

Dialog VISU



Guide Service

No. 303 GB

This service guide includes the different wirings for linking the interface modules and the equipment that can be connected to them.



11/2005

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HISTORY

Interface module history

- Development of module **N-64406-33** (in the year 2000)

- Development of module **S-67406-03** (in the year 2003)

Compared to its predecessor this module also has the following functions:

- * Processing the load information in 4-20 mA technology (cranes POTAIN TECHNIK)
- * Processing the load information with hoist LCC
- * 24 or 48 V power supply for the site kit

- Development of module **B-67406-11** (in the year 2004)

Compared to the two predecessors this module also has the following function:

- * Processing the analog/digital input signal of the anemometer

Visu unit history

Development of software version **V3** - B 64406.45 (in the year 2000) followed by:

V4 (10/2001) : for US units

for a 4/6 reeving

V5 (07/2002) : for display functions in case of radio control

V5.03 (10/2002) : improved display functions in case of radio control
improved version for CAN VISU with EASY dialog

V6.01 (01/2004) : L64406.54 improved display control for change of reeving
for digital wind signal amplifier

for wind test function (via test button on VISU unit)

V6.02 (03/2004) : for travelling movements in Easy function
for an automatic data backup

Note: the software version is displayed for a few seconds when the Visu unit is put into operation.

VISU unit history for cranes with luffing jib

-Two software versions are needed:

POTAIN crane line: code W-67406-07 – processing load information depending on type of reeving

-Development of software version **V1.01** (09/2003) followed by

V2.01 (11/2003) : *for an automatic data backup

*extended by a special link between VISU and Easy for load,
load moment and wind information

*extended by digital anemometer

*for wind test function

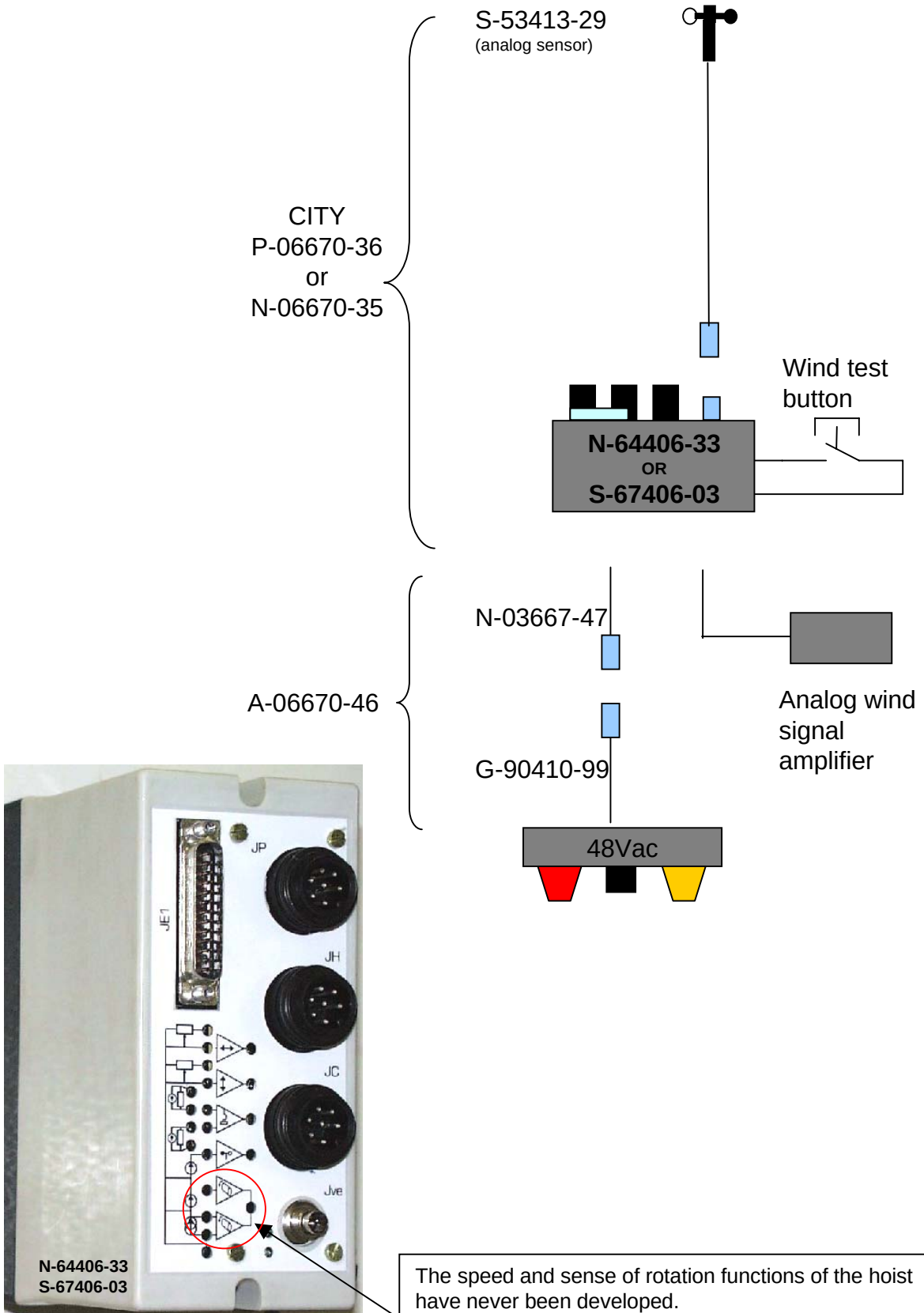
POTAIN TECHNIK crane line: code D-67406-13

Visu does not process load information depending on the type of reeving. This function is carried out by a special processing module.

Development of software version **V1.0** (10/2004) followed by version **V1.01**

WIND MEASURING OPTION WIRING DIAGRAM

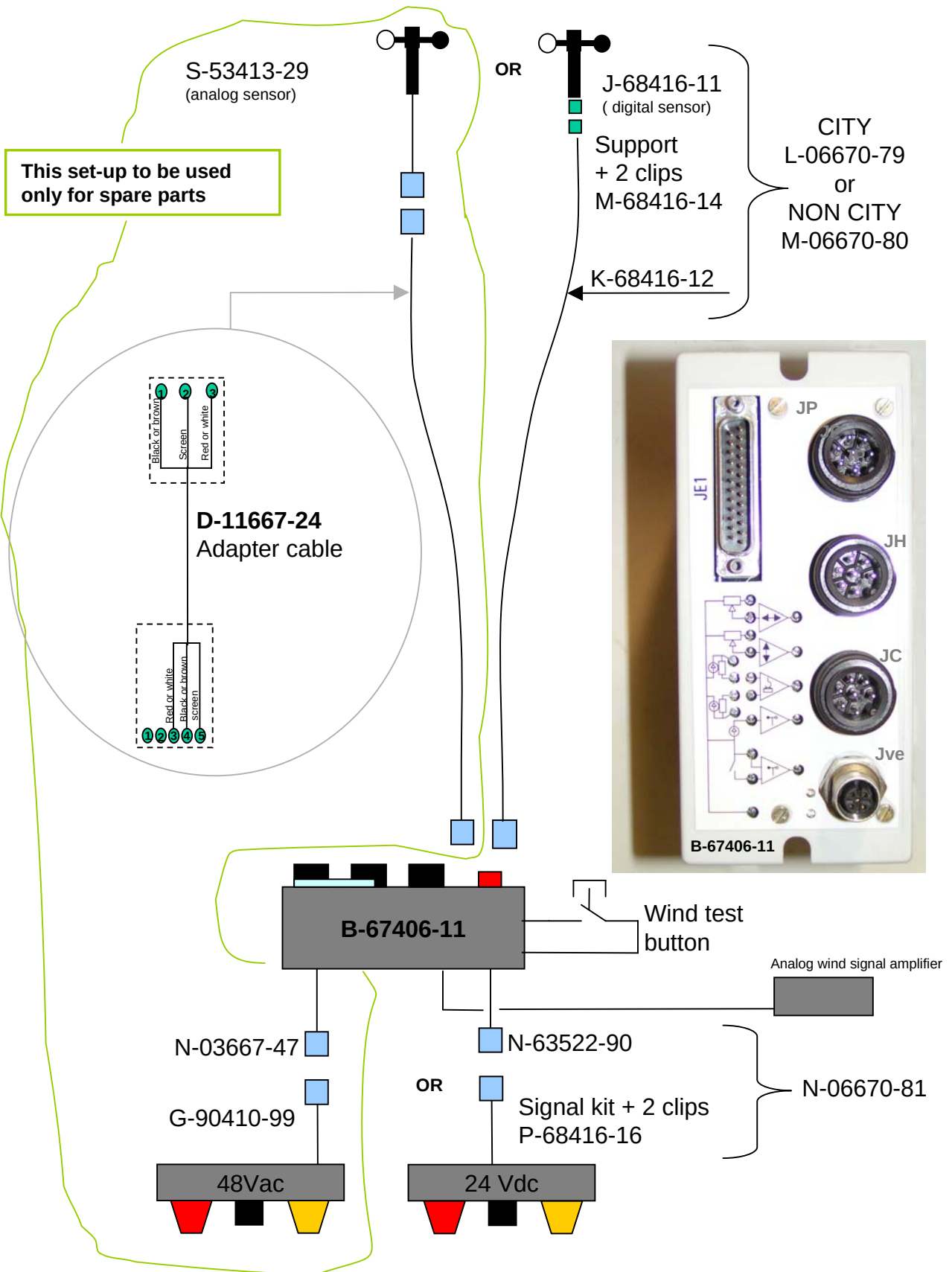
CR-5E-0157 interface wiring N-64406-33 or S-67406-03



