

CDV582M*8192/65536 EIP 36ZB10NT + FS3

3xM12 radial [Click Here for a Quote - customercare@tr-electronic.com](mailto:customercare@tr-electronic.com)

Order-#: **CDV582M-10049**
15.11.2021 / 010102158201030201



Stock photo

EtherNet/IP



Advantages

- CIP Node on EtherNet/IP, CT
- CIP Safety
- Intelligent diagnoses
- Parameterizable gear unit
- Preset "on the fly"
- Salt water resistant
- SIL3, PLe
- Speed signal

Technical data for CDV582M-10049

NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	65.536,000
INTERFACE	ETHERNET-IP/CIPSAFETY
SUPPLY VOLTAGE	10-30VDC
POWER DISSIPATION	< 3W
CONNECTOR TYPE	1X4P.M12-CONNECTOR (A-COD) 2X4P.M12-FEMALE (D-COD)
CONNECTOR-POSITION	RADIAL
MATING PLUG	NO
FLANGE TYPE	ZB36 3XM3+3XM4

Subject to change.

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Technical data for CDV582M-10049 continuation

SHAFT TYPE	10KEYWAY/19,5
STANDARD	EN 61508
	EN 61800-5-2
	EN 62061 / EN ISO 13849
SAFETY	CDV582MD+FS03 EIP SIL3/PLe
TEMPERATURE RANGE	-25+85°C
PROTECTION Class	IP65
OPTIONS ENC	CIP NET LIB VOL.2 ED.1.26
	CIP NET LIB VOL.5 ED.2.20
	CT17-ES
	ETHERNET-IP/CIPSAFETY
	PRESET VIA BUS
	VELOCITY
PINOUT NO.	TR-ECE-TI-DGB-0362
DRAWING NO.	04-CDV582M-M0001
VERSIONNO	000
DOCUMENTATION NO	DOKUMENTE
AL:	N
ECCN:	N
UL-APPROVALS	USA+CANADA

General data for K-CDV58_2FS-EIP-1

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	110 mA
- Specific value	130 mA with second interface
- Condition	unloaded
Supply	
- SELV/PELV	IEC 60364-4-41
- In case of UL / CSA approval	according to NEC Class 2
Device design	
- Type	Multi-Turn
- Redundant scanning system	yes, double
- Design	optical/magnetic

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General data for K-CDV58_2FS-EIP-1 continuation

Total resolution	<= 29 Bit
Number of steps per revolution	<= 8192 = 13 bit resolution
Number of revolutions	<= 65536
Accuracy (functional)	12 Bit, Single-Turn; 0.087 °
EtherNet/IP™ - Interface	
- EtherNet/IP™	IEC 61784-1 CP 2/2, IEC 61158
- Physical Layer	Fast Ethernet, ISO/IEC 8802-3
- Device profile	Encoder Device Profile 0x22
- Dynamic Host Config. Protocol	DHCP is supported
- IP-Address	adjustable via rotary switches
- Ethernet/IP Adapter	CT17 Conformant
- CIP Safety Specification	Edition 2.20
SSI - Interface	
- Equipment	Optional interface
- SSI-Clock input	RS-422; 2-wire
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	<= 1MHz
- Output code	Binary, Gray
- Number of data bits	8...29
- Type of parametrization	programmable
- MTTFd, SSI	150 a
- SSI-Refresh time	500 µs
Incremental - Interface	
- Equipment	Optional interface
- Signal form	Square wave
- Signal form, alternative	SIN / COS
- Incremental signals, square	K1± K2±
- Incremental signals, SIN/COS	SIN± COS±, 1 V _{ss}
- Impulses, square wave	1024...5120, in steps of 1024
- Impulses, SIN/COS	1024 □
- Output driver, TTL	RS-422, 5 VDC
- Output driver, HTL	Push-Pull, Supply Voltage
- Type of parametrization	programmable
- MTTFd, square	180 a
- MTTFd, SIN/COS	190 a
- Duty factor, square	50 %, ± <= 10 %
- Phase angle, square	90 °, ± <= 20 ° (electr.)

