

INDI-BOY DISP-BOYP

LOAD LIMITATION ELECTRONICS

Load limitation with 3 setpoints and display to be installed on a front panel

INDI-BOY / DISP-BOYP



Features

- o Easy and intuitive calibration
- o Display of hoisted load and input signal
- o Internal monitoring system of the integrity of the load cell and the load limitation electronic (positive safety)
- o Options
 - 4(0)...20mA or 0...10V analog output
 - RS232, RS485, USB or fieldbus capabilities
 - NEMA 4X/IP65
 - Rail DIN adaptor
 - Power supply : 48VAC (only for 85...230 VAC version)
 - Also available with industrial metallic housing --> see CRANE-BOY and CRANE-SUMD products

Applications

- Load limitation on
- overhead cranes
 - container cranes
 - gantry cranes

Functions

- Internal survey system of the load cell and the electronic (positive safety)
- TEST button in order to check the good working of the detection system.
- Secret code prohibiting programming by unauthorized persons.
- Intelligent filter with quick reaction to quick overload while not reacting on transitory non significant overload.
- Maximum and minimum memories

Specifications	INDI-BOY	INDI-BOY-24	DISP-BOYP	DISP-BOYP-24	DISP-SUMD	
Type	Load limiter for single load cell	Load limiter for single load cell	Load limiter for single load cell	Load limiter for single load cell	Summation of several 0...20mA output signals	-
Input range	± 24 mV	± 24 mV	4...20mA	4...20mA	0...200mA	-
Sensor excitation	10 VDC @125mA max**	10 VDC @125mA max**	24VDC ± 5% @50mA max.	24VDC ± 5% @50mA max.	-	-
Display	5 digits (14.2 mm)	5 digits (14.2 mm)	5 digits (14.2 mm)	5 digits (14.2 mm)	5 digits (14.2 mm)	-
Accuracy	0.1	0.1	0.1	0.1	0.1	% F.S.
A/D converter	16 bit	16 bit	16 bit	16 bit	16 bit	-
Converter rate	Up to 20 readings /s	Up to 20 readings /s	Up to 20 readings /s	Up to 20 readings /s	Up to 20 readings /s	-
Service temperature range	0...+50	0...+50	0...+50	0...+50	0...+50	C
Storage temperature range	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	C
Power supply	85...250 VAC (15VA)	11...36 VDC (11W), 24VAC (15VA)	85...250 VAC (15VA)	11...36 VDC (11W), 24VAC (15VA)	85...250 VAC (15VA)	-
IP Rating	IP54***	IP54***	IP54***	IP54***	IP54***	-
Qty of relay	3	3	3	3	3	-
Relay type	Form A - potential free	Form A - potential free	Form A - potential free	Form A - potential free	Form A - potential free	-
Breaking capacity relays	3A @250VAC or 30VDC	3A @250VAC or 30VDC	3A @250VAC or 30VDC	3A @250VAC or 30VDC	3A @250VAC or 30VDC	-

* : Configurable at user's level

** : 5 VDC @65mA max (jumper selectable)

*** : IP rating for front panel only

F.S.: full scale - Specifications subject to change without notice

LOAD LIMITER

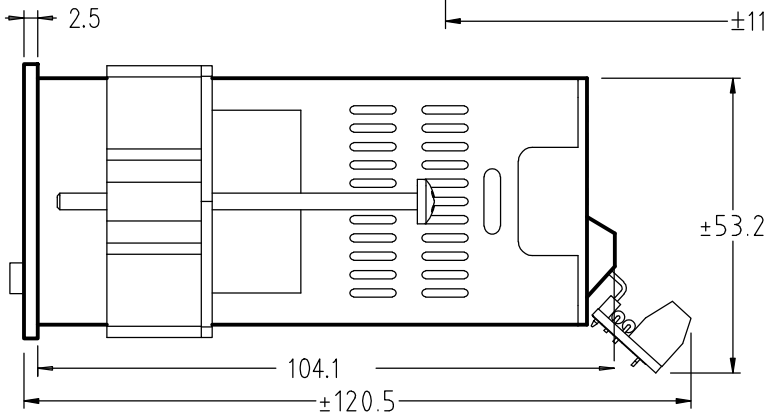
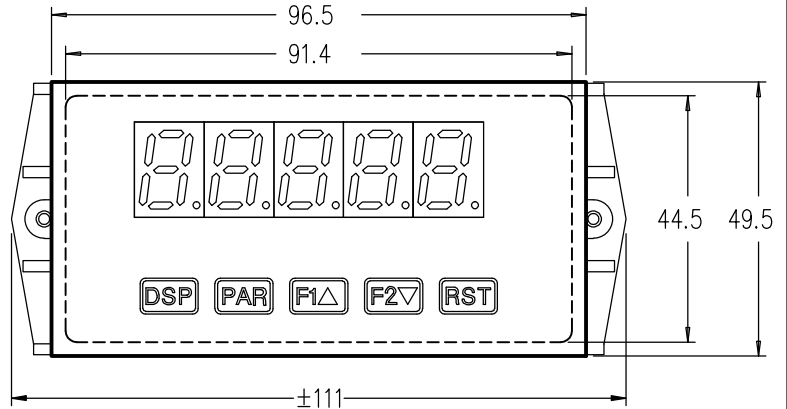
model INDI BOY



