

Control box CA20

Data Sheet



Contents

Introduction.....	3
Features and options	4
Usage	6
System overview.....	8
LED indicator	9
Dimension drawing	10
For side-mounting with LA27.....	11
Mounted on frame	12
Mounting bracket (frame flat)	13
Mounting bracket (frame flat) w/M4 nuts	13
Mounting of cables and cable lock.....	14
Cable management	14
Battery operation.....	15
Motor cable	15
Hand control configuration.....	15
Hand crank actuator	15
Packing.....	15
Contacts	16



Introduction



Developed primarily for the healthcare sector, the analogue control box CA20 is a compact solution optimised for flexible integration and mounting.

With built-in Switch Mode Power Supply (SMPS), the CA20 delivers 90 W with four channels and a hand control port. This lightweight control box represents value for money when applications require a simple, streamlined solution.

The CA20 has an elegant design and offers a choice of mounting options. By using screws or designated bracket, it can be attached directly to the application and on the LA27 actuator using the unique slide-on bracket.

Via inbuilt signal switches, the CA20 communicates directly with the actuator, which means that motor power is being cut off at the control box rather than the actuator is using power switches.

Features and options

Power supply	Universal, 120-240 VAC+10%/-10%, 50/60 Hz 90 W power output (SMPS) at 230 VAC
Mains indicator	Yes - Green LED (mains connected)
Actuator interface	4 channels 6-pin Mini-Fit
Hand control interface	1 port 10-pin modular plug No power for LED etc.
Battery interface	No
Standby power	Approx. 0.3 W (230 V)
Colour	Light grey (RAL 7035)
Output short-circuit protected	Yes
Control concept	Relays (no EAS protection)
Duty cycle	10% - 2/18 min. on/off continuous use at 230 V. Maximum power is 90 W for 80 seconds and 45 W for 40 seconds at 25 °C
Weight	Low weight 0.6 kg
Actuator compatibility	Standard actuators
Battery charger	No
PCP version	N/A
EOP	Yes
IP-Rating	IPX6
Housing type	V-0, ABS, welded
Operation	Simultaneous drive CH1+CH3 / CH2+CH4 (no feedback)
Max. current	5 A/CH (peak) 5 A total
Accessories	Common positive GND not accessible
Power management	Not supported
Safety system	Thermally protected Short-circuit protected
Start/stop	Not supported

Protection class	Class 2 (Class 1 w/pig tail, incl. 2 fuses)
Cable lock	Integrated in lid
Mounting	Compatible with a range of mounting brackets for bed frame. Side mounting possible with LA27.

Usage

Operation temperature	+5 °C to +40 °C
Storage temperature	-10 °C to +50 °C
Relative humidity	20% to 80% – non-condensing
Atmospheric pressure	700 to 1060 hPa
Meters above sea level	Max. 3000 meters
Approvals	IEC60601-1(TÜV)

Ordering example

C A 2 + 0 9 4 7 3 N 0 9 0 A 0

Reserved for future use

Cable (length: 3.2 m)

	Main Power Cable		Main Power Cable	Control Box Type
A	Fixed EU-Power Cable 2pin plug Class 2	F	Fixed EU-Pig tale Power Cable 3pin plug Class1	CA20
B	Fixed UK-Power Cable 2pin plug Class 2	G	Fixed UK-Pig tale Power Cable 3pin plug Class 1	CA20
C	Fixed AU-Power Cable 2pin plug Class 2	H	Fixed AU-Pig tale Power Cable 3pin plug Class 1	CA20
D	Fixed CN-Power Cable 2pin plug Class 2	I	Fixed CN-Pig tale Power Cable 3pin plug Class 1	CA20
E	Fixed US-Power Cable 2pin plug Class 2	J	Fixed US-Pig tale Power Cable 3pin plug Class 1	CA20

