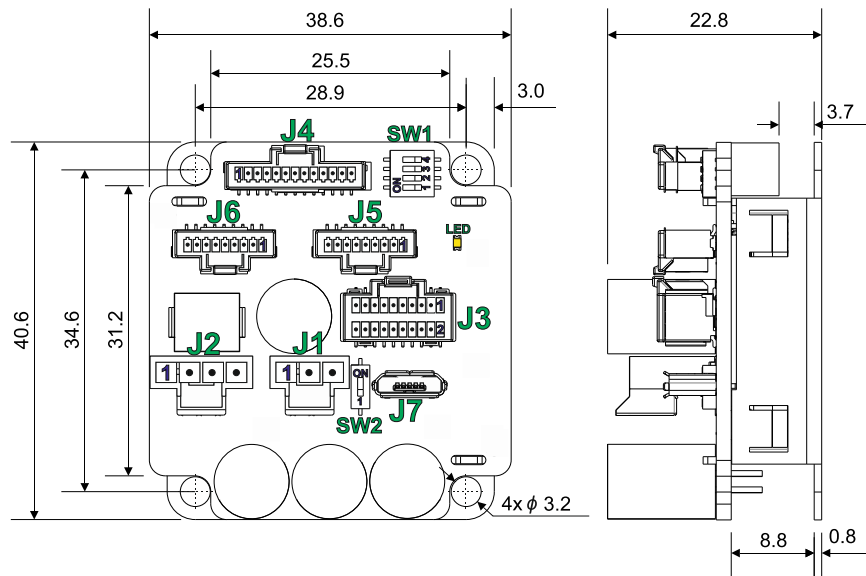




Micro 4803 CZ-CAN DATASHEET P/N: P020.801.E202



All dimensions are in mm. Drawing not to scale.

Motor – sensor configurations			
Sensor	Motor		
	PMSM	BLDC	DC BRUSH
Incr. Encoder	Ⓢ		Ⓢ
Incr. Encoder + Dig. Hall	Ⓢ	Ⓢ	
Linear Halls	Ⓢ		
Digital Halls control only	Ⓢ		
SSI / BiSS-C/ EnDAT/ TAMAGAWA/ Panasonic/ Nikon / Sanyo Denki	Ⓢ	Ⓢ	Ⓢ
Tacho			Ⓢ

Mating Connectors			
Producer	Part No.	Connector	Description
Molex	1053071203	J1	1x3 Nano-Fit, 2.50mm Pitch Nano-Fit Wire-to-Board Housing, 3 circuits
Molex	1053071204	J2	1x4 Nano-Fit, 2.50mm Pitch Nano-Fit Wire-to-Board Housing, 4 circuits
Molex	5011892010	J3	2x10 Pico-Clasp, 1.00mm Pitch Pico-Clasp Wire-to-Board Housing, 20 Circuits
Molex	5013301300	J4	1x13 Pico-Clasp, 1.00mm Pitch Pico-Clasp Wire-to-Board Housing, 13 Circuits
Molex	5013300900	J5, J6	1x9 Pico-Clasp, 1.00mm Pitch Pico-Clasp Wire-to-Board Housing, 9 Circuits
Tensility International Corp	1002333	J7	USB cable, Cable USB A Male - Micro B Male, 1m, shielded, black, 9.6mm plastic width
Molex	0797582140	J1, J2	Pre-Crimped wires for Nano-Fit Cable Assembly, Nano-Fit Crimp Terminal Socket to Nano-Fit Crimp Terminal Socket, 300mm
Molex	0797581019	J3, J4, J5, J6	Pre-Crimped wires for Pico-Clasp Cable Assembly, Pico-Clasp Crimp Terminal Socket to Pico-Clasp Crimp Terminal Socket, 300mm
Molex	1053001400	J1, J2	Pins for Nano-Fit Nano-Fit Crimp Terminal, Female, 0.76µm Gold (Au) Plating, Lubricated, 24-26 AWG
Molex	5011937000	J3, J4, J5, J6	Pins for Pico-Clasp 1.00mm Pitch, Pico-Clasp Female Crimp Terminal, Gold Plating 0.10µm, 28-32 AWG, Reel
Molex	638276000	J1, J2	Crimp tool Nano Fit Crimp Tool, Ratchet, Molex Nano-Fit 105300 Series 26-24AWG Socket Contacts, 207129 Series
Molex	638191500	J3, J4, J5, J6	Crimp tool Pico-Clasp Crimp Tool, Ratchet, Molex Pico-Clasp 501193 & 501334 Series 32-28AWG Contacts

