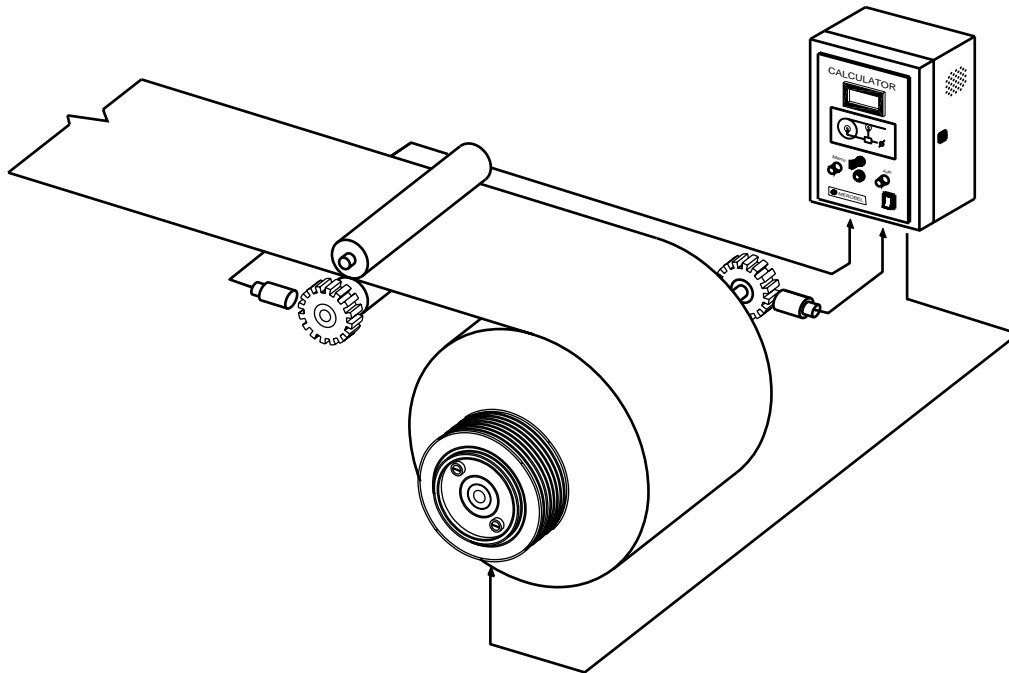


CALCULATOR Cabinet

Technical features

Power supply	110 or 240 V Mono	(Hz)	50-60
Mains consumption		(VA)	120
Output current		(A)	0-3,5
Input/Output analogic voltage		(V)	0-10
Operating temperature		(°C)	0-40
Internal cooling fan			
Weight		(Kg)	10



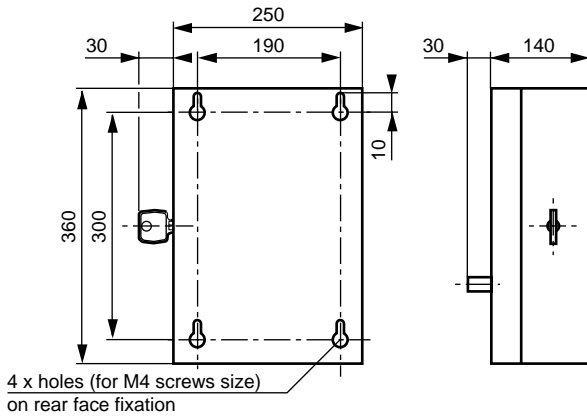
Operating principle

- The CALCULATOR cabinet regulates continuously the tension force of a product wound up on a web. The force set point is regulated by the machine operator. This system is continuously computing the ratio between rotation web and linear speeds, to correct in automatic mode the required torque on the web shaft.
- In the INERTIAL COMPENSATION CONTROL version, the web value of inertia is calculated (weight, speed, diameter) in order to correct the torque value and to keep a constant tension force during transients (acceleration and deceleration).
- This regulator is basically made to operate with the whole range of MEROBEL couplings.

