Product data sheet
Characteristics

HMISCU6A5
3”5 color touch controller panel - Dig 16 inputs/10 outputs

Product availability: Stock - Normally stocked in distribution facility

Main

Range of product	Magelis SCU
Product or component type	Small touch HMI controller
Display size	3.5 inch
Display type	With backlit LED colour TFT LCD
Touch panel	Analogue
Device presentation	Complete product

Complementary

Display resolution	320 x 240 pixels QVGA
Backlight lifespan	50000 hours with 65000 colours
Brightness	16 levels via touch panel
View angle horiz x vert	60° left 60° right 40° top 60° bottom
Character font	Chinese (simplified Chinese) Japanese (ANK, Kanji) Taiwanese (traditional Chinese) ASCII Korean
Supply	External source
[Us] rated supply voltage	24 V at 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	Magelis
Processor name	CPU RISC
Processor frequency	333 MHz
Memory description	128 MB flash memory, type: NAND 128 kB internal data storage memory, type: FRAM 128 MB application run memory, type: DRAM
Integrated connection type	1 RJ45 connector serial link with RS232/RS485 interface at <= 115.2 kbits/s 1 RJ45 connector Ethernet TCP/IP 1 USB 2.0 type mini B 1 USB 2.0 type A SUB-D 9 connector CANopen master bus
Realtime clock	Built-in
Downloadable protocols	CANopen Modbus Modbus TCP/IP
Fixing mode	By 1 nut - diameter: Ø 22 mm, mounting on: 1...6 mm thick panel
Enclosure material	PC/PBT

Shock resistance	147 m/s² (duration=11 ms) conforming to IEC 60068-2-27 on DIN rail 294 m/s² (duration=6 ms) conforming to IEC 60068-2-27 on panel mounting
Vibration resistance	+/- 3.5 mm (f=5...9 Hz) conforming to IEC 60068-2-6 1 gn (f=9...150 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Electrostatic discharge immunity test - test level: 8 kV, air discharge conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 6 kV, contact discharge conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m, 80 MHz...3 GHz conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 2 kV, power lines conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 1 kV, between analogue I/O and operating voltage conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV, relay wires conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 1 kV, Ethernet line conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 1 kV, COM line conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 1 kV, CAN line conforming to IEC 61000-4-4 Surge immunity test - test level: 2 kV, power supply (common mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 1 kV, power supply (differential mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 1 kV common mode, digital I/O conforming to IEC 61000-4-5 Surge immunity test - test level: 0.5 kV differential mode, digital I/O conforming to IEC 61000-4-5 Conducted RF disturbances - test level: 10 V, 0.15...80 MHz conforming to IEC 61000-4-6 Conducted emission - test level: 150 kHz...30 MHz conforming to EN 55011 Radiated emission - test level: 30 MHz...1 GHz conforming to EN 55011
Discrete input number	2 fast input (normal mode) conforming to IEC 61131-2 Type 1 14 digital input conforming to IEC 61131-2 Type 1
Discrete input voltage	24 V DC discrete input logic: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, voltage (state 1): >= 15 V, current (state 1): >= 5 mA, voltage (state 0): <= 5 V, current (state 0): <= 1.5 mA 15...28.8 V DC, voltage (state 1): >= 15 V, current (state 1): >= 2.5 mA, voltage (state 0): <= 5 V, current (state 0): <= 1 mA
Configurable filtering time	0 ms no filter (none) 0.004...0.04 ms bounce filter (latch/event and cumulative filter by step Nx0.5ms (64>=N>=2)) 3...12 ms integrator (none/run/stop)
Input frequency	100 kHz for fast input (encoder mode) - control type A/B 100 kHz for fast input - control type single phase 100 kHz for fast input - control type pulse/direction
Cable distance between devices	Shielded cable: 10 m for fast input Shielded cable: 100 m for digital input Unshielded cable: 50 m for 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), output logic: source 8 digital output, output logic: source
Discrete output voltage	24 V DC (voltage limit: 19.2...28.8 V) with transistor discrete output(s) 24 V DC (voltage limit: 5...30 V) with relay discrete output(s) 220 V AC (voltage limit: 100...250 V) with relay discrete output(s)
Input/output number	2 fast input, terminal(s): FI0...FI1 14 digital input, terminal(s): DI0...DI13 2 fast output, terminal(s): FQ0...FQ1 8 digital output, terminal(s): DQ0...DQ7

