



# DP18 Series

## Models DP18-DC1 / -DC2 / -DC3 / -DC4

### DC Milliammeter

INSTRUCTION SHEET

M2102/1294



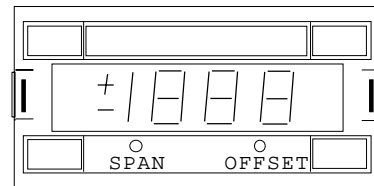
DC INSTRUMENT, 3½ DIGITS, WITH FOUR RANGES SELECTABLE BY CHANGING THE VALUE OF  $R_S$  RESISTOR. THE FULL RANGE READING CAN BE MODIFIED, USING THE APPROPRIATE VALUE FOR THE  $R_S$ . THEREFORE THE READING CAN BE DISPLAYED IN ANY ENGINEERING UNITS.

### 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	5 minutes
SPAN TEMPCO	100 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

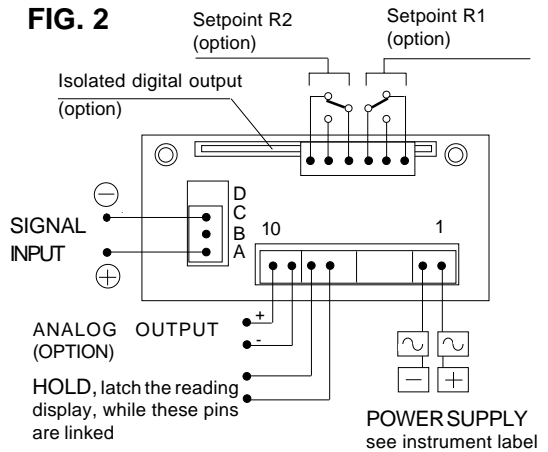
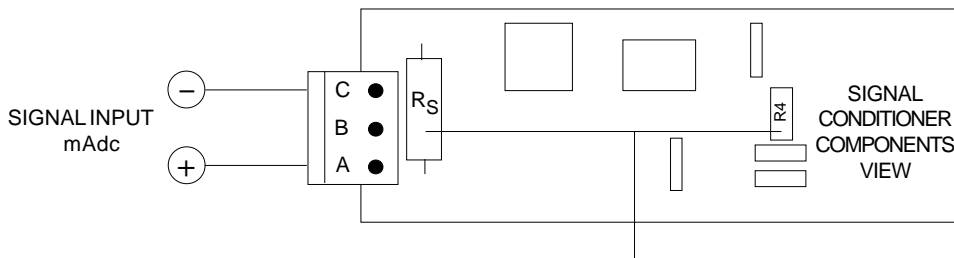


FIG. 3



S1 SELECTOR

MODEL	RANGE mAdc.	DISPLAY READING	DECIMAL POINT CLOSE JUMPER FIG.5	RESOLUTION mA.	IMPEDANCE Ω $R_S$	VALUE Ω $R_4$
DP18-DC1	2	1.999	D3	0.001	150 Ω	57K6 Ω
DP18-DC2	20	19.99	D2	0.01	15 Ω	57K6 Ω
DP18-DC3	200	199.9	D1	0.1	1.5 Ω	57K6 Ω
DP18-DC4	2000	1999	----	1	0.1 Ω	88K7 Ω

MODIFY THE RESISTANCE VALUE  $R_S$  and  $R_4$ , TO GET THE DESIRED READING, USING THE VALUES SHOWN IN THE TABLE.



OPTIONS AND POWER SUPPLIES AVAILABLE FOR DP18 Series

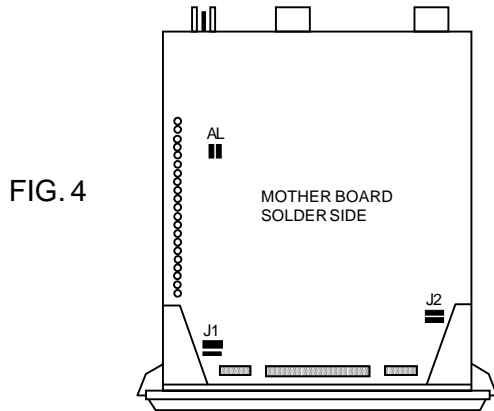
CONTROL OUTPUT/COMMUNICATIONS OPTIONS
Select a maximum of one option from each column

POWER SUPPLY OPTIONS

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

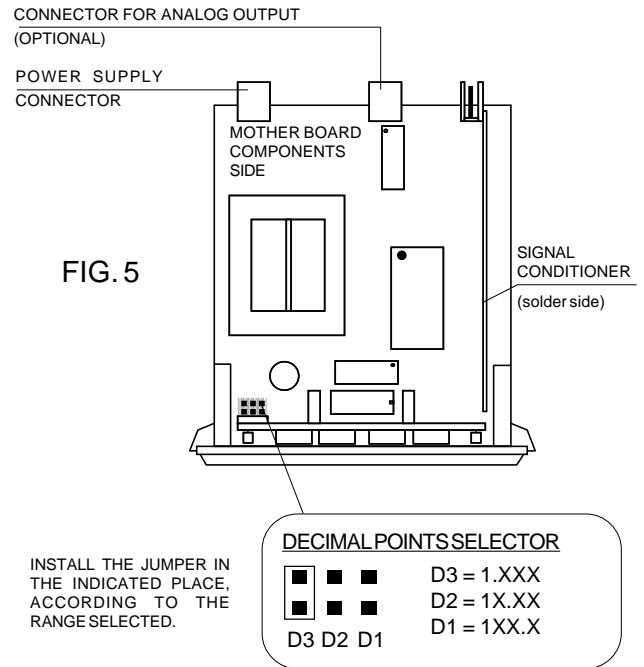
Table with 4 columns: OPTION, POWER, OPTION, POWER. Lists power supply options like 230, STD, 24, 48.

SELECTION OF : DECIMAL POINTS AND SPECIAL OPTIONS



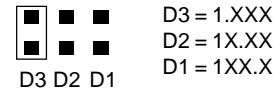
JUMPERS SELECTION FOR SPECIAL OPTIONS

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 ±



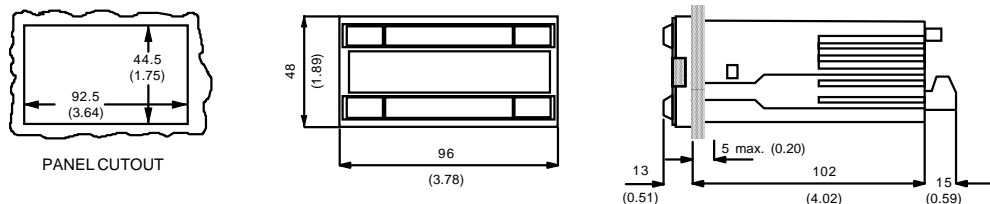
INSTALL THE JUMPER IN THE INDICATED PLACE, ACCORDING TO THE RANGE SELECTED.

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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