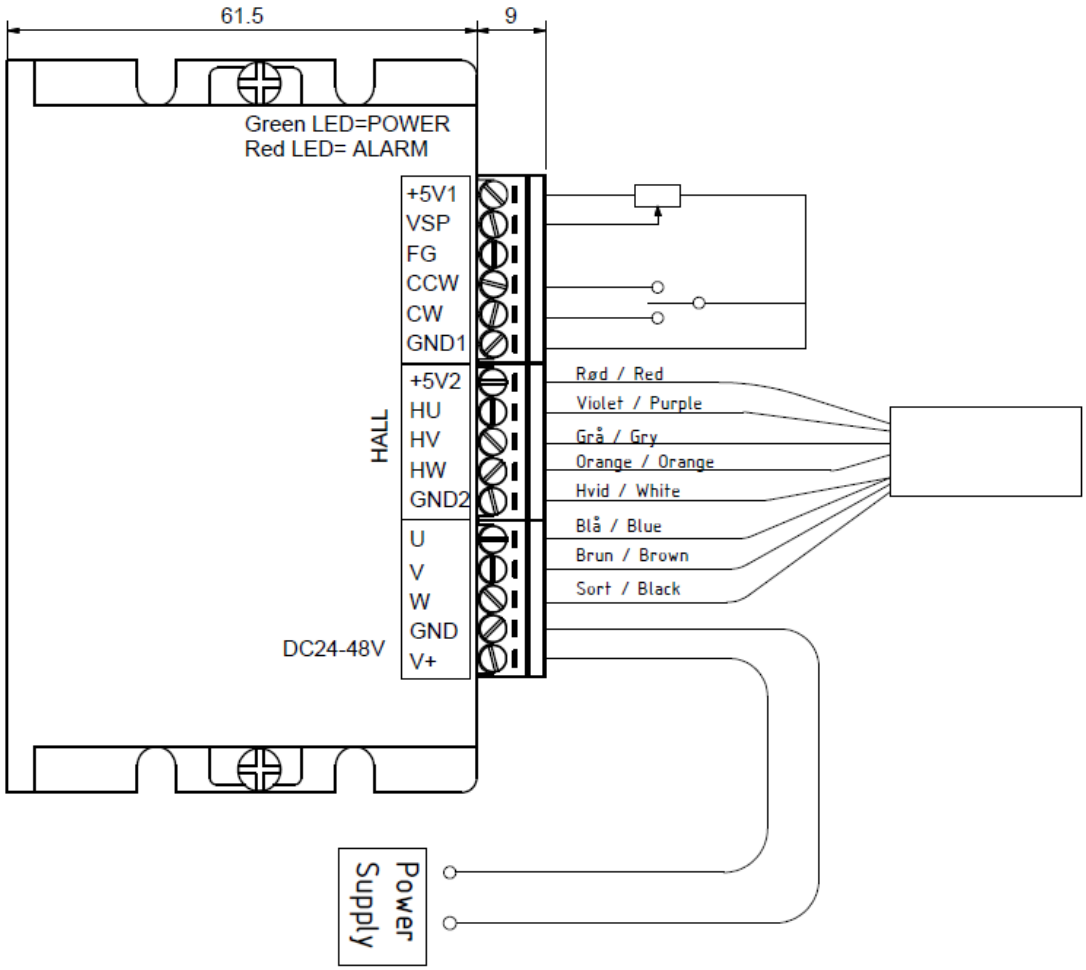
- Non-observance of the installation or maintenance notes from Interroll
- Operation of the motor without suitable motor protection
- Not connecting the internal Interroll thermal circuit breaker (if available)
- Damage to the belt from cutting and cuts from sharp objects
- Damage to the belt from improper belt tracking, over tensioning or damage from corrosive fluids
- Reversing the belt drive before the motor has come to a complete stop
- Use of the belt drive outside the specifications stated on the type of plate and/or in the current Interroll catalogue or quote
- Repairs, alterations, or modifications to the product by anyone other than a qualified Interroll representative will render this warranty invalid unless Interroll has previously agreed to such repairs in writing.

