

DATA RECORDING AND MANAGEMENT - SYSTEM FOR EOT CRANES

The COACH-II, a new generation of electronic data logging, monitoring and management system for overhead (EOT) cranes; adaptable to other types of crane.

It is designed to optimize the maintenance with full knowledge of mechanical stress during use.

It can be used as a "flight recorder" tracing the history of all movements.



COACH-II

Functions

- Hourly recording (on a duration of 25 years) :
 - o Upward (ascent), downward (descent) movement, long travel (translatory) en short travel (trolley direction)
 - o Number of inching
 - o Lifted load spectrum
 - o Overloads
- Recording of sequence of recent movements (6 months)
- SWP calculation (Safe Working Period)
- Display on touch screen
 - o Lifted load
 - o Up, down, long travel and short travel movements
 - o SWP
 - o Current alarms and history of alarms
 - o Temperature (CPU and housing)
 - o Date and time
- Alarm s' detection and management (overload, SWP, etc...)
- Programming of COACH-II and download of the data's by USB stick

Inputs

- 4 digital inputs for voltage free contacts to connect the movements of the crane
- 1 analogical input 0-10V or 4-20mA (to be specified when ordering) from proportional signal of the lifted load. Must be connected to an existing load measuring system.
- Sampling rate: 20 ms
- Cut cable detection
- Protection against overvoltage and reverse polarity
- 4 digital inputs for supplementary voltage free contacts (option)
 Example: Recording of error signals from a frequency inverters

Outputs

- 1 analogue output 0-10V or 4-20mA (to be specified when ordering) proportional to SWP in real time.
- 2 relays actuated by the alarms (user configurable)
- Example : Command of a warning light when the SWP has reached is minimum value
- Early warning system via SMS (optional)
- Ethernet link
- USB stick



Specifications

Parameters	Min	Typical	Max	Unit			
Dowor owney	100	100 - 240					
Power supply	18 24 30 VDC (option						
Analogical measurement precision	-	0.1	-	% Full Scale			
Thermal drift of the analogical input	-	0.1	-	%/10°C			
Temperature measurement accuracy	-	2	-	°C			
Display		Touchscreen – 5,7" – LCD monochrome					
Analogical input (to be specified when ordering		0-10 V or 4-20 mA					
Digital input		Free contacts					
Analogical output (to be specified when ordering		0-10 V or 4-20 mA					
Internal compact flash memory		128 Mbyte					
Output relays	inverter - 5 A at 240 VAC or 28 VDC						
Operational temperature range	0	-	50	°C			
Storage temperature range	-20	-	70	°C			
Protection Rating	-	IP65	-	-			

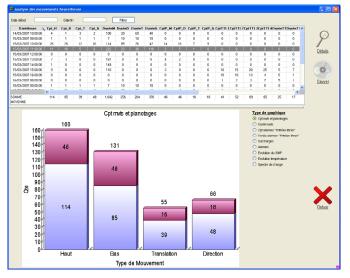
(1) 48 VAC in option

An OEM version of COACH-II without housing is also available (front plate: IP65, rear: IP20, supply: 24 VDC)

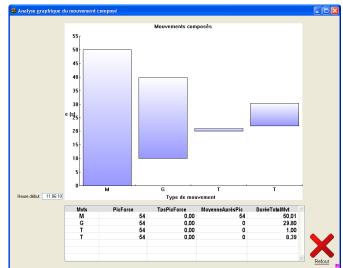
Programming and exploitation software COACH-VIEW

The COACH VIEW software is delivered with the COACH-II. It is a powerful program with following features:

- COACH-II configuration (USB key)Data's download (USB key)
- Analyse of the data's by viewing with charts and tables. This very user friendly program allows: the optimization 0 of servicing schedule, the detection of downtimes and the calculation of the FEM classification of the crane.



DateHeure	o, Hau	t Bas	Trans.	Dir.	PicForce (%)	TpsPicForce (s)	MoyenneAprès	DuréeTotalMvt (s)	SWP	Temp 🔼	0
			2	\Leftrightarrow						36	φ
15/03/2007 11:05:58		♣			55	0,00	55	0,21	9.995	36	
15/03/2007 11:05:59		÷			54	0,00	54	0,19	9.995	36	Analyse
15/03/2007 11:06:00		÷			54	0,00	54	0,20	9.995	36	
15/03/2007 11:06:10			2	\Leftrightarrow	54	0,00	54	50,01	9.995	36	
15/03/2007 11:13:55					54	0,00	54	0,00	9.995	0	
15/03/2007 11:20:54					54	0,00	54	3,50	9.995	36	
15/03/2007 11:21:00		♣			54	0,00	54	1,21	9.995	36	
15/03/2007 11:21:14					54	0,00	54	0,60	9.995	36	
15/03/2007 11:21:15					55	0,00	0	2,62	9.995	36	
15/03/2007 11:21:17				\Leftrightarrow	55	0,00	54	1,00	9.995	36	
15/03/2007 11:21:21		♣			54	0,00	54	0,20	9.995	36	
15/03/2007 11:21:23		÷			54	0,00	54	0,19	9.995	36	
15/03/2007 11:21:40				\Leftrightarrow	54	0,00	54	5,19	9.995	36	
15/03/2007 11:23:40			2	\Leftrightarrow	138	14,18	53	30,30	9.995	36 -	
5/03/2007 11:36:30	1		R	\Leftrightarrow	164	47,38	67	60,51	9.995	37	
5/03/2007 11:44:02					47	0,00	0	17,82	9.995	37	
5/03/2007 11:44:10		♣			47	0,00	47	19,60	9.995	37	\mathbf{V}
15/03/2007 11:45:06					47	0,00	47	1,00	9.995	38	
15/03/2007 11:45:08	-				48	0.00	48	0.40	9.995	38 💌	Retour





Dimensions (All measurements in millimetres)

