



DP18 Series

Model DP18-DV7

Process Indicator

INSTRUCTION SHEET

M2104/1294

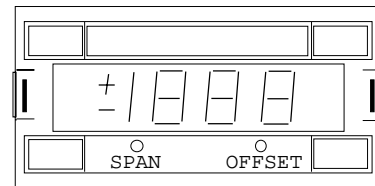


DC INSTRUMENT, 3 1/2 DIGITS, ALLOWS THE READING TO BE DISPLAYED IN ENGINEERING UNITS FOR ANY DC VOLTAGE INPUT LOWER THAN 2 Vdc.

SPECIFICATIONS

DISPLAYS	3 1/2 digits, 7 segment, red LED
HEIGHT	0.56" (14.2 mm.)
SYMBOLS	± 1.8.8.8
DECIMAL POINTS	Selectable by jumpers
OVERRANGE INDICATION	Display flashes 1999
INPUT CONFIGURATION	Bipolar single
ZERO	Automatic
SPAN ADJUSTMENT	± 5 %
CONVERTER	Dual-slope, average value
POLARITY	Automatic ±
SIGNAL INTEGRATION PERIOD	80 ms.
READ RATE	3.12 / sec.
RANGES	See table selection
HOLD	Optional
NOISE REJECTION NMR	50 dB. 50/60 Hz.
ACCURACY	0.15 % ± 1 count
WARMUP TO RATED ACCURACY	2 minutes
SPAN TEMP CO	100 ppm.
ZERO TEMP CO	2.5 µV/°C.
OPERATING TEMPERATURE	0 to 50 °C (32 to 122 °F)
STORAGE TEMPERATURE	-40 to 80 °C (-40 to 176 °F)
WEIGHT	310 gr. (0.68 lb)
CASE MATERIAL	ABS, DIN 43700, black color
STANDARD POWER	115 Vac. ± 10 %, 50/60 Hz.
POWER CONSUMPTION	5.5 VA for AC.
ELECTRICAL CONNECTIONS	Push-in cable connectors
BURN-IN	24 h.

FIG. 1 FRONT VIEW



SPAN : ADJUST THE MAXIMUM READING.
OFFSET : NOT IN SERVICE

SPAN ADJUSTMENT IS ACCESSIBLE BEHIND THE LOW DOOR.

FIG. 2 REAR VIEW

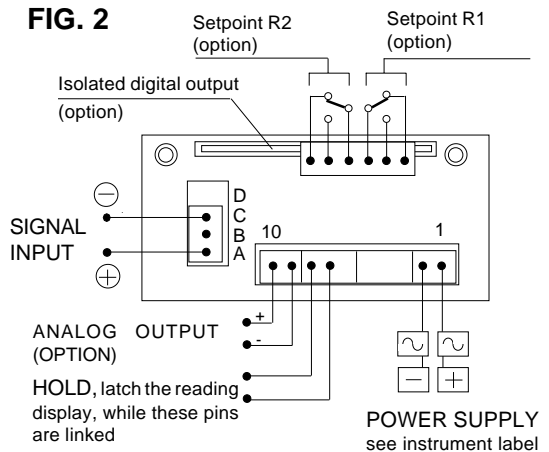
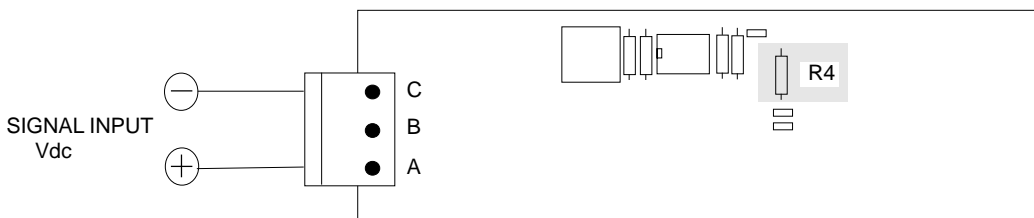


FIG. 3

SIGNAL CONDITIONER



THIS SIGNAL CONDITIONER ACCEPTS THE SIGNAL INPUT IN DC VOLTAGE, AND ALLOWS THE READING TO BE DISPLAYED IN ENGINEERING UNITS. IF THE ACTUAL READING IS NOT APPROPRIATE FOR YOUR REQUIREMENTS, USE THE FOLLOWING SYSTEM TO CALCULATE THE VALUE OF THE RESISTOR R4.

