

Main

Range of Product	Harmony SCU
Product or Component Type	Controller
Device presentation	Basic element

Complementary

Supply	External source
[Us] rated supply voltage	24 V 20.4...28.8 V)DC
Immunity to microbreaks	10 ms
Inrush current	30 A
Power Consumption in W	15 W
Local signalling	No indicator
Number of pages	Limited by internal memory capacity
Software Designation	SoMachine
Operating System	Harmony
Processor name	CPU RISC
Processor frequency	333 MHz
Memory description	Flash NAND, 128 MB Internal data storage FRAM, 128 kB Application run DRAM, 128 MB
Integrated connection type	1 serial link - RJ45 - RS232/RS485 <= 115.2 kbits/s) 1 Ethernet TCP/IP - RJ45 1 USB 2.0 type mini B 1 USB 2.0 type A CANopen master bus - SUB-D 9
Realtime clock	Built-in
Downloadable protocols	Modbus Modbus TCP/IP CANopen
Fixing mode	By 1 nut Ø 22 mm 1...6 mm thick panel
Enclosure Material	PC/PBT
Shock resistance	147 m/s ² 11 ms on DIN rail)IEC 60068-2-27 294 m/s ² 6 ms on panel mounting)IEC 60068-2-27
Vibration resistance	+/- 3.5 mm 5...9 Hz) IEC 60068-2-6 1 gn 9...150 Hz) IEC 60068-2-6

Electromagnetic compatibility	<p>Electrostatic discharge immunity test - test level: 8 kV (air discharge) conforming to IEC 61000-4-2</p> <p>Electrostatic discharge immunity test - test level: 6 kV (contact discharge) conforming to IEC 61000-4-2</p> <p>Susceptibility to electromagnetic fields - test level: 10 V/m (80 MHz...3 GHz) conforming to IEC 61000-4-3</p> <p>Electrical fast transient/burst immunity test - test level: 2 kV (power lines) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 1 kV (between analogue I/O and operating voltage) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 2 kV (relay wires) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 1 kV (Ethernet line) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 1 kV (COM line) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 1 kV (CAN line) conforming to IEC 61000-4-4</p> <p>Surge immunity test - test level: 2 kV (power supply (common mode)) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 1 kV (power supply (differential mode)) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 1 kV common mode (digital I/O) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 0.5 kV differential mode (digital I/O) conforming to IEC 61000-4-5</p> <p>Conducted RF disturbances - test level: 10 V (0.15...80 MHz) conforming to IEC 61000-4-6</p> <p>Conducted emission - test level: 150 kHz...30 MHz conforming to EN 55011</p> <p>Radiated emission - test level: 30 MHz...1 GHz conforming to EN 55011</p>
Discrete input number	2 fast input (normal mode) IEC 61131-2 Type 1 14 digital input IEC 61131-2 Type 1
Discrete input voltage	24 V DC sink or source (positive/negative)
Number of common point	1 fast input (HSC mode) 2 digital input
Discrete input current	7.83 MA fast input 5 mA digital
Input impedance	4.7 kOhm 2.81 kOhm
Sensor power supply	15...28.8 V DC ≥ 15 V ≥ 5 mA ≤ 5 V ≤ 1.5 mA 15...28.8 V DC ≥ 15 V ≥ 2.5 mA ≤ 5 V ≤ 1 mA
Configurable filtering time	0 ms no filter none) 0.004...0.04 ms bounce filter latch/event and cumulative filter by step $N \times 0.5$ ms ($64 \geq N \geq 2$) 3...12 ms integrator none/run/stop)
Maximum input frequency	100 KHz fast input (encoder mode) A/B 100 KHz fast input single phase 100 kHz fast input pulse/direction
Maximum cable distance between devices	Shielded cable < 32.81 ft (10 m) fast input Shielded cable < 328.08 ft (100 m) digital input Unshielded cable < 164.04 ft (50 m) digital input
Connection pitch	0.14 in (3.5 mm)
Overvoltage protection	With
Isolation between channels and internal logic	500 V DC
Isolation between channels	None
Discrete output number	2 fast output (normal mode) source 8 digital output source
Discrete output voltage	24 V DC 19.2...28.8 V)transistor 24 V DC 5...30 V)relay 220 V AC 100...250 V)relay
Input/output number	2 fast input FI0...FI1 14 digital input DI0...DI13 2 fast output FQ0...FQ1 8 digital output DQ0...DQ7
Discrete output current	2 A 4 A)5 ms opening contact digital output 2 A 4 A)2 ms closing contact digital output 300 mA2 ms fast output (normal mode) 50 mA2 ms fast output (PWM or PTO mode)
Insulation resistance	> 10 MOhm between the I/O and internal logic > 10 MOhm between power supply and earth
Maximum output frequency	100 KHz fast output (PTO mode) 1 kHz fast output (PWM mode)

