

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 230 TW

Process thermostat 230 V; 50 Hz

Part Number: L002665

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
- 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
- Adjustable bypass for pressure limiting
- Digital display of pump pressure
- 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



Reserve technical changes

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 230 TW

Process thermostat 230 V; 50 Hz

Part Number: L002665

Features

- Utilises traditional refrigerants (HFCs) in accordance with European legislation to control F-gases (EU) 517/2014



Working temperature min.
-30 °C



Working temperature max.
120 °C

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 230 TW

Process thermostat 230 V; 50 Hz

Part Number: L002665

Technical Features (according to DIN 12876)

Working temperature range	-30 ... 120 °C
Ambient temperature range	5 ... 40 °C
Temperature stability	0.05 ± K
Heater power max.	2.7 kW
Power consumption max.	3.7 kW
Power consumption	16 A
Pump Pressure max.	3.5 bar
Pump flow rate pressure max.	40 L/min
In / Outlet connection thread (outside)	G 3/4
Inlet/outlet hose size	3/4 "
Filling volume min.	3.6 L
Filling volume max.	8.7 L
Water cooling connection thread (outside)	3/4 "
Recommended cooling water temperature	15 °C
Cooling water flow rate	3 L/min
Pressure difference cooling water min.	1 bar
Maximal pressure cooling water	10 bar
Overall dimensions (WxDxH)	430 x 550 x 760 mm
Noise level	58 dB(A)
Refrigerant stage 1	R-449A (GWP 1397); 0.450 kg; 0.6 t CO ₂ -eq
Power supply	230 V; 50 Hz
Power plug	Power cord with angled plug (CEE7/7)

Reserve technical changes

PRODUCT DATA SHEET

Standing: 2021-07-21

LAUDA Integral IN 230 TW

Process thermostat 230 V; 50 Hz

Part Number: L002665

Temperature	Heat transfer liquid	Cooling Capacity 50 Hz
100 °C	Thermal oil	2.3 kW
20 °C	Ethanol	2.3 kW
10 °C	Ethanol	2.3 kW
0 °C	Ethanol	1.9 kW
-10 °C	Ethanol	1.3 kW
-20 °C	Ethanol	0.75 kW
-30 °C	Ethanol	0.35 kW

Reserve technical changes