Exceptions

The Interroll warranty excludes any liability for the following damage:

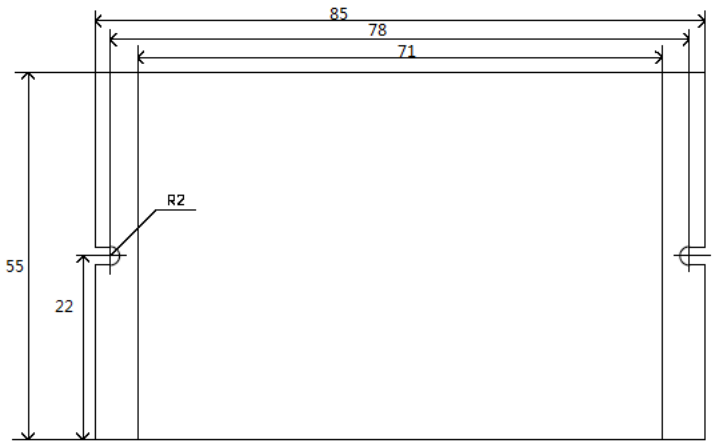
- Damages to the shell lagging or other additional materials through regular wear or incorrect use
- Costs for removal and return shipment of the product to Interroll as part of this warranty
- Damages to other systems that are used in conjunction with the product
- Loss of income, injuries, or other costs in conjunction with the failure of the product

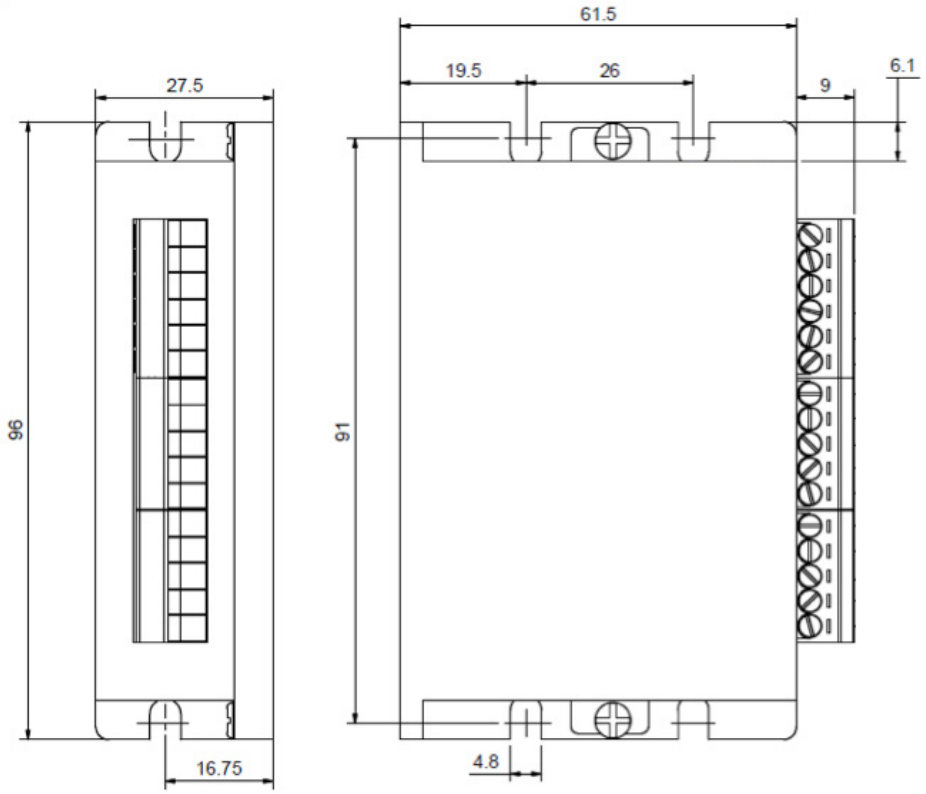
Connection diagram for CO 6500



		CONTROL UNIT	MOTOR CABLE COLORS
1	HV (+5V)	Voltage port for Hall sensor	Red
2	HA	Hall signal A phase	Orange
3	HB	Hall signal B phase	Blue
4	HC	Hall signal C phase	White
5	GND	Low voltage port for Hall sensor	Black
6/7	Direction	CW/CCW on/off when connected to ground GND	-
8	Brake	Connect GND to Brake motor	-
9	DA	Control motor start - stop	-
10	SP (+5V)	PWM Control port, input 0 - +5V Speed control by potentiometer Motor make 2 pulses/revolution	-
11			
12		Power HIGH voltage 15-36Vdc (+pole)	-
13	GND	Power LOW (-pole)	-
14	U	Motor U phase	Brown
15	V	Motor V phase	Grey
16	W	Motor W phase	Purple