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General data for K-CDV58_2FS-EIP-1 continuation

Transmission rate	
- Specific value	100 MBit/s
Cycle time	
- Not safety related	1.0 ms
- Safety related	5 ms
Parameter/Function, changeable	Integration time
	Preset parameter
	Scaling parameter
	Monitoring window
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
	SNCT Device Applet
Functional safety	
- Safety principle	Redundance with cross compare
- SIL-Standardization	DIN EN 61508 / DIN EN 62061
- SIL-Standardization	DIN EN 61800-5-2
- SIL-Level	SIL3 / SIL CL 3
- PL-Standardization	DIN EN ISO 13849
- Performance-Level (PL)	PLe / Cat. 4
- Service life	20 Years
- PFH	1.13E-9 1/h
- PFDav, T = 20 a	9.84E-5
- MTTFd	136 a
- DCavg	99 %, high
- Mode	High demand, continuous
- Proof-Test-Interval	T1 = 20 Years
- Accuracy (safety)	8 Bit, Single-Turn; 1.406 °
Safety functions	
- DIN EN 61800-5-2	SLP (safely-limited position)
- DIN EN 61800-5-2	SDI (safe direction)
- DIN EN 61800-5-2	SCA (safe cam)
- DIN EN 61800-5-2	SS1 (safe stop 1)
- DIN EN 61800-5-2	SS2 (safe stop 2)
- DIN EN 61800-5-2	SOS (safe operating stop)
- DIN EN 61800-5-2	SLS (safely-limited speed)
- DIN EN 61800-5-2	SSR (safe speed range)

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General data for K-CDV58_2FS-EIP-1 continuation

- DIN EN 61800-5-2	SSM (safe speed monitor)
Internal process safety time	
- CIP Safety	9.5 ms + RPI
Maximum Speed, mechanically	≤ 6000 1/min
Shaft load, axial/radial	≤ 50 N, ≤ 100 N
Bearing life time	$\geq 3.9E+10$ revolutions
Bearing life time - Parameter	
- Speed	3000 1/min
- Operating temperature	60 °C
- Shaft load, axial/radial	= 60 %
Point of origin, shaft load	Mounting flange + 10 mm
Shaft type	
- Shaft diameter [mm]	10
- Shaft diameter [mm]	12
- Shaft diameter [mm]	14
- Shaft forming	Parallel key/Groove
Angular acceleration	$\leq 10E+4$ rad/s ²
Moment of inertia, worst-case	$\leq 5.3E-6$ kg m ²
	at shaft diameter 14 mm
	depending from shaft forming
Start-up torque, worst-case	≤ 3.4 Ncm (IP65,-20 °C,+6 σ)
	≤ 10 Ncm (IP67,-20 °C,+6 σ)
	at shaft diameter 14 mm
	depending from shaft forming
Mass, typically	0.3...0.5 kg
Isolation voltage	500 V

Environmental data

Vibration	DIN EN 60068-2-6
- Specific value	≤ 100 m/s ²
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	≤ 1000 m/s ²
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3

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Environmental data continuation

Working temperature	
- Standard	-25...+85 °C
- Derating	$T_w = -0.002 * n + 85$ °C
- Derating	$T_w = -0.004 * n + 85$ °C (IP67)
Storage temperature, dry	-40...+90 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
- Optional	extended to IP67
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

Subject to change.

Passfeder DIN6885-3x3x10
parallel key DIN6885-3x3x10

2x4pol. M12-Stecker, d-codiert (Buchse)
2x4pin. M12-connector, d-coded (female)

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread m4 for
potential equalisation