Options

0 None

Class

9 Class II (Without earth)

Wireless communication

0 None

Software

N None

Voltages

3 120-240VAC +10%/-10%

Power

7 90 W

Channels

4 4 Channels

IP degree

6 IPX6

H-bridge

0 Half bridge

Colour

+ RAL7035 light grey

Control Box Family

2 CA20

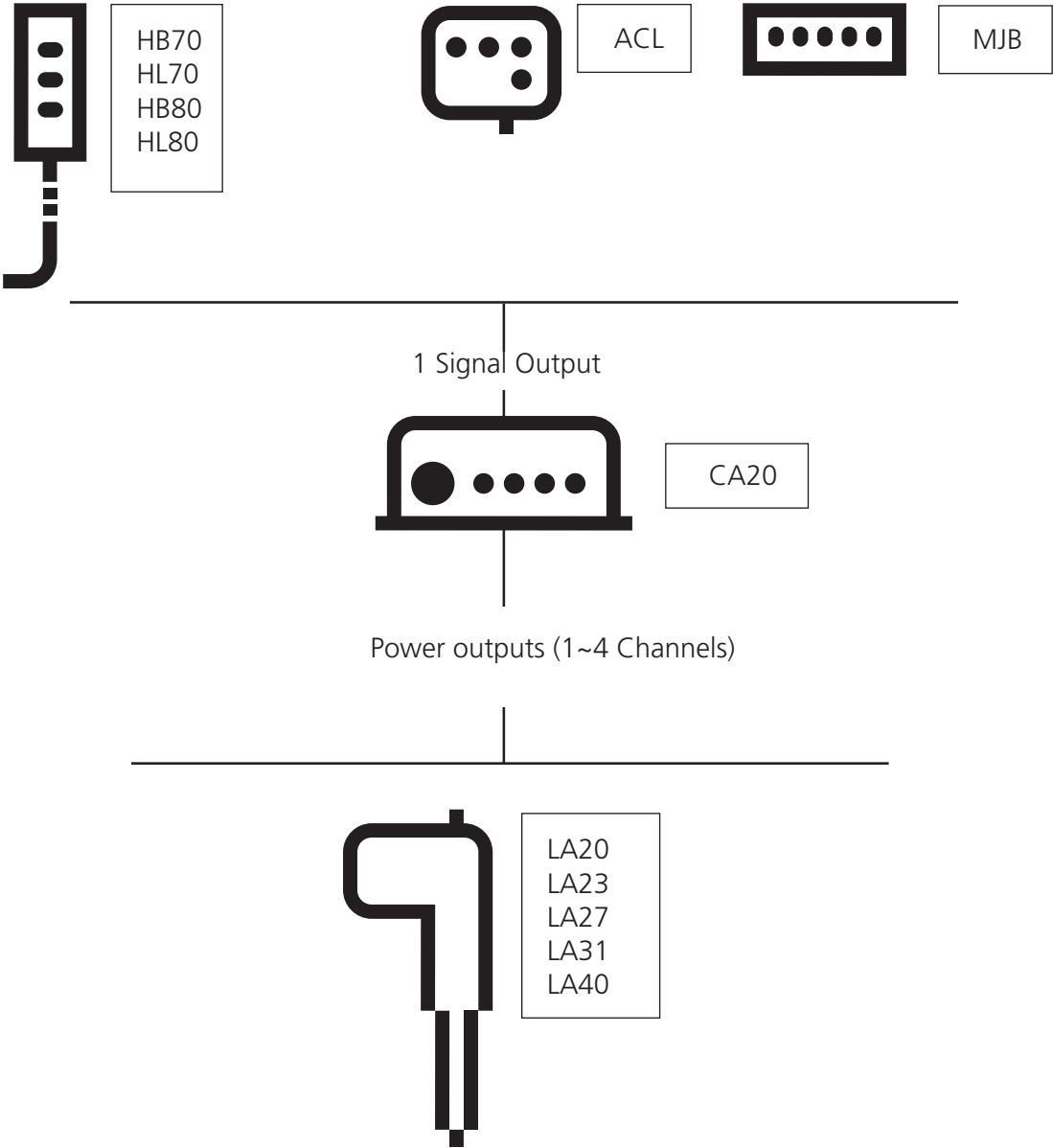
Hand control Input

A Analogue interface

Family

C Control Box

System overview

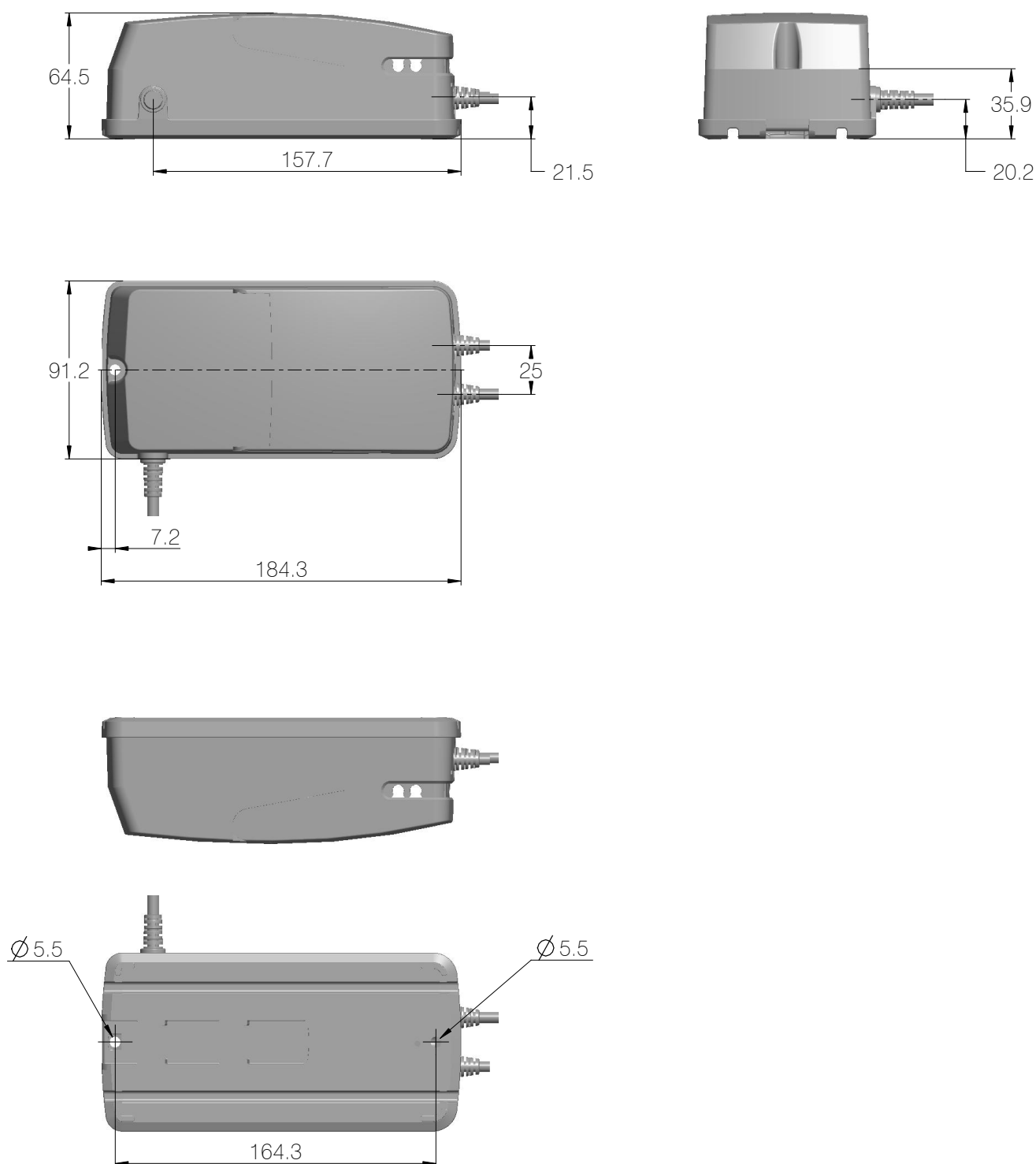


LED indicator



CA20 is equipped with a green LED for indication of mains power connected. When the CA20 is connected to mains, the LED lights green.

