Internal Heating Circuit Module
HZS 533-3

Forward flow temperature (PT1000)
Return flow temperature (PT1000)
Space unit

Mixer open (Relay output)
Mixer closed (Relay output)
Pump (Relay output)

230 V AC supply in and out
Ribbon cable connection to the controller and the next expansion module

Supply Voltage

Relay power supply	230 V AC
Fuse	5 A for relay outputs and/or 3 A for solar module
Internal electronics power supply	+24 V (from HZS 511), must be connected to the expansion controller
Interner Datenspeicher (SRAM)	1200 kByte
+24 V current consumption	HZS 533 maximum 15 mA (without relays) maximum 40 mA (with relays)

Digital Input Specifications (Counter Input)

Input signal	Open Collector
Input frequency	maximum 200 Hz
Signal evaluation	1X
Counter resolution	8-bit
Input delay	typically 0.2 ms
Number of outputs	1 on solar module
Connection technology	3-pin Phoenix RM 3.5 mm

Specifications for the Digital Outputs: 230 V AC 1 A / or 3 A Relay Output

Output voltage	230 V AC	
Max. output current	1 A output current	3 A output current
Number on the heating circuit module	2	1
Number on the buffer module	2	1
Amount on solar module	0	2
Relay types	normally open	
Relays	RT 314024	
Switching range	16.8-30 V DC	
Switching current	typically 9 mA at +24 V	
Switching time	< 10 ms	
Switching power	see data sheet: Tyco Schrack RT1 series	
Fuse	5 AT	
Connection technology	3-pin Phoenix RM 5.08 mm 3 A relay output 4-pin Phoenix RM 5.08 mm 1 A relay output (or 3 A on solar module)	

PT1000 Analog Output Specifications

Number of channels	Heating circuit module: 2 Buffer module: 3 Solar module: 2	Heating circuit module: 0 Buffer module: 0 Solar module: 2	Expansion controller: 1
Sensor type	PT1000 (Ohmic temperature sensor)		
Measurement range	-10 ... +120 °C	-50 ... +200 °C	-50 ... +70 °C
Sensor range	960.86 -1460.68	803.06-1758.56	803.06-1270.75
Resolution	0.2 °C	1.0 °C	0.2 °C
Measurement precision	±0.5 °C	±1 °C	±0.5 °C
Measurement value	14-bit		
Input resistance	10 kΩ		
Input filter	100 ms		
Connection technology	2-pin Phoenix RM 3.5 per PT1000 input		

Room Unit Specifications

Number of room unit connections		1			
Temperature sensor type		PT1000/KTY81-110/KTY81-122/NI1000			
Temperature sensor range		-25° ... +100°C			
		PT1000	KTY81-110	KTY81-122	NI1000
Sensor temperature	-25 °C	typ. 902 Ω	typ. 654 Ω	typ. 660 Ω	typ. 867 Ω
Sensor temperature	100 °C	typ. 1385 Ω	typ. 1696 Ω	typ. 1713 Ω	typ. 1618 Ω
Mode selector switch (MSS)		Night	Automatic	Day	
Set value change	+5 °C	typ. 1335 Ω	typ. 1665 Ω	typ. 1004 Ω	
Set value change	0 °C	typ. 1380 Ω	typ. 1710 Ω	typ. 1050 Ω	
Set value change	-5 °C	typ. 1423 Ω	typ. 1753 Ω	typ. 1092 Ω	
Resolution temperature sensor		0,6 Ω			
Resolution MSS set value change		0,6 Ω			
Measure management temperature sensor		±2 Ω			
Measurement precision MSS set value change		±2 Ω			
Input resistance		4.7 KΩ			
Input filter		100 ms			

Terminal Requirements

Connection technology	**Connector terminals are not included in delivery!** The following spring terminals are required: 3x 3-pin FKC 2.5/ 3-ST-5.08 Phoenix Contact spring terminal connector 1x 4-pin FKC 2.5/ 4-ST-5.08 Phoenix Contact spring terminal connector 2x 2-pin FK-MCP 1.5/ 2-ST-3.5 Phoenix Contact spring terminal connector 1x 3-pin FK-MCP 1.5/ 3-ST-3.5 Phoenix Contact spring terminal connector

Article Number and Miscellaneous

Article number	05-895-533-3
Hardware version	1.x

Environmental Conditions

Storage temperature	-20 ... +70 °C	
Operating temperature	0 ... +60 °C	
Humidity	0-95 %, uncondensed	
EMV stability	according to EN 61000-6-2:2001	
Shock resistance	EN 60068-2-27	150 m/s²

Notes