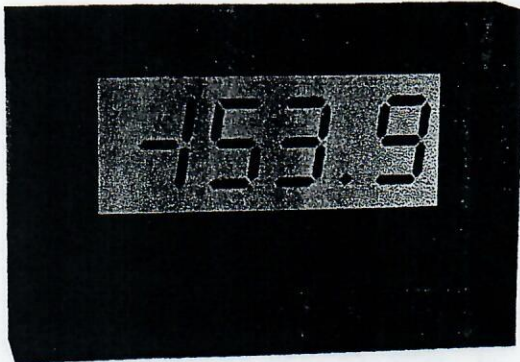


**AC VOLTS POWERLESS DPM®  
"Flat Pack" No Panel Cut Out Required  
(NEMA 3 or NEMA 4X)**

**MODEL  
538**

U.S. Patent No.  
4,908,569



**FLAT PACK**

**Features**

- Signal Powered
- 12-500VAC Ranges
- Optional Backlight
- ½" High LCD Display
- Rugged
- High Accuracy & Resolution
- MTBFC: 80,000 Hours



**SANITARY**

**DESCRIPTION:** Model 538 is designed primarily for A.C. Power line monitoring and controlling where "loading" is of not much concern (typically less than ½ watt). When used for other purposes the "loading" must be taken in consideration (see specifications). The A.C. signal is rectified, filtered, and R.M.S. calibrated, before it is displayed.

**HOUSING:** Otek's Flat Pack requires no panel cut out. Just drill a 10mm (3/8") Ø hole, pass the wires through, attach the provided double-sided tape (to prevent rotation), align the flat pack, tighten the nut and make the connections to the wires. No connector or tools required! No behind the panel space needed! The case is U.L. approved ABS Polycarbonate 94VO rated. **NEMA 4 housing option does not have access to the adjustments. If other than Otek's standard setting is required, please specify at the time of ordering.** Our New Sanitary housing is wall, pipe or panel mount and can include 2 flat packs, please specify.

**DECIMAL POINTS:** Externally selectable.

**BACKLIGHT:** Standard display is reflective black digits over a silver background. An optional backlight is available at the time of ordering. When ordered, the digits are black with an illuminated green background. The intensity is not adjustable (see Typical Connections). The backlight is powered by the AC line. **Not available with 12-60VAC range.**

**WARNING:** The 538 and all its components are referenced to the AC line, NO ISOLATION!

**SPECIFICATIONS AT 25°C**

Accuracy and Linearity .....	±1% of full scale, ±1 count
Maximum Input Signal (volts).....	±150% of range
Maximum Power Consumption .....	0.3 watt
Nominal Power Consumption .....	0.2 watts
Measuring Method .....	AC Average, RMS Calibrated
Span Adjustment Range .....	±30% of full scale
Zero .....	Automatic
Backlight Operating Range .....	60-200V and 200-500V; 50-400Hz
Operating Frequency Range .....	50-60Hz (others on request)
Operating/Storage Temperature .....	-10° to +60°C/-20° to +70°C
Temperature Coefficient .....	100 PPM
Display .....	3½ Digit .5" Reflective LCD
MTBF .....	80,000 Hours
Sanitary Case .....	NEMA 4X up to 250°F Steam Cleaning

**LEAD  
COLOR**

- WHITE
- BLACK
- BROWN
- BLUE
- GREEN
- YELLOW
- ORANGE

**TERMINAL DESCRIPTION**

- AC Low Input
- AC High Input
- Decimal Point Backplane
- Decimal Point Common
- 1.XXX Decimal Point
- 1X.XX Decimal Point
- 1XX.X Decimal Point

**ORDERING INFORMATION (11/1/00)**

MODEL **5** **3** **8** □ □ □ **0**

OPERATING  
VOLTAGE RANGE  
0 ..... 12-60VAC  
1 ..... 60-200VAC  
2 ..... 200-500VAC

BACKLIGHT(2)  
0 ..... No Backlight  
1 ..... Backlight

HOUSING(1)  
0 ..... NEMA 3  
1 ..... NEMA 4X  
2 ..... Sanitary Casing

(2) Not available with 12-60VAC input. See "Backlight" section.