Absolute accuracy error	+/- 0.1 % of full scale cyclic ratio 1...99% fast output (PWM or PTO mode) 1 % of full scale cyclic ratio 1...99% fast output (PWM or PTO mode) +/- 5 % of full scale cyclic ratio 10...90% fast output (PWM or PTO mode) +/- 10 % of full scale cyclic ratio 20...80% fast output (PWM or PTO mode) +/- 15 % of full scale cyclic ratio 30...70% fast output (PWM or PTO mode)
Height	1.99 in (50.65 mm)
Width	5.04 in (128 mm)
Depth	4.02 in (102 mm)
Net Weight	0.79 lb(US) (0.359 kg)

Environment

Standards	FCC Class A ANSI/ISA 12-12-01 UL 508 IEC 61000-6-2 EN 61131-2 CSA C22.2 No 213 Class I Division 2
Product Certifications	GOST[RETURN]C-tick[RETURN]KCC[RETURN]cULus 508[RETURN]cULus CSA 22-2 No 142[RETURN]cUL 1604 Class 1 Division 2
Marking	CE
Ambient Air Temperature for Operation	32...122 °F (0...50 °C)
Ambient Air Temperature for Storage	-4...140 °F (-20...60 °C)
Relative humidity	5...85 % without condensation
Operating altitude	<= 6561.68 ft (2000 m)
Storage altitude	0.00...32808.40 ft (0...10000 m)
Maximum pressure	800...1114 hPa
IP degree of protection	IP20 IEC 60529 rear panel) IP65 IEC 60529 front panel)
NEMA degree of protection	NEMA 4X front panel
Pollution degree	2 IEC 60664
Environmental characteristic	Corrosive gas free

Ordering and shipping details

Category	22569-MAGELIS XBT-GT (AND XBT-G)
Discount Schedule	MC2
GTIN	3595864175591
Returnability	Yes
Country of origin	CN

