

## CC-510

Refrigerated Heating Circulator Bath with air-cooled cooling machine. Powerful, variable speed, pressure and suction pump, evaporator (cooler) and housing of stainless steel, CFC and H-CFC free. With adjustable overtemperature protection according to DIN 12876.

## Pilot ONE:

The new Pilot ONE controller with pioneering technology and advanced control functions brings numerous advantages to routine work. The extensive features list includes a brilliant 5,7" TFT touchscreen display, USB and network connections, an integrated technical glossary and language support in 13 languages (EN, DE, FR, IT, ES, RU, CN, PT, JP, CZ, PL, KO, TR). The Pilot ONE has a convenient navigation system with easily remembered icons and menu categories which are colour sorted to make routine work simpler. Thanks to a favourites menu and One-Click operator guidance all important information is always just a few keystrokes away. Software wizards also help you to set up, ensuring correct settings. The USB port allows connection of the system to a PC or notebook. Together with the Spy software, requirements such as remote control or data transmission are easily achieved in a cost-effective manner. Network integration is easy with the internet port.

The range of functions can be expanded very easily via E-grade at any time by entering a unit specific upgrade code:

E-grade "Exclusive": TAC (True Adaptive Control) - self optimising internal and cascade control, selectable temperature control mode (Internal/Process), programmer with 3 programs (max. 15 steps), ramp function (linear), 5 point calibration, scalable graphic display, favourites menu, display resolution 0,01 K.

E-grade "Professional": Programmer with 10 programs (max. 100 steps), ramp function for temperature gradients (linear and non-linear), 2nd set point, user menus (Administrator level), calendar start.

3-2-2 warranty - registration required.