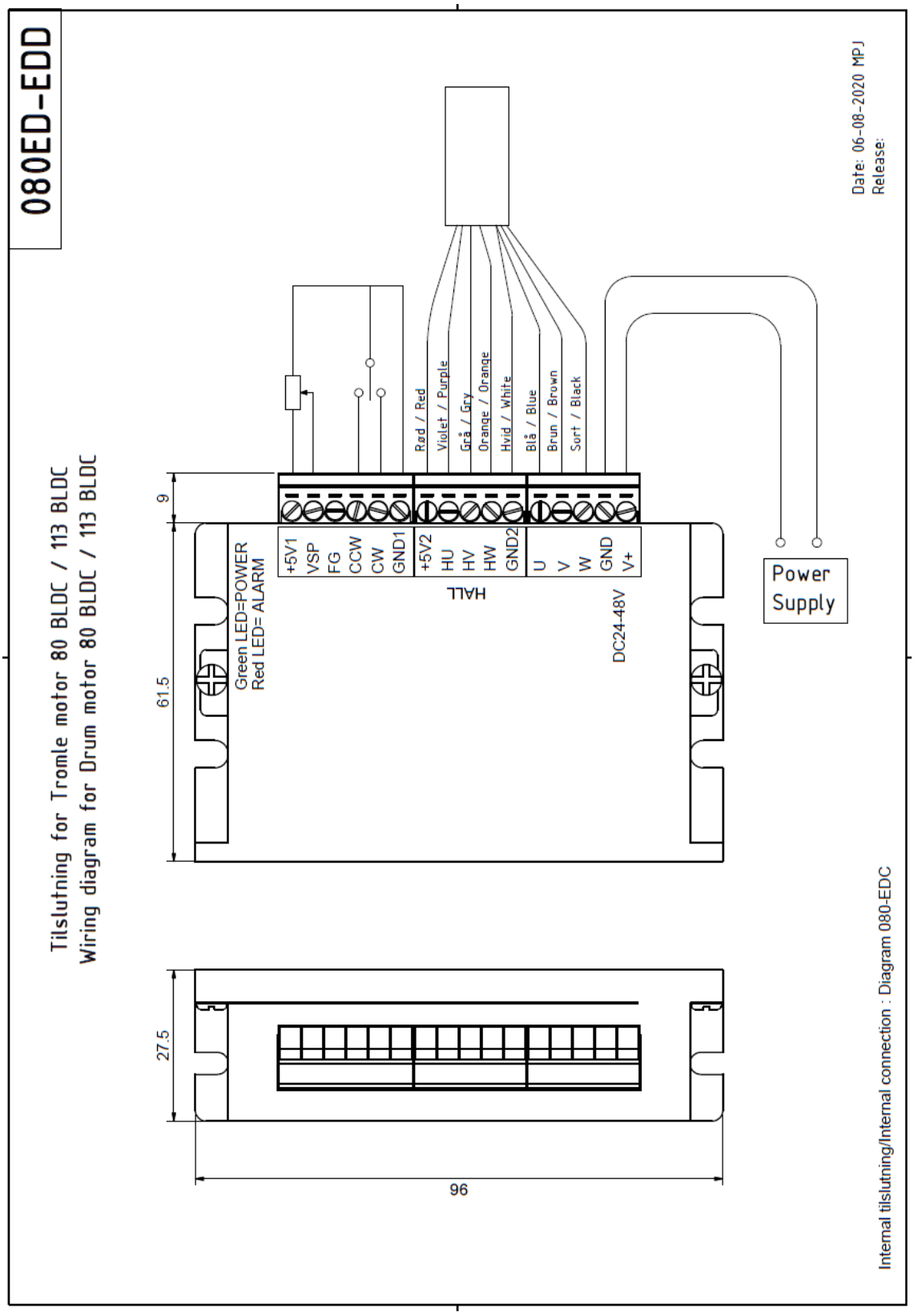
Mechanical mounting





- To get the best heat dissipation, please adopt side mounting
- Mounting: Holes fit for Umbraco Socket Head Cap Screw M4

Wiring diagram for standard BLDC Belt Drive and Control



If you ordered a special BLDC Belt Drive, please refer to the accompanying electrical connection diagram.

