



V116-ALVH (65-264 VAC)
V116-ALVL (20-29 VAC/VDC)
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VISITMPAK V116 & V132

Miniature Temperature/Process Indicators

Provides a 4 Digit Display and Alarm Output
from RTD, Thermocouple or DC Inputs



- Field Configurable Input for Thermocouple, RTD, mV and 4-20mA Signals
- Three Field Configurable Alarm Setpoints with One or Two Alarm Outputs
- Green 4 Digit (9999) Display
- NEMA 4 Front Panel
- Combination Alarm Functions, Alarm Blocking and Programmable Latching/Non-latching
- Power Supply: 85 to 264VAC or 20 to 29V DC or AC

Description

The V116 and V132 are compact, 4 digit indicators (with alarms) that fit 1/16 and 1/32 DIN cutouts, respectively. They accept temperature inputs from J, K, T, L, N, R, S, C, B, and Platinel II type thermocouples and two-wire Platinum 100 Ohm (Pt100) RTDs. Process variables such as 4-20mA or ranges within -12 to 80mV can also be measured. Other thermocouple types such as D and E and custom curves can be configured at the factory. Voltage ranges up to 0-10V can be measured with the optional (model SUB2-1V1) adaptor.

Three programmable setpoint alarms can be field configured as high or low, non-latching and high or low or new, latching. The new alarm indicates when a latched alarm has not been acknowledged and the measured value crosses the setpoint trip level a second time. Alarm hysteresis (deadband) can be configured from 1 to 9999 process variable units.

The alarms can be linked to either the relay output or the digital I/O terminals. The digital I/O terminals can be configured for remote alarm acknowledgment. When configured as an output, those terminals will provide a TTL signal or drive an optional (model SUB2-1R7) relay. These alarm outputs can be configured in combination (e.g., one or all three alarms linked to the relay) and will operate in fail-safe (i.e., normally energized) or non-fail-safe modes. Additionally, the display can be configured for password protection, limiting operator access to any or all functions. An alarm blocking function is also configurable to prevent alarm tripping during process or start-up.

Thermocouples, two-wire RTDs and mV inputs can be accepted into the indicator. Current signals such as 4-20mA are input using the 2.49 Ohm shunt resistor, included with the indicator and mounting hardware. Other shunt resistor values can be used to measure higher current levels provided the produced signal is within the -12mV to 80mV input range. Similarly, voltage inputs such as 0-10V can be measured using the optional attenuator (model SUB2-1V1). The input can be scaled as desired for display. Offsets and two point slope adjustments are fully programmable to compensate for sensor variances.

Application

The V116 and V132 are excellent for temperature and process variable measurement especially when panel space is limited. Extremely compact and efficient, the NEMA 4X, plug-in from front, panel mount indicators can fit in the smallest enclosures or OEM panels.

The field configurable VisiPak indicators make an ideal standardized solution for a variety of temperature measurement and on-off control applications. For example, either the V116 or the V132 can be used to control the heating and cooling elements in an oven or environmental control system using two setpoints for high and low temperature limits. Similarly, a 4-20mA pressure signal can be monitored and the setpoints can be used to control or alarm the gas pressure or liquid level in a tank or vessel. Weight, flow, pressure, temperature, speed, position and rate are just some of the process variables that can be accurately displayed and monitored with these highly compact and effective units.

Table 1: Input & Display Ranges

Input	Display Range and Setpoint Min & Max Limits	
Pt100	-200 to 850 _i C	-325 to 1562 _i F
Type J	-210 to 1200 _i C	-340 to 2192 _i F
Type K	-200 to 1372 _i C	-325 to 2500 _i F
Type T	-210 to 400 _i C	-325 to 750 _i F
Type L	-200 to 900 _i C	-325 to 1650 _i F
Type N	-200 to 1300 _i C	-325 to 2370 _i F
Type R	-50 to 1768 _i C	-58 to 3200 _i F
Type S	-50 to 1768 _i C	-58 to 3200 _i F
Type B	0 to 1820 _i C	32 to 3308 _i F
Type P (Platinel II)	0 to 1369 _i C	32 to 2469 _i F
-12 to 80mV	-999 to 9999	
0 to 20mA	-999 to 9999	
4 to 20mA	-999 to 9999	
0 to 10V*	-999 to 9999	

*Requires input adaptor

Specifications

General

Display:

4 digit (-999 to 9999) with programmable decimal, green, 10mm (0.4 in.) high characters

Inputs:

See Table 1

Output:

Relay (isolated): 2A, 264VAC resistive.