Features
<ul style="list-style-type: none"> ▪ Motion controller and drive in a single compact unit based on MotionChip™ technology
<ul style="list-style-type: none"> ▪ Universal solution for control of rotary and linear brushless and brushed motors;
<ul style="list-style-type: none"> ▪ Advanced motion control capabilities (CSP, PVT, S-curve, electronic gearing and cam)
<ul style="list-style-type: none"> ▪ Motor supply: 48V nominal
<ul style="list-style-type: none"> ▪ Motor output current: <ul style="list-style-type: none"> ▪ Nominal: 4A_{RMS} / 5.6A amplitude nominal; ▪ Peak: 10A_{RMS} / 14A amplitude peak.
<ul style="list-style-type: none"> ▪ Logic supply: 24V nominal, 48V max
<ul style="list-style-type: none"> ▪ Feedback Options (1x Hall sensors + 2x encoders) <ul style="list-style-type: none"> ▪ 1 x Hall sensor interface (digital or linear)
<ul style="list-style-type: none"> ▪ 1st feedback devices supported: <ul style="list-style-type: none"> ▪ Incremental A / B (index Z available only for 1 encoder): differential or single-ended ▪ Absolute: differential or single-ended encoder. Supported protocols: SSI, BiSS, EnDAT, TAMAGAWA, Panasonic, Nikon, Sanyo Denki
<ul style="list-style-type: none"> ▪ 2nd feedback devices supported: <ul style="list-style-type: none"> ▪ Incremental encoder interface (differential) ▪ Absolute differential encoder. Supported protocols: SSI, BiSS, EnDAT, TAMAGAWA, Panasonic, Nikon, Sanyo Denki
<ul style="list-style-type: none"> ▪ 1 x analogue input software selectable: 12-bit 0-5V or ±10V: Reference, Feedback or general purpose
<ul style="list-style-type: none"> ▪ 3 x digital inputs: 2 for limit switches + one Enable, NPN, pull-to-GND to activate, pull-up on-board to +5V. Pull to GND to activate
<ul style="list-style-type: none"> ▪ 3 x configurable I/Os, each software selectable as: <ul style="list-style-type: none"> ▪ Digital input, NPN, with pull-up on-board to +5V. Pull to GND to activate; ▪ Digital output, NPN (open-collector), with pull-up on-board to +5V. Sink current: 1 x 1.5A to drive inductive loads (such as mechanical brake), 2 x 0.1A.
<ul style="list-style-type: none"> ▪ RS-232 serial & USB & TMLCAN and CANopen (CiA 301 v4.2, CiA 305 v.2.2.13 and CiA 402 v3.0) protocols
<ul style="list-style-type: none"> ▪ Operating ambient temperature: 0-40°C (over 40°C with de-rating)
<ul style="list-style-type: none"> ▪ Programmable protections: any short-circuit between motor phases, GND and/or supply, over/under-voltage, over-current, I²t, control error
<ul style="list-style-type: none"> ▪ >99% voltage efficiency

Name ALN	First edition February 16, 2023	Document template: P099.TQT.564.0001	Last edition August 20, 2024	Visa: AS
		Title of document Micro 4803 CZ-CAN PRODUCT DATA SHEET	N° document P020.801.E202.10F.DSH	
			Page: 1 of 5	



Micro 4803 CZ-CAN DATASHEET P/N: P020.801.E202

Pin	Name	Type	Description
J1	1	+Vmot	I Positive terminal of the motor supply: 7 to 48 V _{DC} .
	2	GND	- Ground return.
	3	+Vlog	I Positive terminal of the logic supply input: 6 to 48 V _{DC} .

Pin	Name	Type	Description
J2	1	A	O Phase A for 3-ph motors, Motor+ for DC brush motors.
	2	B	O Phase B for 3-ph motors, Motor- for DC brush motors.
	3	C	O Phase C for 3-ph motors.
	4	GND	- Ground return.

