

DISP-BOYDP CRANE-BOYDP

CRANE OVERLOAD PROTECTION ELECTRONICS FOR 2 HOISTING DEVICES

Electronics ensuring the individual limitation of loads lifted by 2 hoisting systems and limitation of the function of these loads (sum, difference, multiplication, ratio)



CRANE-BOYDP



Features

- o Type:
 - DISP-BOYDP: to be installed on the front panel
 - CRANE-BOYDP: with industrial metallic housing
- o Easy and intuitive calibration
- o Display of hoisted loads and input signals
- o Internal monitoring system of the integrity of load cells and load limitation electronics (fail safe)

Available option(s)

- Analogue output 4 (0)...20 mA or 0...10 V
- RS-232, RS-485 or fieldbus capabilities
- NEMA 4X/IP67 (transparent protection cover + Option "COVER PAX")
- rail DIN adaptor
- stainless steel housing

Application(s)

SENSY's DISP-BOYDP and CRANE-BOYDP are perfectly designed for the following applications:

- OEM - overload protection and slack rope detection of: overhead cranes, container cranes, gantry cranes.

Function(s)

- Internal survey system of the load cell and electronics (fail safe)
- "TEST" button to check the correct working of the detection system
- Secret code prohibiting programming by unauthorised users
- Intelligent filter with quick reaction to overload while not reacting to transitory non-significant overload
- Maximum and minimum memories, smart filter
- A math function (+, -, * or /) can be performed on both signals

Specifications	DISP-BOYDP	DISP-BOYDP24	CRANE-BOYDP	CRANE-BOYDP24	
Type	Load limiter for dual 4..20mA load cell	Load limiter for dual 4...20 mA load cell	Load limiter for dual 4...20 mA load cell	Load limiter for dual 4..20mA load cell	-
Input range	2 x 20 mA (-26 to +26 mA)	2 x 20 mA (-26 to +26 mA)	2 x 20 mA (-26 to +26 mA)	2 x 20 mA (-26 to +26 mA)	-
Sensor excitation	18 VDC \pm 20 % @ 70 mA max. per input channel	18 VDC \pm 20 % @ 70 mA max. per input channel	18 VDC \pm 20 % @ 70 mA max. per input channel	18 VDC \pm 20 % @ 70 mA max. per input channel	-
Display	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	% F.S.*
A/D converter	16 bits	16 bits	16 bits	16 bits	-
Converter rate	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	°C
Storage temperature range	-40...+60	-40...+60	-40...+60	-40...+60	°C
Power supply	85...250 VAC, 50/60 Hz (21 VA)	18...36 VDC (13 W), 24 VAC (16 VA)	85...250 VAC, 50/60 Hz (21 VA)	18...36 VDC (13 W), 24 VAC (16 VA)	-
Qty of relay	3	3	3	3	-
Relay type	"Form A"- potential free	"Form A"- potential free	"Form A"- potential free	"Form A"- potential free	-
Contact rating	3 A @ 250 VAC / 30 VDC	3 A @ 250 VAC / 30 VDC	3 A @ 250 VAC / 30 VDC	3 A @ 250 VAC / 30 VDC	-
IP rating	IP54**	IP54**	IP54	IP54	-

*F.S. : Full Scale.

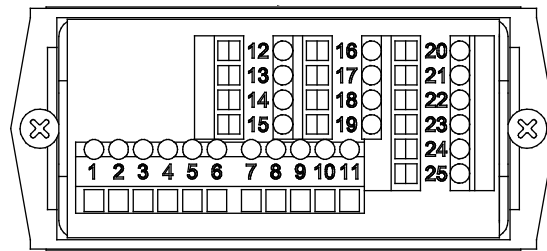
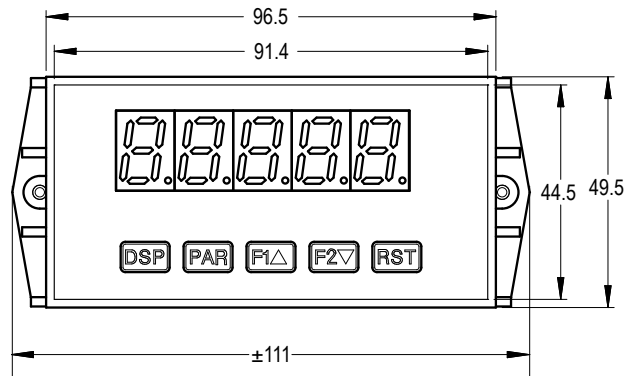
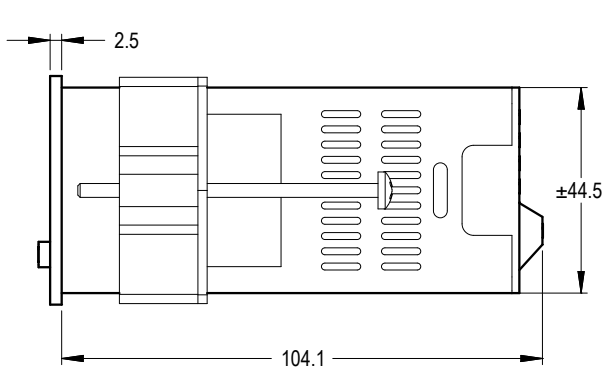
** : IP rating for front panel only.

