

S628 Series Temperature Indicator

The Veeder-Root S628 Series Temperature Indicator is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

Selection of input type is done easily from the front panel. Programmable filtering is used to ensure an accurate display even in electrically noisy environments, while a programmable offset value can be used to correct for known errors in the process. The two alarms can be set up for high or low operation, reverse or direct acting and can be latched.



- AWESOME 0.71" high digit LED display (27% larger than other 1/8DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output, and RS-485 communication
- Accepts most standard thermocouple types and 3 & 4 wire RTDs
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 250 ms sample time with 0.1% accuracy
 - CE approved







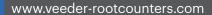
















S628 Series Temperature Indicator

SPECIFICATIONS

B, J, K, N, S and T Termocouples Accuracy: ±0.1% of span

SENSOR INPUT Sample Rate: 250 ms Resolution: 14 bits

Sensor break: Detected within 2 seconds

Sourcing, Edge Sensitive

Logic Low \leq 2.0 VDC, Logic High \geq 3.0 CONTROL INPUTS Impedance: 4.7 K Ω to + voltage - Sourcing

Response Time: 25 ms

Function: Programmable

Solid State: NPN open collector, 30 VDC max., 100 mA max.

OUTPUTS Relay: SPDT, 5A resistive@ 110 VAC

Latency: 75 μ seconds, plus 8 ms for relay pull-in

0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy: $\pm 0.25\%$ (mA at 250Ω , V at $2k\Omega$); degrades linearly to $\pm 0.5\%$

LINEAR OUTPUTS Resolution: 8 bits in 250ms (10 bits in 1s typ.)

Update: Approximately 4/s

Load Impedance: mA ranges: 500Ω maximum; V ranges: 500Ω minimum

RS-485; Serial asynchronous, UART to UART

COMMUNICATION Open ASCII: One start bit, even parity, seven data bits, one stop bit

Baud Rate selectable from 9600, 4800, 2400, or 1200

Maximum Zones: 99

SUPPLY VOLTAGE | 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts

ACCESSORY POWER SUPPLY

Voltage: 20-28 VDC, 24 VDC nominal; Min. Impedance: 910 Ω (22 mA @ 20 VDC)

Red/Green, 7 segment LED

DISPLAY Primary display: 5 digits, 0.71" (18mm) height

Secondary display: single digit, 0.3" (7mm) height Annunciators: Output 1 & Output 2 status

DIMENSIONS 48mm x 96mm, 110mm deep

JIMENSIONS 46IIIII X 96IIIIII, ITOIIIII deep

MOUNTING Panel mount (mounting bracket supplied), 45mm x 92mm cutout

CONNECTIONS Screw type terminals - combination head

FRONT PANEL RATING NEMA 4X/IEC IP65

CASE MATERIAL GE Lexan 940

WEIGHT 0.56 lbs.

OPERATING TEMPERATURE

32° to 131°F (0° to 55°C)

STORAGE TEMPERATURE

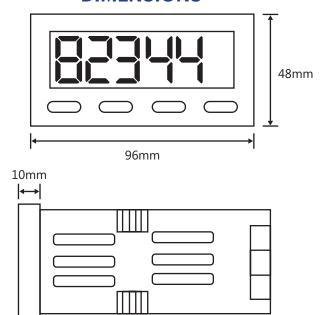
-4° to 176°F (-20° to 80°C)

RELATIVE HUMIDITY

20% to 95% non-condensing

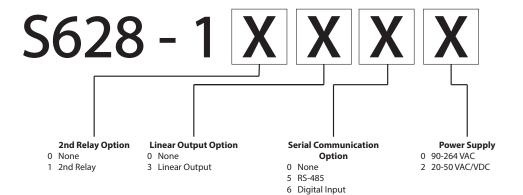
APPROVALS CE

DIMENSIONS



Panel Cutout: 45mm x 92mm (1.77: x 3.62")

100mm













S628 Series Process Indicator DC Process

The Veeder-Root S628 Series DC Process is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

Process inputs are easily scaled into engineering units by programming two input values and their corresponding display values through the front panel. For nonlinear applications, up to 10 scale points can be entered. A teach function, which automatically inputs the current sensor reading as a scale point, further simplifies setup. The two alarms can be setup for high or low operation, reverse or direct acting, and can be latched. An integrating totalizer can be used to accumulate flow or other values where tracking a total may be useful.



- AWESOME 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output,
- RS-485 communication
- Transmitter power simplifies wiring
- mA inputs to 50mA, DCV inputs to ±10 Volts and ±100 mV
- Tare function
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 100 ms sample time with 0.03% accuracy
- CE approved

















S628 Series **Process Indicator DC Process**

SPECIFICATIONS

To 50 mA, ±10 Volts DC, ±100 mV Accuracy: ±0.01% of span

PROCESS INPUT Sample Rate: 100 ms Resolution: 14 bits

Sensor Break: Detected within 2 seconds

Sourcing, Edge Sensitive

Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 CONTROL INPUTS Impedance: $4.7 \text{ K}\Omega$ to + voltage - Sourcing

Function: Programmable

Solid State: NPN open collector, 30 VDC max., 100 mA max.