Pin	Name	Type	Description
J4	1	232TX	O RS-232 Data Transmission.
	2	232RX	I RS-232 Data Reception.
	3	GND	- Ground return.
	4	+Vlog	I Positive terminal of the logic supply input: 6 to 48 V _{DC} .
	5	IN2/LSP	I 5-60V digital NPN input. Positive limit switch input.
	6	IN3/LSN	I 5-60V digital NPN input. Negative limit switch input.
	7	I/O0	I/O 5-50V NPN general-purpose digital programmable input IN0 / or NPN 1.5A output OUT0.
	8	I/O1	I/O 5-50V NPN general-purpose digital programmable input IN1 / or NPN 0.1A output OUT1.
	9	I/O4	I/O 5-50V NPN general-purpose digital programmable input IN4 / or NPN 0.1A output OUT4.
	10	IN5/Enable	I 5-60V digital NPN input. Drive Enable input.
	11	GND	- Ground return.
	12	AnalogIn	I Analog input (range software selectable 0-5V or ±10V)
	13	+5V	O Supply for all feedback sensors.

Pin	Name	Type	Description
J3	1	GND	- Ground return.
	2	Hall1 / LH1	I Digital Hall, or Linear Hall sensor 1.
	3	+5V	O 5V supply for all feedback sensors.
	4	Hall2 / LH2	I Digital Hall, or Linear Hall sensor 2.
	5	+5V	O 5V supply for all feedback sensors.
	6	Hall3 / LH3	I Digital Hall, or Linear Hall sensor 3.
	7	EncA1+/EncA1 Dt1+/Dt1	I Encoder 1 A / Data+; set SW1 pin 1 for differential.
	8	GND	- Ground return.
	9	EncA1-/Dt1-	I Encoder 1 A-/Data- diff. input.; set SW1 pin 1 for differential.
	10	+5V	O 5V supply for all feedback sensors.
	11	EncB1+/EncB1 Clk1+/Clk1	I Encoder 1 B+ / Clock positive; set SW1 pin 2 for differential.
	12	EncA2+/EncA2 Dt2+/Dt2	I Incr. encoder 2 A+ diff. input, or Pulse+, or Data+ for SSI, or Slave+ for BiSS; has 120Ω resistor between pins 12 and 14.
	13	EncB1/ Clk1-	I Encoder 1 B- / Clock- diff. input.; set SW1 pin 2 for differential.
	14	EncA2-/Dt2-	I Incr. encoder 2 A- diff. input, or Pulse-, or Data- for SSI, or Slave- for BiSS; has 120Ω resistor between pins 12 and 14.
	15	Z1+	I Incr. encoder 1 Z single-ended or Z+ diff. input; set SW1 pin 3 for differential.
	16	EncB2+/EncB2 Clk2+/Clk2	I/O Incr. encoder 2 B+ diff. input, or Dir+, or Clock+ for SSI, or Master+ for BiSS; has internal 120Ω resistor between pins 16 and 18.
	17	Z1-	I Leave open for single-ended; set SW1 pin 3 for differential.
	18	EncB2-/ Clk2-	I Incr. encoder 2 B- diff. input, or Dir-, or Clock- for SSI, or Master- for BiSS; has internal 120Ω resistor between pins 16 and 18.
	19	GND	- Ground return.
	20	+Vlog	I Positive terminal of the logic supply: 6 to 48 V _{DC} .

Pin	Name	Type	Description
J5 - CAN	1	GND	- Ground return.
	2	CAN Lo	- CAN-Bus negative line (dominant low)
	3	CAN Hi	- CAN-Bus positive line (dominant high)
	4...9	Rsvd	- Reserved. Do not connect.

Pin	Name	Type	Description
J6 - CAN	1	GND	- Ground return.
	2	CAN Lo	- CAN-Bus negative line (dominant low)
	3	CAN Hi	- CAN-Bus positive line (dominant high)
	4...9	Rsvd	- Reserved. Do not connect.

Pin	Name	Type	Description
J7 - USB	1	+V USB	I USB supply.
	2	USB DM	I/O USB data-.
	3	USB DP	I/O USB data+.
	4	Rsvd	- Reserved. Do not connect.
	5	GND	- Ground return.
	6	SHELL	- Internally connected to pin 5 of J7.

SW1 – Axis ID and Feedback Resistors selection

Position	Description
1	ON = Connect an 120Ω resistor between EncA1-/Dt1- and EncA1+/EncA1/Dt1+/Dt1 feedback pins.
2	ON = Connect an 120Ω resistor between EncB1/Clk1- and EncB1+/EncB1/Clk1+/Clk1 feedback pins.
3	ON = Connect an 120Ω resistor between Z1- and Z1+ feedback pins. ON = AxisID is set as 1
4	OFF = AxisID is set as 255. If the CANOpen mode is selected (SW2 pin 1 is OFF) and the AxisID value is 255, drive will be in "LSS inactive" state.

