PRODUCT DATA SHEET

Standing: 2025-04-02

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L003274

Features

- Process thermostat with integrated cooling system for dynamic temperature control within external circuits
- 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 for use with flammable and non-flammable liquids
- Extremely powerful pressure pump
- Additional pump for internal circulation
- 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)
- Adjustable bypass for pressure limiting
- Digital display of pump pressure
- 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
- SmartCool system for energy-saving digital cooling management including compressor on-off control
- Condenser cooling Water
- Utilises traditional refrigerants (HFCs) in accordance with European legislation to control F-gases (EU) 573/2024

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

PRODUCT DATA SHEET

Standing: 2025-04-02

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L003274

Working temperature min.
-32 °C

Working temperature max.
150 °C

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

PRODUCT DATA SHEET

Standing: 2025-04-02

LAUDA Integral IN 1830 TW Process thermostat 400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz Part Number: L003274

Technical Features (according to DIN 12876)	
Working temperature range	-32 ... 150 °C
Ambient temperature range	5 ... 40 °C
Temperature stability	0.1 ± K
Heater power max.	16 kW
Power consumption max.	18 kW
Current max.	25 A
Pump Pressure max.	5,5 bar (50 Hz), 7,0 bar (60 Hz)
Pump flow rate max. (pressure)	60 L/min (50 Hz); 70 L/min (60 Hz)
In / Outlet connection thread (outside)	M38 x 1,5
Inlet/outlet hose size	1″
Filling volume min.	9.7 L
Filling volume max.	25.5 L
Water cooling connection thread (outside)	3/4 ″
Recommended cooling water temperature	15 °C
Cooling water temperature max.	30 °C
Cooling water flow rate	29 L/min
Recommended pressure difference cooling water	3 bar
Pressure difference cooling water min.	0.8 bar
Max. pressure difference cooling water	10 bar
Maximal pressure cooling water	10 bar
Overall dimensions (WxDxH)	760 x 650 x 1605 mm
Weight	246 kg
Noise level	67 dB(A)
Refrigerant stage 1	R-449A (GWP 1397); 2.200 kg; 3.1 t CO2-eq
Power supply	400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Power plug	Power cord with plug (NEMA L16-30P twist lock; 30 A)
Certification	NRTL according to UL 1995:2018, CSA C22.2 no. 236-15 Ed.5th

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

PRODUCT DATA SHEET

Standing: 2025-04-02

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L003274

Temperature	Heat transfer liquid	Cooling Capacity 50 Hz	Cooling Capacity 60 Hz
150 °C	Thermal oil	19 kW	19 kW
100 °C	Thermal oil	19 kW	19 kW
20 °C	Ethanol	19 kW	19 kW
10 °C	Ethanol	15 kW	15 kW
0 °C	Ethanol	11.5 kW	11.5 kW
-10 °C	Ethanol	7.5 kW	7.5 kW
-20 °C	Ethanol	5 kW	5 kW
-30 °C	Ethanol	2.7 kW	2.7 kW

Standard accessories

- 2 nipples 1" with screw cap M38 x 1,5 for pump connectors
- 2 nipples 1/2" with screw cap G3/4 for 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