

CRANE-BOY CRANE-BOYP

LOAD LIMITATION ELECTRONICS

Load limitation with 3 setpoints and display

CRANE-BOY CRANE-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 TEST button on front cover
- o Options
 - 4(0)...20mA or 0...10V analog output
 - RS232, RS485, USB or fieldbus capabilities
 - NEMA 4X/IP65
 - Power supply : 48VAC (only for 85...230 VAC version)
 - Also available without industrial metallic housing --> see INDI-BOY 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, Smart filter,
- Totalization of several measurements, Protection code, ...

Specifications	CRANE-BOY	CRANE-BOY-24	CRANE-BOYP	CRANE-BOYP-24	CRANE-SUMD	
Type	Load limiter for single load cell	Load limiter for single load cell	Load limiter for single load cell	Load limiter for single 4-20mA 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)

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

LOAD LIMITER

model CRANE-BOY



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

CRANE BOY : 48 to 250 VAC- Strain gages input

" " BOY-24: 24 VAC - " "

" " BOY-DC: 10-30 VDC - " "

" " BOYP : 48 a 250 VAC - 4-20 mA input

" " BOYP24: 24 VAC - " "

" " BOYPDC: 10-30 VDC - " "

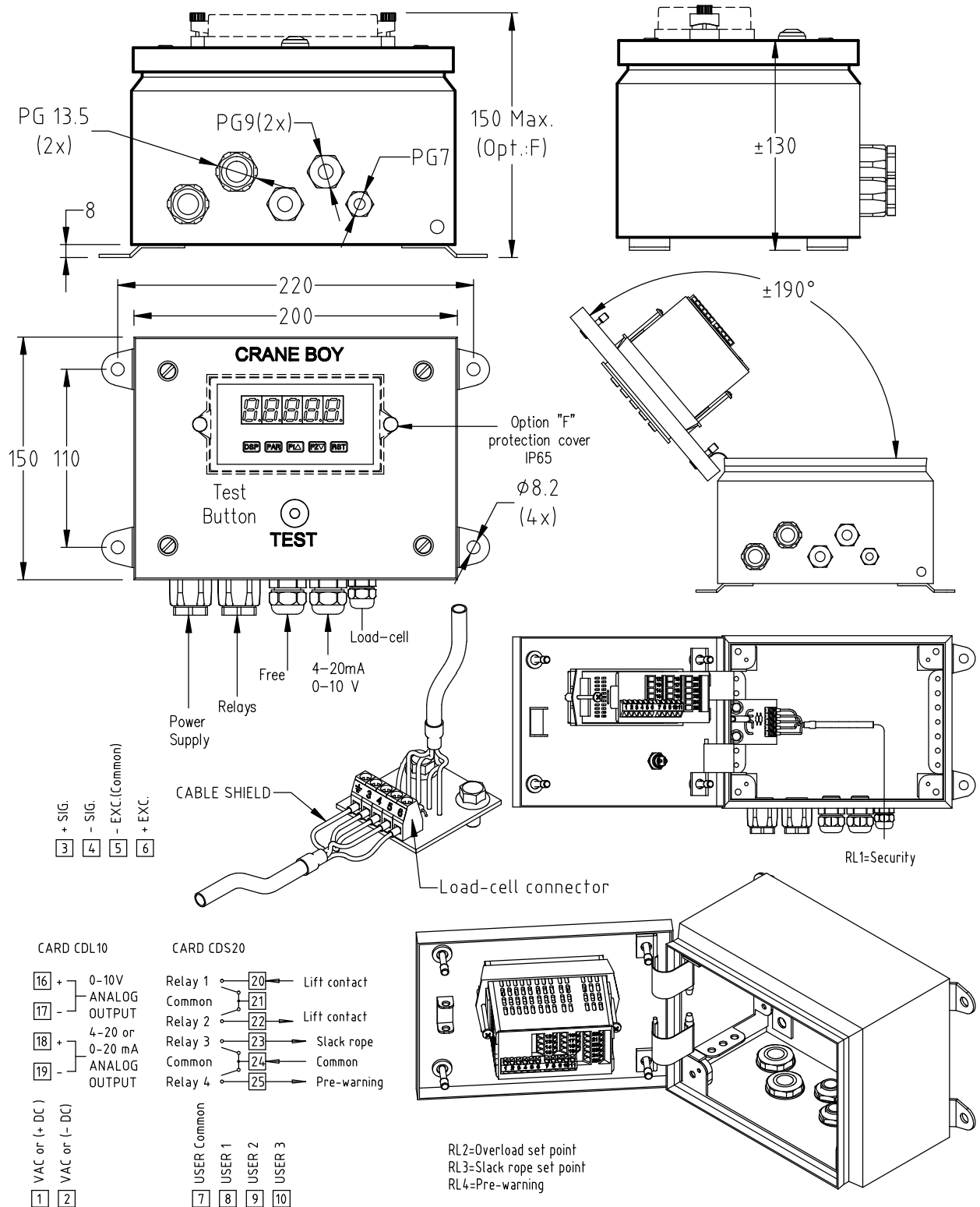
Options :