SW2 – CANOpen / TMLCAN selection

1	ON = TMLCAN mode is selected OFF = CANOpen mode is selected
---	--

LED

The LED (yellow) shows the status of the drive that its logic is supplied

Electrical characteristics

All parameters measured under the following conditions (unless otherwise specified):

- V_{LOG} = 24 VDC; V_{MOT} = 48VDC; F_{PWM} = 20 kHz
- Supplies start-up / shutdown sequence: -any-
- Load current (sinusoidal amplitude) = 5.6A

Operating Conditions		Min.	Typ.	Max.	Units
Ambient temperature		0		40 ¹	°C
Ambient humidity	Non-condensing	0		90	%Rh
Altitude / pressure ²	Altitude (vs. sea level)	-0.1	0 ÷ 2.5	²	Km
	Ambient Pressure	0 ²	0.75 ÷ 1	10.0	atm
Storage Conditions		Min.	Typ.	Max.	Units
Ambient temperature		-40		100	°C
Ambient humidity	Non-condensing	0		100	%Rh
Ambient Pressure		0		10.0	atm
ESD capability (Human body model)	Not powered; applies to any accessible part			±0.5	kV
	Original packaging			±15	kV
Mechanical Mounting		Min.	Typ.	Max.	Units
Airflow				natural convection ³ , closed box	
Spacing required for horizontal mounting	Between adjacent drives		10		mm
	Between drives and nearby walls		10		mm
	Space needed for drive removal		20		mm
	Between drives and roof-top		30		mm
Insertion force	Using recommended mating connectors		20		N
Extraction force			8		N

¹ Operating temperature at higher temperatures is possible with reduced current and power ratings

² Micro 4803 can be operated in vacuum (no altitude restriction), but at altitudes over 2,500m, current and power rating are reduced due to thermal dissipation efficiency.

³ In case of forced cooling (conduction or ventilation) the spacing requirements may drop substantially down to zero as long as the ambient temperature is kept below the maximum operating limit

Name ALN	First edition February 16, 2023	Document template: P099.TQT.564.0001	Last edition August 20, 2024	Visa: AS
		Title of document Micro 4803 CZ-CAN PRODUCT DATA SHEET	N° document P020.801.E202.10F.DSH	
				Page: 2 of 5



Micro 4803 CZ-CAN DATASHEET P/N: P020.801.E202

Environmental Characteristics		Min.	Typ.	Max.	Units
Size (Length x Width x Height)	Global size	40.6 x 38.6 x 22.8			mm
Weight		~1.6 x 1.5 x 0.9			inch
Cleaning agents	Dry cleaning is recommended	Only Water- or Alcohol- based			
Protection degree	According to IEC60529	IP20			-
Logic Supply Input (+V _{LOG})		Min.	Typ.	Max.	Units
Supply voltage	Nominal values	6	24	48	V _{DC}
	Absolute maximum values, drive operating but outside guaranteed parameters	4.9		60	V _{DC}
	Absolute maximum values, continuous	-0.5		63	V _{DC}
Supply current	+V _{LOG} = 12V		90	150	mA
	+V _{LOG} = 24V		60	90	
	+V _{LOG} = 48V		45	60	
Voltage Measurement	Total error			1.5	%
Utilization category	Acc. to 60947-4-1 (I _{PEAK} ≤ 1.05 * I _{NOM})	DC-1			
Motor Supply Input (+V _{MOT})		Min.	Typ.	Max.	Units
Supply voltage	Nominal values	7		48	V _{DC}
	Absolute maximum values, drive operating but outside guaranteed parameters	6		60	V _{DC}
	Absolute maximum values, continuous	-0.5		63	V _{DC}
Supply current	Idle		25		mA
	Operating	-15	±3	+15	A
	Absolute maximum value, short-circuit condition (Duration ≤ 10ms) †			16.5	A
Voltage Measurement	Total error			1.5	%
Utilization category	Acc. to 60947-4-1 (I _{PEAK} ≤ 4.0 * I _{NOM})	DC-3			
Motor Outputs (A/A+, B/A-, C)		Min.	Typ.	Max.	Units
Nominal current	PMSM motors sinusoidal amplitude			5.6	A
	PMSM motors sinusoidal RMS			4	A _{RMS}
	DC/BLDC motors continuous			4.85	A
Peak current	maximum 2.5s	-14		+14	A
Short-circuit protection threshold		±16.5		±18	A
Short-circuit protection delay		2		4	µs
On-state voltage drop	Nominal output current; including typical mating connector contact resistance		0.1		V
Off-state leakage current			0.3	1	mA
Voltage Efficiency			92		%
Motor inductance (phase-to-phase)	Recommended value, for current ripple max. ±5% of full range; +V _{MOT} = 48 V	F _{PWM}			
		20 kHz		900	µH
		40 kHz		480	
		60 kHz		320	
		80 kHz		240	
	100 kHz		200		
	Minimum value, limited by short-circuit protection; +V _{MOT} = 48 V	20 kHz		270	µH
		60 kHz		150	
		40 kHz		100	
		80 kHz		80	
100 kHz			60		
Motor electrical time-constant (L/R)	Recommended value for ±5% current measurement error	20 kHz		330	µs
		40 kHz		170	
		60 kHz		140	
		80 kHz		80	
		100 kHz		66	
Current measurement	FS = Full Scale accuracy		±2	±3	%FS
Supply Output (+5V)		Min.	Typ.	Max.	Units
Output voltage	Current sourced = 400mA	5.05	5.2	5.25	V
Output current ¹		650			mA
	24V motor		800		
Short-circuit to GND protection		Yes / Drive resets at event			
Over-voltage protection		NOT protected			
ESD protection	Human body model	±1			KV

