



# KE01 AC Position/Level Amplifier

BLN-95-9034

Issued: March 1992

## DESCRIPTION

The KE01 Rotary Position/Level Amplifier board is a printed wiring board assembly that accepts microsyn grade or steering information from an SB104 Rotary Position Sensor or slope information from the KS10201 Level Sensor and outputs a pulse-width-modulated signal to a V7059 or MCV113 Servovalve. It is typically used on planing machines, aerial lifts and motor graders.

The amplifier gain is adjustable through a user-provided external 10 kilohm potentiometer. It also has connections for an external setpoint and deviation meter.

## TECHNICAL DATA

### INPUT

#### SUPPLY VOLTAGE

11 - 15 Vdc

#### POWER CONSUMPTION

Dependent on load, 4.5 watts maximum at 12 Vdc

#### INPUT IMPEDANCE TO EACH BRIDGE DEMODULATOR

20 kilohms, minimum

#### MAXIMUM INPUT TO EACH BRIDGE DEMODULATOR

58 Volts peak-to-peak

#### MAXIMUM DIFFERENTIAL INPUT

10 Volts peak-to-peak at the amplifier gain connection

### OUTPUT

#### POWER OUTPUT

0-5.8±.4 Vdc at 12 Vdc supply voltage with a 32 ohm, 0.5 henry load. Frequency of pulse width modulation is 440±40 Hz or 500±50 Hz

#### TRANSDUCER EXCITATION

Square wave at frequency of 440 or 500 Hz, nominal. Nominal amplitude into a slope sensor (10 ohm load) is 1.7 Volts peak-to-peak, 1.4 Vac as read on a VOM. Nominal amplitude into a grade sensor (5 ohm load) is 1.0 Volts peak-to-peak. 0.7 Vac as read on a VOM.

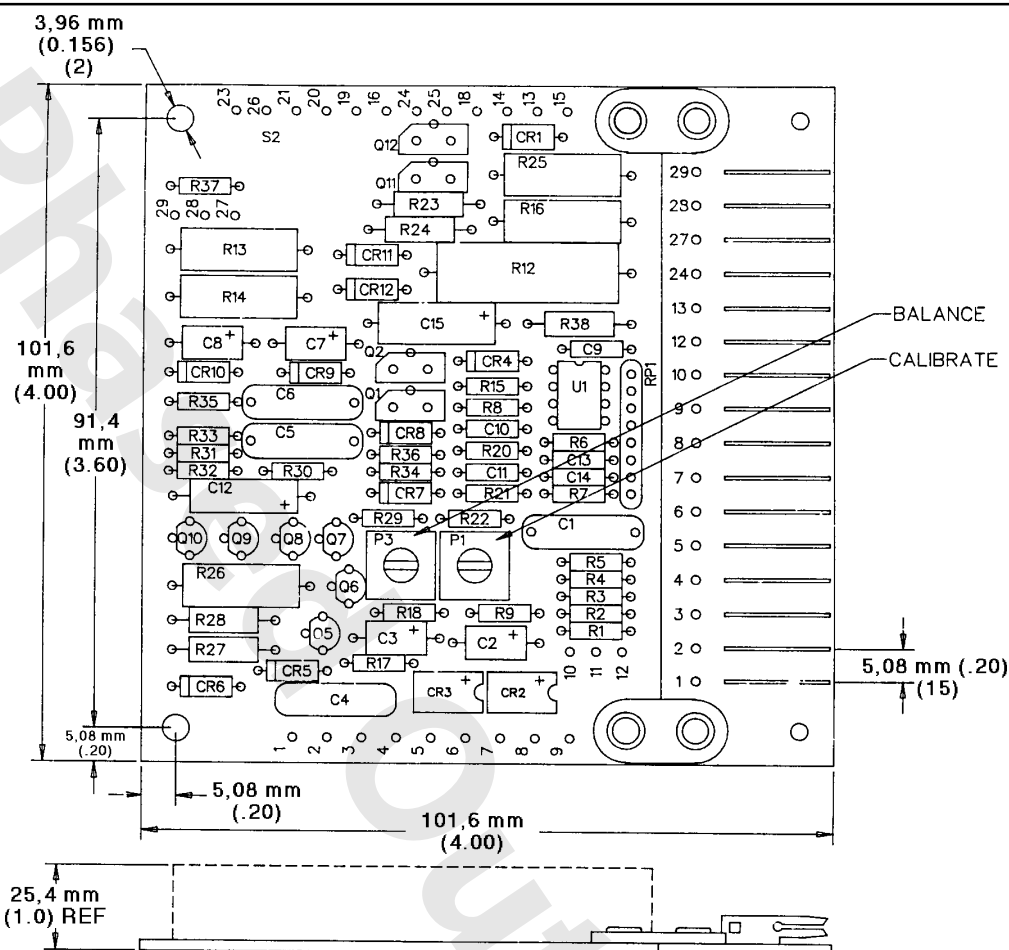
## ORDERING INFORMATION

Order the KE01 Rotary Position/Level Amplifier per the information in Table A.

