Torquemeter

Measurement system to analyse electric drives on load





General

The microprocessor-controlled torquemeter of type LAC measures the torque on the shaft of asynchronous motors. It can be operated on any converter or mains operated three-phase asynchronous motor with squirrel-cage rotor from a rated capacity of 0.55 kW. The torque is determined by the measurement of motor input currents and voltages in conjunction with appropriate field compensation transducers. The gear ratios of the transducers and the stator resistance of the asynchronous machine are required as operating parameter. Determining the torque is possible without separation of the mechanical drive chain.

Features

- display of torque directly in Nm
- * fast commissioning
- * none mechanical wear
- * adapted for converter mode
- * implemented limit contacts and analogue interfaces



scheme: load determination of crane lift





Applications:

- * rotary feeders in sugar factory
- * cement grinding plants
- * agitator driving gears
- technological control, e.g. in the rolling mill technology
- * crane systems und lifting devices
- winder drives
- * trial and test stands
- * determination of viscosity changes

Technical data:

*

*

- * frequency of input variables:
 - 9...100 Hz
- measurement accuracy of torque:
 ± 2%...4% of final value
 - casing: aluminium housing, DIN rail mounting
- * clamps:
 - spring balancer connector WAGO 2,5 mm² inputs:
 - analogue: ± 10 V or 4-20 mA (2x) digital: 24 V or 230 V (4x)
- * outputs:

4...20 mA (2x)

relay-control outputs (4x)

- serial interface:
 RS 232 (isolated)
- certifications: transient emissions EN 61000-6-4 (industrial sector) interference immunity EN 6100-6-2 EN 55011 (VDE 0878) CE-conformity



EAI Elektro- und Automatisierungstechnik GmbH

Bakenröder Str. 11 38871 Ilsenburg / Germany www.eai-net.de Fon: +49 (0) 39452 964 0 Fax: +49 (0) 39452 964 15 mails@eai-net.de



pi_lac_en_220211