Digital Inputs (IN0, IN1, IN2/LSP, IN3/LSN, IN4, IN5/ENA)		Min.	Typ.	Max.	Units	
Mode compliance		NPN				
Default state	Input floating (wiring disconnected)	Logic HIGH				
Input voltage	Logic "LOW"		1.4	1.8	V	
	Logic "HIGH"	IN0, IN1, IN4, IN5/ENA	3.1	2.5		
	Hysteresis		0.9	1.1		
	Logic "LOW"	IN2/LSP, IN3/LSN		1.4		
	Logic "HIGH"		4	3.5		
	Hysteresis			0.6		
Input current	Floating voltage (not connected)		4.5			
	Absolute maximum, continuous	-5		+5		
	Logic "LOW"; Pulled to GND		9	10		
Input frequency		0		500	kHz	
Minimum pulse		1			µs	
ESD protection	Human body model	±2			kV	
Digital Outputs (OUT0, OUT1, OUT4)		Min.	Typ.	Max.	Units	
Mode compliance	All outputs (OUT0, OUT1, OUT4)	NPN 24V				
Default state	Not supplied (+V _{LOG} floating)	High-Z (floating)				
Default state	Immediately after power-up	Logic "HIGH"				
Output voltage	Logic "LOW"; output current = 1.5A for OUT0/0.05A for the other digital outputs			0.4	V	
	Logic "HIGH"; output current = 0, no load	4	4.5	5		
	Logic "HIGH", external load to +V _{LOG}		V _{LOG}			
	Absolute maximum, continuous (free-wheeling diodes to +V _{LOG} to GND)	-0.5		V _{LOG} +0.5		
	Absolute maximum, surge (duration ≤ 1s) †	-1		V _{LOG} +1		
Output current	Logic "LOW", sink current, short duration, duty cycle ≤ 1%	5s max		0.1	A	
				2		
		0.5s max		0.15		
	Logic "HIGH", source current; external load to +V _{LOG} ; V _{OUT} = 2.0V			5	mA	
		Logic "HIGH", leakage current; external load to +V _{LOG} ; V _{OUT} = V _{LOG} max = 40V		0.05		0.1
Minimum pulse width		0.5			µs	
ESD protection	Human body model	±15			kV	
Encoder Inputs (A+, A-, B+, B-, Z+, Z-, A2+, A2-, B2+, B2-) ²		Min.	Typ.	Max.	Units	
Single-ended mode compliance	Leave A1-, B1-, Z1-, A2-, B2- floating	TTL/CMOS/Open-collector (NPN)				
Single-ended threshold	A1+, B1+, Z1+, A2+, B2+	1.2	1.3	1.5	V	
Single-ended input current	Input pulled to GND against on-board 2.2 KΩ pull-up to 5V		2.2	2.5	mA	
Differential mode compliance	For full RS422 compliance, see ²	TIA/EIA-422-A				
Input voltage	Hysteresis	±0.03	±0.05	±0.2	V	
	Differential mode	-15		+15		
	Common-mode range (A+ to GND, etc.)	-7		+12		
Input impedance, differential	A+, A2+, B+, B2+, Z+, Z2+ A-, A2-, B-, B2-, Z-, Z2-		2.2		kΩ	
Input frequency	Differential mode	0		15	MHz	
Minimum pulse width	Differential mode	33			ns	
ESD protection	Human body model	±30			kV	