Declaration of incorporation

Declaration of incorporation

in terms of the EC-Machine Directive 2006/42/EG, Annex II 1 B

The manufacturer

Interroll-Joki A/S
Hammerholmen 2-6
2650 Hvidovre
Denmark

hereby declares with sole responsibility that the product series

- Drum Motor C-series
- Drum Motor S-SMP-series
- Drum Motor S - Series DC
- Drum Motor Series BLDC incl. Controller CO 6500
- Cassette C-series

fully comply with the safety and health requirements of the Machinery Directive 2006/42/EC Appendix I.

The relevant technical documents according to Appendix VII B are available and will be presented to the component national authorities electronically, if required.

Person authorised to compile the technical file:
Jan Støvring Jensen, Interroll-Joki A/S, Hammerholmen 2-6, Hvidovre 2650 Denmark

The partly completed machinery complies with the following EC directives:

- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EC

The following harmonised standard were applied:

- EN ISO 12100:2010

Initial start-up of the partly completed machinery is not permitted until the machinery is incorporated into a machinery which complies with the machinery directive. The EC declaration of conformity must be available according to Appendix II A.

31. august 2021
Hvidovre, Denmark

ATraberg
Andreas Traberg
(Managing Director)

Declaration of Incorporation

in terms of the UK Supply of Machinery (Safety) Regulations 2008

The manufacturer
Interroll-Joki A/S
Hammerholmen 2-6
2650 Hvidovre
Denmark

Represented in the UK by
Interroll Limited
Unit 1a, Orion Way Kettering, Northants
NN15 6NL
England

hereby declares with sole responsibility that the product series

- Drum Motor
  - C-series, SMP-series
  - S-series DC
  - BLDC-series incl. Controller CO 6500
  - Cassette C-series

fully comply with the safety and health requirements of the UK Supply of Machinery (Safety) Regulations 2008

The relevant technical documents are available and will be presented to the component national authorities electronically, if required.

The partly completed machinery complies with the following UK directives:

- UK Electromagnetic Compatibility Regulations 2016
- UK Electrical Equipment (Safety) Regulations 2016
- UK Restrictions of the Use of Certain Hazardous- Substances in Electrical and Electronic Equipment Regulations 2012

Standards:

- EN ISO 12100:2010 Safety of machinery - General principles for design – Risk assessment and risk reduction

In case of modification of the machine, not in consultation with Interroll, this declaration of conformity becomes invalid.

Initial start-up of the partly completed machinery is not permitted until the machinery is incorporated into a machinery which complies with the UK Supply of Machinery (Safety) Regulations 2008.

01.November - 2023
Hvidovre, Denmark

ATraberg

Andreas Traberg
(Managing Director)

Notes

About Interroll

The Interroll Group is a globally leading provider of solutions for material handling. The company was founded in 1959 and has been listed on the SIX Swiss Exchange since 1997. Interroll supplies system integrators and machine builders with a broad product range of platform-based products and services in the categories "Rollers" (conveyor rollers), "Drives" (motors and drives for conveyor systems),"Conveyors & Sorters" as well as "Pallet & Carton Flow" (flow storage systems). Solutions from Interroll are used by express and postal services, in e-commerce, in airports and in the areas of food & beverage, fashion, automotive and other industries. The company counts leading brands, such as Amazon, Bosch, Coca-Cola, DHL, Nestlé, Procter & Gamble, Siemens, Walmart, or Zalando, among its users. With its headquarters in Switzerland, Interroll features a worldwide network of 35 companies with roughly 2,600 employees
(2021).

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