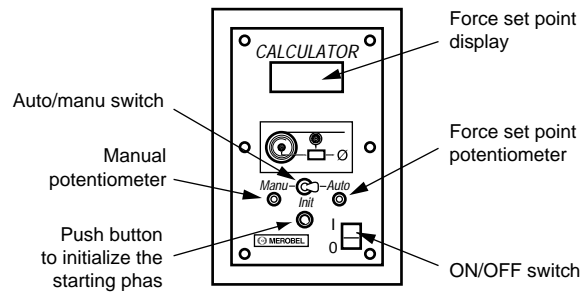
Advantages

- Small cabinet including all the functions.
- Display which allows to control the tension force set point.
- Automatic storage of the last web diameter value when the machine stops.
- Reset by push button when starting cycle.
- Manual mode commutation possible.
- Current regulated power supply (torque independent of the coupling temperature changes).
- Set point monitoring:
 - in local mode with potentiometer on the front panel,
 - in external mode with potentiometer or input voltage (0-10 V).
- From a voltage 0-10 V, possibility to use the web diameter image.
- From external contacts, it is possible:
 - to switch off the current in the coupling (FREEWHEEL function),
 - to fix a current (MAXIMUM TORQUE function), ajustable on the electronic card.
 - to reset the value of the starting phase.
- Advanced version with INERTIAL COMPENSATION CONTROL.

Size and mounting

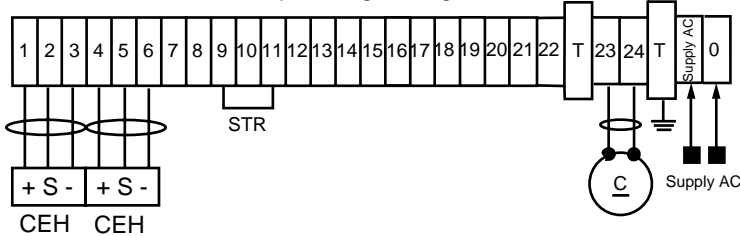


Front panel



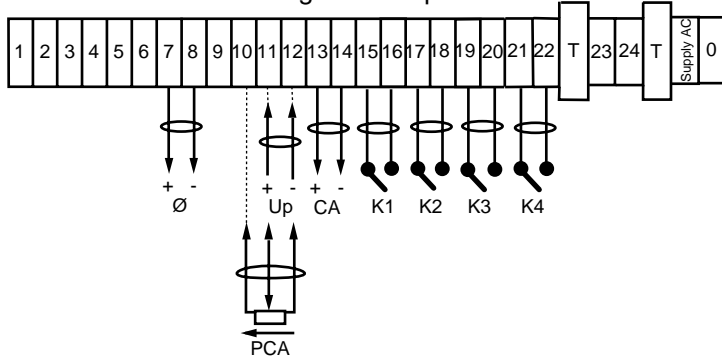
Electrical wirings (terminal)

Basic operating configuration



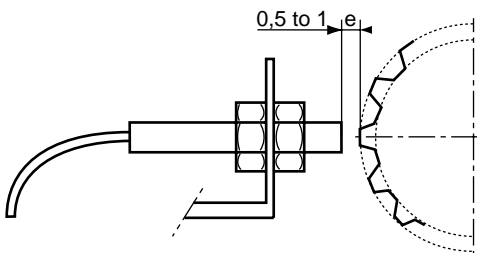
- CEH : Hall effect sensor
- STR : Strap to plug between terminals 9 and 11, when using the front face potentiometer
- C : MEROBEL coupling

configuration Optional



- Ø : Diameter information output (0-10 V).
- Up : External set point (0-10 V).
- PCA : External AUTO set point potentiometer (10 K).
- CA : AUTO set point output (0-10 V).
- K1 : FREEWHEEL contact (see chapter "PROCESS" in the technical file)
- K2 : Max. torque contact (see chapter "PROCESS" in the technical file)
- K3 : AUTO / MANU contact (see chapter "PROCESS" in the technical file)
- K4 : RESET contact (see chapter "PROCESS" in the technical file)

Sensors (Hall effect)



Speed information is detected by Hall effect sensors, associated to the tooth wheels (see technical sheets).

Installation and adjustment

A technical file is provided with the cabinet, giving all the necessities informations to install and adjust your device. It is also available at our Sales department.

Order referencies

240 V AC Standard: 336 840 00
 110 V AC Standard: 336 841 00

Inertial Compensation control: 336 870 00
 Inertial Compensation control: 336 871 00