



DP18 Series Model DP18-DV6 Process Indicator

INSTRUCTION
SHEET

M2103/1294



DC INSTRUMENT, 3½DIGITS, ALLOWS THE READING TO BE DISPLAYED IN ENGINEERING UNITS FOR ANY DC VOLTAGE INPUT FROM 2 TO 600 Vdc, WITH FOUR RANGES SELECTABLE ON THE SIGNAL CONDITIONER BY PLUG-IN JUMPERS.

SPECIFICATIONS

DISPLAYS 3½ digits, 7 segment, red LED
 HEIGHT 0.56" (14.2 mm.)
 SYMBOLS ± 1.8.8.8
 DECIMALPOINTS Selectable by jumpers
 OVERRANGE INDICATION Display flashes 1999

INPUT CONFIGURATION Bipolar single
 ZERO Automatic
 SPAN ADJUSTMENT ± 5 %

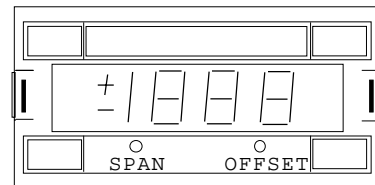
CONVERTER Dual-slope, average value
 POLARITY Automatic ±
 SIGNAL INTEGRATION PERIOD 80 ms.
 READ RATE 3.12 / sec.
 RANGES See table selection
 HOLD Optional

NOISE REJECTION NMR 50 dB. 50/60 Hz.
 ACCURACY 0.05 % ± 1 count
 WARMUP TO RATED ACCURACY 2 minutes
 SPAN TEMPCO 50 ppm.
 ZERO TEMPCO 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

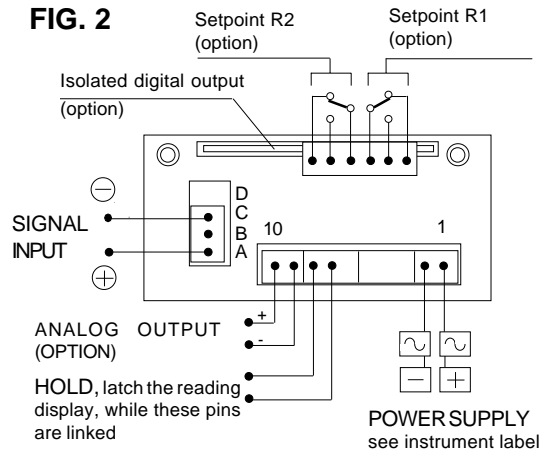
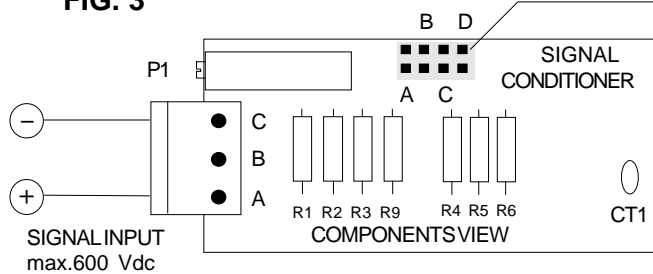


FIG. 3



THIS SIGNAL CONDITIONER ALLOWS THE READING TO BE DISPLAYED IN ENGINEERING UNITS, FOR DC VOLTAGE INPUTS ≥ 2 Vdc

1- APPLY THE RANGE WITH THE MAXIMUM VOLTAGE INPUT

2- FACTOR K :
$$\frac{V_{in} \text{ (signal input in mV)}}{\text{DESIRED READING}}$$

3- IF THE FACTOR K OBTAINED IS LOWER THAN THE FACTOR K SHOWN ON THE TABLE, CHOOSE THE PREVIOUS RANGE.

4- TO DISPLAY THE DESIRED READING, ADJUST TRIMMER P1.

NOTE : FOR THE DESIRED READING, DECIMALS MUST NOT BE CONSIDERED (134.7 WILL BE 1347)

CLOSE THE APPROPRIATE DECIMAL POINT JUMPER (FIG.5), CORRESPONDING TO THE RANGE SELECTED.