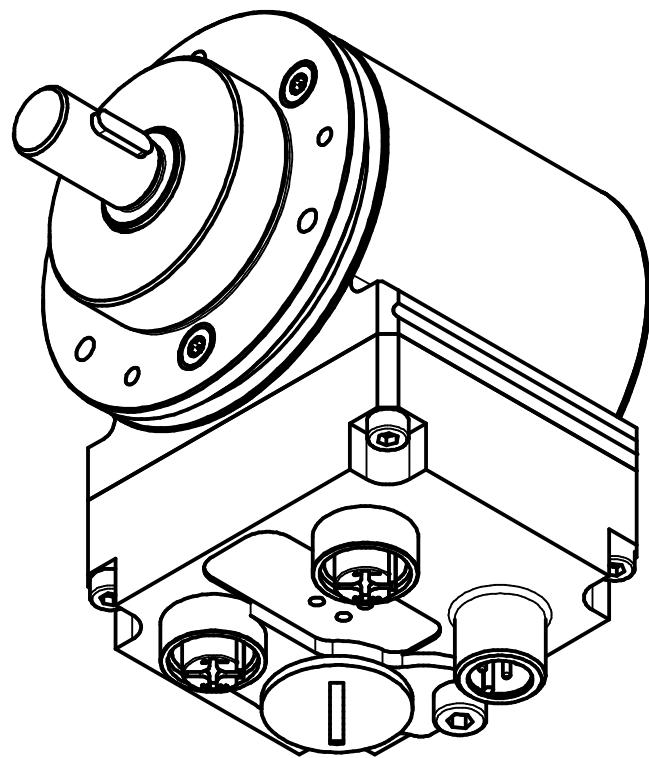
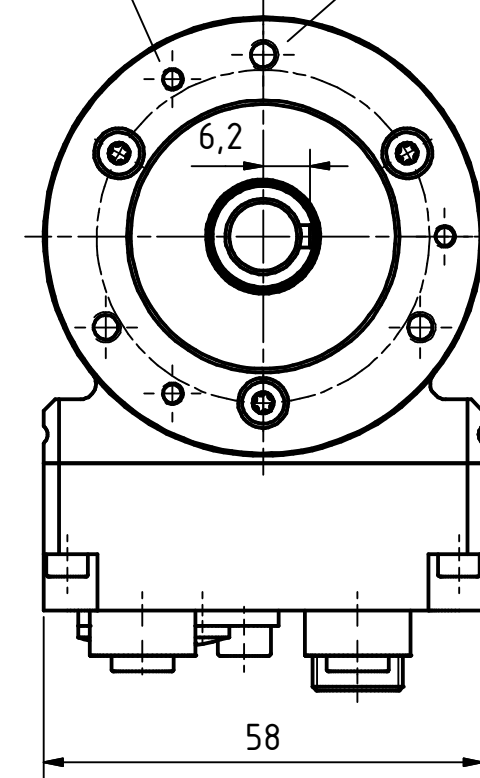
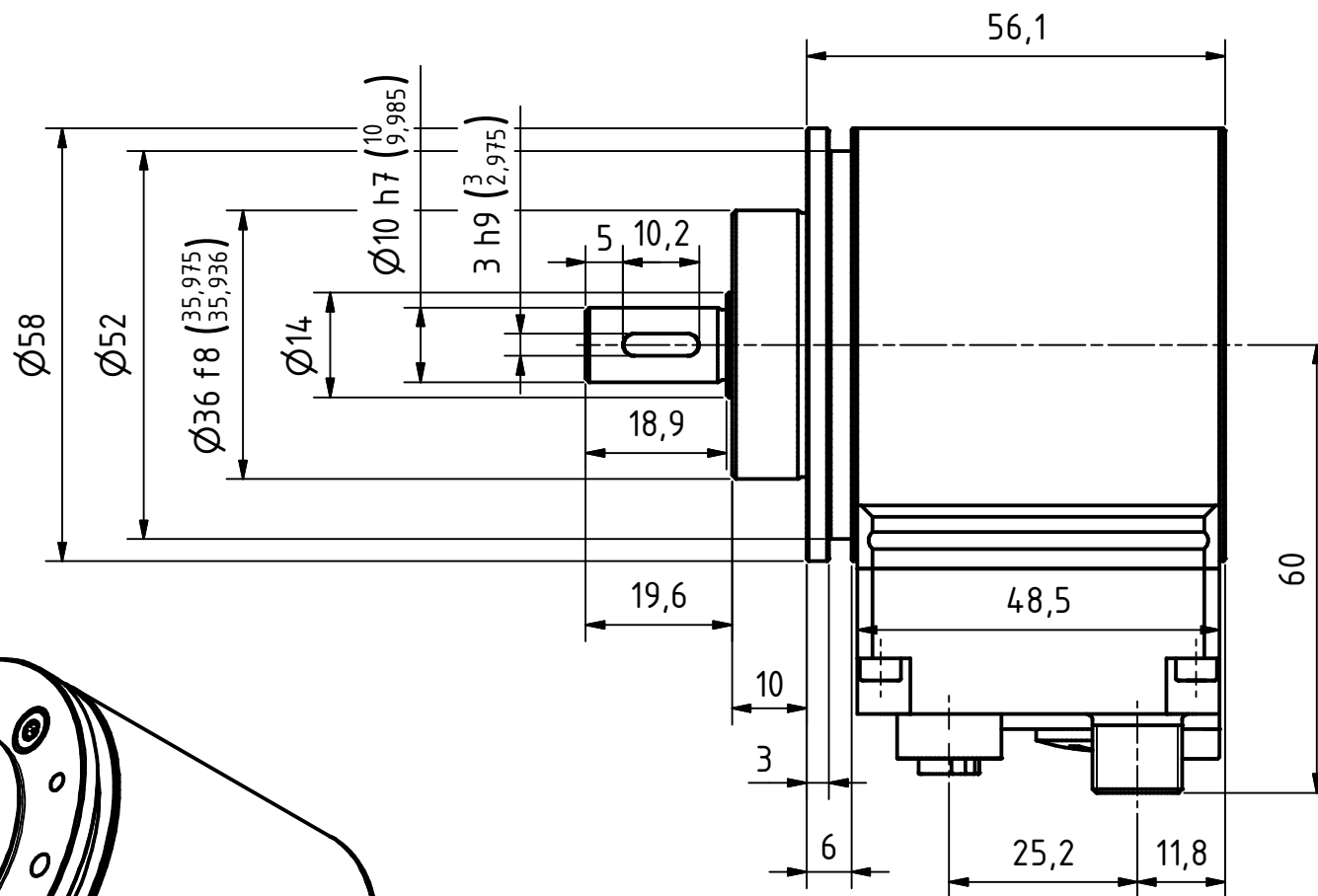
Verschlussstopfen M16x1.5
dummy plug M16x1.5

