

45 Liter Refrigerated Circulator, -25°C



AD45R-20

Key Specifications

Description	-25, 45 L Ref. Circulator
Controller Type	Advanced Digital
Display	3.75" Touch-Pad LCD
Connectivity	Ethernet, USB A & B, RS232/addressable RS485, External Temperature Probe
Languages Supported	4: French, German, Spanish, English
Swivel 180 Rotating Controller	Yes
Working Temperature Range °C	-25° to 135°
Temperature Stability °C	±0.01°
Fluid Optimization/Specific Heat Tuning	Automatic and/or user-adjustable
Temperature Calibration Capability	1-point
Working Access (L x W x D) (cm)	54.9 x 39.8 x 14 cm
Pump Type	Pressure/Suction
External Temperature Control Capability	Yes
Flammability Class (DIN 12876-1)	III (FL)

Electrical Plug Options

Part numbers listed are Standard U.S. and European types. [Country specific plug types available.](#) Contact your [regional distributor to order.](#)

Key Features

Advanced Digital Controller

Key Features

- Intuitive 3.75" (9.5 cm) display with touch-pad control
- 4 languages: French, German, Spanish, English
- Swivel 180™ Rotating Controller
- On-board connectivity: USB-A & B, Ethernet, RS232/addressable RS485, and external temperature probe
- On-screen prompts
- Automatic performance optimization and specific heat tuning
- Single-point calibration capability

Common Specifications

Working Temperature Range °F	-13° to 275°
Working Temperature Range °C	-25° to 135°
Nominal Cooling Capacity @ +20C (W)	1400
Reservoir Capacity (gallons)	11.88
Reservoir Capacity (liters)	45
Reservoir/Tank Material	Stainless Steel
Reservoir Cover	Included
DuraTop	Yes
Cleanable Air Filter	Yes
Working Access (L x W x D) (inches)	21.6 x 15.68 x 5.5 in
Working Access (L x W x D) (cm)	54.9 x 39.8 x 14 cm
Temperature Stability °F	±0.02°
Temperature Stability °C	±0.01°
Display	3.75" Touch-Pad LCD
Display Resolution (Set)	0.01
Display Resolution (Read)	0.01
Pump Type	Pressure/Suction
Pump Speed	Variable
Process Connections	1/4" (F) NPT
External Temperature Control Capability	Yes
Flammability Class (DIN 12876-1)	III (FL)
Over-Temperature Protection / Failsafe Heater Control	Yes

Low Liquid Level Protection	Yes
WhisperCool Environmental Control Technology	Yes
Cool Command Refrigeration Technology	Yes
Reservoir Drain	Yes
Included Software	PolyTemp Viewer, USB driver
Maximum Ambient Temperature °F	95°
Maximum Ambient Temperature °C	35°
Overall Dimensions (L x W x H) (inches)	35.8 x 22.4 x 42.1 in
Overall Dimensions (L x W x H) (cm)	90.9 x 56.8 x 107 cm
Refrigerant	R134a
Environmental Compliance	RoHS, WEEE
Shipping Weight (pounds)	180.0
Shipping Weight (kilograms)	81.5
Catalog Page Number	40-41

60 Hz Only

Part Number	AD45R-20-A13D
Maximum Pressure (psi)	4.3
Maximum Pressure (bar)	0.30
Maximum Pressure Flow Rate (gpm)	5.30
Maximum Pressure Flow Rate (l/min)	20.1
Maximum Suction Flow Rate (gpm)	3.9
Maximum Suction Flow Rate (l/min)	14.7
Cooling Capacity @ -20°C (W)	250
Cooling Capacity @ 0°C (W)	800
Cooling Capacity @ +20°C (W)	1400
Cooling Capacity @ +100°C (W)	1400
Included Hardware	Nylon hose adapters for 3/8", 1/4", and 3/16"
Heater Wattage	2200
Electrical Requirements (VAC/Hz/Ph/A)	208-230/60/1/13
Regulatory Approvals	ETL

50 Hz Only

Part Number	AD45R-20-A12E
Maximum Pressure (psi)	3.6
Maximum Pressure (bar)	0.25
Maximum Pressure Flow Rate (gpm)	4.40
Maximum Pressure Flow Rate (l/min)	16.7
Maximum Suction Flow Rate (gpm)	3.2
Maximum Suction Flow Rate (l/min)	12.2

Cooling Capacity @ -20°C (W)	250
Cooling Capacity @ 0°C (W)	800
Cooling Capacity @ +20°C (W)	1400
Cooling Capacity @ +100°C (W)	1400
Included Hardware	Nylon hose adapters for 3/8", 1/4", and 3/16", and 1/4" NPT to M16 adapter
Heater Wattage	2200
Electrical Requirements (VAC/Hz/Ph/A)	208-240/50/60/1/13
Regulatory Approvals	CE



© 2015-2020 **PolyScience** 6600 W. Touhy Avenue, Niles, Illinois 60714-4516 USA

Phone: +1(847) 647-0611 or +1(800) 229-7569 **Fax:** +1(847) 647-1155

*/

Source URL (modified on 12/26/2019 - 12:10): <https://polyscience.com/circulating-baths/45-liter-refrigerated-circulator-25%C2%B0c-2>