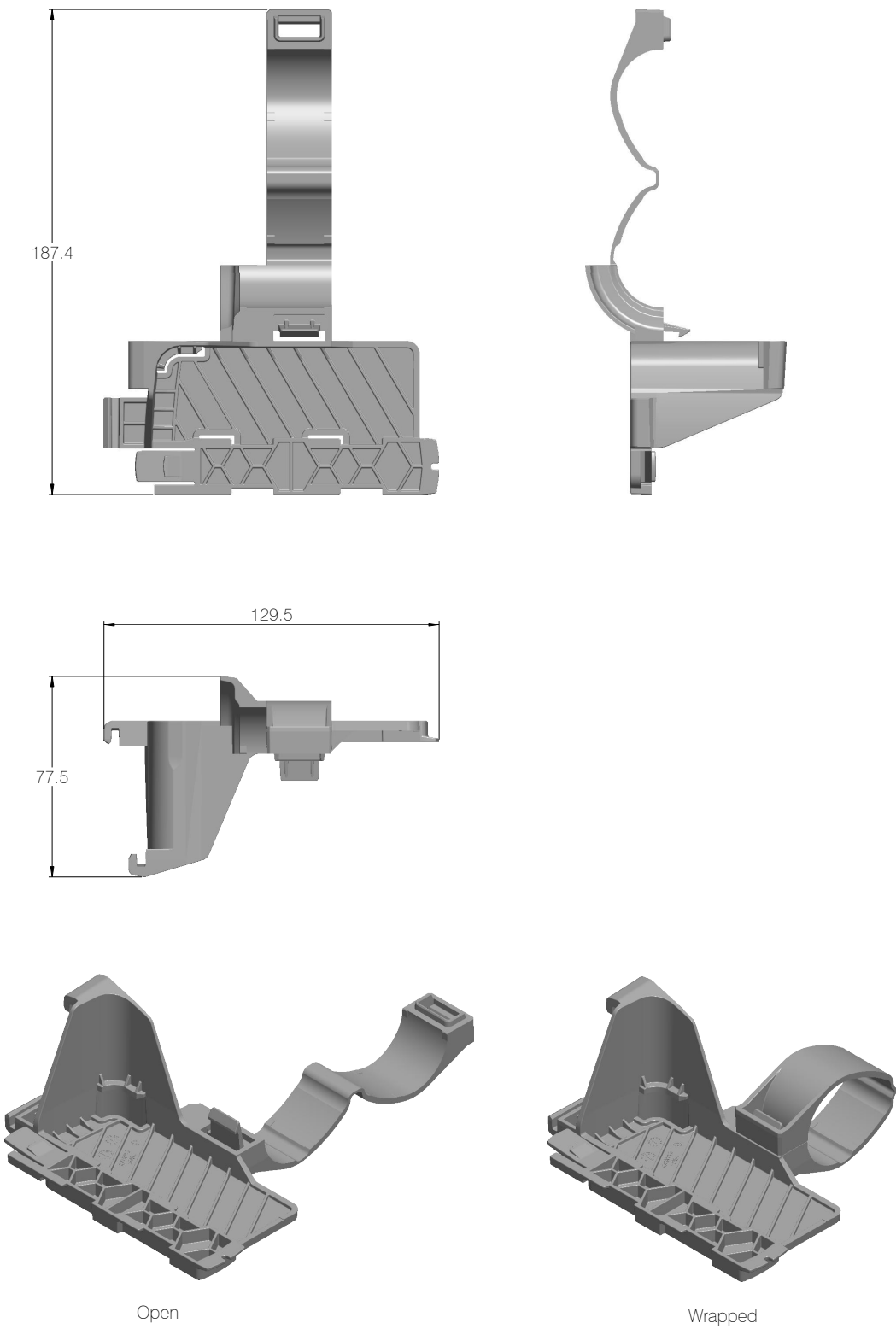
Dimension drawing



Drawing no.: 1047W4001

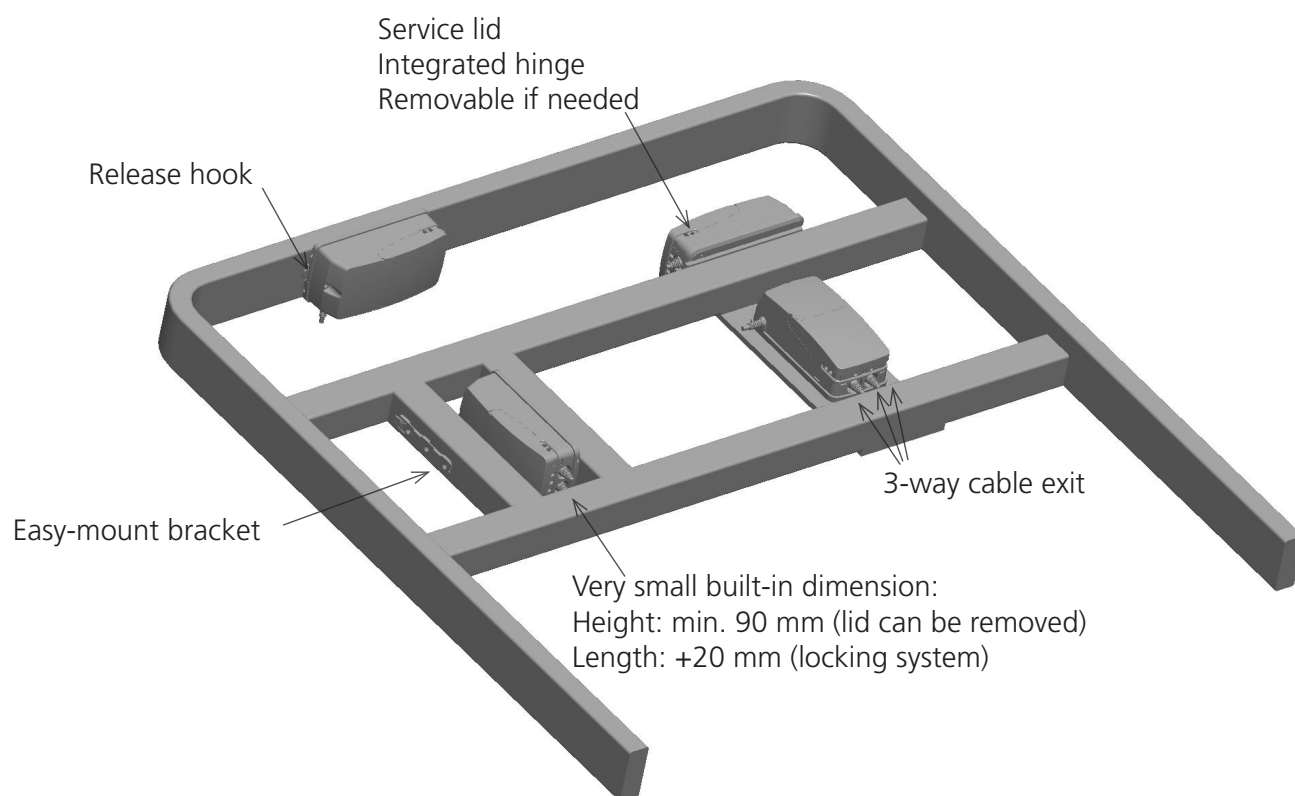
For side-mounting with LA27

