



Safety controllers
Motion Control module, Speed Monitor

MOC3SA-AAB43D31



Model Name > [MOC3SA-AAB43D31](#)
Part No. > [6034245](#)



At a glance

- Zero-speed and drive monitoring
- 4 safe semiconductor outputs
- PL e (EN ISO 13849), SIL3 (IEC 61508), SILCL3 (EN 62061)
- Maximum input frequency of 2 kHz
- Adjustable monitoring limit/monitoring frequency from 0.1 to 9.9 Hz or 0.5 to 99 Hz
- 2 application diagnostic outputs for failure and status display
- Diagnostic LEDs

Your benefits

- Easy commissioning - using only a screwdriver - reduces installation time
- Tool backup using the Flexi Soft Designer and the Flexi Classic Configurator
- Additional HTL encoder evaluation
- Cascading of units is possible



Safety-related parameters

Safety integrity level:	SIL3 (IEC 61508) SILCL3 (EN 62061)
Performance level:	PL e (EN ISO 13849-1)
PFHd:	5.0 * 1E-09 (EN ISO 13849)
TM (mission time):	20 a (EN ISO 13849)
Safe state in the event of a fault:	The safety-related semiconductor outputs are in the OFF state.
Stop category:	0 (EN 60204)

Functions

Standstill:	✓
Safe speed monitoring (SSM):	✓
Safe limited speed (SLS):	✓
Selectable speed limit:	0.1 Hz ... 9.9 Hz
Type of parameterization:	Screwdriver

Mechanical data

Dimensions (W x H x D):	22.5 mm x 96.5 mm x 121 mm
Weight:	180 g

Electrical data

Protection class:	III (EN 61140)
Supply voltage:	24 V DC (19.2 V DC ... 30 V DC)
Residual ripple:	$\leq 10\%$ ¹⁾
Power consumption:	$\leq 3\text{ W}$
Input frequency:	$< 2\text{ kHz}$
Input voltage HIGH:	13 V ... 30 V
Input voltage LOW:	-5 V ... 5 V
Type of output application diagnostic output:	PNP semiconductor, short-circuit protected
Output voltage:	18.4 V DC ... 30 V DC

¹⁾ Within the limits of V_S

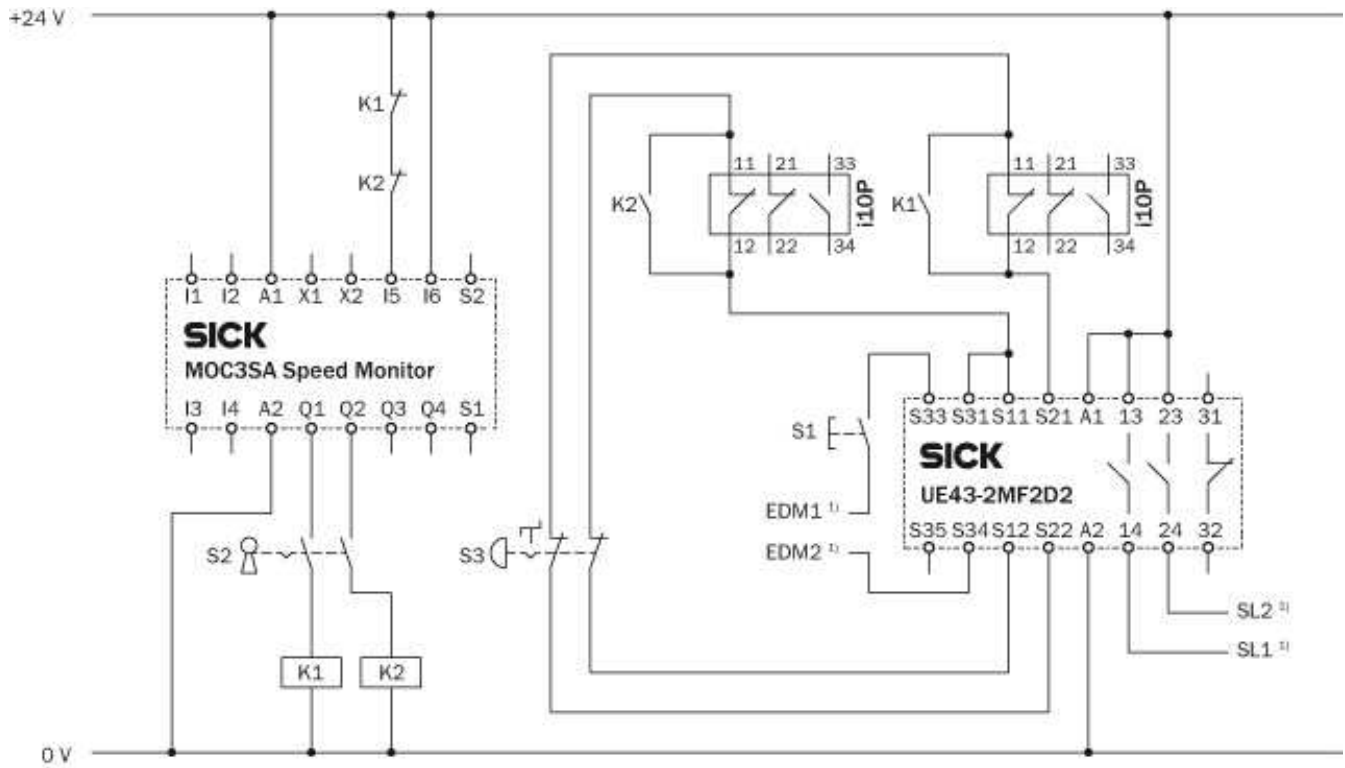
Interfaces

Electrical connection:	Screw-type terminals
Number of safety inputs:	4 (I1 - I4)
Number of safe outputs:	4 (Q1 - Q4)
Number of application diagnostic outputs:	2 (X1, X2)
Encoder interface:	A/B incremental encoder, HTL Proxy

