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Data Sheet
August 13, 2026

SCHNEIDER ELECTRIC / EUROTHERM

Schneider Electric / Eurotherm 818S Temperature Controller / Programmer

Eurotherm 818S 1/4 DIN Temperature / Process Controller The Eurotherm 818S is a 1/4 DIN (96 x 96 mm) microprocessor single-loop PID temperature/process controller in the 818 series. Plug-in I/O and software cover thermocouple, RTD, pyrometer, and linear process inputs with relay, triac, logic, or isolated 4-20 mA outputs. 818S is the basic controller; 818P/P4/P15 add setpoint programmers. Dual display, self-tune and adaptive tune, optional RS485. Supply 85 to 264 Vac (or 24 V ac/dc option), typically 8.5 W. The Eurotherm 818S is a 1/4 DIN (96 × 96 mm) microprocessor single-loop PID temperature/process controller in the 818 series. Plug-in I/O and software cover thermocouple, RTD, pyrometer, and linear process inputs with relay, triac, logic, or isolated 4-20 mA outputs. 818S is the basic controller; 818P/P4/P15 add setpoint programmers. Dual display, self-tune and adaptive tune, optional RS485. Supply 85 to 264 Vac (or 24 V ac/dc option), typically 8.5 W. Furnace and process temperature loops; isolated analog output to valves or VFDs; RS485 supervisory links; retrofit of 818S-MPC single-loop panels.

MODEL Schneider Electric / Eurotherm 818S	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 818S	LISTING https://aumictechlabs.com/products/818s-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Schneider Electric Eurotherm 818S is a 1/4 DIN single-loop PID temperature controller and programmer built for precision process control in industrial environments. This panel-mount unit combines a dual display for concurrent viewing of process variables and setpoints with self-tuning and adaptive tuning capabilities. The 818S executes ramp-to-setpoint programming, offering software-configurable control through modular plug-in architecture suited to diverse thermal management requirements.Technical Specifications Form Factor & Mounting 1/4 DIN panel mount 96 mm (W) × 96 mm (H) × 219 mm (D) including terminal cover IP54 panel sealing with supplied gasket Control & Display Single-loop PID control with dual display Self-tuning and adaptive tuning Ramp-to-setpoint programmer function Power & Electrical Supply: 85–264 VAC (50/60 Hz) or optional 17–40 VAC / 20–40 VDC Power consumption: 8.5–10 W Fusing: 2 A (T) @ 85–264 V AC; 3.15 A (T) @ 17–40 V; 2 A (T) relay outputs; 1 A (T) triac outputs Outputs Control output: Isolated 4–20 mA (reverse acting) Relay output: max 264 VAC, 2 A resistive Triac output: max 264 VAC, 1 A resistive Alarm outputs: up to 2 configurable alarms Leakage current: <2 mA through suppression components Inputs Thermocouple input with 31 linearization options DC isolated input: 0–20 mA or 0–10 V Analog comms DC: 0–20 mA (600 Ω max) or 0–10 V (5 kΩ min) DC isolated output: 0–20 mA or 0–10 V; also 0–20 mA or −5–10 V Logic input (non-isolated): 4 V non-active, volt-free contact capable Digital inputs 1 & 2: configuration-dependent Isolated potentiometer supply: 10 V, 1 mAKey Features Dual-display architecture for simultaneous parameter monitoring Modular software configuration with plug-in module support Self-tuning and adaptive control algorithms Multiple input linearizations for thermocouple and linear sources Isolated 4–20 mA control output with reverse acting logic Configurable alarm outputs for process monitoringTypical Applications Process heating control, thermal chamber management, industrial furnace regulation, and temperature-dependent manufacturing workflows requiring precise closed-loop regulation and programmable ramp profiles.Compatibility & Integration The 818S integrates within the Eurotherm 818 Series ecosystem. Plug-in module configuration enables adaptation to specific control topologies, input sensor types, and output requirements across heat, cool, and motorized valve applications.

