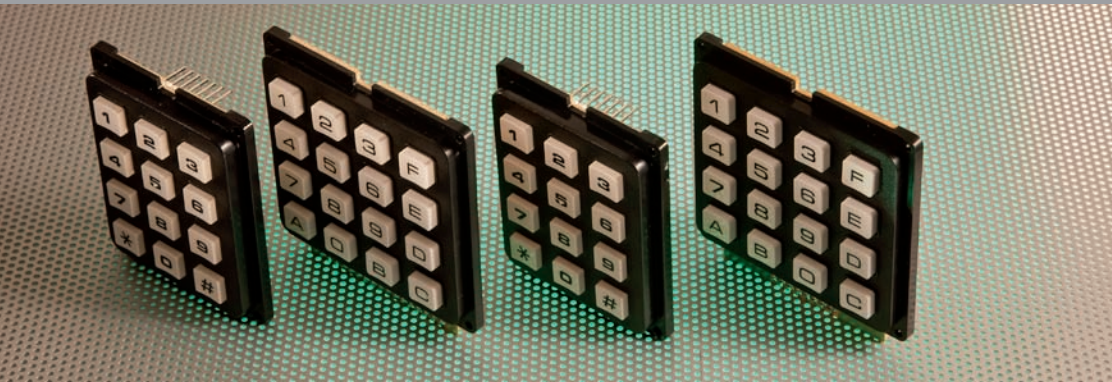


EAO – Your Expert Partner for
Human Machine Interfaces



EAO Product Information

ECO



Description 3

Keypads 4

Technical Data..... 5

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Product Information

General notes

The EAO ECO keypads are suited to all indoor applications including data-entry systems, remote controls, telephone, point of sales terminals or alarm systems.

The ECO range of low-cost, flush-mount keypads are rugged, economical devices available in 12-key telephone style and 16-key hexadecimal II layouts.

Mounting

Mounting is from the back of a panel using fixed studs.

Protection degree of the keypad is IP 40 (front side).

Contacts

To ensure integrity of contacts and lower switch ratings, the contacts are gilded and external connection to the keypad is by means of a pin header on the back.

The electrical keypad circuit can be supplied in a choice of either matrix or common point configuration.

Keys

The keys are made of polycarbonate.

Marking

Standard markings are hot stamped. On request customized symbols and markings are available.

We reserve the right to modify technical data

All dimensions in mm

Keypad



	Front protection	Terminals	Key cap	No. of keys	Marking	Circuit	 60 x 57 Typ-Nr.	 46 x 57 Typ-Nr.	Component layout	Technical drawing	
Keypad Keys for indoor use	IP 40	PH	Plastic white	16	Hexadecimal II	P	ECO.16200.06		2	2	0.024
						M	ECO.16250.06		2	2	0.024
				12	Telephone	P		ECO.12100.06	1	1	0.020
						M		ECO.12150.06	1	1	0.020

Packaging of 10 pcs.
Terminals: PH = Pin header
Circuit: P = Common point, M = Matrix
Component layout from page 6, Technical drawing from page 6

Keypad

Material

Keys

Polycarbonate (PC)

Housing

Polycarbonate (PC)