(1) See NEMA 4X note in "Housing" section above.

**NOTES:**

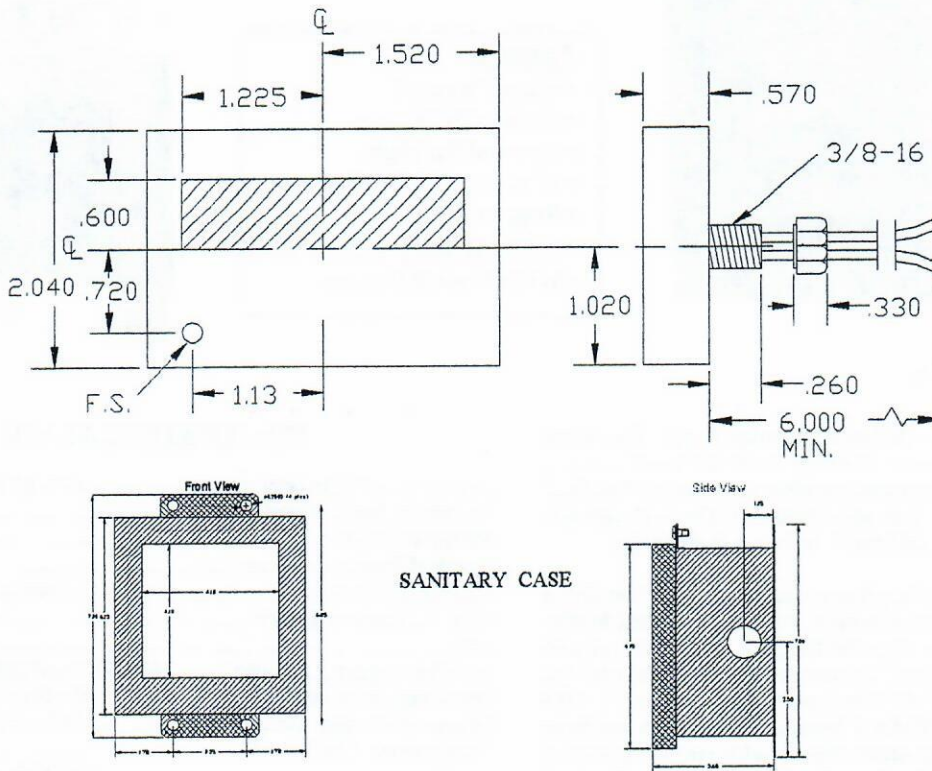
1. Undesired decimal points must be connected to Brown.
2. Desired decimal point must be connected to Blue.

**TRUERNISAC**

538 FLAT PACK MECHANICALS & TYPICAL CONNECTIONS

(WARNING! ALL CKT. ARE REFERENCED TO AC LINE!)

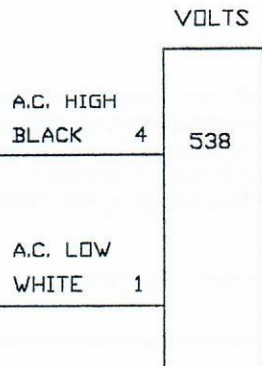
FLAT PACK W/WIRES



TYPICAL CONNECTIONS

TERMINAL DESCRIPTION

- WHITE AC LOW INPUT
- BLACK AC HIGH INPUT
- BROWN BACKPLANE (D.P.)
- ORANGE DEC. POINT 1XX.X
- YELLOW DEC. POINT 1X.XX
- GREEN DEC. POINT 1.XXX
- BLUE DEC. POINT COM.



NOTE: UNDESIREDECIMAL POINTS MUST BE CONNECTED TO BROWN, DESIRED DECIMAL POINTS MUST CONNECTED TO BLUE.

F#87MC538.DWG

(WARNING! ALL CKT. ARE REFERENCED TO AC LINE!)

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