

Gigasense 9:302C Electronic Unit



Gigasense 9:302C Electronic Unit for overload protection

With three load limits and mV-signal input, the compact 9:302C Electronic Unit is your perfect choice for protecting a lifting device against overload. Simply connect 9:302C to one load cell/force transmitter.

It can also be used for other applications such as load indication. The 9:302C is very easy to install with screw terminal blocks and a back lit display.

The unit is delivered programmed and adjusted to your required parameters from factory.

All Gigasense products are known to be straight forward, easy to use and maintenance free. Thus giving you the advantage of "smooth daily work" and low life cycle cost.

GIGASENSE

Gigasense products within Force Measurement and Crane Safety are well known high quality products, built from many years' experience and used by leading heavy duty industry around the world.

Gigasense products meet the highest demands of performance level requirements.

We are represented by many selected local partners in more than 30 countries on six continents.

Gigasense 9:302C Electronic Unit



Technical Data

Transducer input:
0 - 2 mV/V

Operating voltage:
100 - 240 VAC or
18-30 VDC

Protection Class:
IP65
NEMA 1, 3, 3R, 4X, 12, 13
-25 to 70° C

Impact resistance:
IK 08/07 (EN 62262)

Relay outputs:
Two potential free relays +
Output Test Equipment relay

5 A, 250 VAC
6 A, 24VDC

Analogue Output:
4 - 20 mA, max 500 Ω

Enclosure:
ABS
UL 746C 5V

Dimensions:
235 x 185 x 119 mm
9,25 x 7,28 x 4,70 inch

Function

9:302C is an overload protection system intended for use in cranes with a single hoist. One force transmitter with a signal output of 0 - 2 mV/V used with the 9:302C overload protection system.

To conform with European standards, a redundant force transmitter shall be used. The system conforms with performance level C, category 2, according to standard SS-EN ISO 13849-1, with a redundant force transmitter. The system can work with a single channel force transmitter (non redundant force transmitter) where local regulations allow. We always recommend to use a redundant force transmitter with the 9:302C overload protection system.

The 9:302C has two relays, OTE relay and one analogue 4-20mA signal output:

Relay 1

Limit 1 is normally used for slack rope detection

Relay 2

Limit 2 is normally used for overload limitation at 110% of the crane's nominal capacity. Limit 2 includes two set points: Limit 2A and 2B. For Limit 2A you can easily choose between on and off delay for the overload limit. Limit 2B is always without delay and is mostly used for a switch value above Limit 2A. Limit 2B switch value is sometimes called emergency limit, as it immediately cuts crane movement, and the value is often set to 120-125% of nominal capacity.

Relay OTE (Output Test Equipment)

The relay output marked OTE, shall be connected to the crane control system. In case of system errors in the 9:302C system, the OTE relay shall stop the crane and indicate the error to the operator. The problem that occurred must be investigated and repaired before the crane is put in operation again.

4 - 20 mA

The analogue signal output can be used to transfer the load indication to your own system or to run a Gigasense large format display

Built in display

LCD, 2 rows each with 16 alphanumeric characters. The height of the characters is 5 mm. The display is back lit to enable readings in any environment.

Settings

Simple setting of switch levels with 4 push buttons on panel. No laptop or tools are needed. Settings are normally made from factory.

Safety

The 9:302C Electronic Unit is self-checking. Any malfunction of load cell or cable will indicate overload. This informs the operator some component of the overload system is out of order.



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