Indramat

DATA SHEET

TDA1.3-100-3-L00

Industrial automation components

Manufacturer	Indramat
Catalog number	tda13-100-3-l00
Category	Industrial automation components
Product type	Industrial automation components
Status	Active product

Technical specification

Weight	9.97 kgs
Voltage	300 V
Product Type	Drive
Signal Type	300
Current	100 A
Signal Level	300 V

Description

The Indramat TDA1.3-100-3-L00 is a high-performance main spindle controller engineered for precise rotor position determination in demanding industrial applications. Designed for integration with Indramat's 2AD asynchronous and 1MB frameless motors, this controller excels in CNC machine tools, delivering exceptional performance in milling, turning, and grinding centers. It features a rated current of 100 A and a continuous effective current of 70 A, operating on a 300 V DC link circuit. The controller interfaces via the SERCOS interface, providing real-time communication of speed, position, and torque commands. With a compact design weighing 10.5 kg, it integrates seamlessly into modern CNC systems without compromising performance or footprint. The TDA1.3-100-3-L00 offers high-resolution rotor feedback capable of detecting position at 1/2,000,000 revolutions, enabling sub-microstep accuracy in demanding machining applications. Its ambient temperature range spans +5 to +45 °C, with a maximum permissible temperature threshold of 55 °C, ensuring consistent performance under variable shop conditions. Built to withstand environmental stresses, it holds a Humidity Class of F per DIN 40 040 and a Protection Class of IP10 per DIN 40 050, guarding against ingress of solid objects over 50 mm. This controller is ideal for applications requiring precise spindle positioning and integration with feed axes for C-axis operations, operating effectively across a wide speed range.