

Movement by Perfection



Ventilation, control and drive technology



ZAc core

Technical information

ZAcore - Detailed technical description of the base module

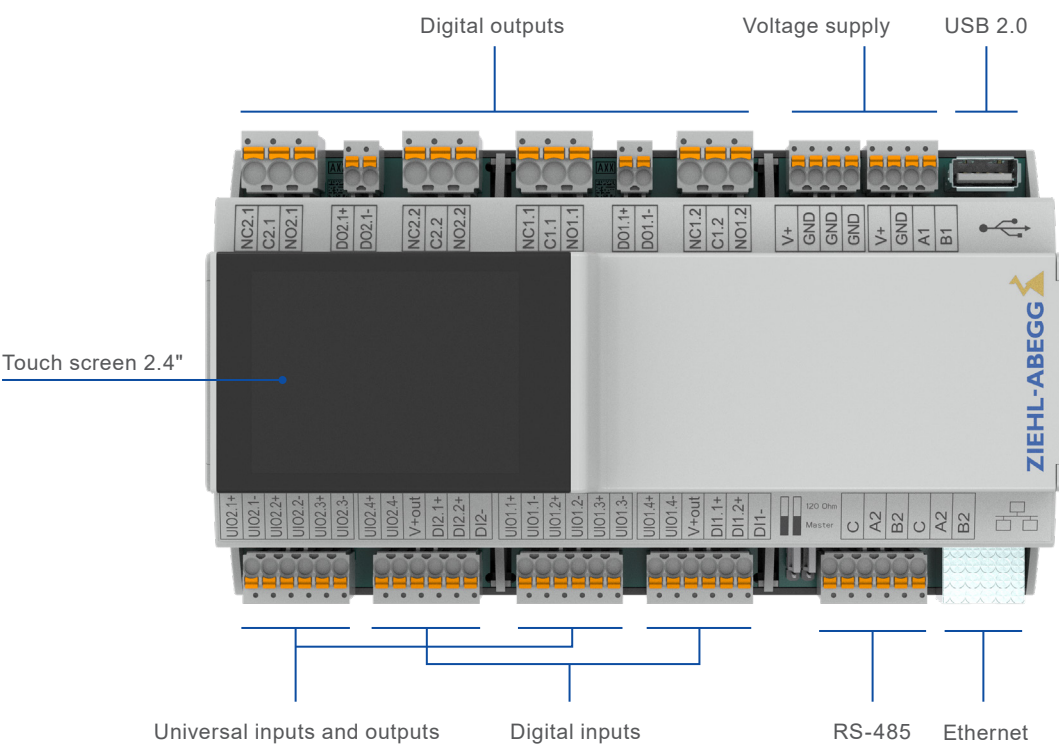


Illustration shows ZAcore in size “Large”

Technical data

Operating system	Embedded Real-Time Linux based (Buildroot)
CPU	Single Core ARM Cortex-A7 @ 792 MHz
Main memory (RAM)	512 MB DDR3L
Internal flash memory	eMMC 4 GB, usable 3.5 GB Distribution: Operating system partitions: 2x1 GB Data: approx. 1.5 GB
Internal data memory	approx. 1.5 GB in separate data partition
Supply voltage	24 VDC ±10%
Communication	Modbus RTU server & client (max. 64 nodes) BACnet MS/TP server
Ethernet protocols	MODBUS-TCP server & client, BACnet IP server, HTTPS, NTP

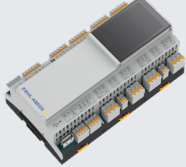


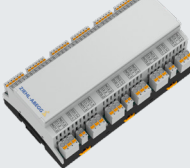
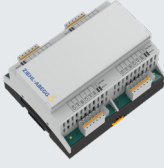
ziehl-abegg.com/en/zacore

Technical data

Specification of digital inputs	Max. Number of inputs	32
	DI input voltage	5 to 30 V DC
	Impedance	4 kOhm
	Max. Frequency	5 kHz, compatibility: S0 DIN 43864 or EN 62053-31
Specification of relay outputs	Max. Number of outputs	32
	Max. Contact rating	6 A 250 V
	Min. Switching voltage	5 V
	Min. switching current	10 mA
	Max. Operation cycles	6000
Specification for open-collector output	Max. Number of outputs	16
	Min. Collector voltage	5 V DC
	Max. collector voltage	30 V DC
	Max. current rating	50 mA
	Max. Cable length	30 m
Specification for universal outputs and inputs	Max. Number of interfaces	64
	Analogue inputs	0 - 10 V, 0 - 20 mA, resistance measurement
	Resolution	13 bit
	Analogue outputs	0 - 10 V, 0 - 20 mA
	Resolution	16 bit
	Signal types	V, mA, Ω , Digital
Environmental conditions	Ambient temperature (operation)	-20 to +50 °C
	Ambient temperature (storage)	-25 to +85 °C
	Degree of protection (without protective housing)	IP20
	Degree of protection (with protective housing)	IP65
	Degree of contamination	2 according to IEC 60664-1 and IEC 60730-1
	Operating altitude	0 to 2000 m
	Installation position	Any
	Relative humidity	5 ... 95%
	Vibration resistance	1 g according to IEC 60068-2-6
	Shock resistance	15 g according to IEC 60068-2-27
	EMC interference immunity	according to EN 61000-6-2
	EMC emitted interference	in accordance with EN61000-6-3

Geometric data and connections

	Basic modules				
	Small	Medium		Large	
Design					
Size (L, W, H) in mm	53.6 x 89.7 x 48.9	107.6 x 89.7 x 48.9	107.6 x 89.7 x 48.9	161.6 x 89.7 x 48.9	161.6 x 89.7 x 48.9
RS-485 (insulated/non-insulated)	2	2	2	2	2
Universal inputs and outputs	-	4	4	8	8
Digital inputs	-	2	2	4	4
Digital outputs:					
- Relay	-	2	2	4	4
- Open collector	-	1	1	2	2
Ethernet RJ-45	1	1	1	1	1
USB 2.0 interface	1	1	1	1	1

	Extension modules			
	Small	Medium	Large	Medium
Design				
Size (L, W, H) in mm	53.6 x 89.7 x 48.9	107.6 x 89.7 x 48.9	161.6 x 89.7 x 48.9	107.6 x 89.7 x 48.9
RS-485 (insulated/non-insulated)	0	0	0	4
Universal inputs and outputs	4	8	12	0
Digital inputs	2	4	6	0
Digital outputs:				
- Relay	2	4	6	0
- Open collector	1	2	3	0