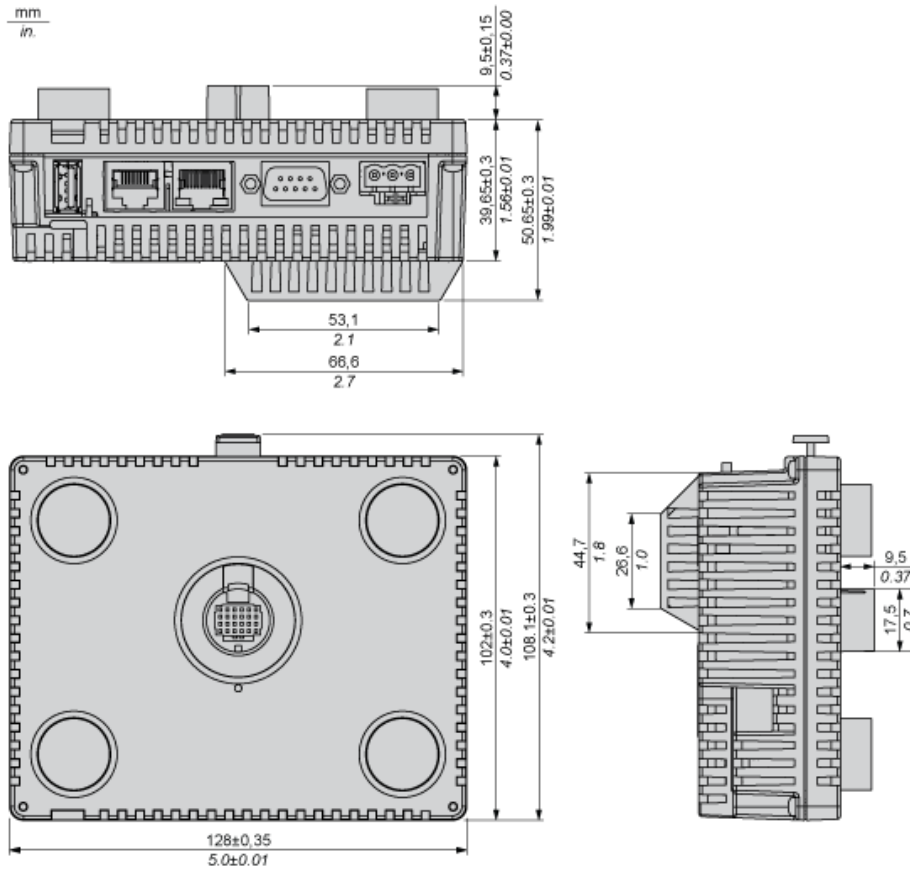
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.62 in (9.200 cm)
Package 1 Width	7.48 in (19.000 cm)
Package 1 Length	10.55 in (26.800 cm)
Package 1 Weight	34.85 oz (988.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	14.72 lb(US) (6.677 kg)

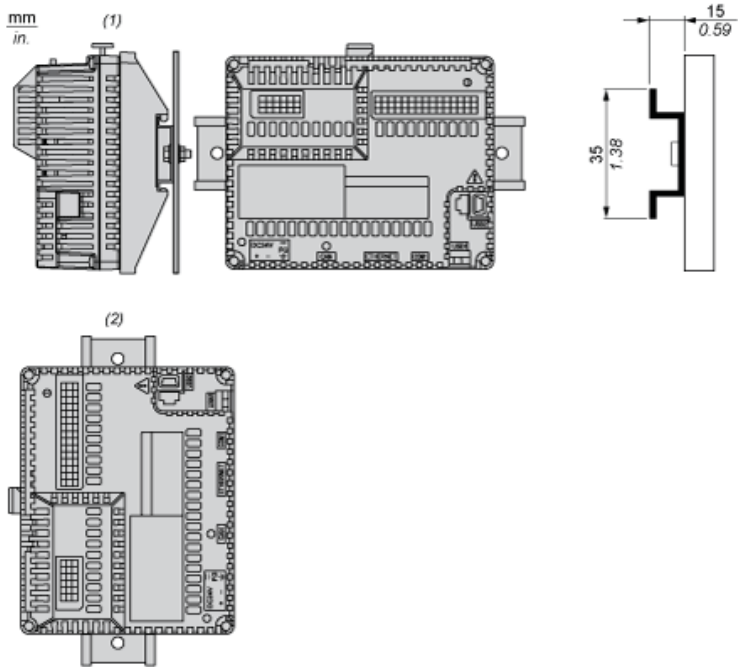
Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Upgradeability	Upgradeable through digital modules and upgraded components

