

Internal Controller Expansion Card

HZS 532-2



Controller AT90CAN32 with 1x CAN bus

Thermo resistance (PT1000 or KTY81-110 or KTY81-122 / -25 ... +100 °C / 0.2 °C / ± 0.5 °C / 2 Pole)

Up to 5 internal expansion modules can be connected

The +24V supply is provided by the CPU (HZS 511)

CPU (HZS 511) connected over internal CAN bus

The connection to the internal expansion modules is made over a 26-pin ribbon cable

Controller Performance Data

Controller	AT90CAN32
Command execution time	approximately 0.7 μ s
Interface connections	1x CAN
Internal program memory	32 kByte (Flash)
Internal data and/or program buffering (internal EEPROM)	1 kByte (Flash) no buffer battery required!

Supply Voltage

Relay power supply	230 V AC
Fuse	10 A for relay outputs
Internal electronics power supply	+24 V (from HZS 511), must be connected to the expansion controller
+24 V current consumption	HZS 532-2: maximum 60 mA (without relays) maximum 120 mA (with relays) HZS 532-2 with 5 expansion modules, maximum 350 mA

Specifications for the Digital Outputs: 230 V AC Relay Output

Output voltage	230 V AC
Maximum output current	maximum 6.5 A (single relay output) maximum 8.5 A (all relay outputs)
Number on the expansion controller	5
Number on the heating circuit module	3
Relay types	normally open
Relays	RT 314024 WG
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	10 AT
Connection technology	3x 3-pin Phoenix RM 5.08 1x 4-pin Phoenix RM 5.08

Analog Input Specifications for the KTY81-110 and/or KTY81-122 (or PT1000)

Number of channels	2
Sensor type	KTY81-110 or KTY81-122 (and or PT1000)
Measurement range	-25 ... +100 °C for the KTY sensor -50 ... +200 °C for the PT1000 sensor
Sensor range	KTY81-110: 654-1696 Ω KTY81-122: 660-1713 Ω (PT1000: 803-1758 Ω)
Resolution	0.2 °C
Measurement precision	± 0.5 °C
Measurement value	14-bit
Typical current measuring	1.1 mA
Input resistance	8.2 K Ω
Input filter	100 ms
Connection technology	2-pin Phoenix RM 3.5 per analog input

Space Unit FBR1 Specifications

Number of inputs	1 per heating circuit module and 1 on the controller
Applicable sensor type	FBR1
Sensor range for actual value (actual temperature)	660-1200 Ω
Sensor range for the set value (space correction)	1000-1100 Ω
Actual resolution value	0.6 Ω
Resolution setting	0.6 Ω
Input resistance	4.7 kΩ
Input filter	100 ms
Measurement value	14-bit
Measurement precision of the actual value	±2 Ω
Measurement precision of the set value	±2 Ω

Terminal Requirements

Connection technology	Connector terminals are not included in delivery! The following spring terminals are required: 5x 3-pin FK-C 2,5/3-ST-5,08 Phoenix Contact spring terminal connector 1x 4-pin FK-C 2,5/4-ST-5,08 Phoenix Contact spring terminal connector 2x 2-pin FK-C 2,5/2-ST-5,08 Phoenix Contact spring terminal connector 1x 3-pin FK-MCP 1,5/3-ST-3,5 Phoenix Contact spring terminal connector 1x 4-pin FK-MCP 1,5/4-ST-3,5 Phoenix Contact spring terminal connector
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Article Number and Miscellaneous

Article number	05-895-532-2
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