Features & description

From manufacturer datasheet

Features

• 1/4 DIN single-loop PID (818S); programmers 818P / P4 / P15 • Self-tune and adaptive tune; dual display • Plug-in input/output modules • Relay max 264 V 2 A; triac 1 A / 264 V class • Supply 85-264 Vac 48-62 Hz, typically 8.5 W • Optional digital RS485 9600 baud

818S Characteristics / Specifications

PARAMETER	VALUE
Model	818S
Manufacturer	Eurotherm
Instrument Type	Temperature / Process Controller
Series	818
Alias	818S; 818S-MPC
Panel Size	96 × 96 mm (1/4 DIN)
Supply Voltage	85 to 264 Vac
Supply Frequency	48 to 62 Hz
Power Consumption	8.5 W typical (German handbook)
Low Voltage Option	24 V ac/dc (order code SN/24 examples)
Relay Output Max	264 V, 2 A class
Triac Output	85 to 264 V, 1 A class (handbook)
Logic Output	galvanically isolated logic (handbook)
Analog Output Example	isolated reverse-acting 4-20 mA (R4MA20)
Communications Example	digital RS485, 9600 baud
Control Modes	PID, PI, PD, P, or on/off (series)
Tune	self-tune and adaptive tune
Display	dual digital
Input Thermocouple Example	Type K -270 to 1372 C instrument / -250 to 1200 C display class (code table)
Input Pt1	-200 to 850 C instrument / -200 to 800 C display (code 70)
Input Linear	-9999 to 19999 (code 00)
Input Square Root	-9999 to 19999 (code 92)
Type N	-270 to 1300 C class
Type R	-50 to 1767 C class
Type S	-50 to 1767 C class

PARAMETER	VALUE
Type B	400 to 1820 C class
W5Re W26Re	10 to 2320 C class
Cold Junction	internal or external 0 to 100 C
Integral Derivative Units	seconds or minutes (software option S/M)
Manual Key	enabledEor disabledDConnectors: screw terminals
Programmer Siblings	818P 16 segments; 818P4 four programs; 818P15 fifteen programs
Ship Weight Listing	2 lbs typical controller; boxed surplus listings higher
Safety EMC	Low Voltage and EMC directives (listings)
Example Full Code	818S/TC/R4MA20/None/None/None/485/96/SN/24/0/2300/C/... Notes Specs from Eurotherm 818 datasheet/handbook and 818S order-code listings. I/O is modular; read the installed code for input curve, outputs, and 85-264 Vac versus 24 V. Do not confuse 818S with 818P programmers.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Technical Specifications

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Logic Output	galvanically isolated logic (handbook)
Analog Output Example	isolated reverse-acting 4-20 mA (R4MA20)
Communications Example	digital RS485, 9600 baud
Control Modes	PID, PI, PD, P, or on/off (series)
Tune	self-tune and adaptive tune
Display	dual digital
Input Thermocouple Example	Type K -270 to 1372 C instrument / -250 to 1200 C display class (code table)
Input Pt100	-200 to 850 C instrument / -200 to 800 C display (code 70)
Input Linear	-9999 to 19999 (code 00)
Input Square Root	-9999 to 19999 (code 92)
Type N	-270 to 1300 C class
Type R	-50 to 1767 C class
Type S	-50 to 1767 C class

PARAMETER	VALUE
Type B	400 to 1820 C class
W5Re W26Re	10 to 2320 C class
Cold Junction	internal or external 0 to 100 C
Integral Derivative Units	seconds or minutes (software option S/M)
Manual Key	enabled E or disabled D
Connectors	screw terminals
Programmer Siblings	818P 16 segments; 818P4 four programs; 818P15 fifteen programs
Ship Weight Listing	2 lbs typical controller; boxed surplus listings higher
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

Aumictech
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

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