Indramat

DATA SHEET

RAC3.1-100-460-A0I-W1-220

Industrial automation components

Manufacturer	Indramat
Catalog number	rac31-100-460-a0i-w1-220
Category	Industrial automation components
Product type	Industrial automation components
Status	Active product

Technical specification

Rated Connection Voltage	3 x AC 400 V, 50 Hz, ±15% or 3 x AC 460 V
Rated Current	100 A
Cooling	Internal Blower / Built-in fan
Control Voltage	AC 230 V / 50-60 Hz
Speed Command Input	Analogue (+/- 10 V)
Interface Terminal	X4, 9 poles
Protection Category	IP10 per EN 60529
Ambient Operating Temperature Range	5 to 45°C
Storage Temperature Range	-30 to +85°C
Controller Weight	49 kg

Description

The Indramat RAC3.1-100-460-A0I-W1-220 is a high-performance AC main spindle drive controller engineered for precision spindle regulation in industrial automation applications. Designed by Indramat, a leader in motion control technology, this device offers robust performance and reliability. Operating on a rated connection voltage of 3 x AC 400 V, 50 Hz, ±15% or 3 x AC 460 V, it delivers a rated current of 100 A, ensuring consistent torque output under variable mains conditions. The controller features an internal blower with a built-in fan for efficient cooling, maintaining optimal thermal performance across an ambient operating temperature range of 5 to 45°C. Control electronics operate from a separate rated connection for control electronics of AC 230 V / 50-60 Hz, consuming just 200 VA of control power. Speed is commanded via an analogue input of ±10 V, while the interface terminal X4 (9 poles) provides secure, low-noise signal routing. The unit meets IP10 per EN 60529 protection standards and withstands storage temperatures from -30 to +85°C. Weighing 49 kg, it is designed for easy integration into machine tool and spindle systems, reducing cabinet wiring complexity. The RAC3.1-100-460-A0I-W1-220 is ideal for applications requiring precise spindle control, such as fabrication, milling, and turning centers, offering scalable performance and predictable maintenance schedules to maximize uptime in precision-driven manufacturing lines.