

Schneider Series Service Manual

DR-1030-000

1. Description

The DR-1030-000 part from Schneider Electric's Modicon series is designed as a servo drive, operating effectively in various industrial scenarios. It supports a rated voltage of 325V DC with a maximum current capacity of 30 Amps and an input voltage range of 240 to 480 VAC, making it versatile for different applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon
Part	Number DR-1030-000
Weight	8.13 lbs (3.69 kg)
Product	Servo Drive
Max	Current 30 Amps
Rated	Voltage 325 V (DC)
Input	Voltage Range 240-480 VAC
Control	Mode Vector Control
Feedback	Type Incremental Encoder
Encoder	Resolution Up to 20 bits
Communication	Interface RS232/RS485/CANopen
Operating	Temperature Range -10 to 50 degrees Celsius
Humidity	Range 0 to 90% Non-condensing
Protection	Class IP20
Control	Signal Input ± 10 ($\pm 5\%$)
Digital	Inputs 8 configurable inputs
Adjustable	Switching Frequency 2 kHz to 16 kHz

3. Product Information

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Technical specifications for DR-1030-000

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Digital Inputs 8 configurable inputs

Adjustable Switching Frequency 2 kHz to 16 kHz

Description

Designed by Schneider Electric, the DR-1030-000 servo drive represents a crucial component in motion control systems. Operating at a nominal voltage of 325 V DC, it is suitable for a wide variety of applications. This unit can handle a peak current of 30 amps and supports an input voltage range spanning from 240 to 480 VAC, highlighting its flexibility.

The control method employed in this device is vector control, which provides precise control of speed and torque characteristics of connected motors. Feedback is managed via an incremental encoder, achieving a resolution of up to 20 bits, ensuring accurate position sensing for dynamic applications. For communication, the drive features multiple interfaces, including RS232, RS485, and CANopen, facilitating straightforward integration with other systems.

Operating effectively in ambient conditions, the temperature range for this drive is set between -10 to 50 degrees Celsius. Furthermore, it can function in environments with relative humidity levels ranging from 0 to 90%, provided they are non-condensing.

Rated with a protection class of IP20, the DR-1030-000 is designed for indoor applications, protecting internal components from dust and other objects. It weighs around 5.5 kilograms, making installation and maintenance manageable. The control signal input is specified at ± 10 ($\pm 5\%$), and users can configure up to 8 digital inputs for varied control options. Additionally, the switching frequency can be adjusted between 2 kHz to 16 kHz, enabling tailored performance based on application requirements.