Article No. 1047W1009



Drawing No: 1047W4008

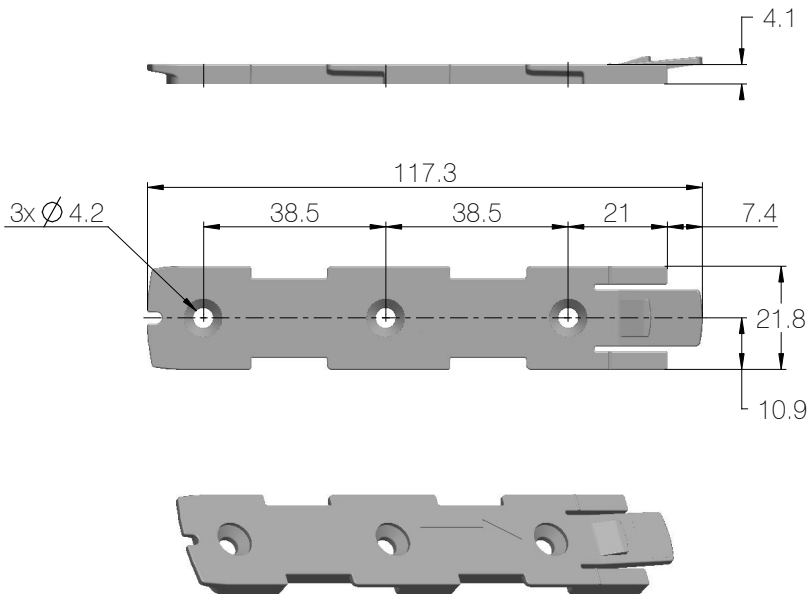
Mounted on frame



Drawing No: 1047W4011

Mounting bracket (frame flat)