3xM3, 3tieft/deep


TK \varnothing 48 \pm 0.2, (3x120°)

3xM4, 3tieft/deep

TK \varnothing 48 \pm 0.2, (3x120°)



Artikel-Nr. und Steckerbelegung: siehe Datenblatt
Article-No. and pin connections: see data sheet

	TR Electronic GmbH Eglisshalde 6 D-78647 Trossingen Tel. +49 7425 228-0 www.tr-electronic.de		Tolerierung ISO 8015		Maßstab 1 : 1 DIN A3	
	Zeichnungs-Nr. nur für diese Ausführung gültig Drawing-No. only for this type valid				CDV-582-M, 36er Zentr.	
			Datum	Name		
			Erstellt	03.05.2018	FLAIG	
			Bearb.	28.12.2020	FLAIG	
			Gepr.	04.01.2021	NEMECZ	
			Norm			
www.tr-electronic.de DXF+Info: info@tr-electronic.de				Zeichnungs-Nr.: / Drawing-No.:		Blatt
2 Passfeder ergänzt 28.12.2020 FLA				04-CDV582M-M0001		1
1 Steckerausrichtung 16.08.18 FLA				Dok.Art. IDW Teil-Dok. 000 Dok.Vs. 02		1 Bl.
Zustf.	Änderungen	Datum	Name	EDV-Nr.:		

Steckerbelegung / Pin assignment

CD_582 EtherNet/IP / CIP Safety

axialer Steckerabgang /
axial connector outlet

radialer Steckerabgang /
radial connector outlet

A Potentialausgleich /
Potential equalisation

B IP-Adresse / *IP address*
- Valid addresses = 1 – 254

Rücksetzen auf Werkseinstellungen /
Reset to factory settings
- D: [TR-ECE-BA-D-0163](#)
- GB: [TR-ECE-BA-GB-0163](#)

X1	Flanschstecker / <i>Male socket</i> (M12x1-4 pol. A-coded)		
1	10 – 30 V DC	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>	Steckseite <i>Mating Face</i>
2	-	N.C.	
3	0 V	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>	
4	-	N.C.	

X2 = PORT 1 X3 = PORT 2	Flanschdose / <i>Female socket</i> (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	<i>Transmission Data +</i>	Steckseite <i>Mating Face</i>
2	RxD+	Empfangsdaten +	<i>Receive Data +</i>	
3	TxD-	Sendedaten -	<i>Transmission Data -</i>	
4	RxD-	Empfangsdaten -	<i>Receive Data -</i>	

Die Schirmung ist großflächig auf das Gegensteckergehäuse aufzulegen!
Empfehlung: Potentialausgleich [A] großflächig mit dem Erdungsanschluss verbinden. /

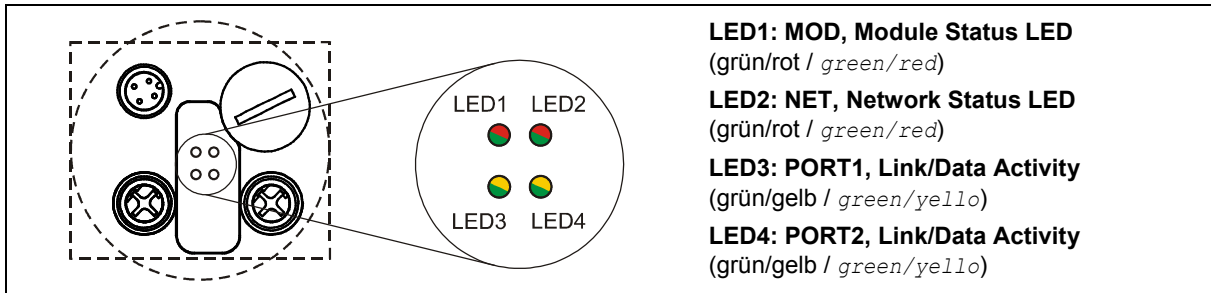


The shielding is to be connected with large surface on the mating connector housing!
Recommendation: Connect the potential equalisation [A] to the grounding connection across a sufficiently sized surface.