**TABLE A. INFORMATION NECESSARY TO ORDER THE KE01.**

MODEL NUMBER	USED IN	PULSE-WIDTH MODULATION FREQUENCY
KE01101	ACP114, ACP135, MCP100	440 Hz
KE01102	ACP129	440 Hz
KE01103	ACP114, ACP135	500 Hz
KE01104	MCP100	500 Hz

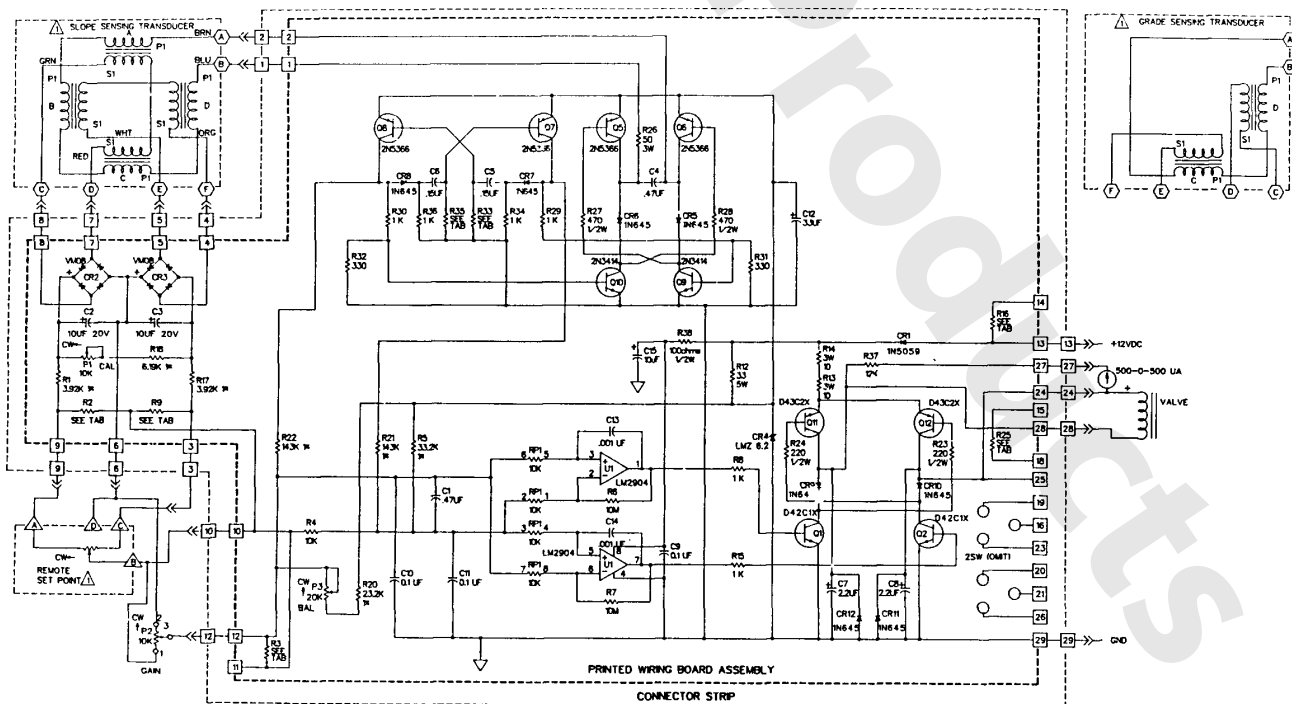
## DIMENSIONS



Dimensions of the KE01 Circuit Board in Millimeters (Inches).

1590

## CONNECTION DIAGRAM



Printed Wiring Board Diagram

1591

## CUSTOMER SERVICE

### NORTH AMERICA

---

#### ORDER FROM

Danfoss (US) Company  
Customer Service Department  
3500 Annapolis Lane North  
Minneapolis, Minnesota 55447  
Phone: (763) 509-2084  
Fax: (763) 559-0108

#### DEVICE REPAIR

For devices in need of repair or evaluation, include a description of the problem and what work you believe needs to be done, along with your name, address and telephone number.

### RETURN TO

Danfoss (US) Company  
Return Goods Department  
3500 Annapolis Lane North  
Minneapolis, Minnesota 55447

### EUROPE

---

#### ORDER FROM

Danfoss (Neumünster) GmbH & Co.  
Order Entry Department  
Krokamp 35  
Postfach 2460  
D-24531 Neumünster  
Germany  
Phone: 49-4321-8710  
Fax: 49-4321-871-184