WIND MEASURING OPTION WIRING DIAGRAM

CR-5E-0643 interface wiring **B-67406-11**

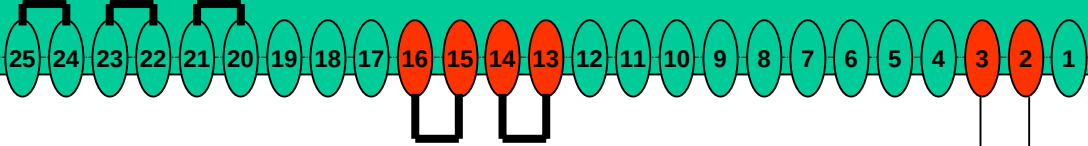
CR-5E-0645 load option wiring (POTAIN Technik)



WIND MEASURING OPTION WIRING

N-64406-33
S-67406-03

J1



P-06670-36

Analog anemometer kit City
Wind test button S306X+ attachment CITY
S-53413-29 analog anemometer

N-06670-35

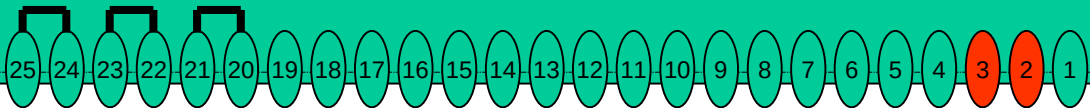
Analog anemometer kit non CITY
Wind test button S306X + attachment
S-53413-29 analog anemometer

Note: bridges 13-14 and 15-16 are no longer required from Viso software version V5.00 onward.

It is even recommended to remove them from version V6.01 onward to preserve the information of the disconnected wind sensor.

B-67406-11

J1



L-06670-79

Digital anemometer kit City
Wind test button S306X + attachment CITY
J-68416-11 digital anemometer

M-06670-80

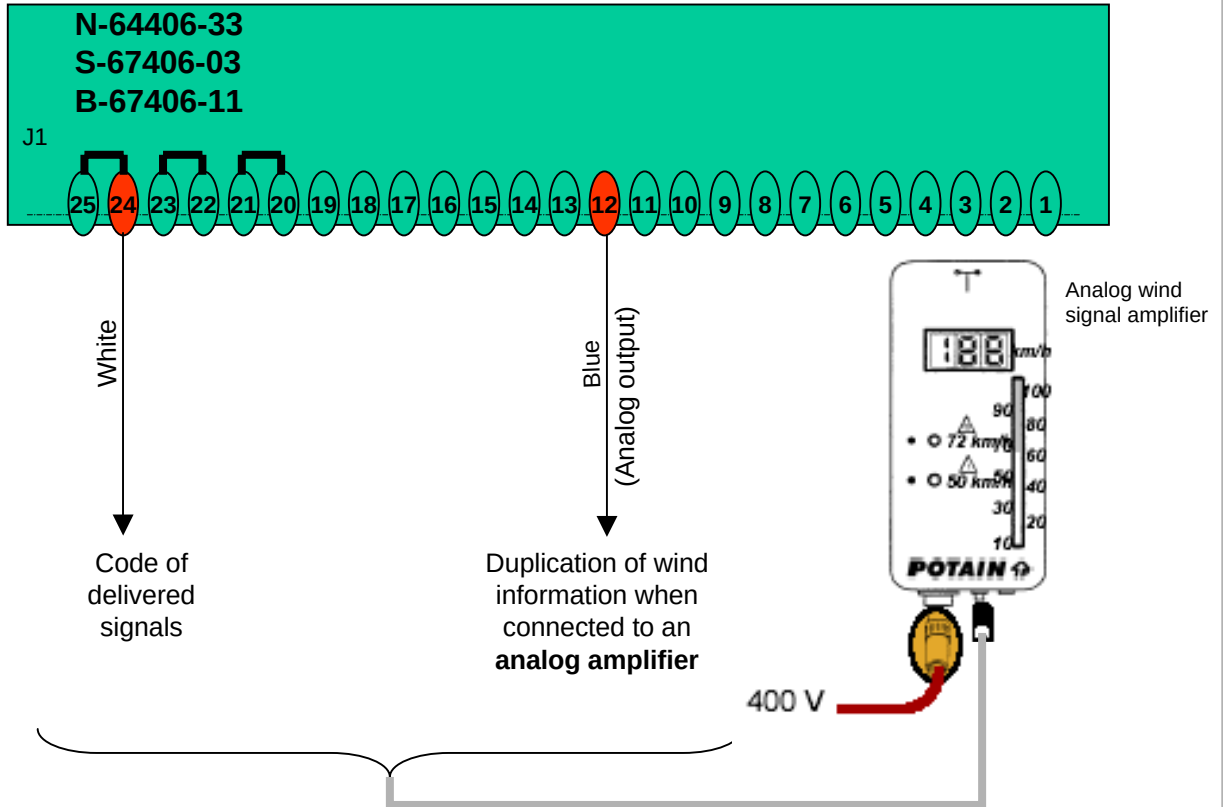
Digital anemometer kit non CITY
Wind test button S306X + attachment
J-68416-11 digital anemometer

The addition of the function « TEST » indicated on the appropriate VISU button has allowed S306X to be omitted (from software version 6.01 onward).

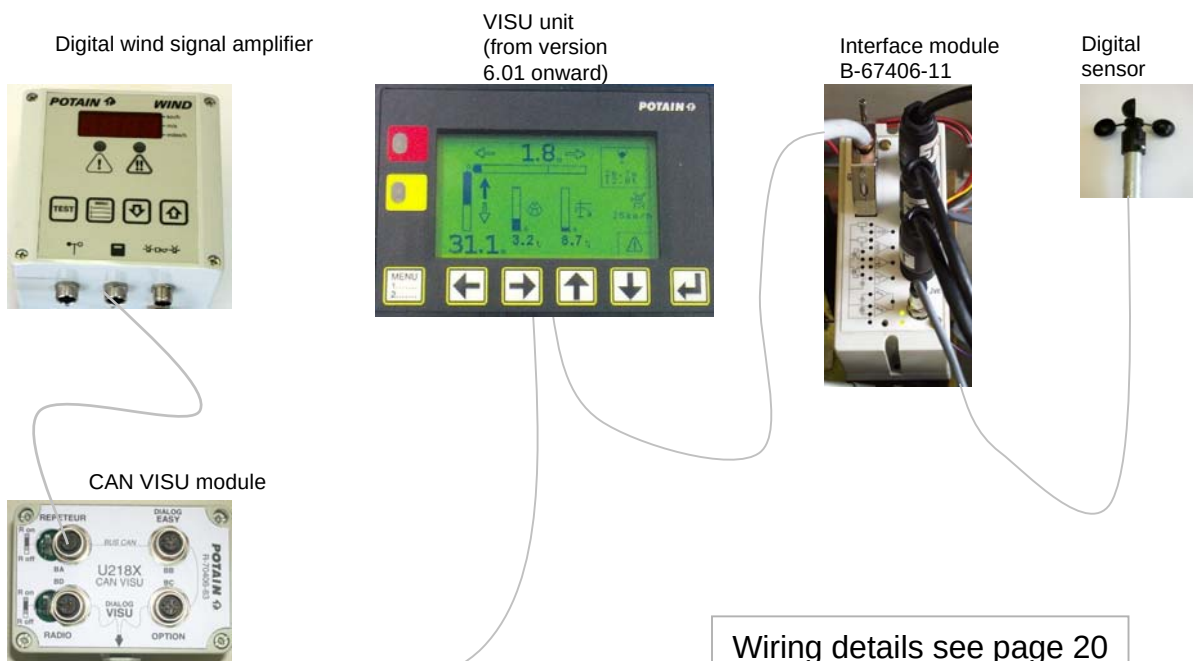
Wind measuring options L-06670-79 and M-06670-80 are replaced by code L-06670-79 consisting of the anemometer + support + cable (from software version 6.01 onward).