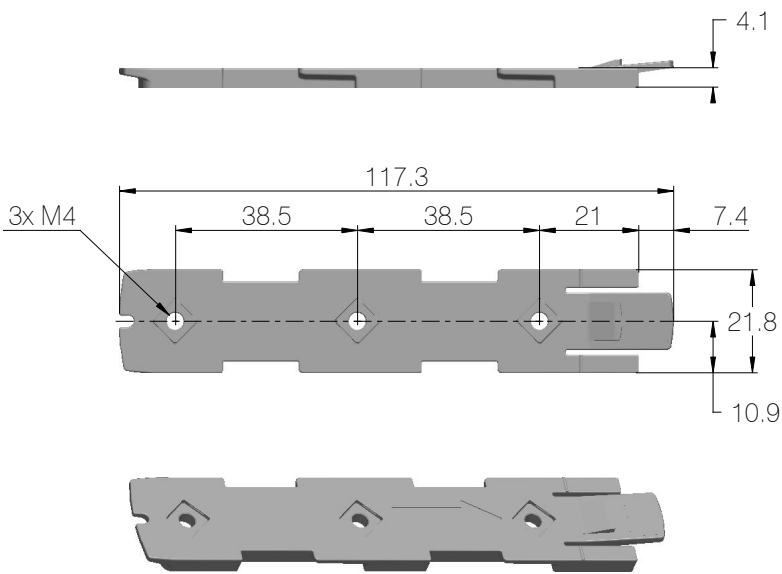
(Article No. 1015W1001)



Drawing No.: 1015W4001

Mounting bracket (frame flat) w/M4 nuts

(Article No. 1015W9009)



Drawing No.: 1015W4009

Mounting of cables and cable lock

Cable lock for actuator:

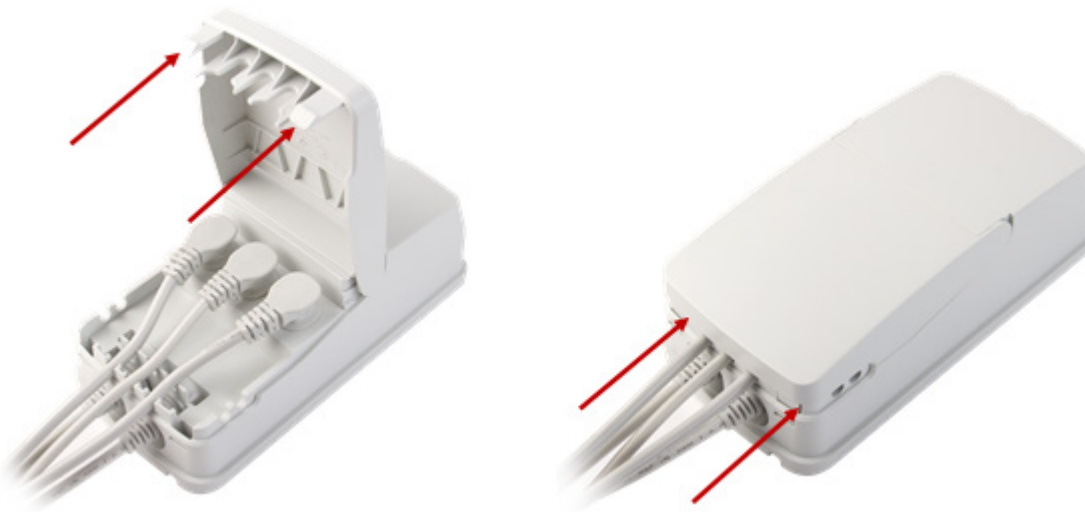
The control box CA20 has a uniquely designed cable lid. The lid also works as an integrated cable lock when closed.

1. Mount cable plugs in control box
2. Close lid until lock snaps into place (see arrows)

To allow free access to the cables, the lid has a rest position when completely opened.

It is possible to remove the lid by lifting it a few degrees and pulling it away from the housing under tight mounting conditions.

Cable management



Cable lock control port and ES port:



Battery operation

CA20 has no battery backup available.

Motor cable

Always use 6-wire Mini-Fit cables.

Please note that 3 angled motor cables are required for channel 1-3 and 1 straight motor cable for channel 4.

Hand control configuration

CA20 works with analogue hand controls with tactile switches (common positive).

Hand crank actuator

Hand cranking is not possible.

Packing

The products are packed in full-pallet boxes with 216 pcs in each.

The minimum order quantity is 432 pcs and this corresponds to 2 pallets.