Specifications subject to change without notice.



ISO 9001 certified

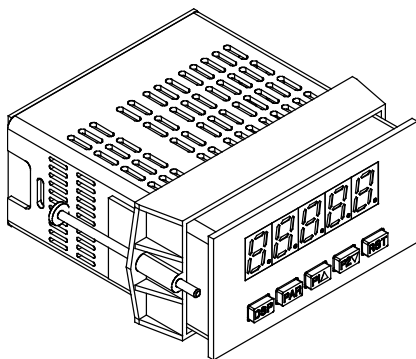
DISP-BOYDP > STANDARD DIMENSIONS



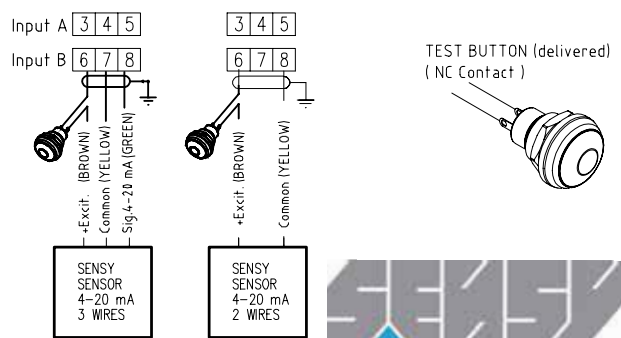
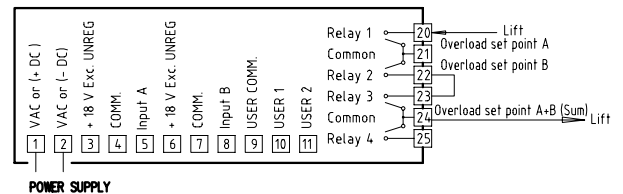
Note: recommended min. clearance (behind the panel) for mounting is 140 mm deep and 53.4 mm high. Panel cut-out 92 mm (-0+0.8) 45 mm (-0+0.5)

Dimensions in mm

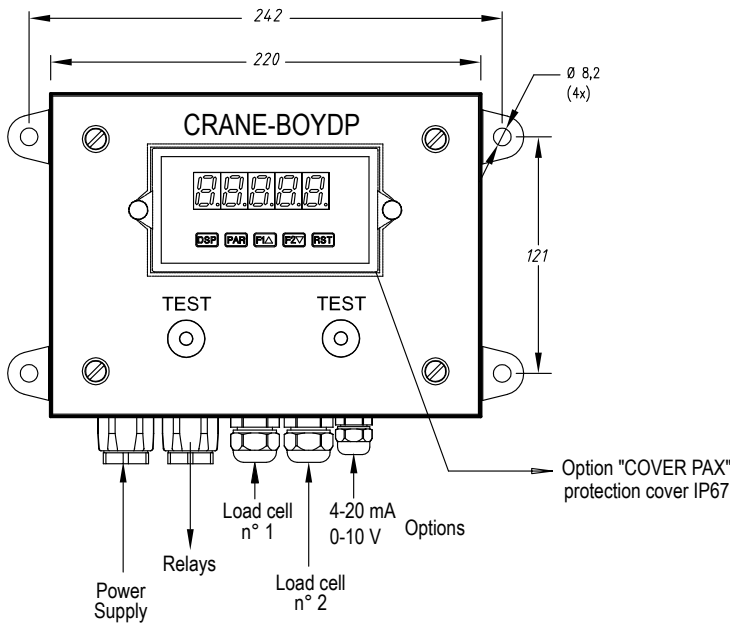
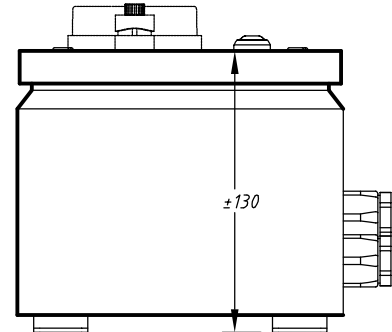
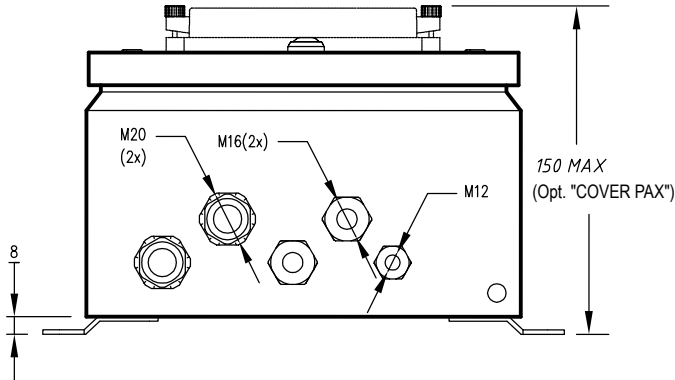
Other view