Power supply : 48 to 250 VAC / 24 VAC / 10-30 VDC IP54
 INDI BOY : 48 to 250 VAC- Strain gages input
 " " BOY-24: 24 VAC - "
 " " BOY-DC: 10-30 VDC - "

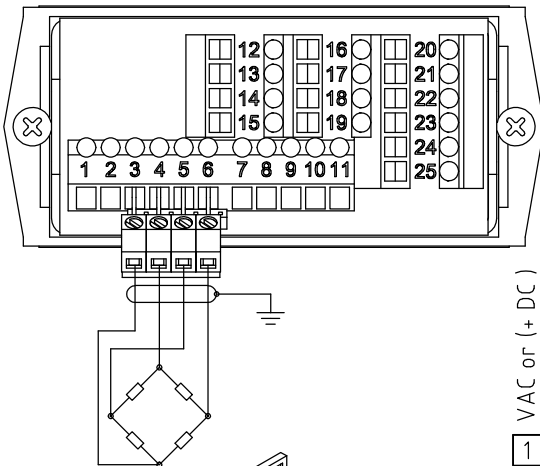
Options :

CARD CDL10 = 4-20 mA / 0-10 V output
 CARD CDC20 = RS232 output
 CARD CDC10 = RS485 output
 F= Splashproof Cover IP 65



Note:
 recommended min. clearance (behind the panel) for mounting is depth 140 mm and height 53.4mm.
 Panel cut-out
 92mm (-0+0.8)
 45mm (-0+0.5)

RL1-Security
 RL2-Overload set point
 RL3-Slack rope set point
 RL4-Pre-warning



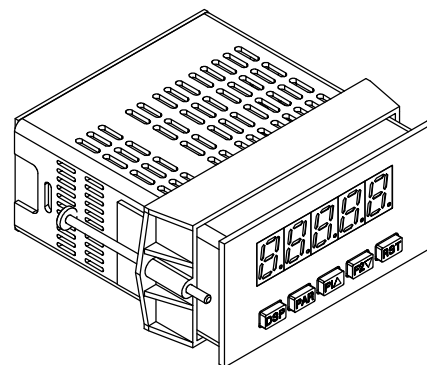
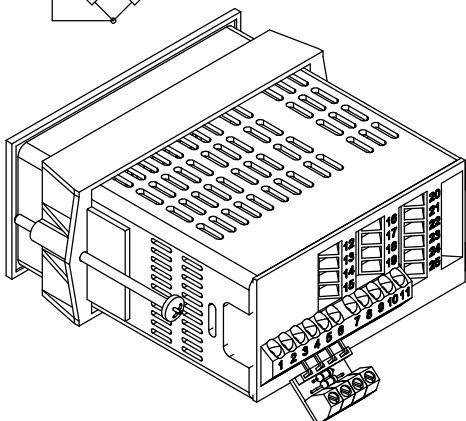
CARD CDL10

16 + 0-10V ANALOG OUTPUT
 17 -
 18 + 4-20 or 0-20 mA ANALOG OUTPUT
 19 -

CARD CDS20

Relay 1 20 Lift contact
 Common 21
 Relay 2 22 Lift contact
 Relay 3 23 Slack rope
 Common 24
 Relay 4 25 Pre-warning

1 VAC or (+ DC)
 2 VAC or (- DC)
 3 + Sig.
 4 - Sig.
 5 - EXC. (Common)
 6 + EXC.
 7 USER Common
 8 USER 1
 9 USER 2
 10 USER 3



LOAD LIMITER

model DISP BOYP



Power supply : 48 to 250 VAC / 24 VAC / 10-30 VDC IP54

DISP BOYP : 48 to 250 VAC- 4-20 mA input

" " BOYP24: 24 VAC - " "

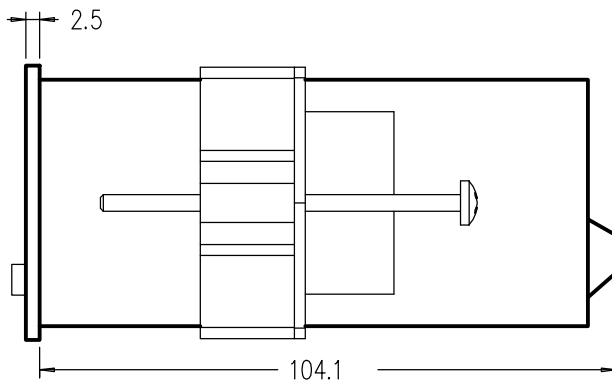
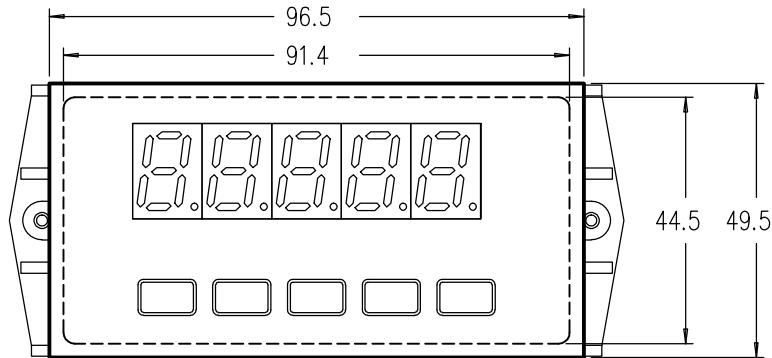
" " BOYPCDC: 10-30 VDC - " "