Discrete output current	300 mA, response time 2 ms fast output (normal mode) 50 mA, response time 2 ms fast output (PWM or PTO mode) 2 A (current per output common:4 A), response time 5 ms with opening contact for digital output 2 A (current per output common:4 A), response time 2 ms with closing contact for digital output
Insulation resistance	> 10 MOhm between the I/O and internal logic > 10 MOhm between power supply and earth
Output frequency	<= 100 kHz for fast output (PTO mode) <= 1 kHz for fast output (PWM mode)
Absolute accuracy error	+/- 0.1 % of full scale of cyclic ratio 1...99% fast output (PWM or PTO mode) 1 % of full scale of cyclic ratio 1...99% fast output (PWM or PTO mode) +/- 5 % of full scale of cyclic ratio 10...90% fast output (PWM or PTO mode) +/- 10 % of full scale of cyclic ratio 20...80% fast output (PWM or PTO mode) +/- 15 % of full scale of cyclic ratio 30...70% fast output (PWM or PTO mode)
Height	2.95 in (74.95 mm)
Width	5.04 in (128 mm)
Depth	4.02 in (102 mm)
Product weight	1.13 lb(US) (0.512 kg)

Environment

Standards	FCC Class A EN 61131-2 RoHS compliant UL 508 WEEE directive 2002/96/EC ANSI/ISA 12-12-01 CSA C22.2 No 213 Class I Division 2 IEC 61000-6-2 RoHS China SJ/T 11363-2006
Product certifications	CUL 1604 Class 1 Division 2 CULus CSA 22-2 No 142 GOST CULus 508 KCC C-Tick
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...10000 m
Maximum pressure	800...1114 hPa
IP degree of protection	IP65 front panel conforming to IEC 60529 IP20 rear panel conforming to IEC 60529
NEMA degree of protection	NEMA 4X front panel
Pollution degree	2 conforming to IEC 60664
Environmental characteristic	Corrosive gas free

Ordering and shipping details

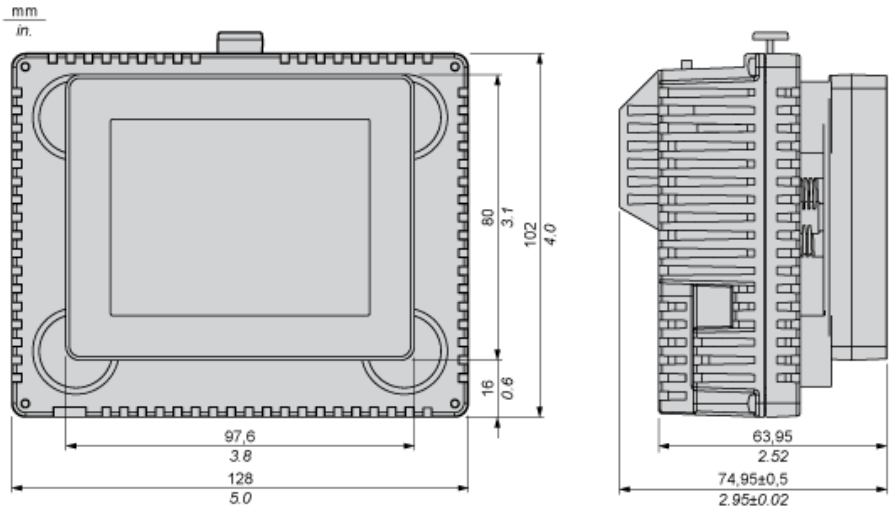
Category	22568 - HMI CONTROLLERS
Discount Schedule	MC2
GTIN	00785901491781
Nbr. of units in pkg.	1
Package weight(Lbs)	2.5699999999999998
Returnability	Y
Country of origin	CN