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

CARD CDC20 = RS232 output

CARD CDC10 = RS485 output

F= Splashproof Cover IP 65



LOAD LIMITER

model CRANE BOYP

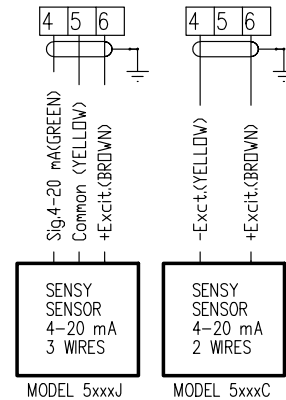
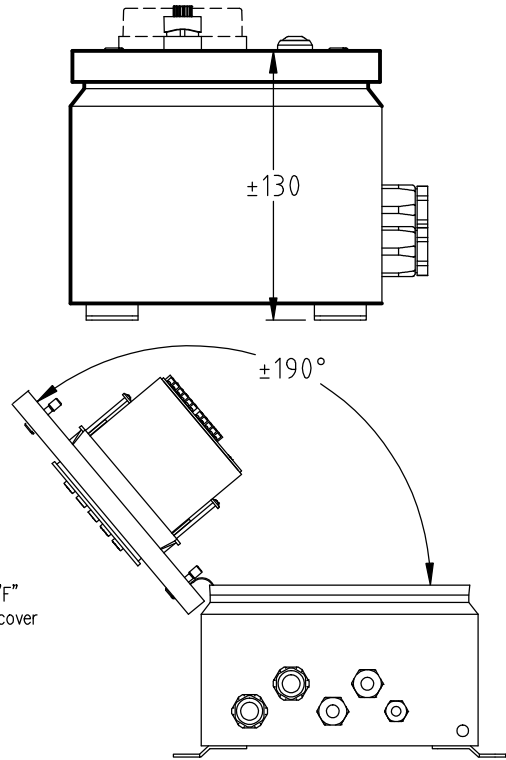
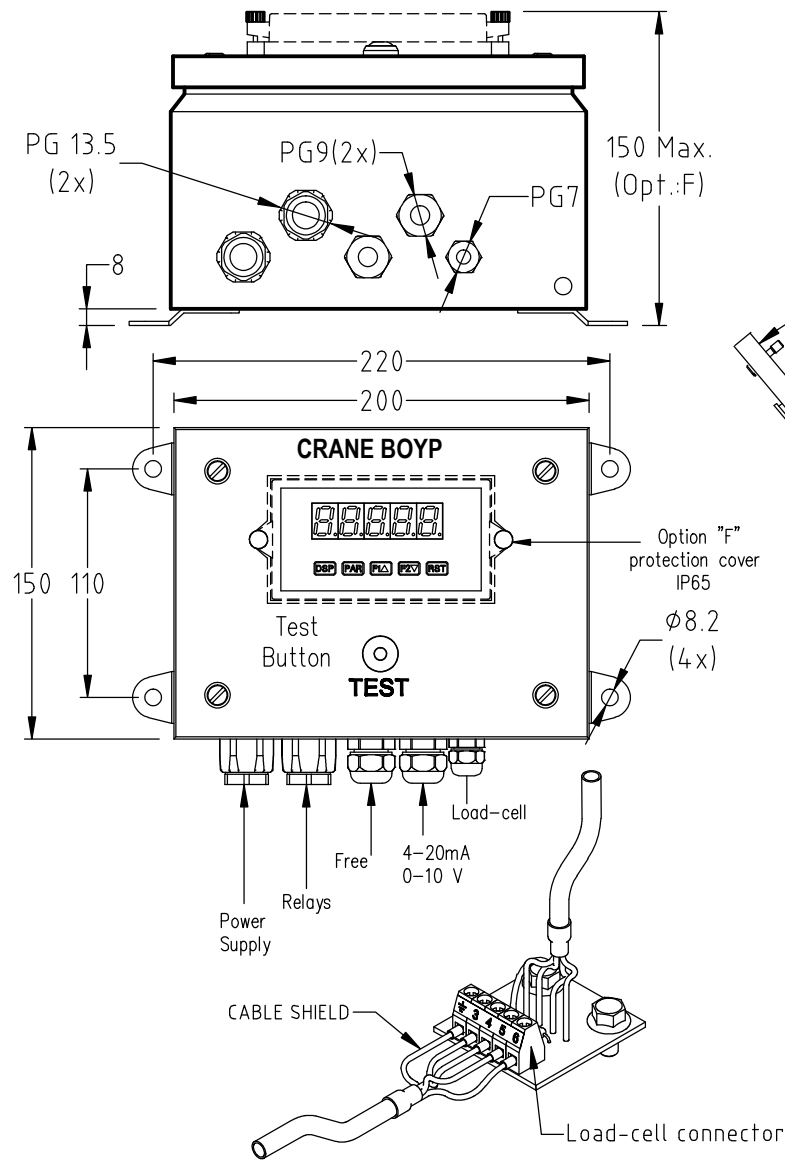


