LL200 LOAD LIMITER

Description:

The LL200 is designed to be used in combination with current transformers (CT's), for load limitation of hoisting devices such as electric chain hoists and electric wire rope hoists.
The LL200 can be used on a single speed motor with just one CT required. For dual speed motors, both the high speed and low speed can be monitored with the use of two CT's.
The LL200 is used to monitor the working load of a hoisting motor based on the electrical current draw of a motor in low speed and high speed.
The unit supervises the present value of the connected high speed or low speed current. Two limits can be set for the over-current.

The over-current function permits a certain time period of higher current during the motor start-up. If the current drawn by the motor exceeds the current setting of the limit switch beyond the allowance setting then a relay will trip the up control circuit. The motor can still be lowered in order to remove an overload condition.

Times and currents are set digitally and stored in memory, the setting is simplified and requires no measuring instruments. Motor current is displayed on the screen during operation. Installation is simplified as each unit is supplied with a pre-wired cable and two current transformers (CT's).

Specification:

Power Supply:

Rated value	110V or 220V (-15%, + 20%)
Frequency	45 to 65 Hz
Burden	5 VA

Display:

Range	0 … 999
Type	LED ,7 segments, 3 digits
Color	Red
Data updating time	1 Sec

Input circuit:

A/D Converter resolution DC	10 bits (1024 points conv.)
Conversion method	Successive approximations
Conversion time	600 uS
Measurement accuracy	0.15 % ± 1 digit
Measurement range	1.3 rated value
Overload	2 In continuously
Burden	0.055 VA

Output relay:

Rated AC current	6 A
Max AC current	10 A
Rated voltage	250 VAC, 50/60 Hz
Insulation resistance	>100 MΩ @ 500VDC
Mechanical life	10 million operations
Electrical life	100,000 operations

Current transformer (CT):

Primary current	100 A
Secondary current	50 mA
Accuracy	1 %
Applied voltage test	1000 V
Insulation resistance	100 MΩ
Dimension (mm)	Toroid 15.3 (ID), 34.7 (OD), 13.2 (H)
Weight	30 g

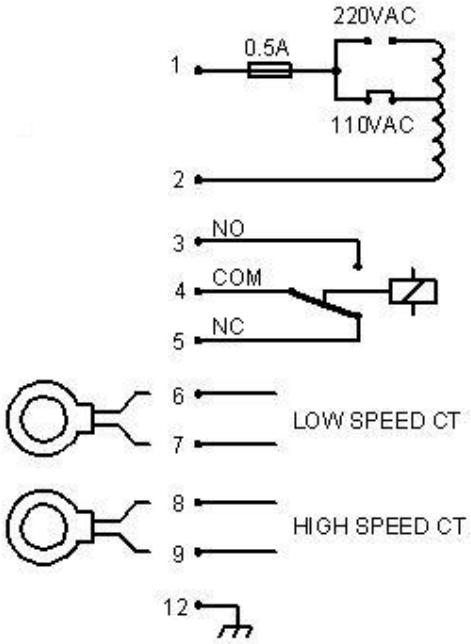
Enclosure:

Material	ABS
Color	Dark gray
Protection	IP 65
Dimension (mm)	120 x 80 x 55
Weight (w/o cable)	0.5 Kg

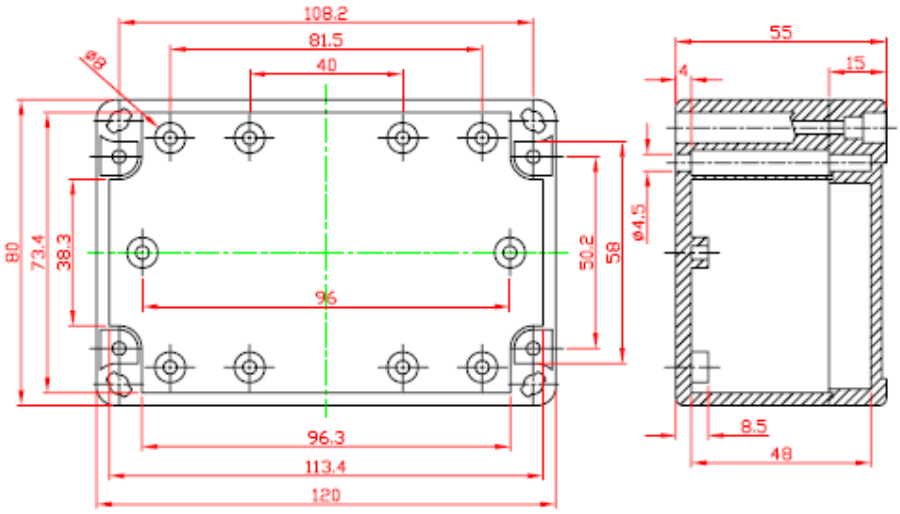
Environment:

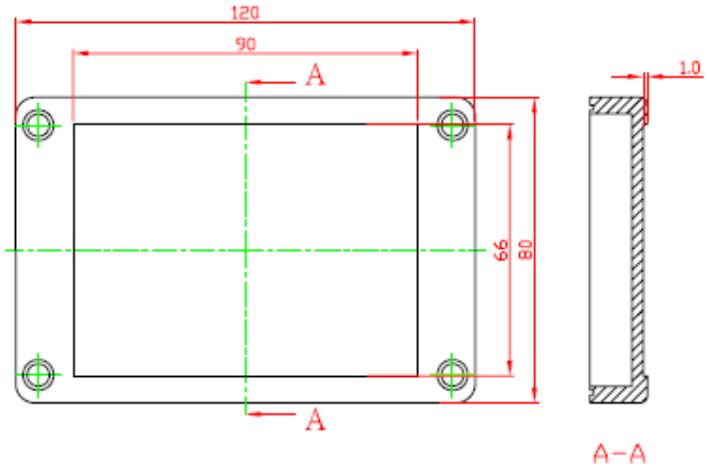
Storage temperature	-40 to 70°C
Operation temperature	-20 to 60°C
Humidity	<70 % R.H.

Wiring Diagrams:

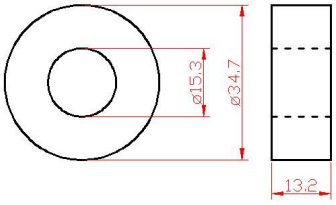


Enclosure Dimensions:





Current Transformer Dimensions:



All dimensions in [mm]