# Intelligent Tension Control Unit ITC for LB303

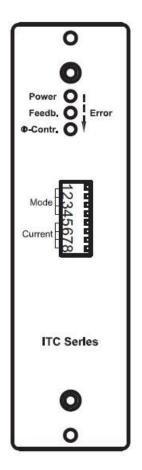
This Intelligent Tension Controller is designed for optimizing the performance of our own hysteresis brakes and clutches to work in different operating modes as required by varies of applications.

#### 1. Technical details:

Voltage for hysteresis brakes and clutches at nominal torque and coil temperature of 120°C	30 VDC		
Allowed Residual Ripple	1.5V		
Operating Voltage Range	24-36 VDC		
Open Circuit Power Consumption	< 150 mA		
Maximum Input Current (Depending on unit size)	2.8 A		
Voltage Output	10V±0.8V, 20 mA (Ra min=500Ω)		
Input Resistance	RE≥3.3kΩ		
Ambient Temperature	0 to 50°C		
Storage Temperature	-30 to +70°C		
Humidity	DIN IEC68, part 2-30		
Safety Class According To DIN 40 050	IP 30		
Rack	92mm Plug-In Module		
Connection	18-pin termainal		
Weight	0.43 kg		

## 2. LED Indicators:

Name	Function		
LED (1) "Power"	Power on, to show ITC is ready		
LED (2) "Feedback"	Closed-loop working mode (DIP Switch 1,2,3,4 is		
	on)		
LED (3) "Φ Control"	$\Phi$ Arm Position Control, DIP Switch 3 = "0" and 4		
	= "1"		
	$\Phi$ Calculation Control, DIP Switch 3 = "1" and "4		
	= "0"		
	LED "Φ-Control" flashes, while the setting		
	process is not executed under the two mentioned		
	modes.		
	Otherwise, LED (3) keeps On.		
Error:	3 LEDs flashes alternately, error occurs		
Mode:	See: Working mode table		
Current:	See: Working mode table		



## 3. Foot pins definition:

Pin	Function / definition	Pin	Function / definition		
1	Negative power supply	2	Negative power supply		
3	No connection / Reserved	4	No connection / Reserved		
5	Negative power supply	6	Negative output (To brake)		
7	Voltage output 10V +/- 0.8VDC, Max current 20mA; Loading resistance Ra min=500 ohm	8	Voltage input, rated (0 to +10v) Input resistance Ri = 200k ohm; Remarks: if pin 5 is connected to external GND, the external analog voltage input must be less than 10V		
9	Voltage input, rated (0 to +10v) Input resistance Ri = 200k ohm; Remarks: if pin 5 is connected to external GND, the external analog voltage input must be less than 10V	10	No connection / Reserved		
11	No connection / Reserved	12	No connection / Reserved		
13	No connection / Reserved	14	Short-circuit with negative terminal, controller output current = 0		
15	Short-circuit with negative terminal, controller output current = maxmium	16	Positive output (To brake)		
17	Power supply +24V, Maximum current 2.8A (Depending on loading)	18	Power supply +24V, Maximum current 2.8A (Depending on loading)		

### 4. Working Mode

Working Mode									
DIP Swtich	1	2	3	4	5	6	7	8	
Open Loop Control	OFF								
Closed Loop Control	ON	ON	ON	ON	ON	OFF	ON	ON	

5. Connection