¹ For more details see the "Current de-rating with +5V output current" graph

² Full RS-422 compatibility, as well as noise rejection improvement the setting of SW1 pins 1, 2, 3 for each signal pair (A1+/A1-, B1+/B1-, Z1+/Z1-) is needed

Name ALN	First edition February 16, 2023	Document template: P099.TQT.564.0001	Last edition August 20, 2024	Visa: AS
		Title of document Micro 4803 CZ-CAN PRODUCT DATA SHEET	N° document P020.801.E202.10F.DSH	
			Page: 3 of 5	



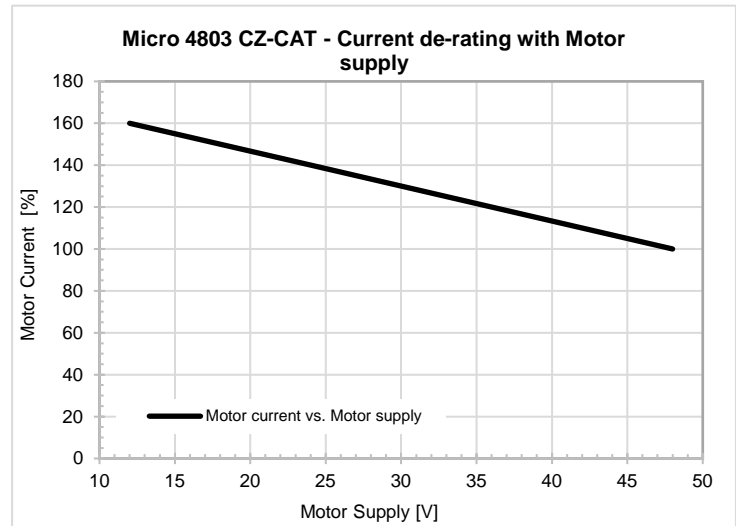
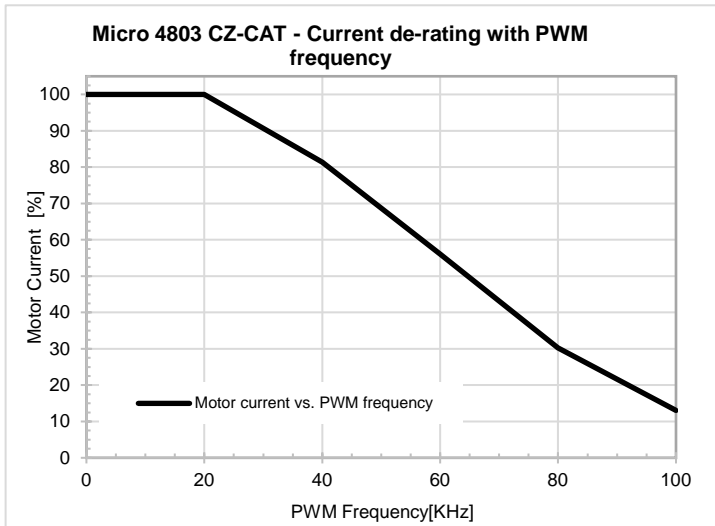
Micro 4803 CZ-CAN DATASHEET

P/N: P020.801.E202

Hall Inputs (Hall1, Hall2, Hall3)		Min.	Typ.	Max.	Units
Mode compliance TTL / CMOS / Open-collector (NPN sink), or analog (linear) 0...5V					
Default state	Input floating (Wiring disconnected)	4.5	4.7	5	V
Input voltage	Digital	Logic "LOW"	1.5	1.7	
		Logic "HIGH"	3	2.5	
	Hysteresis	0.5			
	Analog	0	0.5...4.5	4.95	
Input current	Logic "LOW"; Pull to GND		2.3		mA
	Logic "HIGH"; Internal 2.2KΩ pull-up to 5V		0		
Minimum pulse width			70		μs
ESD protection	Human body model		±15		kV
RS-232		Min.	Typ.	Max.	Units
Compliance TIA/EIA-232-C					
Bit rate	Software selectable	9600		115200	Baud
Short-circuit	232TX short to GND	Guaranteed			
ESD protection	Human body model	±2			kV
	Human body model	±1			kV
Absolute encoder interface:					
SSI, BiSS-C, EnDAT, Tamagawa, Nikon, Sanyo Denki					
		Min.	Typ.	Max.	Units
Differential mode (CLOCK, DATA)	For full RS422 compliance, see ¹	TIA/EIA-422-A			
CLOCK (DATA) Output voltage	Differential; 50Ω differential load	1.5	3.3		V
	Common-mode, referenced to GND	1	1.7	3	
CLOCK frequency	Software selectable	1000, 2000, 3000, 4000			kHz
CLOCK (DATA) Short-circuit protection	Common-mode voltage ±15V	Yes, protected			
DATA format	Software selectable	Binary / Gray			
		Single-turn / Multi-turn			
		Counting direction			
		CRC type			
DATA resolution	Single-turn			56	Bits
	Multi-turn and single-turn			56	
If total resolution >31 bits, some bits must be ignored by software setting to achieve a max 31 bits resolution					