Offer Sustainability

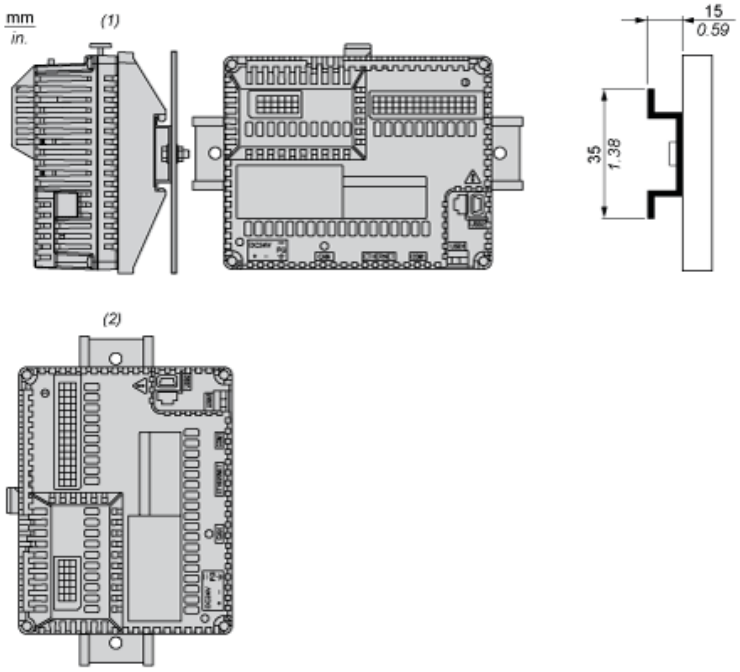
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0844 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available
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
- - - - - - - Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
- - - - - - - More information	For more information go to www.p65warnings.ca.gov