WIND SIGNAL AMPLIFIER WIRING

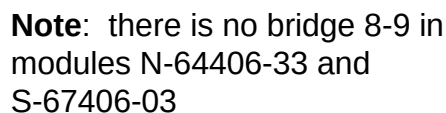
Analog wind signal amplifier wiring



Digital wind signal amplifier

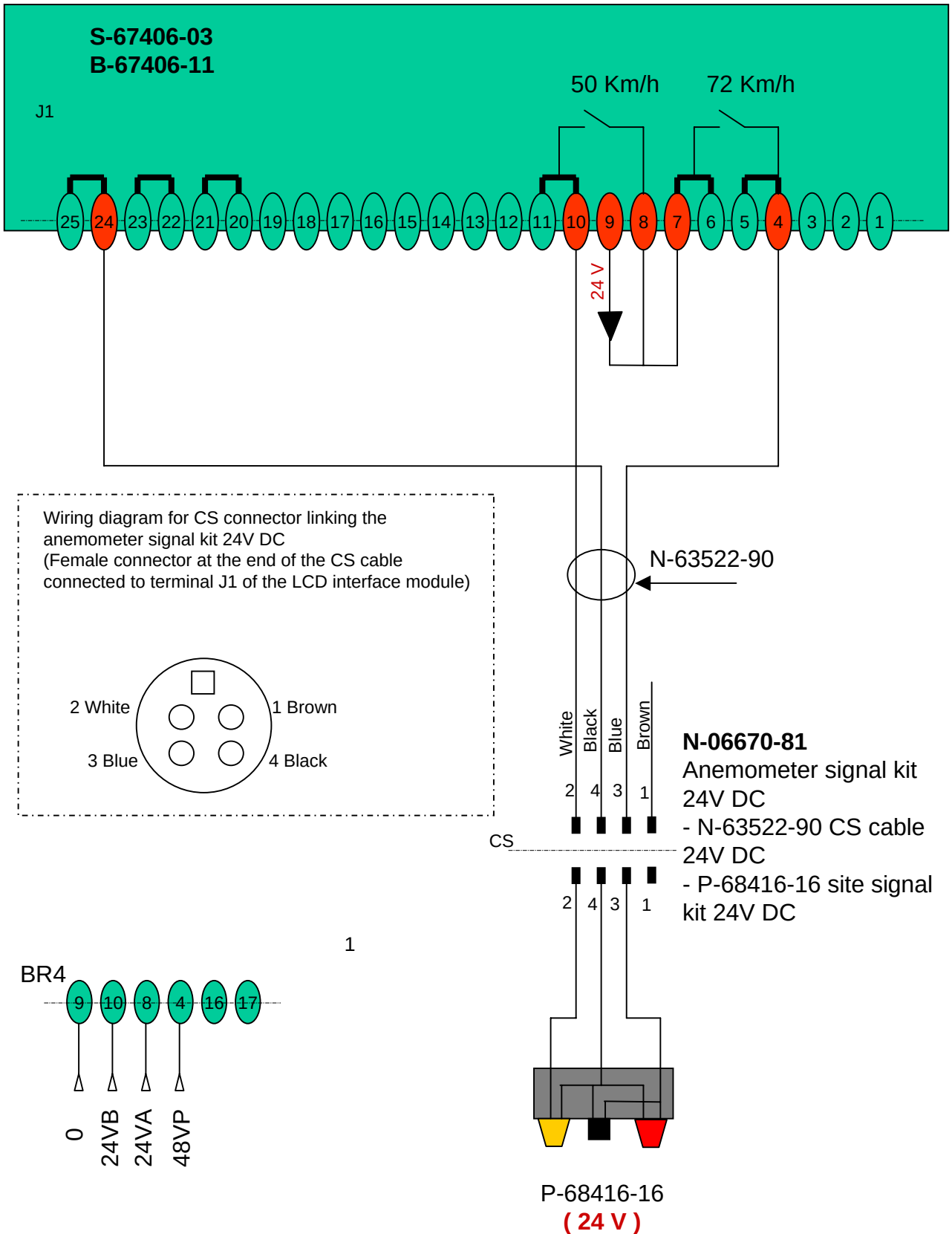


48 V AC SIGNAL KIT OPTION



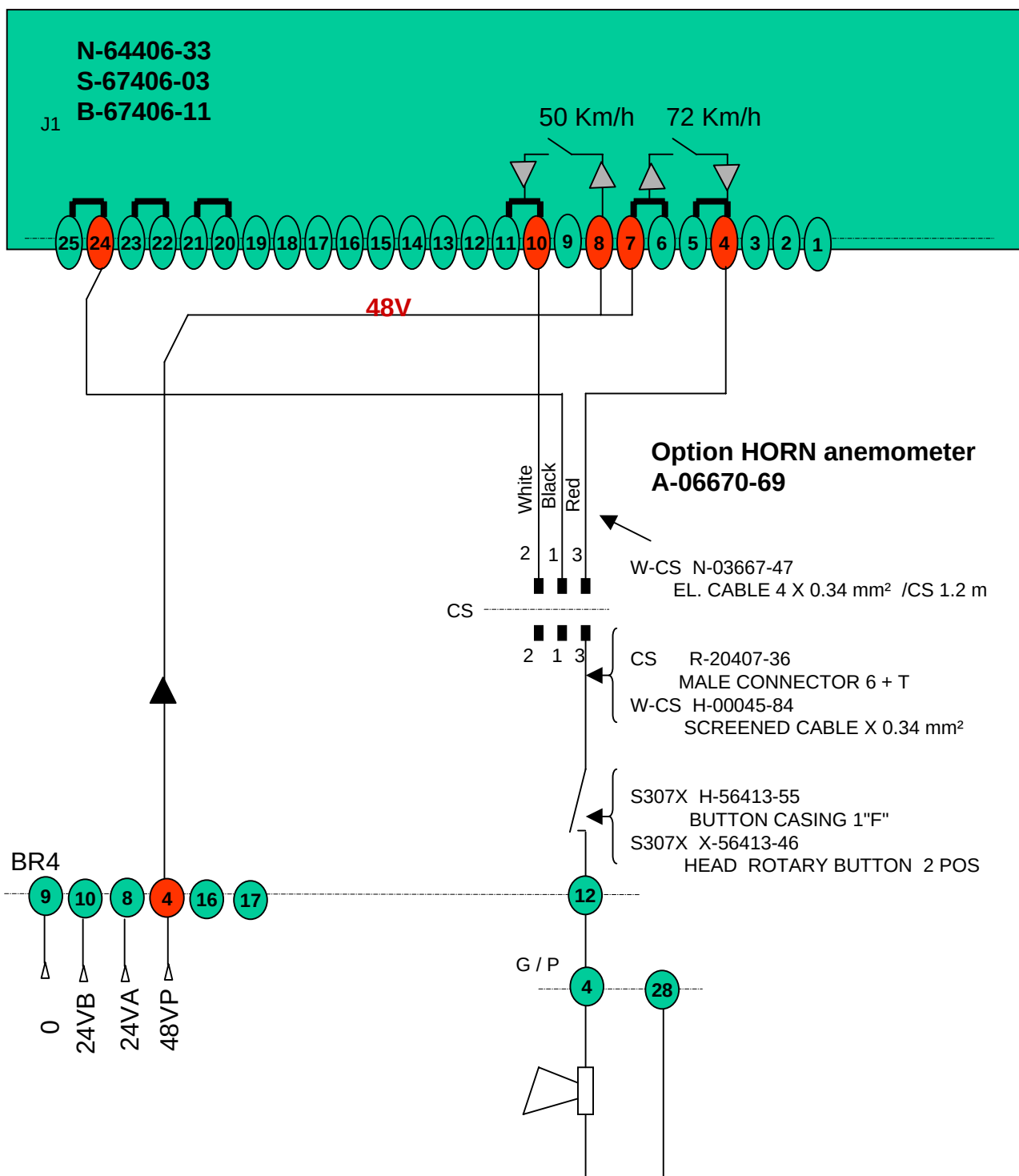
POWER SUPPLY FOR SITE KIT

24 V DC SIGNAL KIT OPTION



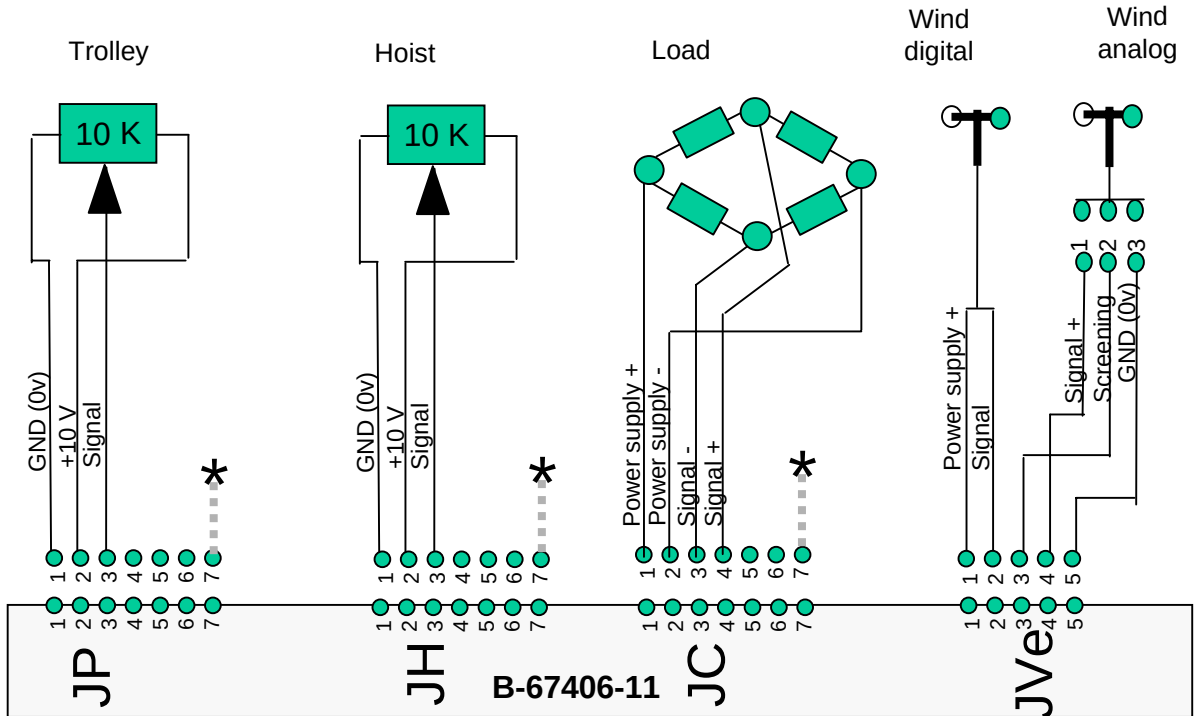
1) Pin 9 supplies 24V DC for the signal kit
24V DC (no external power supply)

SIGNAL KIT ANEMOMETER HORN OPTION



Note: there is no bridge 8-9 in modules N-64406-33 and S-67406-03

WIRING WITH POTAIN MEAS. SENSORS (radius & height)



★ The earthing strip must be connected to terminal 7, central terminal of connectors JP,JH,JC.

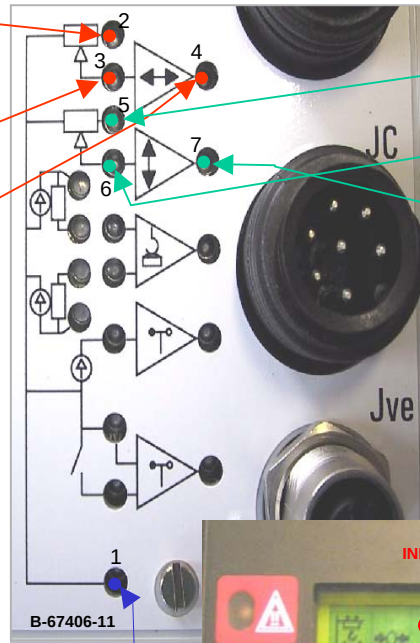
RADIUS

HEIGHT

POWER SUPP. Test between points 1 and 2 (connector JP)	+14.5 V to +15.5 V sensor off +10 V to +11 V sensor on
