

BTDA 1085A **UNIVERSAL MOTOR SPEED CONTROLLER**

The BTDA 1085A is a monolithic integrated circuit that provides all the necessary functions for the speed control of universal (AC series) motors in an open or closed loop configuration; additionally it has the facility for defining the initial speed/time characteristics. The circuit provides a phase angle varied trigger pulse to the motor control triac.

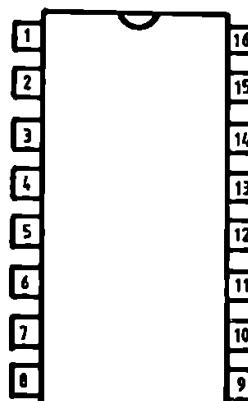
The functions of this circuit include :

- guaranteed full wave triac drive
- soft start from power-up
- on-chip frequency/voltage convertor and ramp generator
- current limiting incorporated
- direct drive from AC line

Features

- Operating temperature	0 ... +70 °C
- Storage temperature	-25 ... +125 °C
- Regulated voltage	15.5 V
- Control amplifier transconductance	max. 300 uA/V
- Trigger pulse repetition period	max. 215 us
- Trigger pulse width	max. 100 us
- Output leakage current	min. 30 uA

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|-----------------------------------|----|
| 1. Current synchronisation | 1 |
| 2. Voltage synchronisation | 2 |
| 3. Motor current limit | 3 |
| 4. Actual speed | 4 |
| 5. Set speed | 5 |
| 6. Ramp current generator control | 6 |
| 7. Ramp generator timing | 7 |
| 8. V- | 8 |
| 9. V+ | 9 |
| 10. Ballast resistor | 10 |
| 11. F/VC pump capacitor | 11 |
| 12. Digital speed sense | 12 |
| 13. Trigger pulse output | 13 |
| 14. Sawtooth capacitor | 14 |
| 15. Sawtooth set current | 15 |
| 16. Closed loop stability | 16 |



PACKAGE MP-117 / TOP VIEW