

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L002670

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



Reserve technical changes

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L002670

Features

- 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) 517/2014



Working temperature min.
-30 °C



Working temperature max.
150 °C

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 1830 TW Process thermostat
400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
Part Number: L002670

Technical Features (according to DIN 12876)

Working temperature range	-30 ... 150 °C
Ambient temperature range	5 ... 40 °C
Temperature stability	0.1 ± K
Heater power max.	16 kW
Power consumption max.	18 kW
Power consumption	25 A
Pump Pressure max.	5.5 bar (50 Hz); 7.0 bar (60 Hz)
Pump flow rate pressure max.	60 L/min (50 Hz); 70 L/min (60 Hz)
In / Outlet connection thread (outside)	M38x1,5
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 flow rate	29 L/min
Pressure difference cooling water min.	3 bar
Maximal pressure cooling water	10 bar
Overall dimensions (WxDxH)	760 x 650 x 1605 mm
Noise level	64 dB(A)
Refrigerant stage 1	R-449A (GWP 1397); 2.200 kg; 3.1 t CO ₂ -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)

Reserve technical changes

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 1830 TW Process thermostat
 400 V; 3/PE; 50 Hz & 460 V; 3/PE; 60 Hz
 Part Number: L002670

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

Reserve technical changes