CURSOR Test points 1 & 3	0.5 V to 10 V depending on sensor position
Interface output Test points 1 & 4	0.5 to 9.5 V
INFORMATION on VISU screen	between 50u and 950u

POWER SUPP. Test points 1 & 5 (connector JH)	+14.5 V to +15.5 V sensor off +10 V to +11 V sensor on
CURSOR Test points 1 & 6	0.5 V to 10 V depending on sensor position
Interface output Test points 1 & 7	0.5 V to 9.5 V
INFORMATION on VISU screen	Between 50u and 950u

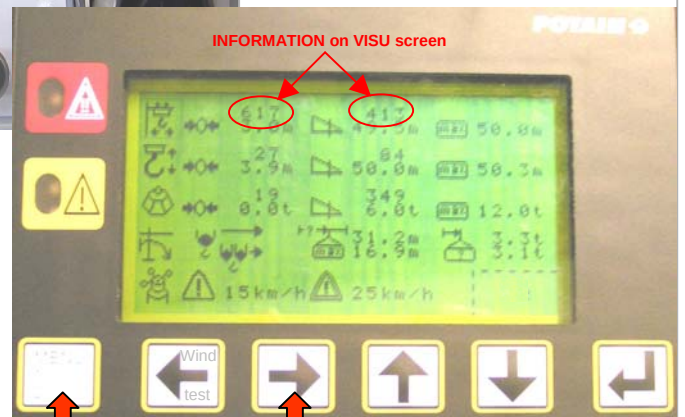
Check correct position of sensors. If during a movement of the trolley or pulley the dead zone of a sensor is entered, a fault message is displayed on the screen at the level of the appropriate sensor in the screen shown below. This fault is displayed during the time this zone is passed.



GND (0V)