Dimensions

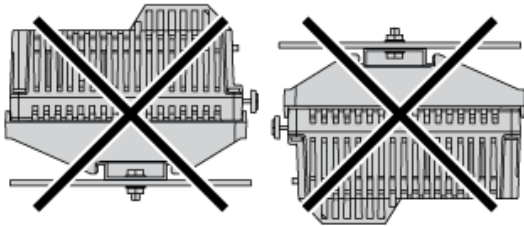


Recommended Mounting position

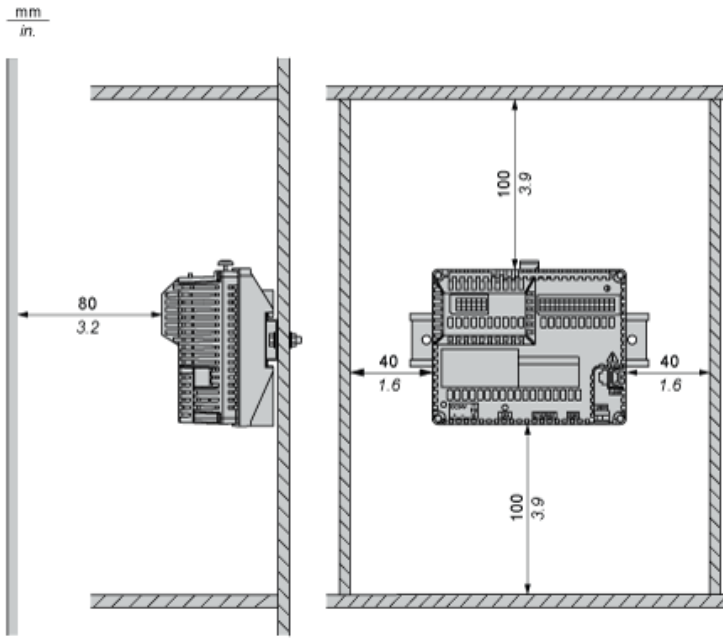


- (1) Horizontal mounting
- (2) Vertical mounting

No Recommended Mounting Position

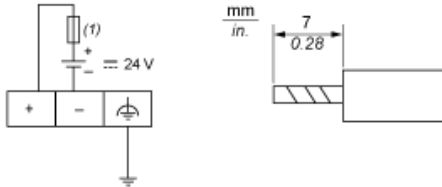


Clearance



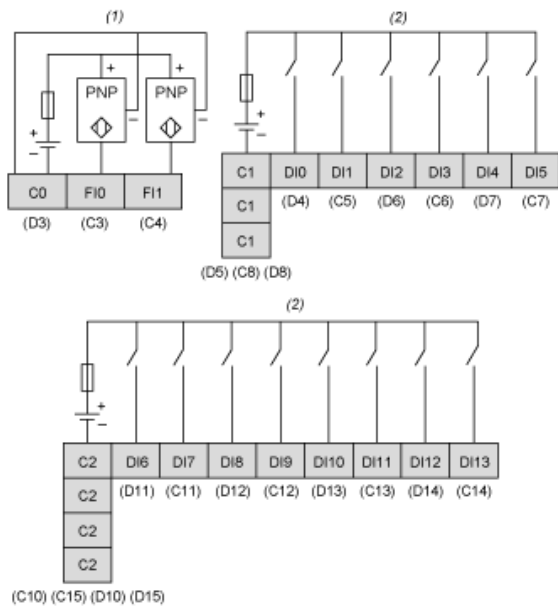
Keep adequate spacing for proper ventilation to maintain an ambient temperature between 0...50 °C (32...122 °F) for horizontal installation and 0...40 °C (32...104 °F) for vertical installation.

Wiring Diagram



(1) Slow-blow 2A type T fuse

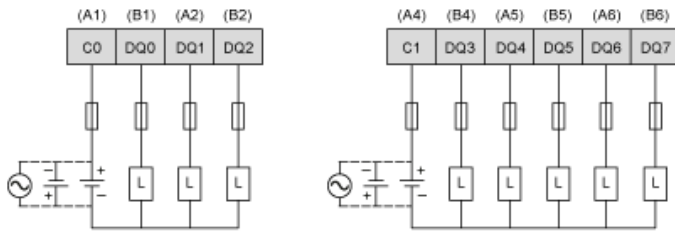
Wiring Diagram of Digital Inputs



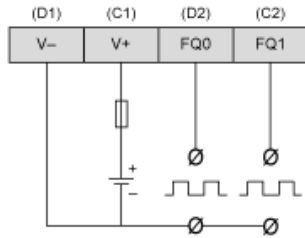
(1) HSC inputs with pin assignment of terminal blocks C,D.
(2) Digital inputs with pin assignment of terminal blocks C,D.

Wiring Diagram of Digital Outputs

(1)



(2)



- (1) Digital outputs with pin assignment of terminal blocks A,B.
- (2) PWM outputs with pin assignment of terminal blocks C,D.
- (L) Load