Options : CARD CDL10 = 4-20 mA / 0-10 V output

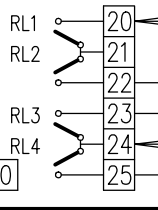
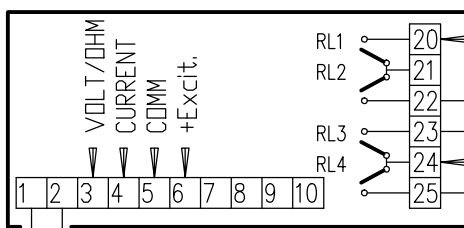
CARD CDC20 = RS232 output

CARD CDC10 = RS485 output

F= Splashproof Cover IP 65



Note:
recommended min. clearance (behind the panel) for mounting is depth 140 mm and height 53.4mm.
Panel cut-out
92mm (-0+0.8)
45mm (-0+0.5)



RL1 — Lift contact

RL2 — Lift contact

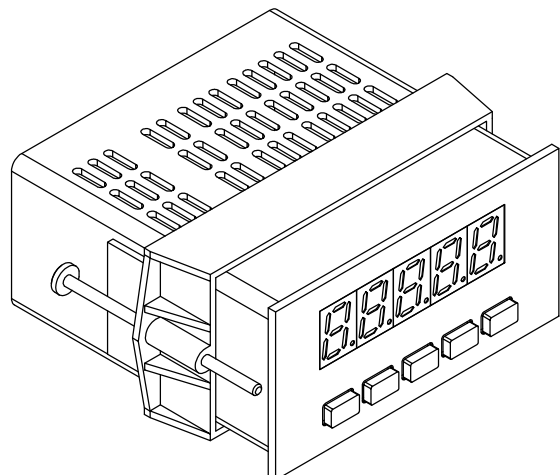
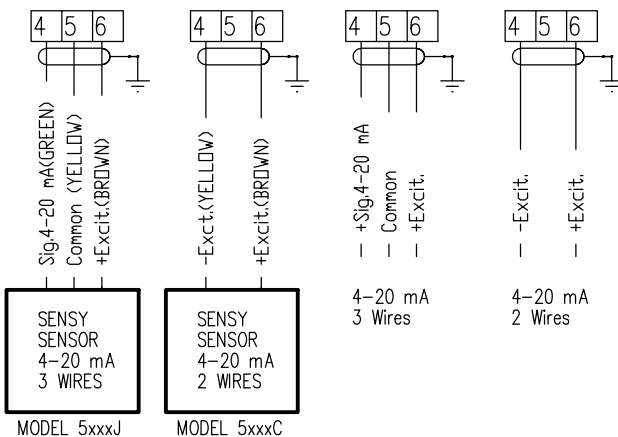
RL3 — Slack rope

Common

Pre-warning

RL1=Security
RL2=Overload set point
RL3=Slack rope set point
RL4=Pre-warning

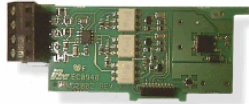
POWER SUPPLY





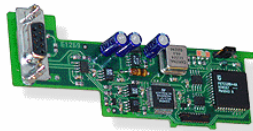
CARD-CDC10

- RS485 field bus communication interface
- Available with crew terminals or DB9 connector



CARD-CDC20

- RS-232C half duplex communication interface
- Available with crew terminals or DB9 connector



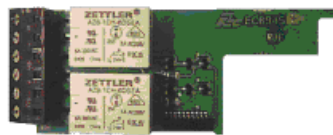
CARD-CDC50

- Profibus-DP (EN 50170) communication interface



CARD-CDL10

- Analog output signal: 0-20 mA, 4-20 mA, or 0-10 VDC (*)



CARD-CDS10

& CARD-CDS20 (already included in load limitation electronics)

- 2 or 4 set-points activating each an independent relay



It is possible to install up to 3 different option cards in the same panel meter. These options have to be of different type.
 Ex. : CARD-CDS-20 + CARD-CDL10 + CARD-CDC20 is available
 CARD-CDS20 + CARD-CDS10 or CARD-CDC10 + CARD-CDC20 is not available

Full technical documentation available on request