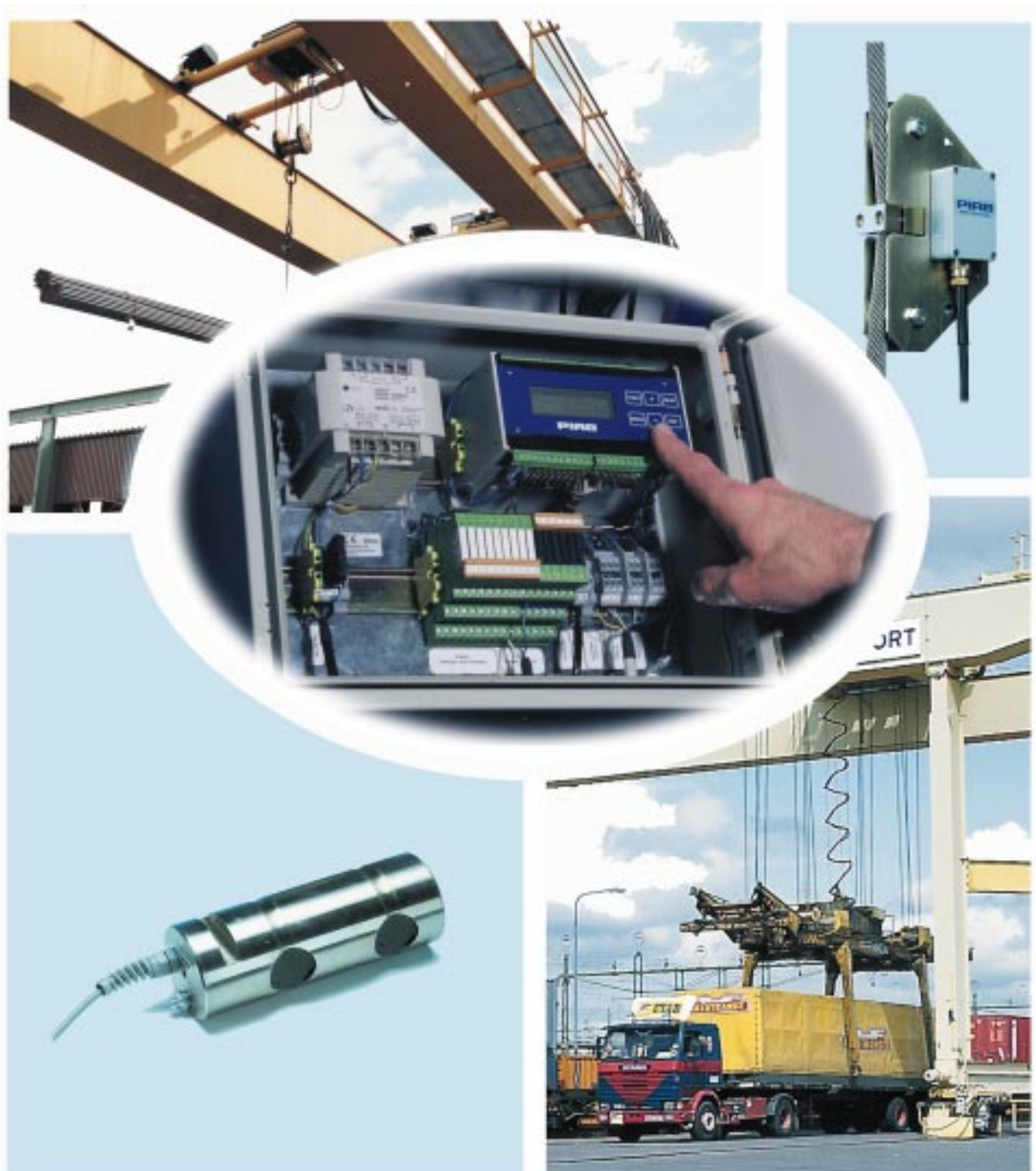


CRANE SAFETY MONITOR CSM



PIAB Crane Safety Monitor (CSM) is an electronic control unit to be used in Overload Protection Systems. The CSM evaluates and computes signals from force transducers and can be set for alarm at pre set alarm limits. By installing the CSM hazards for personnel and material can be avoided. The CSM will also record the operation of the hoist. The CSM is designed for indoor or outdoor operation in aggressive and demanding industrial environments.

PIAB™

TECHNICAL DATA

OPERATING VOLTAGE:

85-264 V AC, 47-440 Hz or 120-370 VDC.

ENCLOSURE:

Lacquered steel box,
Dimensions 380x300x155 mm.

PROTECTION CLASS: IP65

TEMPERATURE RANGE: -20°C to +70°C.

INPUTS:

One to three inputs, current signal, each 4-20 mA.

LIMIT SETTINGS:

Limit 1, (Slack) Rope Warning
Limit 2A, Overload Indication/Warning
Limit 2B, Overload Warning /Cut Off

Optionally, further limit settings can be made. The Switch Limits can be set with "on-" or "off-" delay up to 5 seconds.

Switching Capacity 8 A, 250 V AC.
Greater switching capacity can be achieved through installing contactors as an option.

RECORDING OF HOISTING MOVEMENT:

Two Inputs: Low and High speed.
Voltages: 12V DC, 24V DC, 115V AC or 230V AC.

OUTPUT:

RS485, Serial, (can be used for Remote Display or for other purposes)

DISPLAY (BUILT IN):

LCD, 2 rows each with 16 alphanumeric characters. Height of characters 5 mm, back lit.

SETTING OF SWITCH LEVELS/PROGRAMMING:

Simply via 6 push buttons on panel.



PIAB™

Force Measurement

PIAB Sweden AB, Box 123, S-184 22 Åkersberga.
Visiting address: Stationsvägen 16.
Tel Int +46-8-540 839 00. Fax Int +46-8-540 213 64.
Internet: www.piab.se/force E-mail: info@piab.se

The CSM can monitor the following functions/operations:

- Slack Rope status.
- Load Indication (Load in Hook).
- Load Peak Value.
- Set Switch Limits.
- Total Service Time.
- Overload Service Time.
- Number of Hoisting Cycles.
- Levels for Change of Hoisting Speed.
- Service Time converted into Full-Load Service Time.
- (For computing of Safe Working Period as per ISO 12482-1, Cranes - Condition monitoring).

Safety and Economy:

- Protects personnel and property against hazards due to overload.
- Enhances safety for personnel at crane operations.
- Monitors the operational conditions of the crane as well as the recommended service intervals. Through this monitoring the crane can be fully utilised during its entire life period (Safe Working Period).
- PIAB CSM is self-checking. All faults result in overload indication.