Mess-System-Adresse / <i>Measuring system address</i>	Schalter / <i>Switches</i>	TCP/IP Object Attr. 3: Config Control	Beschreibung / <i>Description</i>
	0 = (0x00)	0x00	Flash Konfiguration / <i>Flash configuration</i>
		0x02	DHCP Anfrage / <i>DHCP request</i>
	1...254 = (0x01...0xFE)	-	IP-Adresse: 192.168.1.xxx Network Mask: 255.255.255.0 Gateway Address: 192.168.1.254
	255 = (0xFF)	-	DHCP Anfrage / <i>DHCP request</i>

Steckerbelegung / Pin assignment

Status-LEDs



LED1: MOD, Module Status LED

(grün/rot / green/red)

LED2: NET, Network Status LED

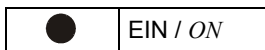
(grün/rot / green/red)

LED3: PORT1, Link/Data Activity

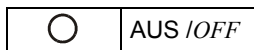
(grün/gelb / green/yellow)

LED4: PORT2, Link/Data Activity

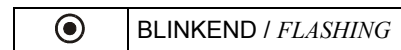
(grün/gelb / green/yellow)



EIN / ON



AUS / OFF



BLINKEND / FLASHING

LED1: MOD

grün / green

<input type="radio"/>	Versorgung fehlt, Hardwarefehler / <i>No supply voltage, hardware error</i>
<input checked="" type="radio"/>	Betriebsbereit (Mess-System arbeitet ordnungsgemäß) / <i>Executing (Measuring system is operating in normal condition)</i>
<input checked="" type="radio"/> 1 Hz	Mess-System befindet sich im Idle-Zustand / <i>Measuring system is in the idle state</i>

rot / red

<input checked="" type="radio"/>	Critical fault (ein Kritischer Fehler ist aufgetreten) / <i>A critical fault occurred</i>
<input checked="" type="radio"/> 1 Hz	Abort-Zustand / <i>Abort state</i>

rot-grün / red-green

<input checked="" type="radio"/> <-> <input checked="" type="radio"/> 1 Hz	Mess-System befindet sich im Selbsttest oder muss konfiguriert werden / <i>Measuring system is in self test or needs commissioning</i>
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LED2: NET

grün / green

<input type="radio"/>	Versorgung fehlt, Hardwarefehler, Mess-System offline / <i>No supply voltage, hardware error, Measuring system offline</i>
<input checked="" type="radio"/>	Mess-System online, Verbindungen hergestellt / <i>Measuring system online, connections established</i>
<input checked="" type="radio"/> 1 Hz	Mess-System online, keine Verbindungen hergestellt / <i>Measuring system online, no connections established</i>

rot / red

<input checked="" type="radio"/>	IP-Adresse mehrfach vergeben / <i>Duplicated IP address detected</i>
<input checked="" type="radio"/> 1 Hz	E/A-Verbindungen im Timeout-Zustand / <i>I/O connections in timeout state</i>

rot-grün / red-green

<input checked="" type="radio"/> <-> <input checked="" type="radio"/> 1 Hz	Kommunikationsfehler-Zustand / <i>Communication faulted state</i>
<input checked="" type="radio"/> <-> <input checked="" type="radio"/> 2 Hz	Vorgeschlagene TUNID-Anforderung empfangen / <i>Propose TUNID request received</i>

LED3 / LED4: PORT1 / PORT2 - Link/Data Activity LEDs

grün / green

<input type="radio"/>	keine Ethernet-Verbindung hergestellt / <i>No ethernet connection established</i>
<input checked="" type="radio"/>	Ethernet-Verbindung hergestellt / <i>Ethernet connection established</i>

gelb / yellow

<input checked="" type="radio"/> / <input checked="" type="radio"/>	Datenaustausch aktiv / <i>data exchange active</i>
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Betriebsanleitung beachten! - Observe User Manual!

