

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.



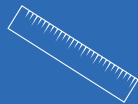
- AWESOME 0.71" high digit LED display (27% larger than other 1/8DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital 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



TIME



COUNT



MEASURE

8:43

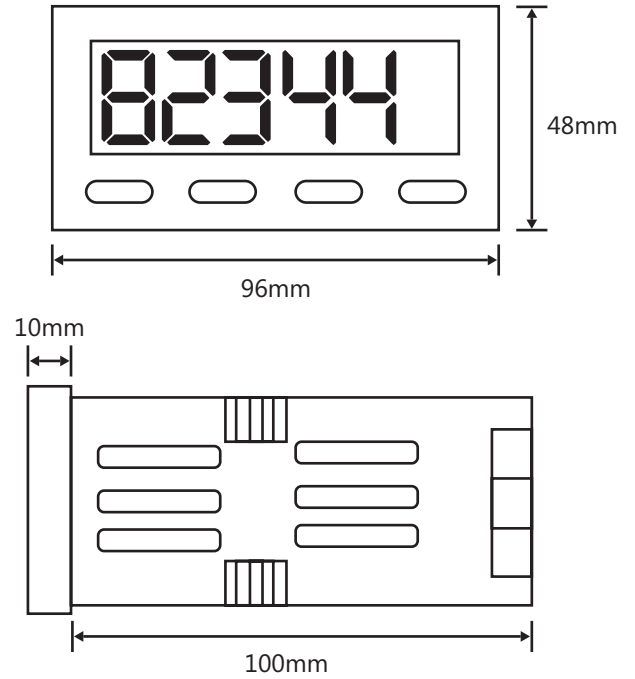
DISPLAY

S628 Series Temperature Indicator

SPECIFICATIONS

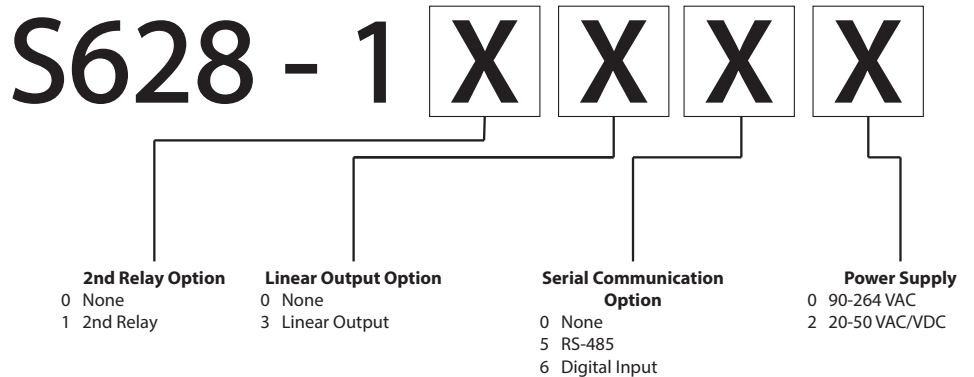
SENSOR INPUT	B, J, K, N, S and T Termocouples Accuracy: ±0.1% of span Sample Rate: 250 ms Resolution: 14 bits Sensor break: Detected within 2 seconds
CONTROL INPUTS	Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 Impedance: 4.7 kΩ to + voltage - Sourcing Response Time: 25 ms Function: Programmable
OUTPUTS	Solid State: NPN open collector, 30 VDC max., 100 mA max. Relay: SPDT, 5A resistive@ 110 VAC Latency: 75 μ seconds, plus 8 ms for relay pull-in
LINEAR OUTPUTS	0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V Accuracy: ±0.25% (mA at 250Ω, V at 2kΩ); degrades linearly to ±0.5% Resolution: 8 bits in 250ms (10 bits in 1s typ.) Update: Approximately 4/s Load Impedance: mA ranges: 500Ω maximum; V ranges: 500Ω minimum
COMMUNICATION	RS-485; Serial asynchronous, UART to UART 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: 910Ω (22 mA @ 20 VDC)
DISPLAY	Red/Green, 7 segment LED 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
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")

ORDERING INFORMATION



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.



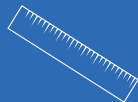
- AWESOME 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital 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