## Technical data according to DIN 12876

Operating temperature range Temperature stability at -10°C-50200 °CItemperature stability at -10°C0.02 Ktemperature set point / display5,7" colour TouchscreenInternal temperature sensorPt100Sensor external connectionPt100Interface digitalEthernet, USB (Host u. Device), RS232Safety classificationIII / FLHeating power1,65 kWCooling power2,1 kWat 10°C2,1 kWat 0°C2,1 kWat 0°C2,1 kWat -0°C0,4 kWRefrigeration machineair-cooled, CFC- and HCFC-freeRefrigerant (ASHRAE, GHS)R452A (A1, H280)Refrigerant quantity1,4 kgPressure pumpyesmax. delivery pressure0,7 barSuction pumpyesmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. delivery pressure (suction)91Bath volume261min. filling capacity191Bath volume261min. filling capacity937 mmBath volume937 mmHeight of bath opening937 mmNet weight148 kgPower supply requirement208V 2- 60Hzmax. cent weight148 kg			
temperature set point / display 5,7° colour Touchscreen Pt100 Interface digital Pt100 Interface digital Ethernet, USB (Host u. Device), RS232 Safety classification III / FL Heating power 1,65 kW Cooling power 2,1 kW at 20°C 2,1 kW at 20°C 2,1 kW at 20°C 2,1 kW at -20°C 2,1 kW Refrigeration machine air-cooled, CFC- and HCFC-free 4622 (A1, H280) Refrigerant (ASHRAE, GHS) R452A (A1, H280) Refrigerant quantity 1,4 kg Pressure pump yes max. delivery pressure 0,7 bar Suction pump yes max. delivery pressure (suction) 0,4 bar Pump connection M16x1 male 0,7 bar Suction pump 268 max. delivery pressure (suction) 0,4 bar Pump connection M16x1 male 0,7 bar Suction pump 268 max. delivery function 261 min. filling capacity 191 Bath capacity Wth displacement rack 151 Width bath opening WxD / bath depth 260 x 260 / 200 mm Height of bath opening WxDXH ** Net weight 0 bath opening WXDXH **	Operating temperature range	-50200 °C	
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at -20°C1 kWat -40°C0,4 kWRefrigeration machineair-cooled, CFC- and HCFC-freeRefrigerant (ASHRAE, GHS)R452A (A1, H280)Refrigerant quantity1,4 kgPressure pumpyesmax. delivery pressure0,7 barSuction pumpyesmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath capacity with displacement rack15 lWidth bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	at 20°C	2,1 kW	
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Refrigeration machineair-cooled, CFC- and HCFC-freeRefrigerant (ASHRAE, GHS)R452A (A1, H280)Refrigerant quantity1,4 kgPressure pumpyesmax. delivery25 l/minmax. delivery pressure0,7 barSuction pumpyesmax. delivery (suction)18,5 l/minmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath capacity with displacement rack15 lWidth bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	at -20°C	1 kW	÷.
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Refrigerant quantity1,4 kgPressure pumpyesmax. delivery25 l/minmax. delivery pressure0,7 barSuction pumpyesmax. delivery (suction)18,5 l/minmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Refrigeration machine		
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Suction pumpyesmax. delivery (suction)18,5 l/minmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	max. delivery	25 I/min	
max. delivery (suction)18,5 l/minmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	max. delivery pressure	0,7 bar	all Ca
max. delivery (suction)18,5 l/minmax. delivery pressure (suction)0,4 barPump connectionM16x1 malemax. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Suction pump	yes	
Pump connectionM16x1 maleOrder-No.: 2020.0011.01max. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	max. delivery (suction)	18,5 l/min	
max. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	max. delivery pressure (suction)	0,4 bar	
max. permissible kin. viscosity50 mm²/sBath volume26 lmin. filling capacity19 lBath capacity with displacement rack15 lWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Pump connection	M16x1 male	Order-No : 2020 0011 01
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Bath capacity with displacement rack15 IWidth bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Bath volume	26	
Width bath opening WxD / bath depth260 x 260 / 200 mmHeight of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	min. filling capacity	19	
Height of bath opening937 mmOverall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Bath capacity with displacement rack	15 I	
Overall dimensions WxDxH **605x706x1136 mmNet weight148 kgPower supply requirement208V 2~ 60Hz	Width bath opening WxD / bath depth	260 x 260 / 200 mm	
Net weight148 kgPower supply requirement208V 2~ 60Hz	Height of bath opening	937 mm	
Power supply requirement 208V 2~ 60Hz	Overall dimensions WxDxH **	605x706x1136 mm	
Power supply requirement 208V 2~ 60Hz	Net weight	148 kg	
	•	208V 2~ 60Hz	
		12,5 A	

from Serial-No.:	418053	1.2/21
min. ambient temperature	5 °C	
Degree of Protection max. ambient temperature	IP20 40 °C	
Fuse	2x16 A	

Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.

Included Accessories:

mini USB cable #54949, blank plug, hose connector NW12, sleeve nuts thread, bath cover.

Optional accessories:

drain valve, displacement insert to reduce bath volume, calibration insert, Com.G@te, temperature control / - connection hoses, thermofluids, further accessories, etc.: see catalog.

Output data valid for: Room temperature 20°C. If the ambient temperature rises, the cooling capacity may drop.

in accordance with EN60034-1 the following voltage and frequency tolerances are valid:

Voltage + / - 5% with a simultaneous frequency tolerance of + / - 2%

Example -5% voltage and + 2% frequency -> not allowed!

-5% voltage and - 2% frequency -> allowed

Information to Electromagnetic compatibility: Classification (disturbance) to EN55011: Class A, Group 1

Standard delivery conditions - Power cable configuration:

1. Single / two-phase devices (100V to 240V) --> with power cable and country-specific plug (please specify when ordering)

2. Three-phase devices with current consumption less than 63A --> with cable, without plug

3. Three-phase devices with current consumption greater than 63A --> without cable, without plug

This equipment is compliant to US-SNAP and all applicable EU laws. The US-SNAP end-use for this equipment is the industrial process refrigeration. Certification by a Notified Body upon request.

\*\* Please respect space requirements. See operating conditions at www.huber-online.com