Analog Inputs (REF, FDBK)					
0...5V Mode		Min.	Typ.	Max.	Units
Input voltage	Operational range	0		4.95	V
	Absolute maximum values, continuous	-12		+18	
	Absolute maximum, surge (duration ≤ 1s)			±36	
Input impedance	To 1.447V		20		kΩ
Resolution			12		bits
Integral linearity				±2	bits
Offset error			±2	±10	bits
Gain error			±1%	±3%	% FS ²
Bandwidth (-3dB)	Software selectable	0		1.5	kHz
ESD protection	Human body model		±2		kV
±10V Mode		Min.	Typ.	Max.	Units
Differential voltage range			±10		V
Common-mode voltage range	Referenced to GND	-12	0...10	+50	V
Input impedance	To 1.447V		20		kΩ
Resolution			12		bits
Integral linearity				0.036	%FS ²
Offset error	Common-mode voltage = 0...10 V		±0.2	±0.5	%FS ²
Gain error			±0.5	±3	%FS ²
Bandwidth (-3dB)	Software selectable	0		5.5	kHz
CAN-Bus		Min.	Typ.	Max.	Units
Compliance ISO11898, CiA-301v4.2, CiA 305 v2.2.13, 402v3.0					
Bit rate	Software selectable	125		1000	Kbps
Bus length	1Mbps			25	m
	500Kbps			100	
	≤ 250Kbps			250	
Resistor	Between CAN-Hi, CAN-Lo	none on-board			
Node addressing	Hardware: by SW1	1 & 255			TMLCAN
	Software	1 ÷ 127 (CANopen); 1- 255 (TMLCAN)			
Voltage, CAN-Hi or CAN-Lo to GND		-58		+58	V
Voltage, CAN-Hi to CAN-Lo		-45		+45	V
ESD protection	Human body model		±15		kV

[†] Stresses beyond values listed under "absolute maximum ratings" may cause permanent damage to the device. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability



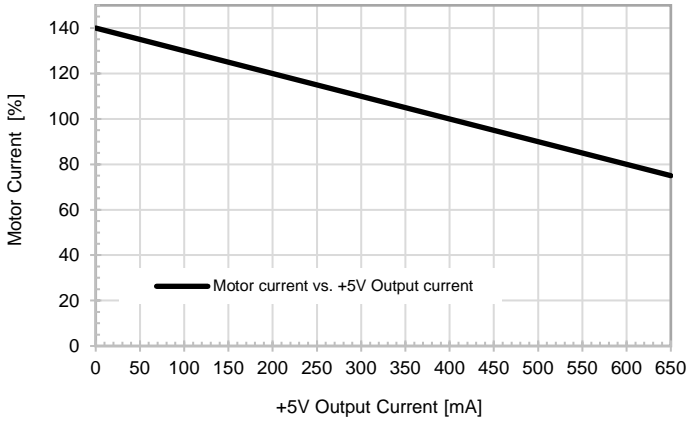
¹ Full RS-422 compatibility, as well as noise rejection improvement the setting of SW1 pins 1, 2, 3 for each signal pair (A1+/A1-, B1+/ B1-, Z1+/Z1-) is needed

² "FS" stands for "Full Scale"