Minimum 12V DC, 100mA.

Logic (non-isolated): 9VDC, 12mA. Can be used as alarm output or alarm acknowledge input.

Accuracy:

+/-1°C or +/-0.25% of reading, whichever is greater

Cold Junction Compensation:

>30 to 1 rejection of ambient temperature change. Uses Instant Accuracy cold junction sensing technology to eliminate warm-up drift and respond rapidly to ambient temperature changes.

Input Filtering:

Off to 999.9 seconds

Panel Sealing:

NEMA 4X, or IP65 (EN60529)

EMC Compliance (CE Mark):

Emissions: EN50081-2

Immunity: EN50082-2

Temperature:

Operating: 0 to 55°C (32 to 131°F)

Storage: -30 to 75°C (-22 to 167°F)

Humidity:

5 to 95% RH, non-condensing

Power:

Standard 85 to 264VAC, 48 to 62Hz,

optional 20 to 29V DC or AC, 5 W max.

Agency Approvals:

cUL listed per standard UL508.

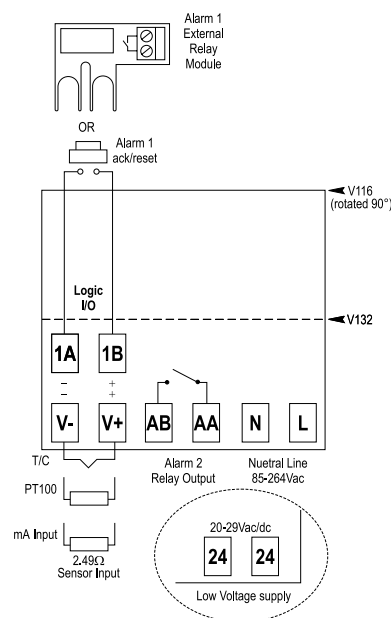
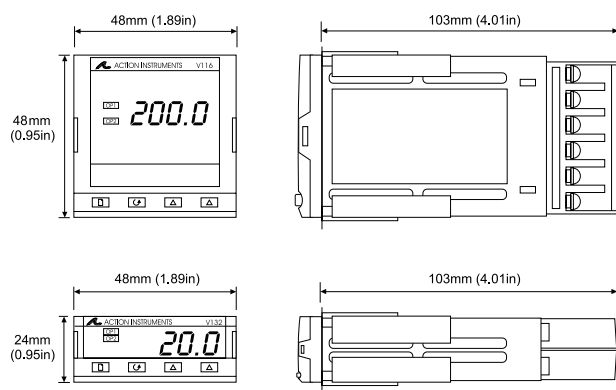
CEconformance per EMC directive 89/336/EEC,

amended by 93/68/EEC and Low Voltage

Directive 73/23/EEC, amended by 93/68/EEC.

Dimensions

Wiring



Ordering Information

Specify:

- Model Number:
V116-ALVH (65-264VAC powered) or
V116-ALVL (20-29VDC/AC powered) or
V132-ALVH (65-264VAC powered) or
V132-ALVL (20-29VDC/AC powered)
- Accessories: (see Accessories)
- Optional Factory Configuration, specify C620 with the desired configuration information.

Accessories

The VisiPak model V116 and V132 are shipped with mounting brackets, 2.49 Ohm shunt resistor and user manual. In addition, the following accessories are available:

- SUB2-1R7** External Relay
SUB2-1V1 0-10V Input Adapter