TIME



COUNT



MEASURE

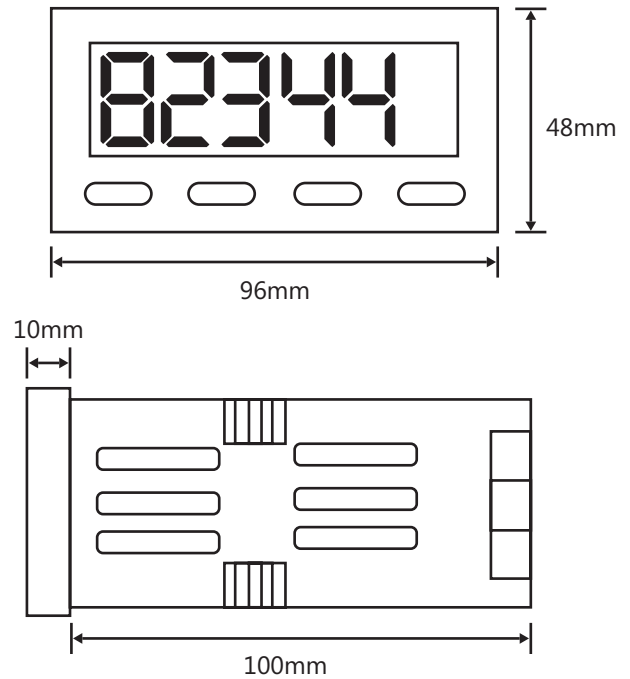
8:43

DISPLAY

SPECIFICATIONS

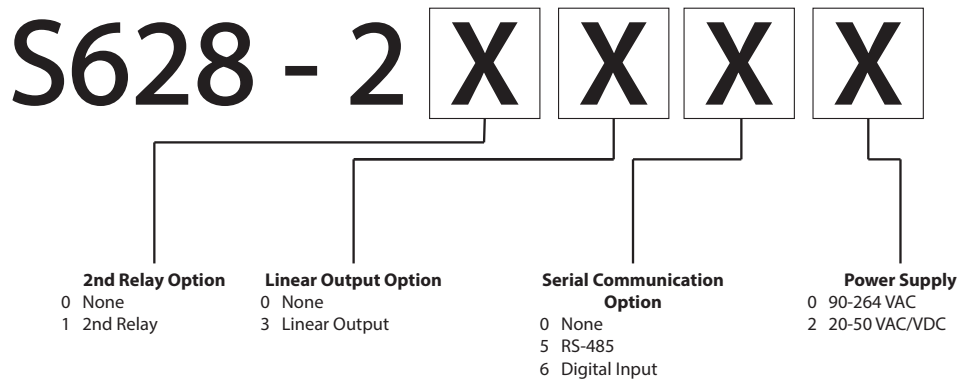
PROCESS INPUT	To 50 mA, ±10 Volts DC, ±100 mV Accuracy: ±0.01% of span Sample Rate: 100 ms Resolution: 14 bits Sensor Break: Detected within 2 seconds
CONTROL INPUTS	Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 Impedance: 4.7 KΩ to + voltage - Sourcing Function: Programmable
OUTPUTS	Solid State: NPN open collector, 30 VDC max., 100 mA max. Relay: SPDT, 5A resistive @ 110 VAC Latency: 75 μ seconds, plus 8 ms for relay pull-in
LINEAR OUTPUTS	0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V Accuracy: ±0.25% (mA at 250Ω, V at 2kΩ); degrades linearly to ±0.5% Resolution: 8 bits in 250ms (10 bits in 1s typ.) Update: Approximately 4/s Load impedance: mA ranges 500Ω maximum; V ranges 500Ω minimum
COMMUNICATION	RS-485; Serial asynchronous, UART to UART 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: 910Ω (22 mA @ 20 VDC)
DISPLAY	Red/Green, 7 segment LED 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
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")

ORDERING INFORMATION



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.



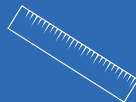
- AWESOME 0.71" high digit LED display (27% larger than other 1/8DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital 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