Contacts

FACTORIES

Denmark - Headquarters

LINAK A/S

Phone: +45 73 15 15 15

Fax: +45 74 45 80 48

Fax (Sales): +45 73 15 16 13

Web: www.linak.com

China

LINAK (Shenzhen) Actuator Systems, Ltd.

Phone: +86 755 8610 6656

Phone: +86 755 8610 6990

Web: www.linak.cn

Slovakia

LINAK Slovakia s.r.o.

Phone: +421 51 7563 444

Web: www.linak.sk

Thailand

LINAK APAC Ltd.

Phone: +66 33 265 400

Web: www.linak.com

USA

LINAK U.S. Inc.

Americas Headquarters

Phone: +1 502 253 5595

Fax: +1 502 253 5596

Web: www.linak-us.com
www.linak-latinamerica.com

SUBSIDIARIES

Australia

LINAK Australia Pty. Ltd

Phone: +61 3 8796 9777

Fax: +61 3 8796 9778

E-mail: sales@linak.com.au

Web: www.linak.com.au

Austria

LINAK Zweigniederlassung - Österreich (Wien)

Phone: +43 (1) 890 7446

Fax: +43 (1) 890 744615

E-mail: info@linak.de

Web: www.linak.at - www.linak.hu

Belgium

LINAK Actuator-Systems NV/SA

(Belgium & Luxembourg)

Phone: +32 (0)9 230 01 09

E-mail: beinfo@linak.be

Web: www.linak.be - www.fr.linak.be

Brazil

LINAK Do Brasil Comércio De Atuadores Ltda.

Phone: +55 (11) 2832 7070

Fax: +55 (11) 2832 7060

E-mail: info@linak.com.br

Web: www.linak.com.br

Canada

LINAK Canada Inc.

Phone: +1 502 253 5595

Fax: +1 416 255 7720

E-mail: info@linak.ca

Web: www.linak-us.com

Czech Republic

LINAK C&S s.r.o.

Phone: +42 058 174 1814

Fax: +42 058 170 2452

E-mail: info@linak.cz

Web: www.linak.cz - www.linak.sk

Denmark - International

LINAK International

Phone: +45 73 15 15 15

E-mail: info@linak.com

Web: www.linak.com

Denmark - Sales

LINAK Danmark A/S

Phone: +45 86 80 36 11

Fax: +45 86 82 90 51

E-mail: linak@linak-silkeborg.dk

Web: www.linak.dk

Finland

LINAK OY

Phone: +358 10 841 8700

E-mail: linak@linak.fi

Web: www.linak.fi

France

LINAK France E.U.R.L

Phone: +33 (0) 2 41 36 34 34

Fax: +33 (0) 2 41 36 35 00

E-mail: linak@linak.fr

Web: www.linak.fr

Germany

LINAK GmbH

Phone: +49 6043 9655 0

Fax: +49 6043 9655 60

E-mail: info@linak.de

Web: www.linak.de

India

LINAK A/S India Liaison Office

Phone: +91 120 4531797

Fax: +91 120 4786428

E-mail: info@linak.in

Web: www.linak.in

Ireland

LINAK UK Limited (Ireland)

Phone: +44 (0)121 544 2211

Fax: +44 (0)121 544 2552

+44 (0)796 855 1606 (UK Mobile)

+35 387 634 6554 (Rep.of Ireland Mobile)

E-mail: sales@linak.co.uk

Web: www.linak.co.uk

Italy

LINAK ITALIA S.r.l.

Phone: +39 02 48 46 33 66

Fax: +39 02 48 46 82 52

E-mail: info@linak.it

Web: www.linak.it

Japan

LINAK K.K.

Phone: 81-45-533-0802

Fax: 81-45-533-0803

E-mail: linak@linak.jp

Web: www.linak.jp

Malaysia

LINAK Actuators Sdn. Bhd.

Phone: +60 4 210 6500

Fax: +60 4 226 8901

E-mail: info@linak-asia.com

Web: www.linak.my

Netherlands

LINAK Actuator-Systems B.V.