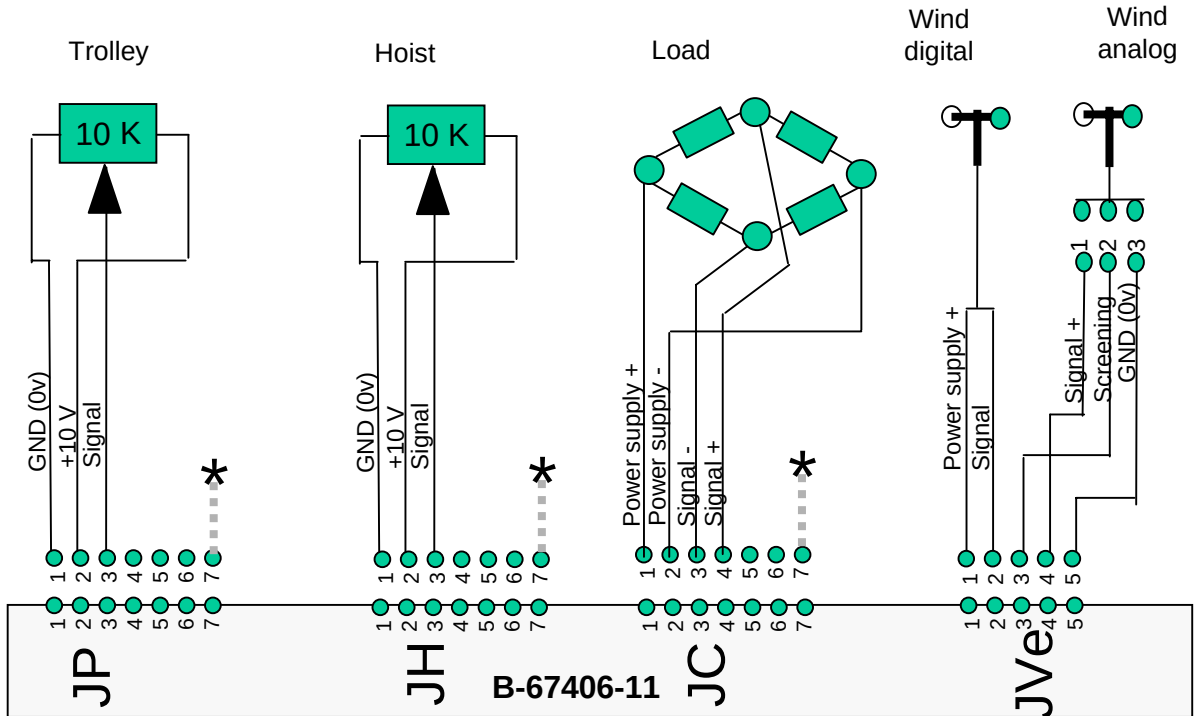


To call this screen display



To call this screen display

WIRING WITH POTAIN MEAS. SENSORS (load and wind)

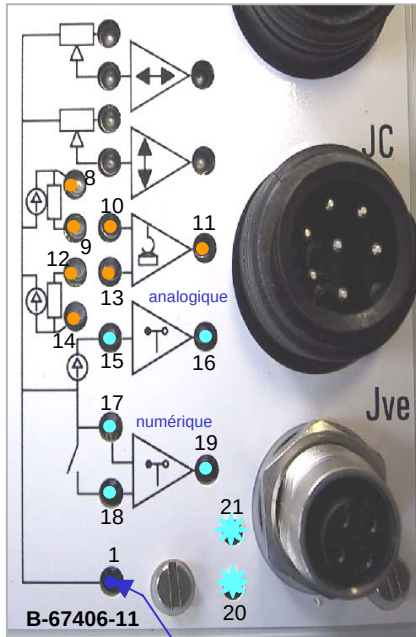


* The earthing strip must be connected to terminal 7, central terminal of connectors JP,JH,JC.

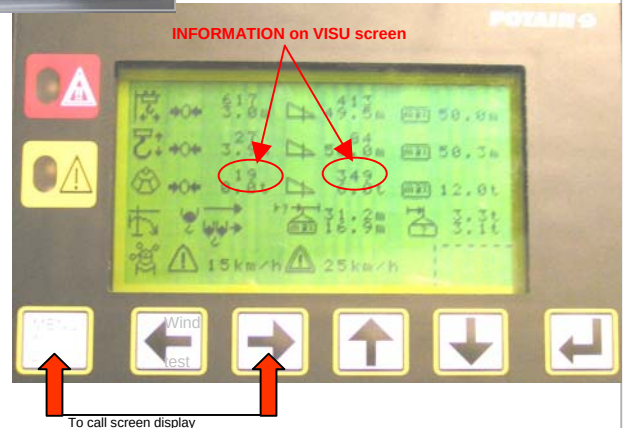
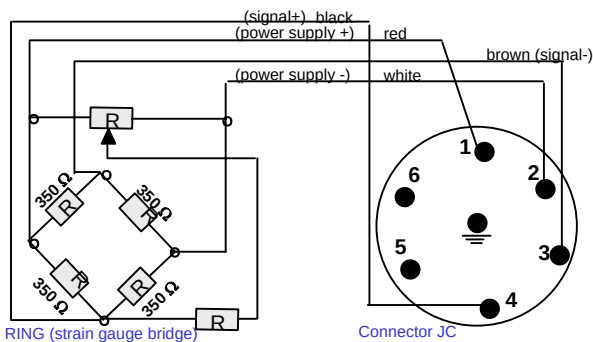
LOAD

WIND

POWER SUPPLY Test points 1 & 8 Test points 1 & 14	(with dropout resistors) +15 V -15 V
POWER SUPPLY of strain gauge bridge Test points 1 & 9	+14.5 V to +15.5 V sensor off +3.5 V to +4 V sensor on
POWER SUPPLY of strain gauge bridge Test points 1 & 12	-14.5 V to -15.5 V sensor off -3.5 V to -4 V sensor on
Amplifier input Test points 10&13	Between 0.1 mV and 6.3 mV
Interface output Test points 1 & 11	011 V to 10 V 0 V without load Appr. 7 V to 9 V with maximum load
INFORMATION on VISU screen	5u without load 1023u with max. load



Analog sensor input Test points 1 & 15 Analog sensor output Test points 1 & 16	Input and output voltages (see next page)
Digital sensor Test points 1&17 (Hz) 1&19 (V)	Input frequency and output voltage (see next page)
1 & 18 power supply (between 12V & 16V)	To check if the sensor is powered
20 LED early warning	Extinguishes at 50km/h or less depending on setting
21 LED warning	Extinguishes at 72km/h or less depending on setting
INFORMATION on VISU screen	Info on limits for warning and early warning



WIND SENSOR INFORMATION

Digital wind sensor
information

Analog wind sensor
information

(Positive voltage compulsory)

With interface modules: **B-67406-11**

N-64406-33 S-67406-03 B-6740611

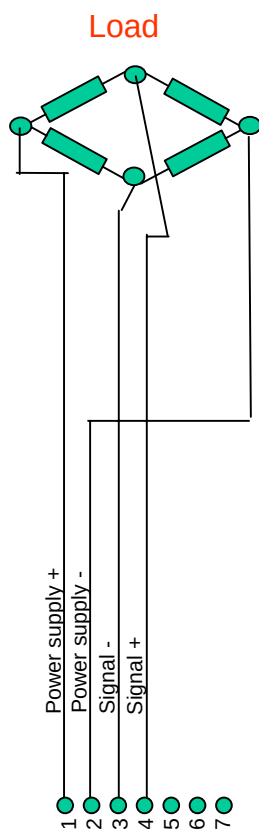
Speed (km/h)
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180

Input signal frequency (Hz)	U module output (V)
0	0
13	0.25
26	0.49
39	0.74
52	0.99
65	1.23
78	1.48
91	1.73
104	1.97
116	2.22
129	2.47
142	2.71
155	2.96
168	3.21
181	3.45
194	3.70
207	3.95
220	4.19
233	4.44
246	4.69
259	4.93
272	5.18
285	5.43
298	5.67
311	5.92
323	6.17
336	6.41
349	6.66
362	6.90
375	7.15
388	7.40
401	7.64
414	7.89
427	8.14
440	8.38
453	8.63
466	8.88

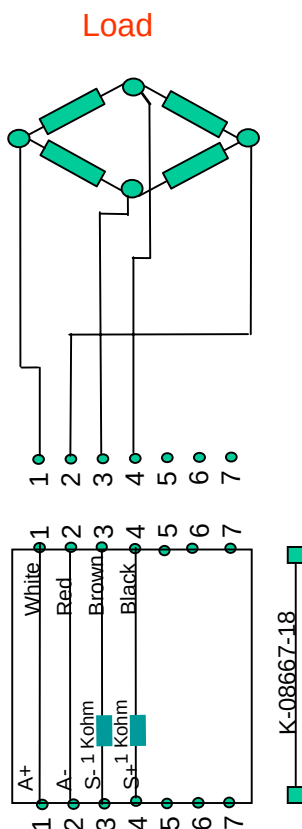
U module input (V)	U module output (V)
0	0
0.11	0.28
0.22	0.55
0.33	0.83
0.44	1.10
0.55	1.38
0.66	1.65
0.77	1.93
0.88	2.20
0.99	2.48
1.10	2.75
1.21	3.03
1.32	3.30
1.43	3.58
1.54	3.85
1.65	4.13
1.76	4.40
1.87	4.68
1.98	4.95
2.09	5.23
2.20	5.50
2.31	5.78
2.42	6.05
2.53	6.33
2.64	6.60
2.75	6.88
2.86	7.15
2.97	7.43
3.08	7.70
3.19	7.98
3.30	8.25
3.41	8.53
3.52	8.80
3.63	9.08
3.74	9.35
3.85	9.63
3.96	9.90