EXAMPLE : DISPLAY 124.8 WHEN SIGNAL INPUT IS 460 mVdc (DECIMALS MUST NOT BE CONSIDERED)

SIGNAL INPUT IN MILLIVOLTS
 R4 VALUE IN OHMS

$$\left(\frac{\text{READING}}{\text{SIGNAL INPUT}} \times 10,000 \right) - 10,000 = R4$$

$$R4 = \left(\frac{1248}{460} \times 10,000 \right) - 10,000 = 17,130 \Omega$$

INSTALL R4 ON THE SIGNAL CONDITIONER BOARD, PLUG-IN JUMPER IN POSITION "D1" (FIG. 5), ON THE DECIMAL POINT SELECTOR AND ADJUST SPAN POTENTIOMETER, PLACED ON THE FRONT PANEL, UNTIL THE DISPLAY READS 124.8



OPTIONS AND POWER SUPPLIES AVAILABLE FOR DP18 Series

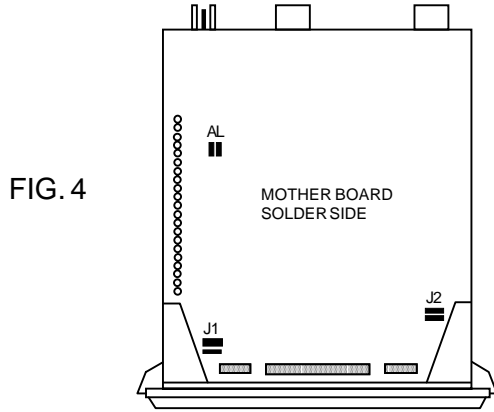
CONTROL OUTPUT/COMMUNICATIONS OPTIONS
Select a maximum of one option from each column

POWER SUPPLY OPTIONS

Table with 4 columns: OPTION, DESCRIPTION, OPTION, DESCRIPTION. Lists options like BCD, R1, R2, APH1, 232 and A01, A02, A03, APH2.

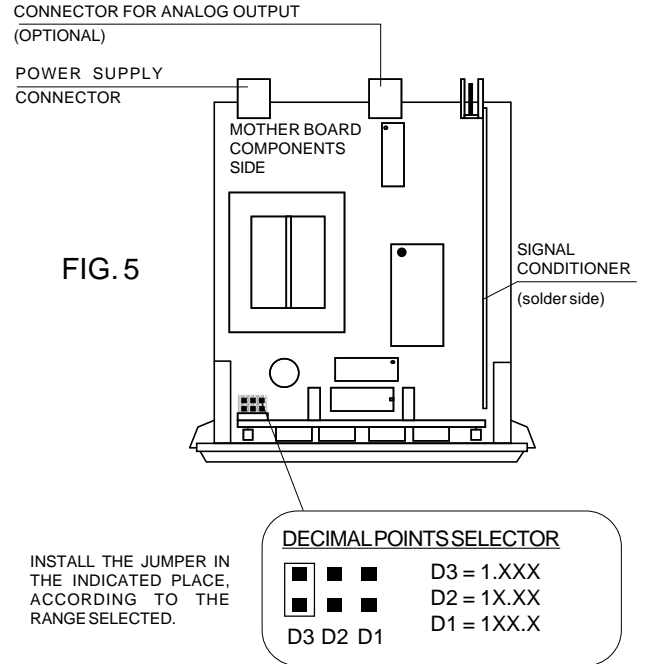
Table with 4 columns: OPTION, POWER, OPTION, POWER. Lists power supply options like 230, STD, 24, 48.

SELECTION OF : DECIMAL POINTS AND SPECIAL OPTIONS



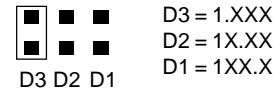
JUMPERS SELECTION FOR SPECIAL OPTIONS

AL: OPEN ONLY WHEN ALARM SETPOINT CARD OPTION IS ADDED
J1: OPEN TO ELIMINATE THE LEAST-SIGNIFICANT DIGIT (LSD)
J2: OPEN TO ELIMINATE THE INDICATION ±



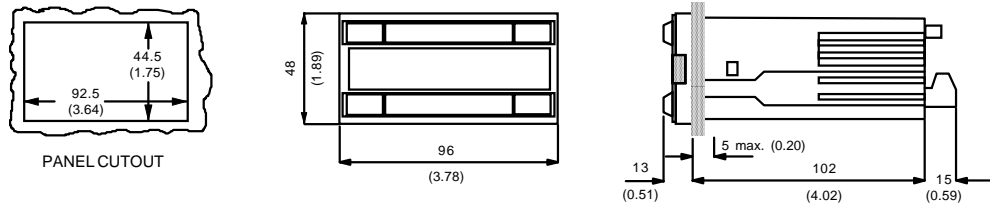
INSTALL THE JUMPER IN THE INDICATED PLACE, ACCORDING TO THE RANGE SELECTED.

DECIMAL POINTS SELECTOR



MECHANICAL DIMENSIONS mm (in)

FIG. 6



WARRANTY/DISCLAIMER

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 13 months from date of purchase.

OMEGA is pleased to offer suggestions on the use of its various products. However OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products.

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CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity;



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RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. P.O. number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

- 1. P.O. number to cover the COST of the repair,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

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