Power supply : 48 to 250 VAC / 24 VAC / 10-30 VDC IP54
CRANE

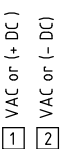
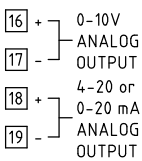
- " " BOYP : 48 a 250 VAC - 4-20 mA input
- " " BOYP24: 24 VAC - " "
- " " BOYPDC: 10-30 VDC - " "

Options :

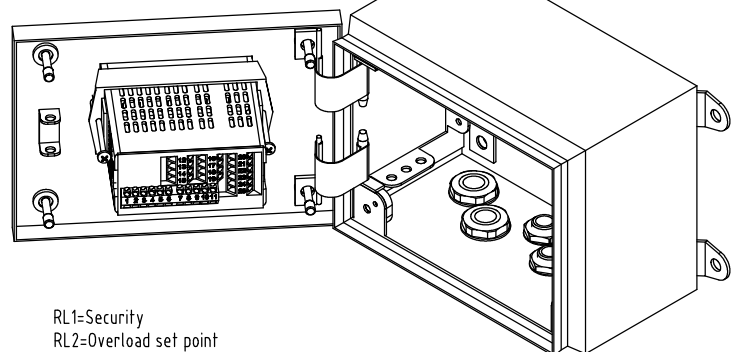
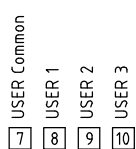
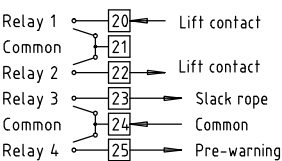
- CARD CDL10 = 4-20 mA / 0-10 V output
- CARD CDC20 = RS232 output
- CARD CDC10 = RS485 output
- F= Splashproof Cover IP 65



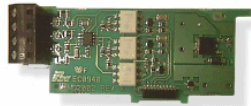
CARD CDL10



CARD CDS20

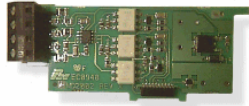


RL1-Security
RL2=Overload set point
RL3=Slack rope set point
RL4=Pre-warning



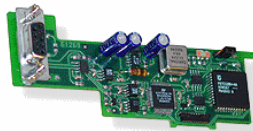
CARD-CDC10

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



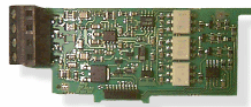
CARD-CDC20

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



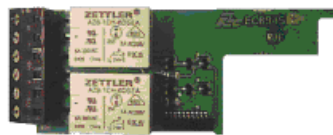
CARD-CDC50

- 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