HMISCU6A5

Dimensions

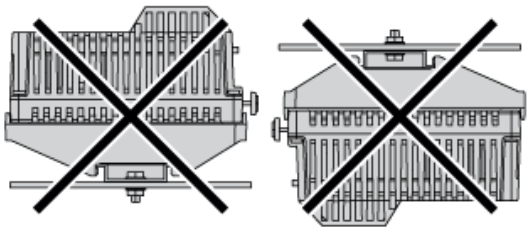


Recommended Mounting position

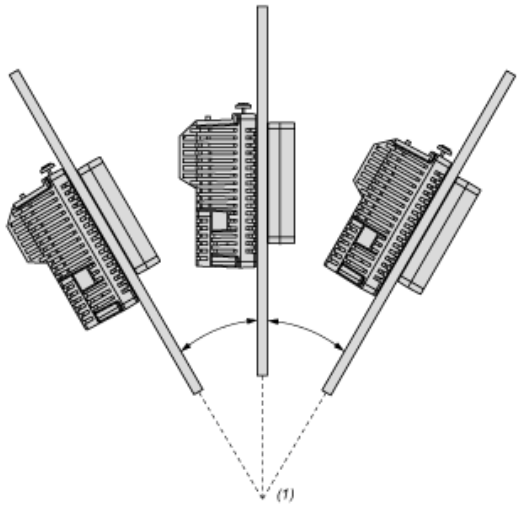


(1) Horizontal mounting
(2) Vertical mounting

No Recommended Mounting Position

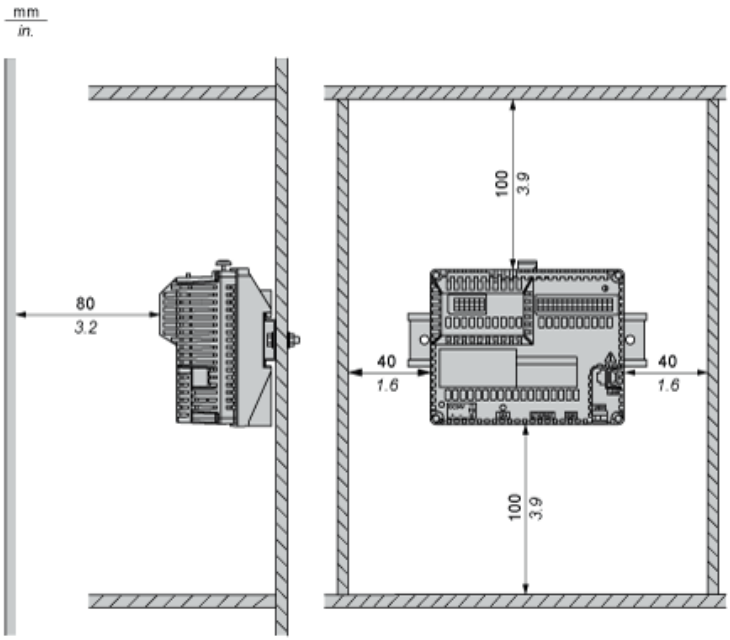


Mounting on a Slanted Panel



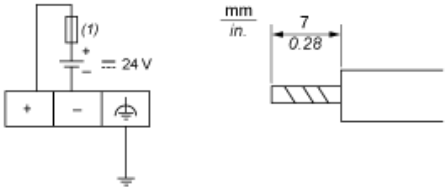
(1) 30° or less

Clearance



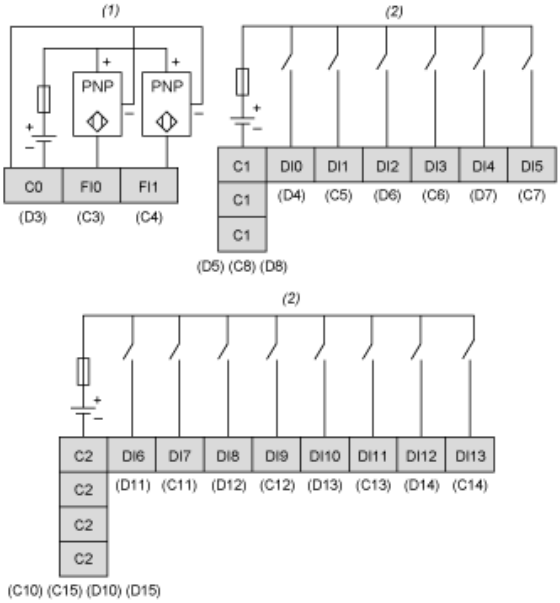
Keep adequate spacing for proper ventilation to maintain an ambient temperature between 0...50 °C (32...122 °F) for horizontal installation and 0...40 °C (32...104 °F) for vertical installation.

Wiring Diagram



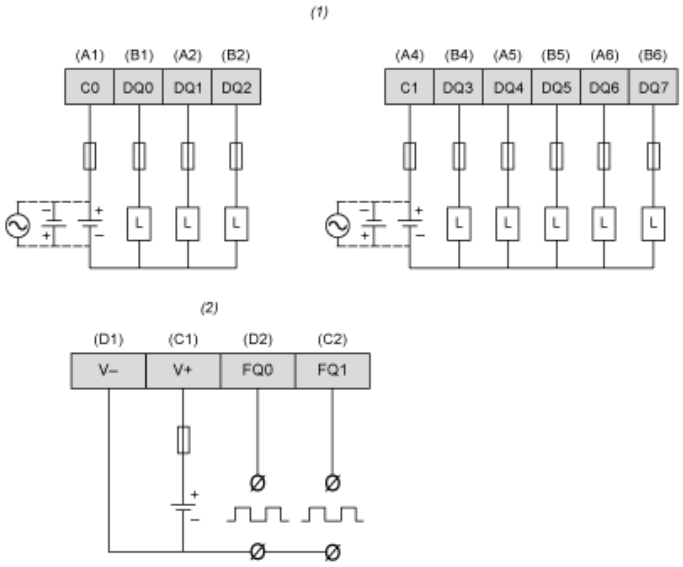
(1) Slow-blow 2A type T fuse

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

Mouser Electronics

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