THE DIFFERENT POTAIN LOAD SENSORS

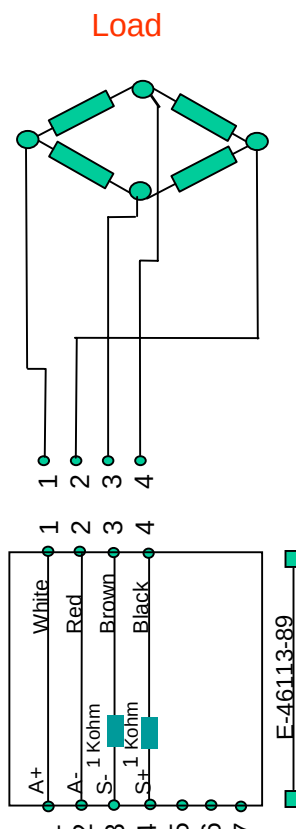
Current VISU dialog wiring



VISU dialog wiring with older load sensors (before 2000 product line) for older displays (shoe type)



VISU dialog wiring with older load sensors for older displays (type 4 separate scales)



JP

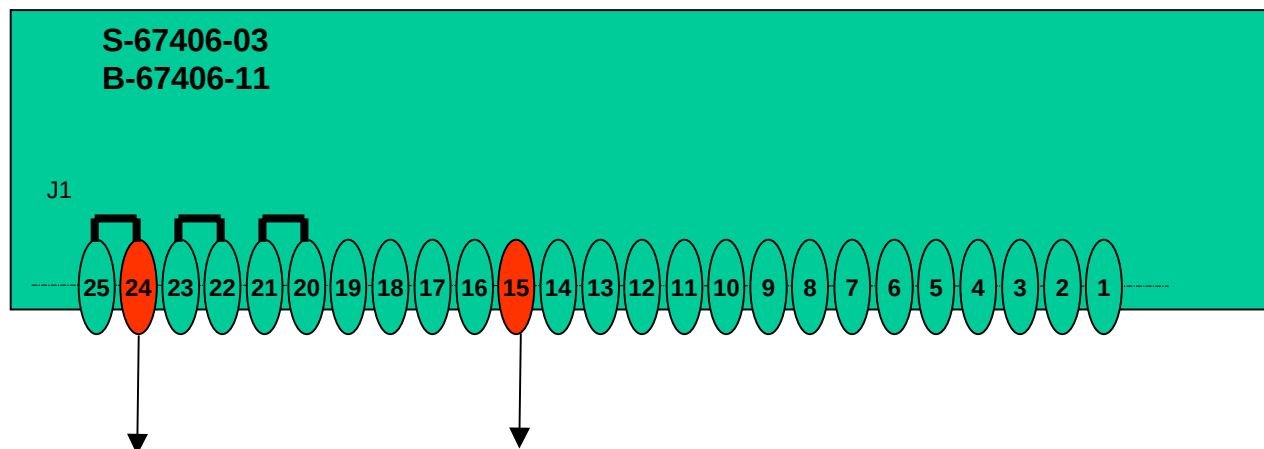
JH

JC

JVe

N-64406-33
S-67406-03
B-67406-11

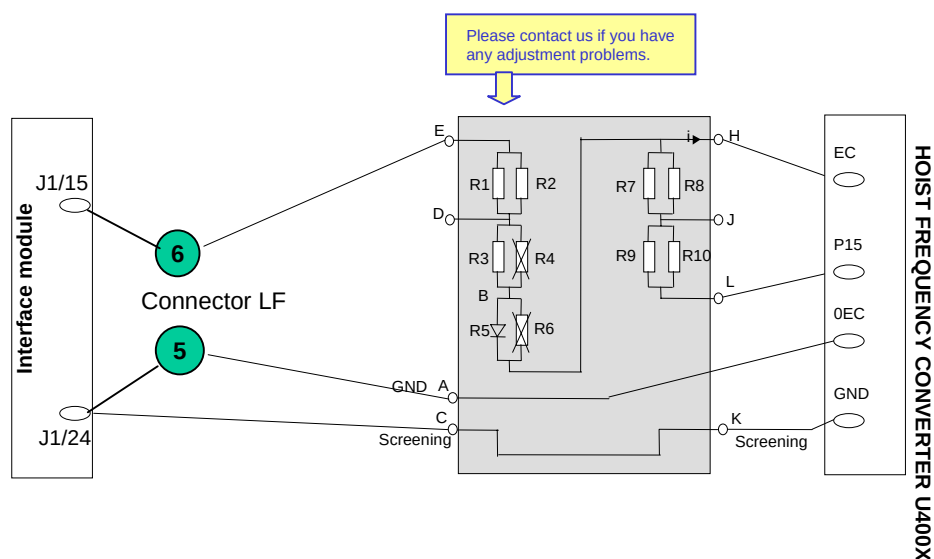
WIRING WITH HOIST 150 LCC



**Wiring only to be provided with
a 150LCC hoist (remove bridges
13-14 and 15-16 on J1)**

Signal 0 -10V

- without load between 0 & 1 V
- with max. load between 5 and 10 V



Wiring with 4-20 mA LOAD SENSORS

Cranes POTAIN TECHNIK

ex. BKT machines

S-67406-03
B-67406-11

- 25
- 24
- 23
- 22
- 21
- 20
- 19
- 18
- 17
- 16
- 15
- 14
- 13
- 12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

