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CE HOISTING

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 mV/V load cell	Load limiter for single mV/V load cell	Load limiter for single 4-20mA load cell	Load limiter for single 4-20mA load cell	Summation of several 0...20mA output signals	-
Input range	± 24mV / ±240mV*	± 24mV / ±240mV*	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 - free potential	Form A - free potential	Form A - free potential	Form A - free potential	Form A - free potential	-
Breaking capacity relay	3A @250VAC or 30VDC (resistive load)	3A @250VAC or 30VDC (resistive load)	3A @250VAC or 30VDC (resistive load)	3A @250VAC or 30VDC (resistive load)	3A @250VAC or 30VDC (resistive load)	-

* : 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

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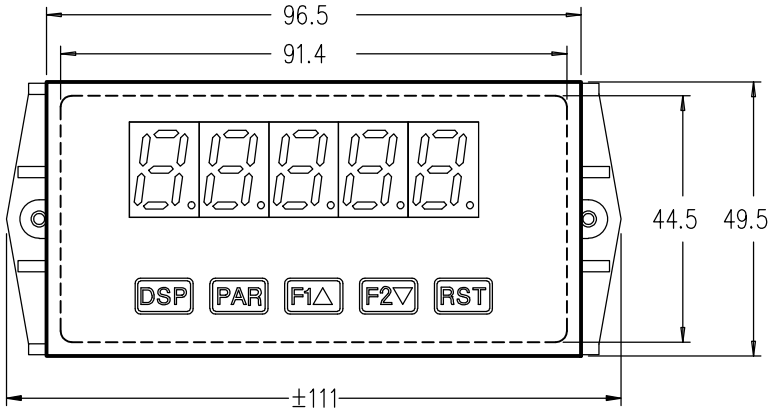
LOAD LIMITER

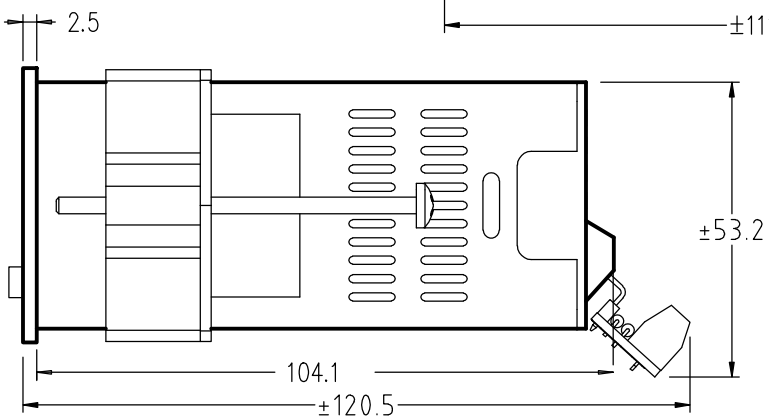
model INDI BOY

CE

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 - " "

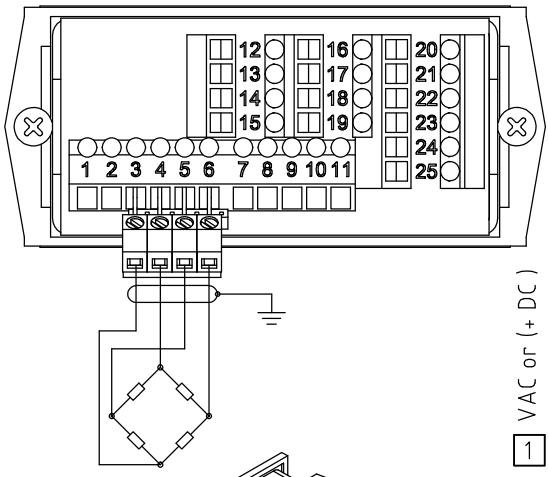
Options :
CARD CDL10 = 4-20 mA / 0-10 V output
CARD CDC20 = RS232 output
CARD CDC10 = RS485 output
F= Splashproof Cover IP 65





Note:
recommended min. clearance (behind the panel) for mounting is depth 140 mm and heigth 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



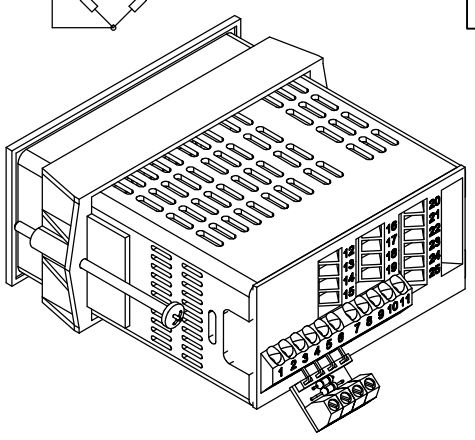
CARD CDL10

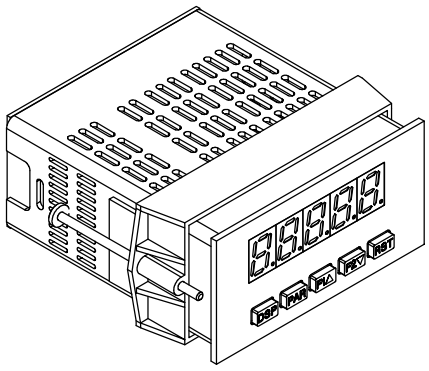
16 (+) 17 (-) 0-10V ANALOG OUTPUT
18 (+) 19 (-) 4-20 or 0-20 mA ANALOG OUTPUT

