PRODUCT DATA SHEET

Published: 2026-07-22

LAUDA Integral IN 2050 PW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L003214

Features

- Process thermostat for pressurised operation with integrated cooling system for dynamic temperature control within external circuits
- For use with non-flammable liquids
- Coloured TFT display for simultaneous indication of actual & set values and graphic illustration of the temperature profile
- Clear text menu navigation, six selectable languages DE, EN, FR, ES, IT, RU
- Management of heat transfer liquids with stored properties
- Easy input via cursor and soft keys. Additional Tmax key for overtemperature protection
- SelfCheck Assistant for system diagnosis
- Fully electronic continuous controller with PID action for internal & external control
- Self adapt function for determination of control parameters
- PowerAdapt system for the use of the maximum possible amount of heat permitted by the power supply system
- Low-level and adjustable over-temperature protection with acoustic alarm
- Powerful LAUDA Variopump (pressure pump) with 8 selectable output levels or control of outflow pressure
- USB and Ethernet interface equipped as standard
- Port for external Pt100 integrated, second external Pt100 feasible via interface module
- Remote fault indication through floating contact
- Option for upgrading up to 2 additional interfaces (RS 232/485, Profibus, analogue, contact or EtherCAT module)
- Programmer with 150 temperature/time segments that can be separated into 5 programs
- Integrated web server for browser based operation in local area networks via PC, tablet or smart phone, secure data transfer due to authentication procedure and encryption
- Integrated and adjustable bypass
- Digital display of pump pressure
- Very small internal volume and big non-thermostated expansion vessel (cold fluid layer system)
- Filling by using compressed air or a drum pump
- SmartCool system for energy-saving digital cooling management including compressor on-off control
- Condenser cooling Water

Reserve technical changes

LAUDA DR. R. WOBSER GMBH & CO. KG
Laudaplatz 1 • 97922 Lauda-Königshofen • DE

T + 49 (0) 9343 503-0
info@lauda.de • www.lauda.de
WEEE-Reg-Nr.: DE 66 42 40 57

Kommanditgesellschaft: Sitz Lauda-Königshofen
Registergericht Mannheim • HRA 560069

Persönlich haftende Gesellschafterin:
LAUDA DR. R. WOBSER Verwaltungs-GmbH
Sitz Lauda-Königshofen
Registergericht Mannheim • HRB 560226

Geschäftsführer:
Dr. Gunther Wobser (Vors.), Dr. Mario Englert,
Dr. Marc Stricker
Beirat: Dr. Gerhard Wobser

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Features

- Utilises traditional refrigerants (HFCs) in accordance with European legislation to control F-gases (EU) 573/2024

Working temperature min.
-40 °C

Working temperature max.
140 °C

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Technical Features	
Working temperature range	-40 ... 140 °C
Pressurised blanket max.	4 bar
Ambient temperature range	5 ... 40 °C
Temperature stability	0.05 ± K
Heater power max.	16 kW
Power consumption max.	18 kW
Current max.	25 A
Pump Pressure max.	6,0 bar
Pump flow rate max. (pressure)	120 L/min
In / Outlet connection thread (outside)	M38 x 1,5
Inlet/outlet hose size	1″
Filling volume min.	11.1 L
Filling volume max.	36.3 L
Water cooling connection thread (outside)	3/4 ″
Recommended cooling water temperature	15 °C
Cooling water temperature max.	30 °C
Cooling water consumption	26 L/min
Recommended pressure difference cooling water	3 bar
Pressure difference cooling water min.	0.8 bar
Max. pressure difference cooling water	10 bar
Maximum pressure cooling water	10 bar
Overall dimensions (WxDxH)	1100 x 895 x 1865 mm
Weight	382 kg
Noise level	58 dB(A)
Refrigerant stage 1	R-449A (GWP 1397); 2.300 kg; 3.2 t CO2-eq
Power supply	400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Power plug	Power cord with plug (IEC 60309, 5-pol, CEE, red, 32 A)

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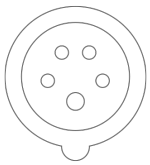

Power cord with plug (IEC 60309, 5-pol, CEE, red, 32 A)

Temperature	Pump stage	Heat transfer liquid	Cooling Capacity 50 Hz	Cooling Capacity 60 Hz
140 °C	8	Waterglycol	20 kW	20 kW
100 °C	8	Waterglycol	20 kW	20 kW
20 °C	8	Waterglycol	20 kW	20 kW
10 °C	8	Waterglycol	15 kW	15 kW
0 °C	8	Waterglycol	10.8 kW	10.8 kW
-10 °C	8	Waterglycol	7.8 kW	7.8 kW
-20 °C	4	Waterglycol	4.8 kW	4.8 kW
-30 °C	4	Waterglycol	3 kW	3 kW
-40 °C	4	Waterglycol	1.6 kW	1.6 kW

Reserve technical changes

Standard accessories

- 2 nipples 1/2" with screw cap G3/4 for cooling water

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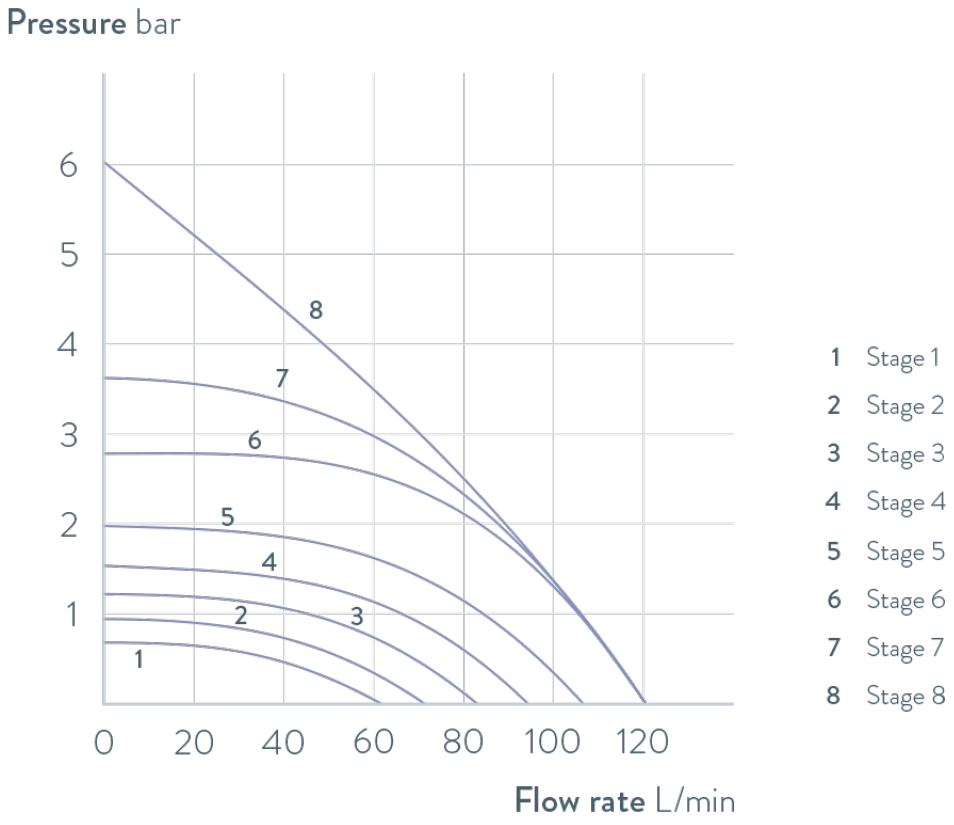
PUMP CHARACTERISTICS Heat transfer liquid: Water



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