JP

JH

JC

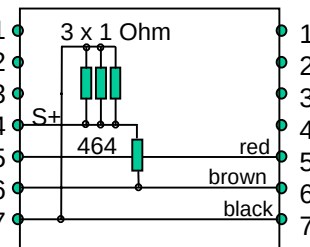
JVe

- 1
- 2
- 3
- 4
- 5
- 6
- 7

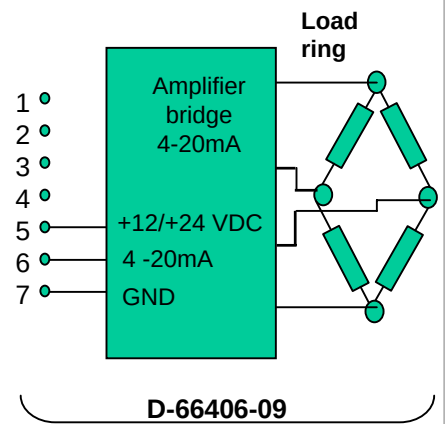
- 1
- 2
- 3
- 4
- 5
- 6
- 7

- 1
- 2
- 3
- 4
- 5
- 6
- 7

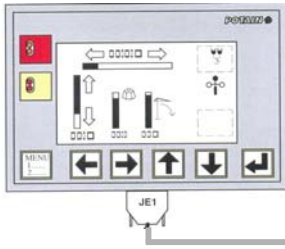
- 1
- 2
- 3
- 4
- 5
- 6
- 7



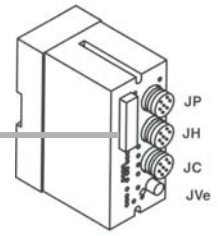
N-08667-44



Cable linking VISU with interface module

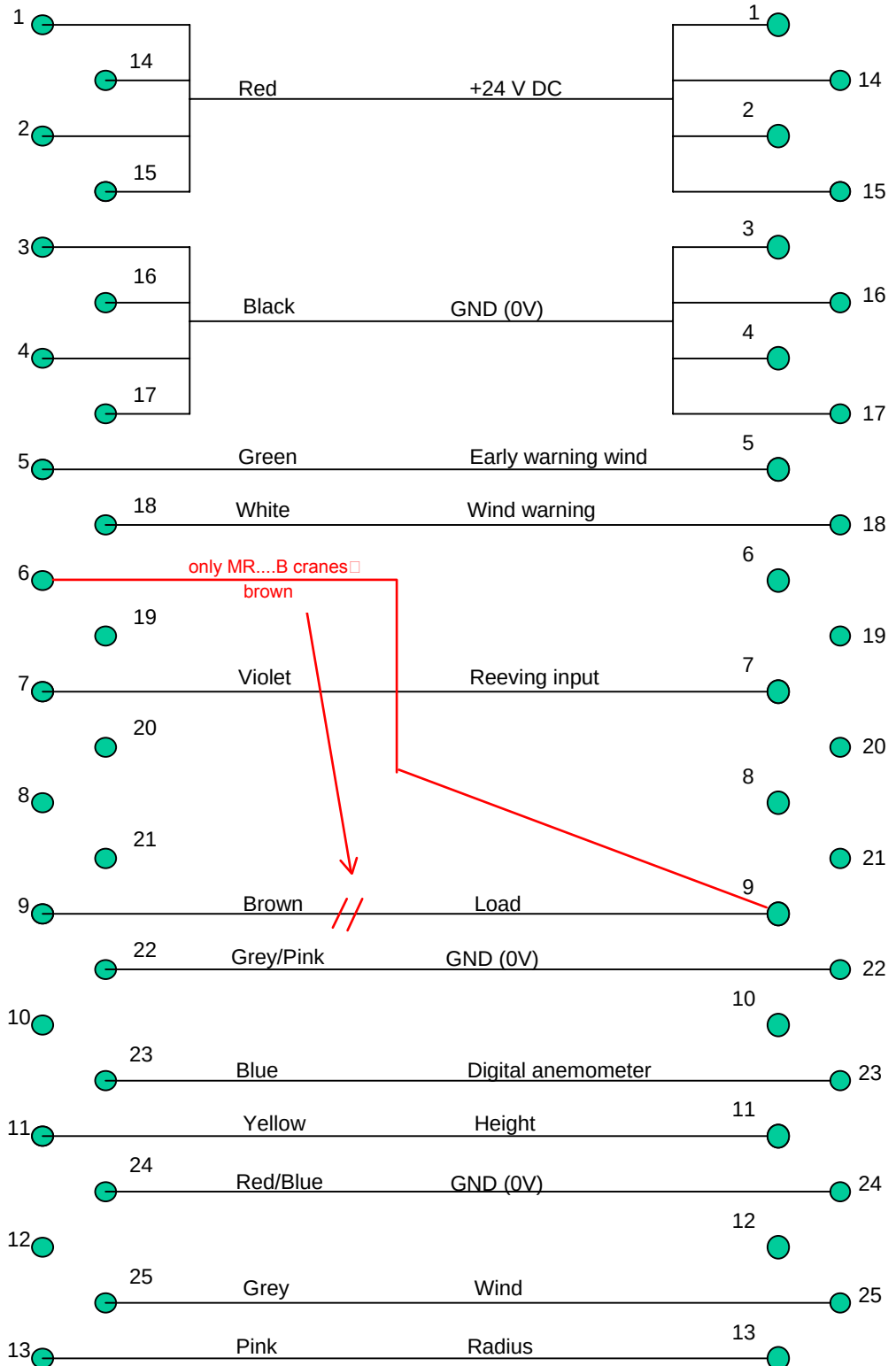


D-64416-36
(only MR...B cranes K-13667-38)



D-64416-36

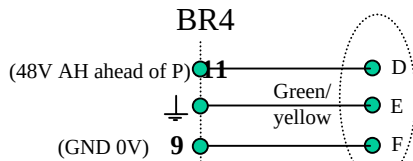
(only MR...B cranes K-13667-38)



THE CAN VISU MODULE AND ITS EXTENSIONS

The CAN VISU module is provided to be used with:
Digital wind signal amplifier
Radio control unit with display
EASY dialog

Wind signal amplifier option



Wind signal amplifier power supply

To be wired only if the crane is not equipped with «Easy dialog »

Wind signal amplifier



P-63522-91

Amplifier	Switch
YES	R Off
NO	R On

EASY dialog option

EASY dialog board



R-63522-93

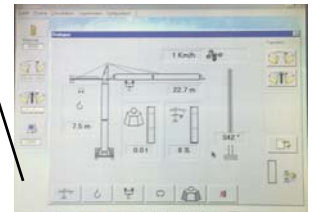


Option proxima

J-77522-27
(Radio)

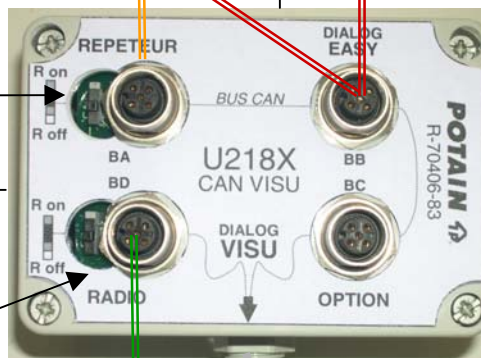
or

T-77522-13
(cable)