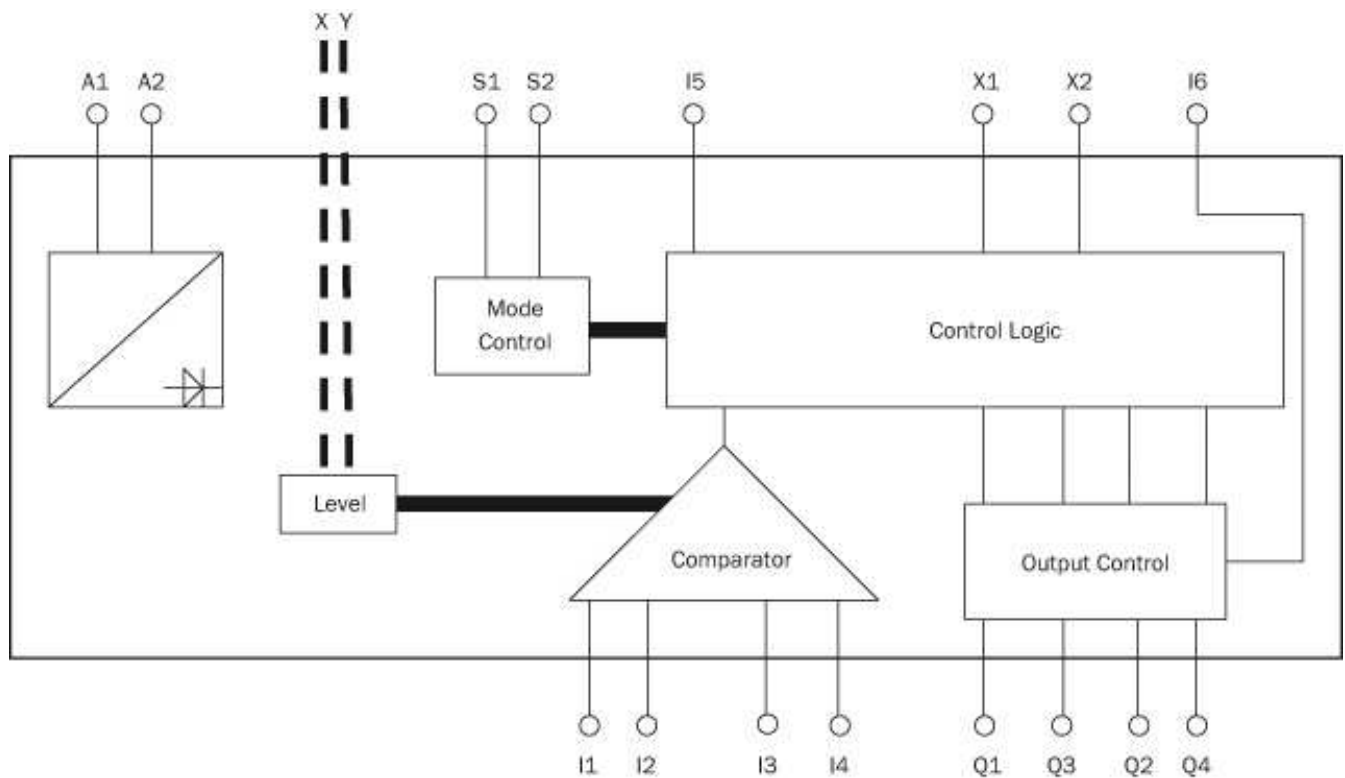
Ambient data

Protection class housing:	IP 40 (EN 60529)
Enclosure rating terminals:	IP 20 (EN 60529)
Ambient operating temperature:	-25 °C ... +55 °C
Storage temperature:	-25 °C ... +70 °C
Air humidity:	10 % ... 95 %, non-condensing
Climate conditions according to:	EN 61131-2
Electromagnetic compatibility (EMC):	Class A (EN 61000-6-2, EN 55011)
Vibration resistance:	5 g RMS, 5 Hz ... 500 Hz (EN 60068-2-64)

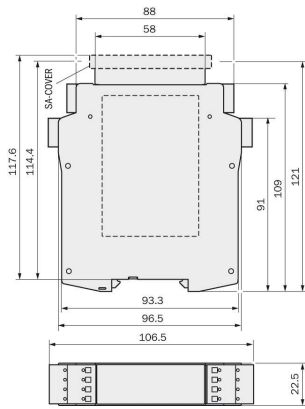
Connection diagram



Connection diagram



Dimensional drawing



Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com