OUTPUTS Relay: SPDT, 5A resistive @ 110 VAC

Latency: 75 µ seconds, plus 8 ms for relay pull-in

0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy: $\pm 0.25\%$ (mA at 250Ω , V at $2k\Omega$); degrades linearly to $\pm 0.5\%$

LINEAR OUTPUTS Resolution: 8 bits in 250ms (10 bits in 1s typ.)

Update: Approximately 4/s

Load impedance: mA ranges 500Ω maximum; V ranges 500Ω minimum

RS-485; Serial asynchronous, UART to UART

Open ASCII: One start bit, even parity, seven data bits, one stop bit COMMUNICATION

Baud Rate selectable from 9600, 4800, 2400, or 1200

Maximum Zones: 99

SUPPLY VOLTAGE 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts

ACCESSORY POWER SUPPLY

Voltage: 20-28 VDC, 24 VDC nominal: Min. Impedance: 910Ω (22 mA @ 20 VDC)

Red/Green, 7 segment LED Primary display: 5 digits, 0.71" (18mm) height DISPLAY

Secondary display: single digit, 0.3" (7mm) height

Annunciators: Output 1 & Output 2 status

DIMENSIONS 48mm x 96mm, 110mm deep

MOUNTING Panel mount (mounting bracket supplied), 45mm x 92mm cutout

CONNECTIONS Screw type terminals - combination head

FRONT PANEL RATING NEMA 4X/IEC IP65

> CASE MATERIAL GE Lexan 940

> > WEIGHT 0.56 lbs.

OPERATING 32° to 131°F (0° to 55°C) **TEMPERATURE**

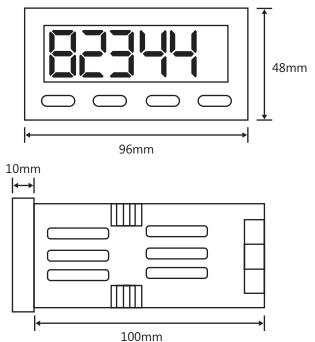
STORAGE TEMPERATURE -4° to 176°F (-20° to 80°C)

RELATIVE HUMIDITY

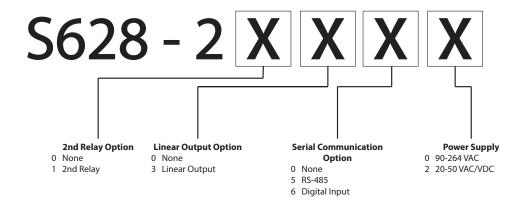
20% to 95% non-condensing

APPROVALS CE

DIMENSIONS



Panel Cutout: 45mm x 92mm (1.77: x 3.62")





















S628 Series Process Indicator AC Volts/Amps

The Veeder-Root brand S628 Series Process Indicator AC Volts/Amps is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

Process inputs are easily scaled into engineering units by programming two input values and their corresponding display values through the front panel. A teach function, which automatically inputs the current sensor reading as a scale point, further simplifies setup. The two alarms can be setup for high or low operation, reverse or direct acting, and can be latched.



- AWESOME 0.71" high digit LED display (27% larger than other 1/8DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output,
- RS-485 communication
- Transmitter power simplifies wiring
- Inputs from 0-1 VAC to 0-600 VAC, 0-1 mA to 0-1 amp
- True RMS measurement
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 250 ms sample time with 0.1% accuracy
- CE approved



















S628 Series **Process Indicator AC Volts/Amps**

SPECIFICATIONS

From 0-1 VAC to 0-600 VAC, 0-1 mA to 0-1 amp

Frequency: 20 Hz to 5kHz - degrades at higher frequencies

PROCESS INPUT Accuracy: ±0.1% of span Sample Rate: 250 ms

Resolution: 14 bits

Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0

CONTROL INPUTS Impedance: $4.7 \text{ K}\Omega$ to + voltage - Sourcing

Response Time: 25 ms

Function: Programmable

Solid State: NPN open collector, 30 VDC max., 100 mA max.