Phone: +31 76 5 42 44 40 /

+31 76 200 11 10

E-mail: info@linak.nl

Web: www.linak.nl

New Zealand

LINAK New Zealand Ltd

Phone: +64 9580 2071

Fax: +64 9580 2072

E-mail: nzsales@linak.com.au

Web: www.linak.com.au

Norway

LINAK Norge AS

Phone: +47 32 82 90 90

E-mail: info@linak.no

Web: www.linak.no

Poland

LINAK Polska

LINAK Danmark A/S (Spółka Akcyjna)

Phone: +48 22 295 09 70 /

+48 22 295 09 71

E-mail: info@linak.pl

Web: www.linak.pl

Republic of Korea

LINAK Korea Ltd.

Phone: +82 2 6231 1515

Fax: +82 2 6231 1516

E-mail: info@linak.kr

Web: www.linak.kr

Slovakia

LINAK Slovakia S.R.O.

Phone: +421 51 7563 444

Web: www.linak.sk

Spain

LINAK Actuadores, S.L.u

Phone: +34 93 588 27 77

Fax: +34 93 588 27 85

E-mail: esma@linak.es

Web: www.linak.es

Sweden

LINAK Scandinavia AB

Phone: +46 8 732 20 00

Fax: +46 8 732 20 50

E-mail: info@linak.se

Web: www.linak.se

Switzerland

LINAK AG

Phone: +41 43 388 31 88

Fax: +41 43 388 31 87

E-mail: info@linak.ch

Web: www.linak.ch - www.fr.linak.ch

www.it.linak.ch

Taiwan

LINAK (Shenzhen) Actuator systems Ltd.

Taiwan Representative office

Phone: +886 2 272 90068

Fax: +886 2 272 90096

E-mail: sales@linak.com.tw

Web: www.linak.com.tw

Turkey

LINAK İth. İhr. San. ve Tic. A.Ş.

Phone: +90 312 4726338

Fax: +90 312 4726635

E-mail: info@linak.com.tr

Web: www.linak.com.tr

United Kingdom

LINAK UK Limited

Phone: +44 (0)121 544 2211

Fax: +44 (0)121 544 2552

E-mail: sales@linak.co.uk

Web: www.linak.co.uk

DISTRIBUTORS

Argentina

Novotec Argentina SRL

Phone: 011-4303-8989 / 8900

Fax: 011-4032-0184

E-mail: info@novotecargentina.com

Web: www.novotecargentina.com

Colombia

MEM Ltda

Phone: +[57] (1) 334-7666

Fax: +[57] (1) 282-1684

E-mail: servicioalcliente@memltda.com.co

Web: www.mem.net.co

India

Mechatronics Control Equipments India Pvt Ltd

Phone: +91-44-28558484, 85

E-mail: bala@mechatronicscontrol.com

Web: www.mechatronicscontrol.com

Indonesia

PT. Himalaya Everest Jaya

Phone: +6 221 544 8956 /+6 221 544 8965

Fax: +6 221 619 1925

Fax (Sales): +6 221 619 4658

E-mail: hejplastic-div@centrin.net.id

Web: www.hej.co.id

Israel

NetivTech LTD

Phone: +972 55-2266-535

Fax: +972 2-9900-560

Email: info@NetivTech.com

Web: www.netivtech.com

Singapore

Servo Dynamics Pte Ltd

Phone: +65 6844 0288

Fax: +65 6844 0070

E-mail: servodynamics@servo.com.sg

South Africa

Industrial Specialised Applications CC

Phone: +27 011 466 0346

E-mail: gartht@isagroup.co.za

Web: www.isaza.co.za

United Arab Emirates

Mechatronics

Phone: +971 4 267 4311

Fax: +971 4 267 4312

E-mail: mechtron@emirates.net.ae

Terms of use

LINAK® takes great care in providing accurate and up-to-date information on its products. However, the user is responsible for determining the suitability of LINAK products for a specific application. Due to continual development, LINAK products are subject to frequent modifications and changes. LINAK reserves the rights to conduct modifications, updates, and changes without any prior notice. For the same reason, LINAK cannot guarantee the correctness and actual status of imprinted information on its products.

LINAK uses its best efforts to fulfil orders. However, for the reasons mentioned above, LINAK cannot guarantee availability of any particular product at any given time. LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or in other written material created and produced by LINAK, LINAK subsidiaries, or LINAK affiliates. All sales are subject to the 'Standard Terms of Sale and Delivery for LINAK A/S' available on LINAK websites. LINAK and the LINAK logotype are registered trademarks of LINAK A/S. All rights reserved.