CARD CDS20

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

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





Rev.5/12/2006 INDIBOY.DWG

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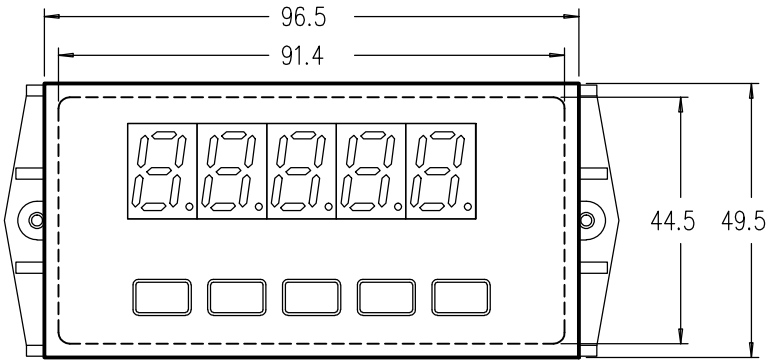
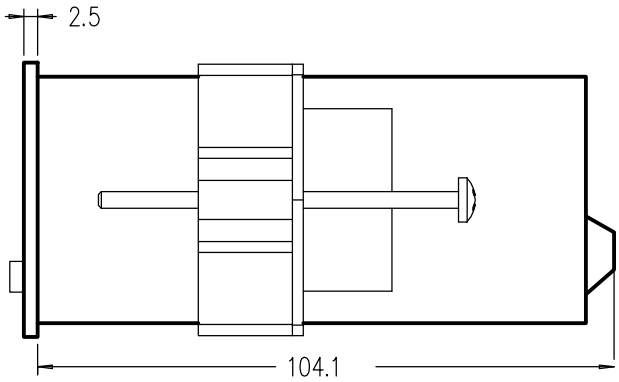
LOAD LIMITER

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 - " "
" " BOYPDC: 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:
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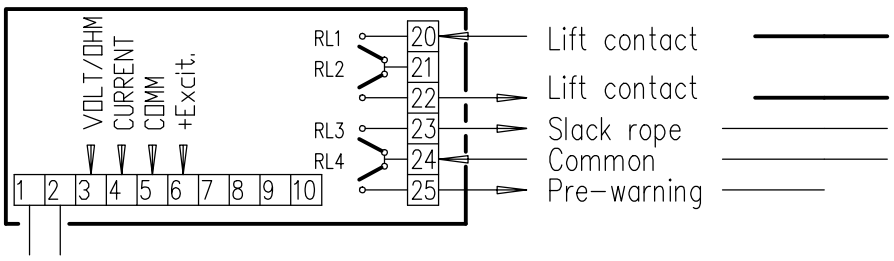
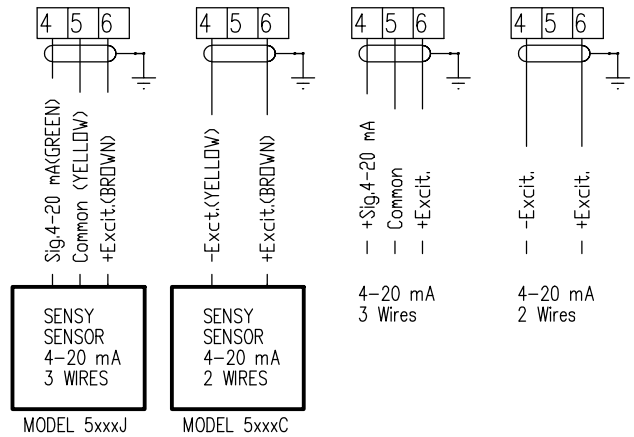
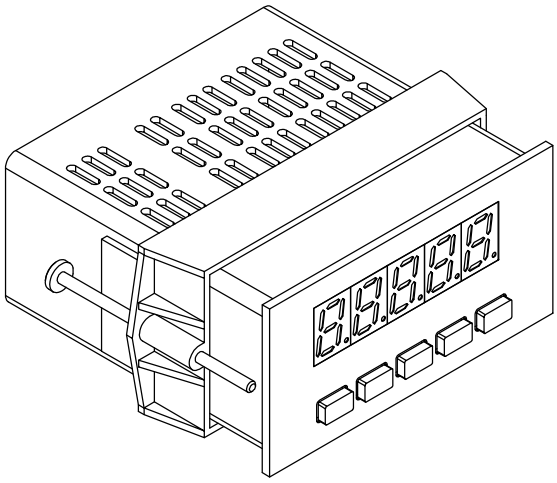
Panel cut-out
92mm (-0+0.8)
45mm (-0+0.5)



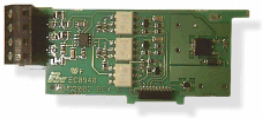
RL1=Security
RL2=Overload set point
RL3=Slack rope set point
RL4=Pre-warning

POWER SUPPLY

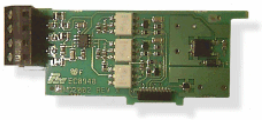




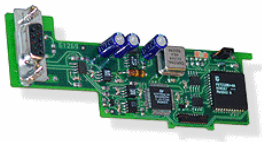
Rev.4/12/2006 DISPBOYP.DWG



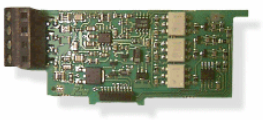
CARD-CDC10
- RS485 field bus communication interface
- Available with crew terminals or DB9 connector



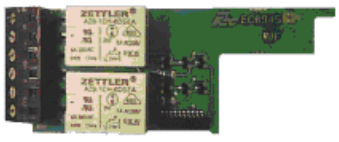
CARD-CDC20
- RS-232C half duplex communication interface
- Available with crew terminals or DB9 connector



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 activationg 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