Contacts

Carbon/Gold

Mechanical characteristics

Actuating force

1.2 N $\pm$ 35 %

Actuating travel

1.4 mm $\pm$ 0.1 N

Rebound time

$\leq$ 2 ms

Marking height

3.5 mm

Electrical characteristics

Operating voltage/-current

Nominal 24 V, 20 mA

Maximum voltage 24 V

Minimum voltage 500 mV

Minimum current 10 mA

Contact resistance

$<200 \Omega$ of electric circuit

Isolation resistance

$>1000 \text{ M}\Omega$ at 100 VDC

Life time

>1 Million cycles operation per key at nominal break rating

Switch rating

0.5 W

ESD-protection

5 kV

Environmental conditions

Storage temperature

-40 °C ... +65 °C

Operating temperature

-20 °C ... +60 °C

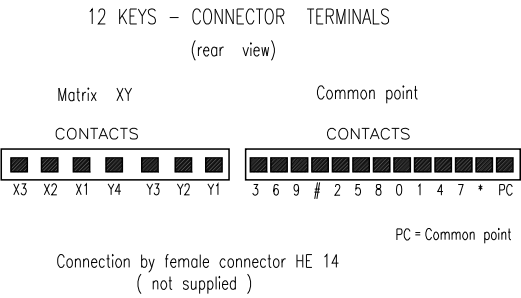
Approvals

Declaration of conformity

CE

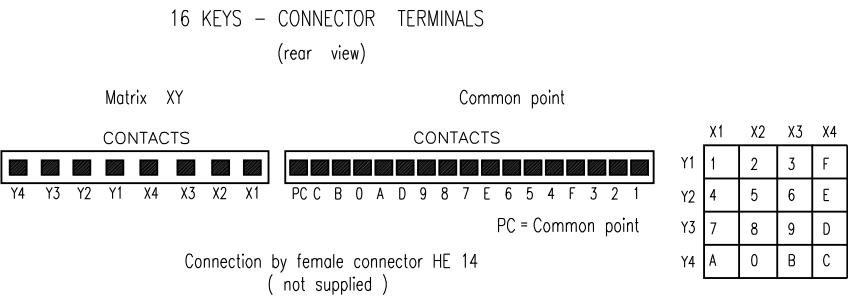
Component layout

1 Keypad page 4



	X1	X2	X3
Y1	1	2	3
Y2	4	5	6
Y3	7	8	9
Y4	*	0	#

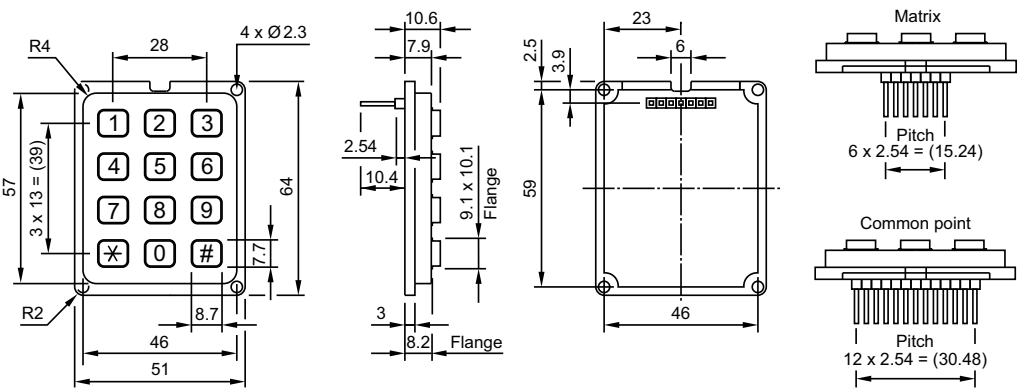
2 Keypad page 4



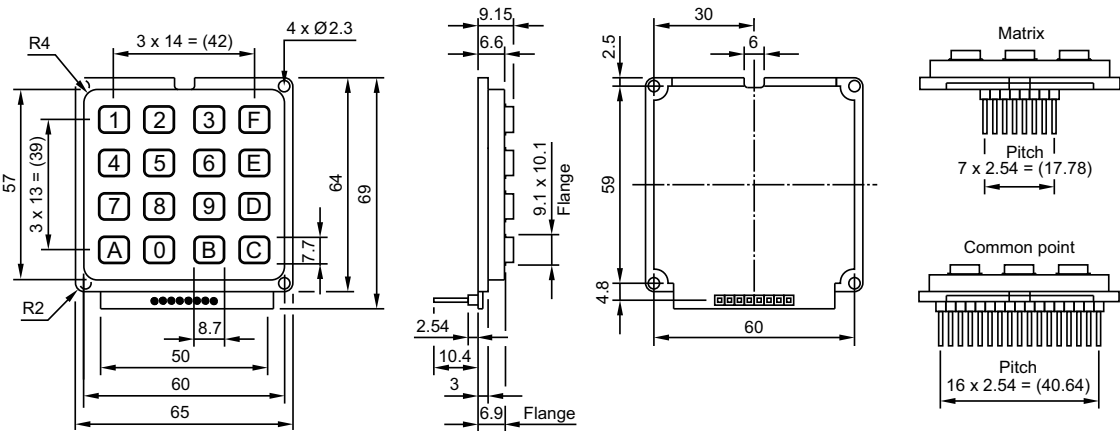
	X1	X2	X3	X4
Y1	1	2	3	F
Y2	4	5	6	E
Y3	7	8	9	D
Y4	A	0	B	C

Technical drawing

1 Keypad page 4



2 Keypad page 4



Index from Typ-Nr.

Typ-Nr.	Page	Typ-Nr.	Page	Typ-Nr.	Page
ECO.12100.06	4				
ECO.12150.06	4				
ECO.16200.06	4				
ECO.16250.06	4				

	EAO AG
	Tannwaldstrasse 88
	4601 Olten, Switzerland
E-mail	info@eao.com
Website	www.eao.com
	Austria
Phone	+49 201 85 87 0
Fax	+49 201 85 87 210
E-mail	sales.ede@eao.com
	Belgium
Phone	+32 3 777 82 36
Fax	+32 3 777 84 19
E-mail	sales.ebl@eao.com
	China
Phone	+852 27 86 91 41
Fax	+852 27 86 95 61
E-mail	sales.ehk@eao.com
	France
Phone	+33 1 64 43 37 37
Fax	+33 1 64 43 37 49
E-mail	sales.esa@eao.com
	Germany
Phone	+49 201 85 87 0
Fax	+49 201 85 87 210
E-mail	sales.ede@eao.com
	Italy
Phone	+39 035 481 0189
Fax	+39 035 481 3786
E-mail	sales.eit@eao.com
	Japan
Phone	+81 3 5444 5411
Fax	+81 3 5444 0345
E-mail	sales.esj@eao.com
	Netherlands
Phone	+31 78 653 17 00
Fax	+31 78 653 17 99
E-mail	sales.enl@eao.com
	Sweden
Phone	+46 8 683 86 60
Fax	+46 8 724 29 12
E-mail	sales.esw@eao.com
	Switzerland
Phone	+41 62 388 95 00
Fax	+41 62 388 95 55
E-mail	sales.ech@eao.com
	United Kingdom
Phone	+44 1444 236 000
Fax	+44 1444 236 641
E-mail	sales.euk@eao.com
	USA
Phone	+1 203 877 4577
Fax	+1 203 877 3694
E-mail	sales.eus@eao.com
	Other Countries
Phone	+41 62 286 92 10
Fax	+41 62 296 21 62
E-mail	info@eao.com