Terminals

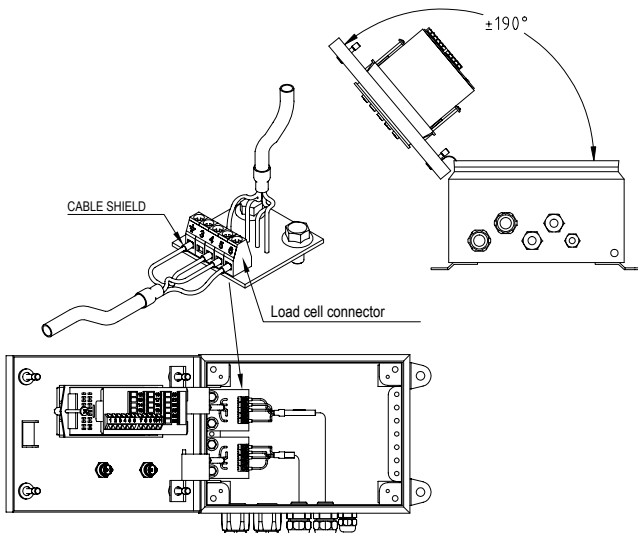


CRANE-BOYDP > STANDARD DIMENSIONS

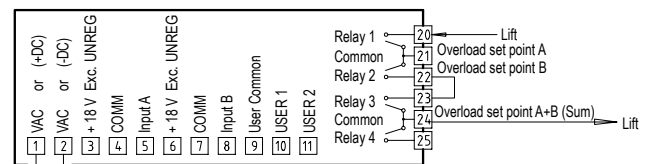


Dimensions in mm

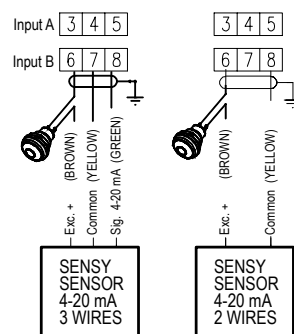
Other view



Terminals



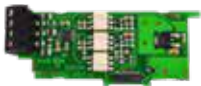
POWER SUPPLY



OPTIONAL CARDS

Communication cards (max. 1 choice)

CARD-CDC10

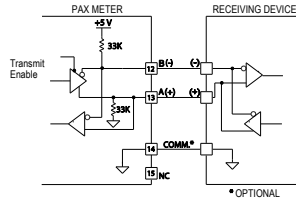


CARD-CDC1C

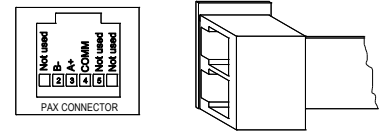


- RS-485 field bus communication interface

CARD-CDC10



CARD-CDC1C



CARD-CDC20

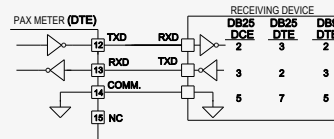


CARD-CDC2C

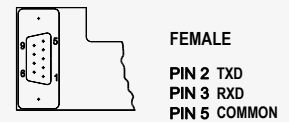


- RS-232 half-duplex communication interface
Available with crew terminals or DB9 connector

CARD-CDC20



CARD-CDC2C



CARD-CDC30



CARD-CDC40



- DeviceNet communication interface
- Modbus communication interface

CARD-CDC40 is not necessary for models:

INDI-PAXS2 DISP-PAXx2
INDI-BOYS2 DISP-BOYP2
CRANE-BOYS2 CRANE-BOYP2
CRANE-SUMD2 DISP-SUMD2
DISP-PAXDP, DISP-BOYDP, CRANE-BOYDP

CARD-CDC50 / CARD-CDC50-CRANE*



- Profibus-DP (EN 50170) communication interface

* As the CARD-CDC50 is too long for the housing of the CRANE-BOY, the CARD-CDC50-CRANE is supplied with a spacer to be insert between the front of the electronics and the housing.

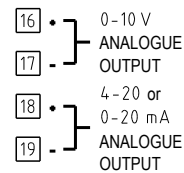
Analogue output card

CARD-CDL10



- Analogue output signal: 0-20 mA, 4-20 mA, 0-10 VDC

CARD-CDL10



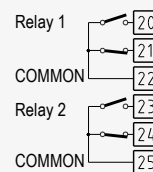
Relay cards (max. 1 choice)

CARD-CDS10 & CARD-CDS20

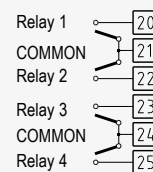


- 2 or 4 set-points activating each an independent relay

CARD-CDS10



CARD-CDS20



Cards already included

- Analogue output card:

CARD-CDL10

- Relay card:

CARD-CDS20 (4 set-points)

- Models:

CABIN-2xB1SUMD; CABIN-4xB1SUMD

- Models:

INDI-BOY DISP-BOYP; CRANE-BOY CRANE-BOYP; DISP-BOYDP
CRANE-BOYDP; CRANE-SUMD DISP-SUMD; CRANE-BOY-Exd;
CABIN-2xB1SUMD; CABIN-4xB1SUMD.