TIME



COUNT



MEASURE

8:43

DISPLAY

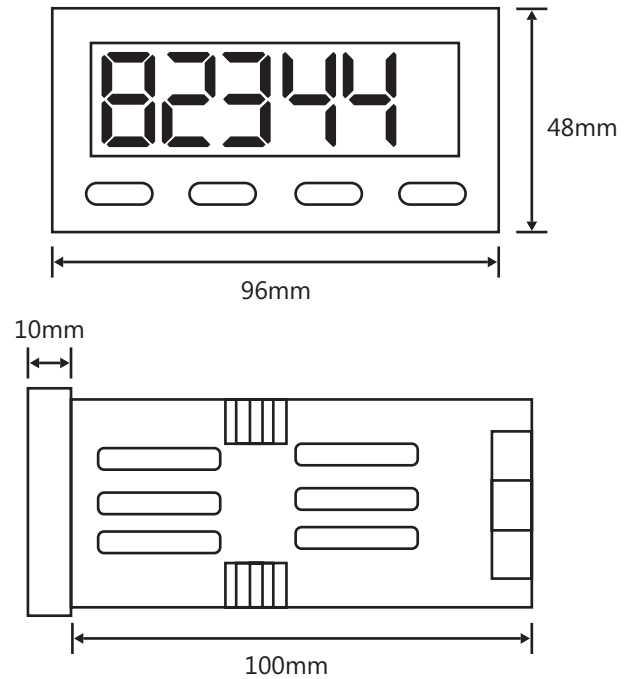
S628 Series

Process Indicator AC Volts/Amps

SPECIFICATIONS

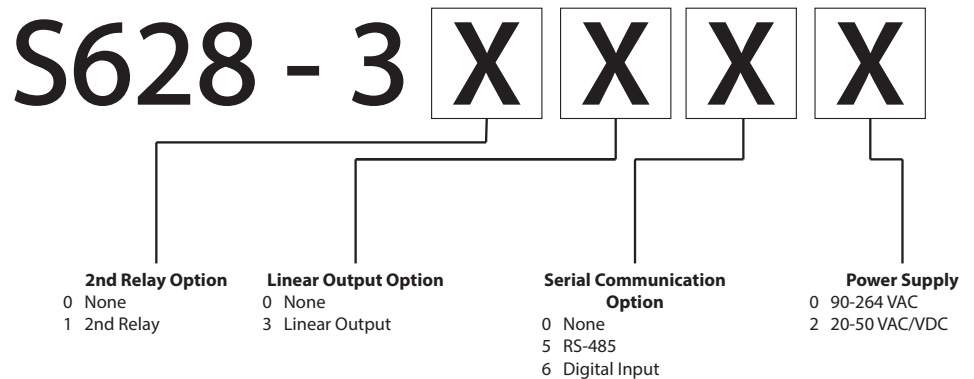
PROCESS INPUT	From 0-1 VAC to 0-600 VAC, 0-1 mA to 0-1 amp Frequency: 20 Hz to 5kHz - degrades at higher frequencies Accuracy: $\pm 0.1\%$ of span Sample Rate: 250 ms Resolution: 14 bits
CONTROL INPUTS	Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 Impedance: 4.7 k Ω to + voltage - Sourcing Response Time: 25 ms Function: Programmable
OUTPUTS	Solid State: NPN open collector, 30 VDC max., 100 mA max. Relay: SPDT, 5A resistive@ 110 VAC Latency: 75 μ seconds, plus 8 ms for relay pull-in
LINEAR OUTPUTS	0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V Accuracy: $\pm 0.25\%$ (mA at 250 Ω , V at 2k Ω); degrades linearly to $\pm 0.5\%$ Resolution: 8 bits in 250ms (10 bits in 1s typ.) Update: Approximately 4/s
COMMUNICATION	RS-485; Serial asynchronous, UART to UART 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)
DISPLAY	Red/Green, 7 segment LED 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
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")

ORDERING INFORMATION



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.



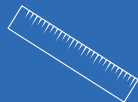
- AWESOME 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output,
- RS-485 communication
- Transmitter power simplifies wiring
- 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



TIME



COUNT



MEASURE

8.43

DISPLAY

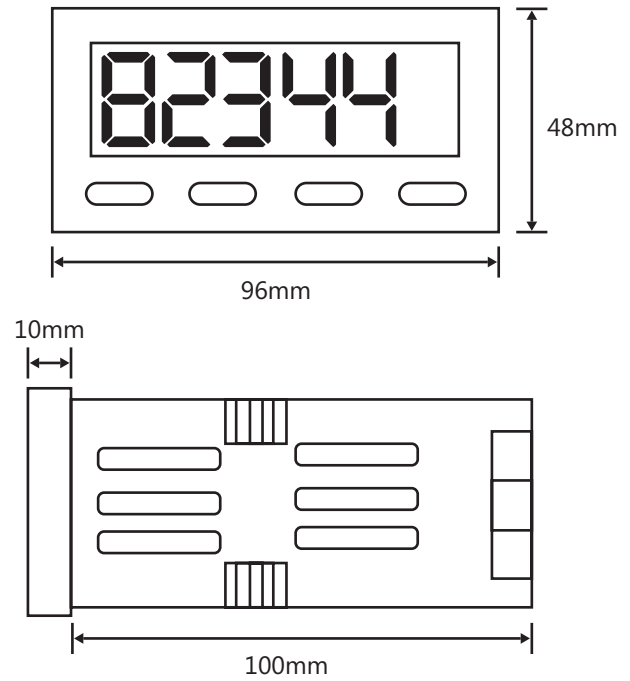
S628 Series

Process Indicator DC Volts/Amps

SPECIFICATIONS

PROCESS INPUT	From 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps Accuracy: $\pm 0.1\%$ of span Sample Rate: 250 ms Resolution: 14 bits
CONTROL INPUTS	Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 Impedance: 4.7 k Ω to + voltage - Sourcing Response Time: 25 ms Function: Programmable
OUTPUTS	Solid State: NPN open collector, 30 VDC max., 100 mA max. Relay: SPDT, 5A resistive@ 110 VAC Latency: 75 μ seconds, plus 8 ms for relay pull-in
LINEAR OUTPUTS	0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V Accuracy: $\pm 0.25\%$ (mA at 250 Ω , V at 2k Ω); degrades linearly to $\pm 0.5\%$ Resolution: 8 bits in 250ms (10 bits in 1s typ.) Update: Approximately 4/s Load Impedance: mA ranges: 500 Ω max.; V ranges: 500 Ω min.
COMMUNICATION	RS-485; Serial asynchronous, UART to UART; 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
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APPROVALS	CE

DIMENSIONS



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

ORDERING INFORMATION

S628 - 5 X X X X

2nd Relay Option
0 None
1 2nd Relay

Linear Output Option
0 None
3 Linear Output

Serial Communication Option
0 None
5 RS-485
6 Digital Input

Power Supply
0 90-264 VAC
2 20-50 VAC/VDC