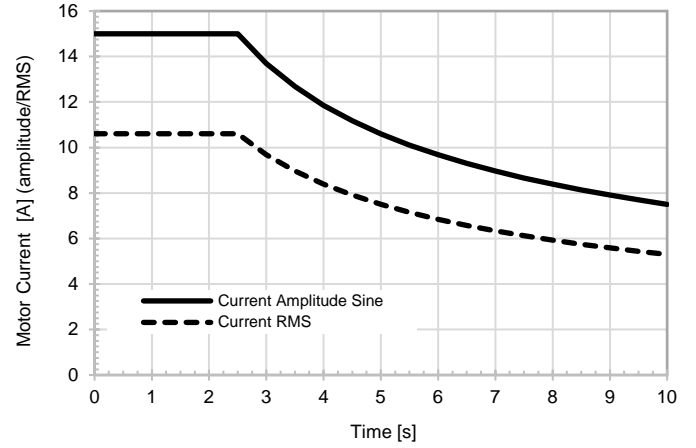
Name ALN	First edition February 16, 2023	Document template: P099.TQT.564.0001	Last edition August 20, 2024	Visa: AS
		Title of document Micro 4803 CZ-CAN PRODUCT DATA SHEET	N° document P020.801.E202.10F.DSH	
			Page: 4 of 5	



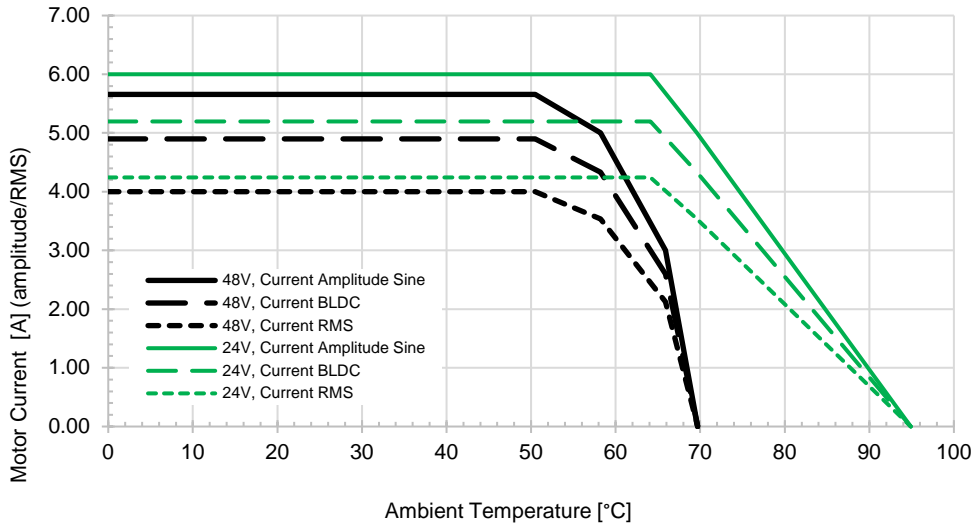
Micro 4803 CZ-CAT - Current de-rating with +5V output current



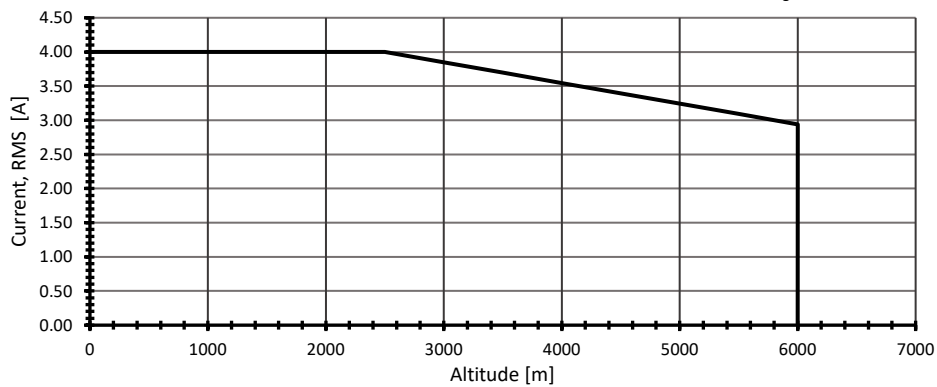
Micro 4803 CZ-CAT - Peak current vs. Time



Micro 4803 CZ-CAT - Current de-rating with ambient temperature



Micro 4803 CZ-CAN - Derating with altitude



Name ALN	First edition February 16, 2023	Document template: P099.TQT.564.0001	Last edition August 20, 2024	Visa: AS
		Title of document Micro 4803 CZ-CAN PRODUCT DATA SHEET	N° document P020.801.E202.10F.DSH	
			Page: 5 of 5	