

User Guide

UD53

**Resolver interface
small option module
for Unidrive**

Part Number: 0460 - 0088

Issue Number: 4

General Information

The manufacturer accepts no liability for any consequences resulting from inappropriate, negligent or incorrect installation or adjustment of the operating parameters of the equipment or from mismatching the Drive with the motor.

The contents of this Guide are believed to be correct at the time of printing. In the interests of a commitment to a policy of continuous development and improvement, the manufacturer reserves the right to change the specification of the product or its performance, or the contents of this Guide, without notice.

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Use within the European Union, etc

The following information applies where the end use of the Drive is within the European Union, the European Economic Area, or other regions which have implemented Directives of the European Council or equivalent measures.

The Drive complies with the Low Voltage Directive 73/23/EEC.

The installer is responsible for ensuring that the equipment into which the Drive is incorporated complies with all relevant Directives.

The complete equipment must comply with the EMC Directive 89/336/EEC.

If the Drive is incorporated into a machine, the manufacturer is responsible for ensuring that the machine complies with the Machinery Directive 89/392/EEC. In particular, the electrical equipment should generally comply with European Harmonised standard EN60204-1.

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1 Introduction

1.1 Main features of the UD53

Applications The UD53 Resolver *small option module* is an interface module for installation in a Unidrive. The UD53 operates with resolvers having the following specifications:

Input impedance: $>85\Omega$ at 6kHz

Turns ratio (primary:secondary): 3:1 or 2:1

Excitation voltage: 6V_{RMS} or 4V_{RMS}

The Drive must be operating in the Closed-loop Vector or Closed-loop Servo mode; the resolver connected to the UD53 is used for speed and position feedback.

Simulated encoder outputs The simulated-encoder outputs produce *quadrature AB* signals corresponding to the *line counts* from the source encoder. Alternatively, these outputs can be configured for frequency and direction (F/D) signals. In both cases, the outputs retain position information when direction is changed.

By default, the resolver is used as the source for the simulated-encoder outputs; alternatively, the main encoder (Encoder 1) connected to the 15-way D-type on the Drive can be used as the source.

The number of pulses per revolution can be scaled by factors of 2.

Installation The UD53 must be fitted in the *small option module* bay of the Unidrive.

All connections to the Drive are made by a multi-way connector. Connections from external equipment are made by a plug-in 16-way screw-terminal block on the UD53.