S1 SELECTOR

RANGE	CLOSE JUMPER	FACTOR	IMPEDANCE K
0-2 Vdc	A	1	500 KΩ
0-10 Vdc	C	5	1 MΩ
0-100 Vdc	C,B	50	
0-600 Vdc	C,D	250	



OPTIONS AND POWER SUPPLIES AVAILABLE FOR DP18 Series

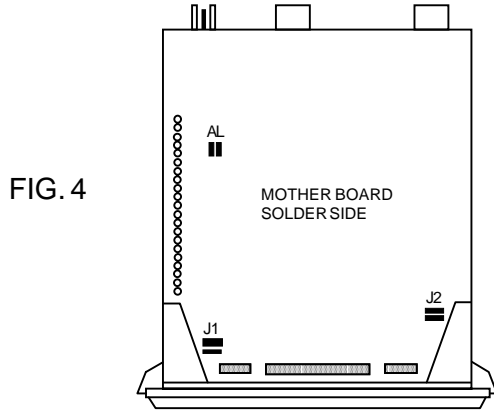
CONTROL OUTPUT/COMMUNICATIONS OPTIONS
Select a maximum of one option from each column

POWER SUPPLY OPTIONS

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

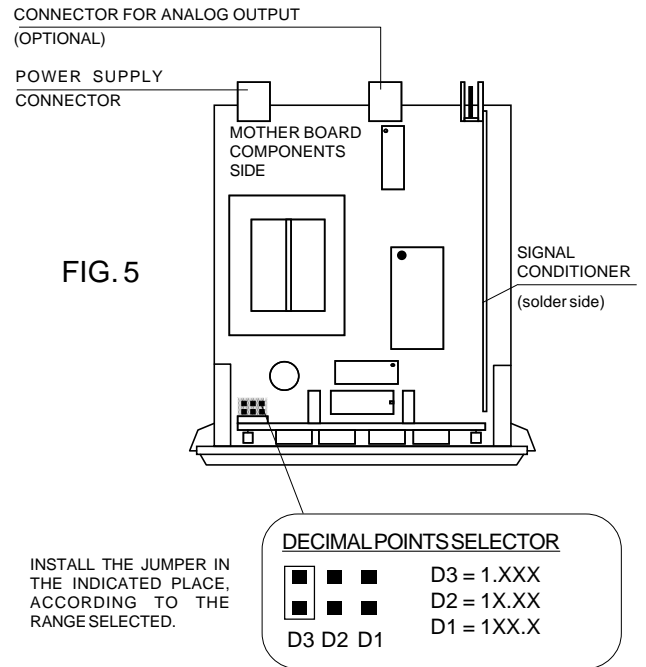
Table with 4 columns: OPTION, POWER, OPTION, POWER. Lists power supply options like 230, STD, 24, 48.

SELECTION OF : DECIMAL POINTS AND SPECIAL OPTIONS



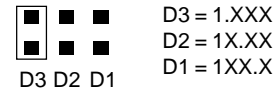
JUMPERS SELECTION FOR SPECIAL OPTIONS

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 ±



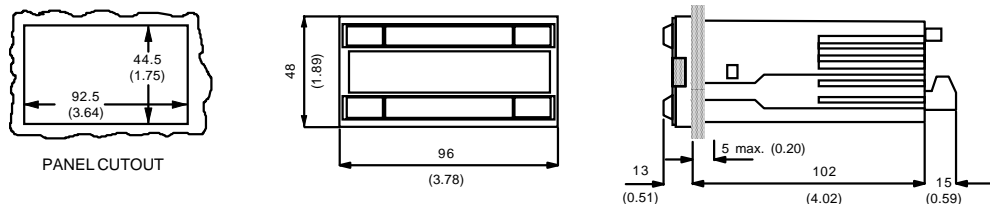
INSTALL THE JUMPER IN THE INDICATED PLACE, ACCORDING TO THE RANGE SELECTED.

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.

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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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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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