OUTPUTS Relay: SPDT, 5A resistive@ 110 VAC

Latency: 75 μ seconds, plus 8 ms for relay pull-in

0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy: $\pm 0.25\%$ (mA at 250Ω , V at $2k\Omega$); degrades linearly to $\pm 0.5\%$ LINEAR OUTPUTS

Resolution: 8 bits in 250ms (10 bits in 1s typ.) Update: Approximately 4/s

RS-485; Serial asynchronous, UART to UART

Open ASCII: One start bit, even parity, seven data bits, one stop bit COMMUNICATION

Baud Rate selectable from 9600, 4800, 2400, or 1200

SUPPLY VOLTAGE 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts

ACCESSORY POWER SUPPLY

Voltage: 20-28 VDC, 24 VDC nominal; Min. Impedance: 910Ω (22 mA @ 20 VDC)

Red/Green, 7 segment LED Primary display: 5 digits, 0.71" (18mm) height DISPLAY

Secondary display: single digit, 0.3" (7mm) height

Annunciators: Output 1 & Output 2 status

DIMENSIONS 48mm x 96mm, 110mm deep

MOUNTING Panel mount (mounting bracket supplied), 45mm x 92mm cutout

CONNECTIONS Screw type terminals - combination head

FRONT PANEL RATING NEMA 4X/IEC IP65

> CASE MATERIAL GE Lexan 940

> > WEIGHT

OPERATING 32° to 131°F (0° to 55°C) **TEMPERATURE**

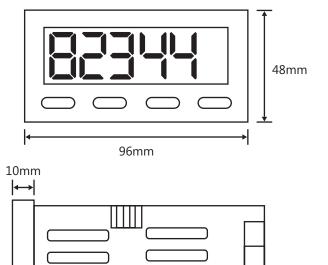
STORAGE TEMPERATURE -4° to 176°F (-20° to 80°C)

RELATIVE HUMIDITY

20% to 95% non-condensing

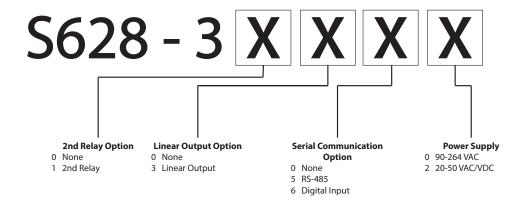
APPROVALS CE

DIMENSIONS



Panel Cutout: 45mm x 92mm (1.77: x 3.62")

100mm



















S628 Series Process Indicator DC Volts/Amps

The Veeder-Root S628 Series DC Volts/Amps is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

Process inputs are easily scaled into engineering units by programming two input values and their corresponding display values through the front panel. A teach function, which automatically inputs the current sensor reading as a scale point, further simplifies setup. The two alarms can be setup for high or low operation, reverse or direct acting, and can be latched.



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- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output,
- RS-485 communication
- Transmitter power simplifies wiring
- Inputs from 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 250 ms sample time with 0.1% accuracy
- CE approved

















S628 Series **Process Indicator DC Volts/Amps**

SPECIFICATIONS

From 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps

Accuracy: ±0.1% of span PROCESS INPUT Sample Rate: 250 ms

Resolution: 14 bits

Sourcing, Edge Sensitive

Logic Low \leq 2.0 VDC, Logic High \geq 3.0 Impedance: 4.7 K Ω to + voltage - Sourcing CONTROL INPUTS

Response Time: 25 ms

Function: Programmable

Solid State: NPN open collector, 30 VDC max., 100 mA max.

OUTPUTS Relay: SPDT, 5A resistive@ 110 VAC

Latency: 75 µ seconds, plus 8 ms for relay pull-in

0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy: $\pm 0.25\%$ (mA at 250Ω , V at $2k\Omega$); degrades linearly to $\pm 0.5\%$

LINEAR OUTPUTS Resolution: 8 bits in 250ms (10 bits in 1s typ.)

Update: Approximately 4/s Load Impedance: mA ranges: 500Ω max.; V ranges: 500Ω min.

RS-485; Serial asynchronous, UART to UART;

Open ASCII: One start bit, even parity seven data bits, one stop bit; COMMUNICATION

Baud Rate selectable from 9600, 4800, 2400, or 1200

SUPPLY VOLTAGE 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts

ACCESSORY POWER SUPPLY

Voltage: 20-28 VDC, 24 VDC nominal; Min. Impedance: 910Ω (22 mA @ 20 VDC)

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FRONT PANEL RATING NEMA 4X/IEC IP65

> CASE MATERIAL GE Lexan 940

> > WEIGHT

OPERATING TEMPERATURE

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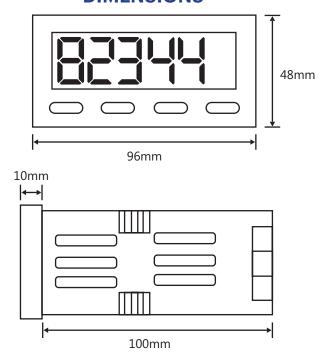
STORAGE TEMPERATURE

-4° to 176°F (-20° to 80°C)

RELATIVE HUMIDITY 20% to 95% non-condensing

> APPROVALS CE

DIMENSIONS



Panel Cutout: 45mm x 92mm (1.77: x 3.62")