Option radio control with display

Radio	Switch
YES	R Off
NO	R On



S-63522-94

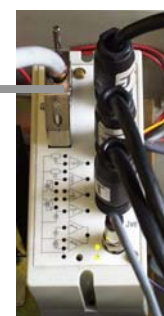


Display VISU



From software version 6.01 onward irrespective of interface module

Interface VISU

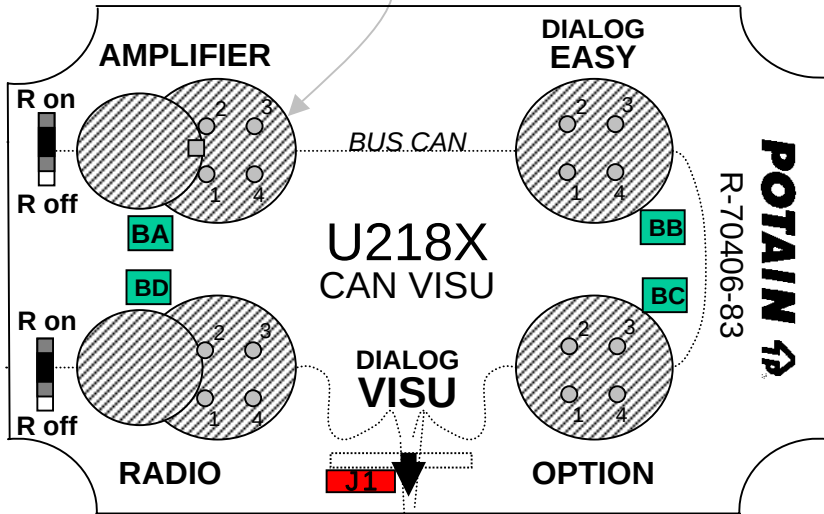


- Radius
- Height
- Load
- Wind
- Single/double reeving

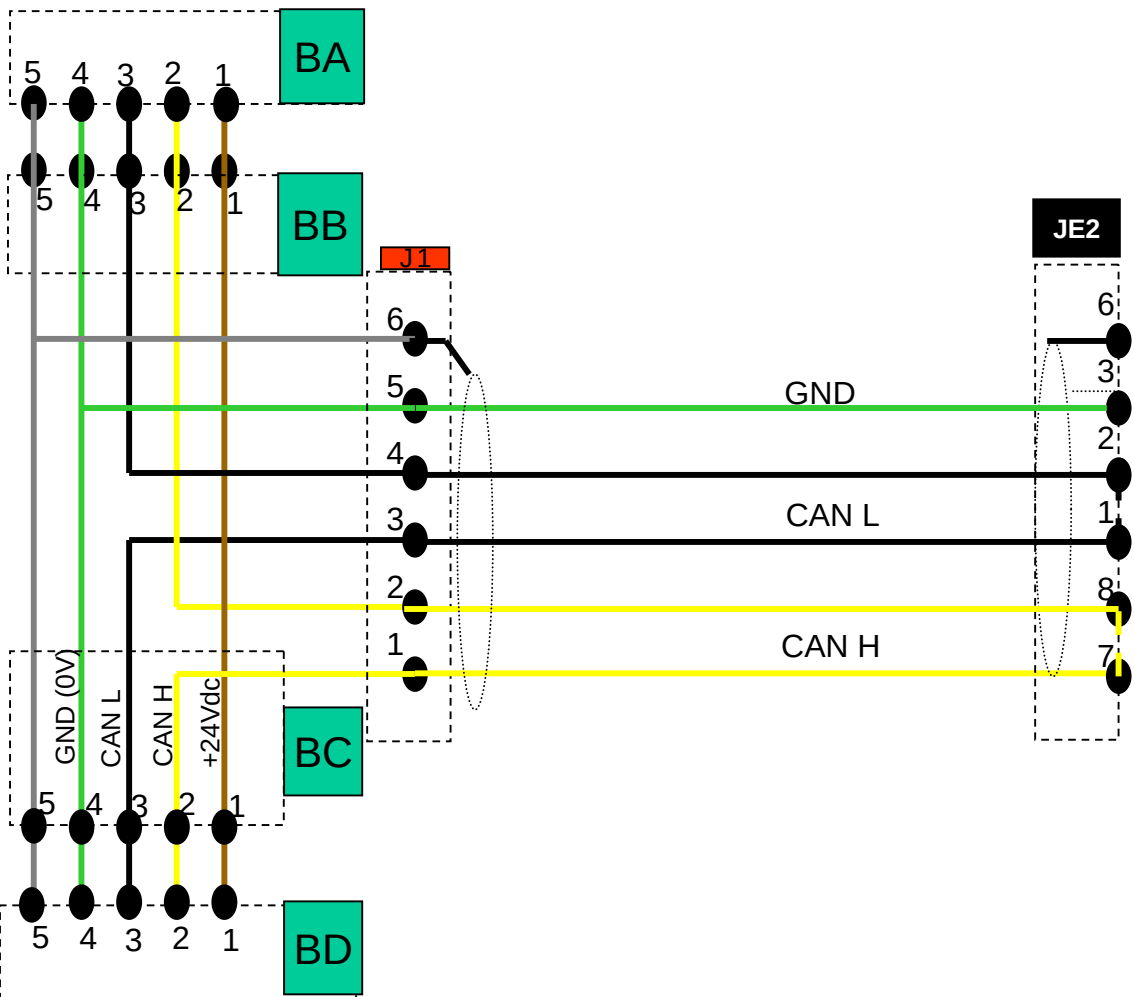
D-64416-36

Cable linking CAN VISU module with VISU unit

- 1- +24v
- 2- CAN. H
- 3- CAN. L
- 4- GND (0v)

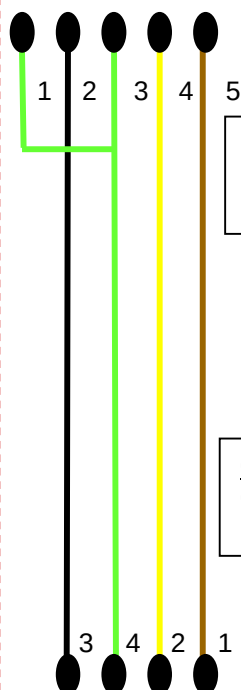


Cable linking CAN VISU module with Visu unit



Cables linking CAN VISU module / Easy / Radio control / Wind signal amplifier

Female connector
Phoenix contact 5pts
Code J-21407-79



Cable tag
CAN EASY
U200X – J1

Cable length
1m
LIYCY 2x2x0.5
Code :
D-16045-06

Cable tag
CAN EASY
U218X – JB

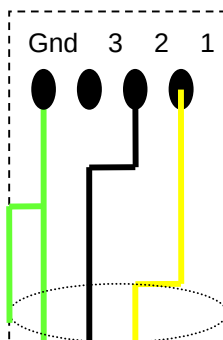
Male connector M12 (screening
on connector casing)
Code P-64407-49

- 1 Brown
- 2 Yellow
- 3 White
- 4 Green

R-63522-93

Cable linking CAN VISU / EASY

Male connector
(screening on GND)
Amphénol 4pts
Code X-17407-53



Cable tag
CAN RRC

Cable length
15m
LIYCY 2x2x0.5
Code :
D-16045-06

Cable tag
CAN RRC
U218X – JA

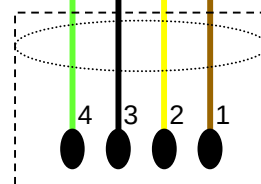
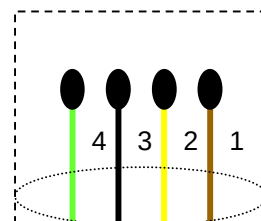
Male connector M12 (screening
on connector casing)
Code P-64407-49

- 1 Brown
- 2 Yellow
- 3 White
- 4 Green

S-63522-94

Cable linking CAN VISU / Radio
control unit

Male connector M12
Code P-64407-49



Male connector M12
Code P-64407-49

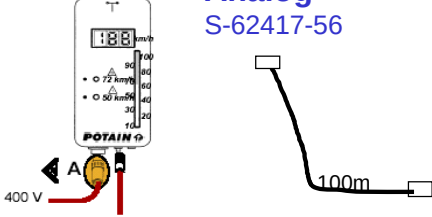
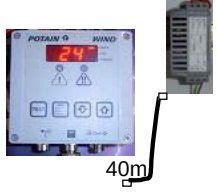
P-63522-91

Cable linking CAN VISU /
Wind signal amplifier

Cable length 60m
LIYCY 2x2x0.5

SELECTION OF WIND SIGNAL AMPLIFIERS

AMPLIFIERS

Analog S-62417-56		Digital F-68416-31	
			
Ahead of digital sensor	As spare parts in case of interface for digital / analog sensor	Use of an analog amplifier with digital anemometer	Use of a digital amplifier with digital anemometer

 Sensor	Analog S-53413-29	•	•		
	Digital J-68416-11			•	•
 Adapter cable analog/digital D-11667-24			•		
 Interface	N-64406-33 or S-67406-03	•			
	B-67406-11		•	•	•
 VISU Unit	Software versions: V3 and following	•	•		
	Software versions: from V6.01 onward			•	•
 CAN VISU module R-70406-83					•

TRAINING - PROGRAMS

OUR PROGRAMS

Please consult us for detailed programs of these courses

FIELDS (Levels)	TITEL	PERIOD (Days)	CONCERNED EQUIPMENT
DRIVING			
Crane drivers - learners	C1CA	14	All tower cranes
Experienced crane driver (School education)	C3CA	4,5	All tower cranes
Experienced crane drivers (little education)	C4CA	8	All tower cranes
Experienced crane drivers (School education)	C3TP	4,5	All tower cranes
Experienced crane drivers (School education)	C6	3	GMA
Crane driving assessment (CACES)	EPRC	1	GMA and / or GME
Crane drivers	GM1	14	Mobile cranes category -1B-
TECHNOLOGY			
Prevention of risks linked to the operating mode in complete safety on tower cranes	PRIMO	2	All sites / All cranes
Slinger, signalman – tower cranes	ESGAT	1	All sites / All cranes
Tower cranes-technology and operation	G1	4	All cranes
Prevention Responsibility Obligation	PRO	1	All sites / All cranes (can be carried out on the site)
MAINTENANCE			
Basic maintenance	T1	4	Remote controlled equipment, PC winches
Maintenance : advanced course	T2	4	RCS – RCV - D3V - RT mechanisms
Maintenance : advanced course	T12GME	4	LVF Optima - RVF Optima – DVF mechanisms on cranes slewing from the top
Maintenance : advanced course	T12GMA	4	LVF - RVF2 - RVF+ - DVF mechanisms and Igo mechanisms
Maintenance : advanced course	T13	4	LCC - RVF Optima - DVF mechanisms
Maintenance : advanced course	T11	3	Interference control systems of Top Tracing type
Maintenance : advanced course	T14	2,5	Peripheral systems of VISU-EASY-SCAN Dialog
Maintenance : advanced course	T18 SITE	3	Mechanisms on MR, TOPLESS cranes, except MDT 128 – MDT 178 – MDT 98
Maintenance : advanced course	T15	4	Peripheral systems of PILOT Dialog
Maintenance : advanced course	T16	2	Radio controls (except Igo)
ERECTION			
Erection, putting into service, maintenance	MH	2	Hydraulic self-erecting cranes (HD)
	M2	2	Hydraulic self-erecting cranes (IGO)
	MHDT	3	Telescopic, hydraulic self-erecting cranes (HDT 70-80)
	M1	4	Telescopic cranes equipped with extension masts (GTMR 331-336-346)
	M4	4	Telescopic cranes equipped with extension masts GTMR (386)
Introduction to the erection of tower cranes slewing from the top	M5	4	Tower cranes slewing from the top (MD-MC range)
Putting into service of tower cranes- adjusting of safety devices and peripheral systems	M3	3	All cranes

The inter-company courses are intended to meet a part of your needs. If the training which you plan has to include characteristics specific to your working sector or your company, it is possible to carry out really TAILOR-MADE courses. If the means can be put at our disposal, certain INTRA-COMPANY maneuvers can be carried out on site.



TRAINING COURSES for Dialog VISU

Detailed programs, registration forms are available on www.potain.fr

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