Logic module AC010

Content

Logic module
AC010
Benefits and advantages - Logical links instead of wiring


1SVC 110 000 F 0534


1SVC 110 000 F 0535


1SVC 110 000 F 0536

Concept

AC010 logic modules are suitable for small and medium-sized control tasks and are able to substitute logic wiring in a quick and easy manner.

They can be used for applications in control as well as for timing functions, e. g.

- in buildings, lighting systems, air-conditioning systems, general control functions,
- in small machines and systems or
- as stand-alone control module for small applications.

Steps to the application of AC010

- AC010 can be used easily, rapidly and comfortably without any time-consuming planning and programming.
- The user can discover the advantages and the benefit of these logic modules in no time at all.
- AC010 provides for the control statements according to a simple circuit diagram.
- Setup, storage, simulation and documentation are performed using the compact and user-friendly AC010-PS001 software.

Software characteristics

- Display on a PC monitor according to DIN, ANSI
- Various languages to choose from
- Easy installation on all Windows operating systems

Technical data

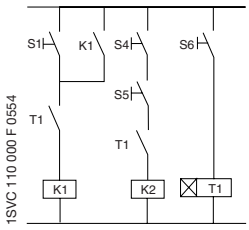
Local and remote expansion modules.

Max. expansion: 24 inputs / 16 outputs

- Digital inputs
- 2 analog outputs
- Relay outputs, 8 A max.
- Transistor outputs 0.5 A
- With or without display

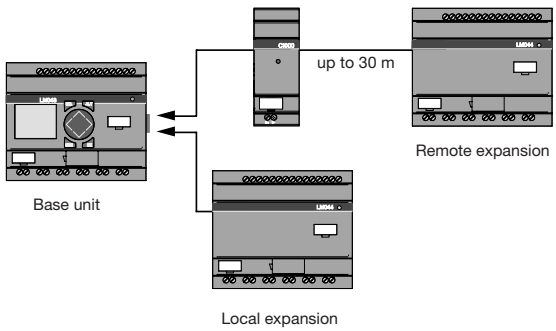
Software characteristics

- Logical links
- Timing function
- Counter
- Timer with weekend function
- Real-time clock
- Compare functionality



1SVC 110 000 F 0554

Expansion



2CDC 312 001 F 0003

The AC010 12/6-8 I/O logic modules can be expanded easily. This I/O expansion is possible on local and remote level.

Approval	LM02x	LMo4x	LM00x	LM01x	DO001	DX0x
UL	■	■	■	■	■	■
CSA	■	■	■	■	■	■
	■	■	■	■	■	■

Logic module
AC010
Ordering details

LM024-CX12RDC

LM041-CE18RDC

DX021-EX20TDC

Logic modules (DC power supply)

DC power supply, DC inputs
2 inputs can also be used as analog inputs, 0 - 10 V

Modules with 12 inputs can be expanded

Type	Supply voltage	Internal inputs/outputs	Order code	Pack. unit pieces	Price 1 piece	Weight 1 piece kg/lb
LM021-12RDC	24 V DC	8/4 relay	**1SVR 440 610 R0100**	1		0.2/0.44
LM022-C12RDC	24 V DC	8/4 relay	**1SVR 440 610 R0300**	1		0.2/0.44
LM023-C12RDC12V	12 V DC	8/4 relay	**1SVR 440 612 R0300**	1		0.2/0.44
LM024-CX12RDC	24 V DC	8/4 relay	**1SVR 440 610 R0200**	1		0.2/0.44
LM025-C12TDC	24 V DC	8/4 trans.	**1SVR 440 610 R1300**	1		0.2/0.44
LM026-CX12TDC	24 V DC	8/4 trans.	**1SVR 440 610 R1200**	1		0.2/0.44
LM041-CE18RDC	24 V DC	12/6 relay	**1SVR 440 620 R5300**	1		0.3/0.66
LM042-CXE18RDC	24 V DC	12/6 relay	**1SVR 440 620 R5200**	1		0.3/0.66
LM043-CE20TDC	24 V DC	12/8 trans.	**1SVR 440 620 R6300**	1		0.3/0.66
LM044-CXE20TDC	24 V DC	12/8 trans.	**1SVR 440 620 R6200**	1		0.3/0.66

Logic modules (AC power supply)

AC power supply, AC inputs, relay outputs

Modules with 12 inputs can be expanded

LM001-12RAC	AC	8/4 relay	**1SVR 440 611 R0100**	1		0.2/0.44
LM002-C12RAC	AC	8/4 relay	**1SVR 440 611 R0300**	1		0.2/0.44
LM003-CX12RAC	AC	8/4 relay	**1SVR 440 611 R0200**	1		0.2/0.44
LM011-CE18RAC	AC	12/6 relay	**1SVR 440 621 R5300**	1		0.3/0.66
LM012-CXE18RAC	AC	12/6 relay	**1SVR 440 621 R5200**	1		0.3/0.66

Expansion modules

Each logic module with 12 inputs can be expanded by one expansion module, either locally or remotely using the coupler CI000.

Type	Supply voltage	Connection	Internal inputs/ outputs	Order code	Pack. unit pieces	Price 1 piece	Weight 1 piece kg/lb
DO001-EX02R	none	only local	- / 2 relay	**1SVR 440 600 R5000**	1		0.07/0.145
DX001-EX18RAC	AC	local/rem.	12 AC / 6 rel.	**1SVR 440 621 R0000**	1		0.3/0.66
DX011-EX18RDC	DC	local/rem.	12 DC / 6 rel.	**1SVR 440 620 R0000**	1		0.3/0.66
DX021-EX20TDC	DC	local/rem.	12 DC / 8 trans.	**1SVR 440 620 R1000**	1		0.3/0.66

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Logic module - Accessories
AC010
Ordering details, product overview

Accessories for logic modules AC010

Typ	Description	Order code	Pack unit pieces	Price 1 piece €
CI000	Coupler for remote expansion up to 30 m, only for logic modules with 12 inputs	**1SVR 440 600 R 0000**	1	
FD001	Device bases for screw mounting (9 pieces per package)	**1SVR 440 694 R 0000**	1	
MD001	8 kB memory module for 12 I/O AC010	**1SVR 440 691 R 0000**	1	
MD002	16 kB memory module for 18/20 I/O AC010	**1SVR 440 691 R 1000**	1	
PS001 - SOFT	AC010 programming system CD-ROM in various languages	**1SVR 440 690 R 0000**	1	
SD001	Power supply unit, input voltage 115/230 V AC Output voltages 12 V DC / 0.02 A, 24 V DC / 0.25 A	**1SVR 440 631 R 0100**	1	
SD002	Power supply unit, input voltage 115/230 V AC, Output voltage 24 V DC / 1.25 A	**1SVR 440 631 R 0000**	1	
TD001	Input/output simulator with 115/230 V AC power supply unit for LM0..- 12 DC	**1SVR 440 693 R 0000**	1	
TK001	Connecting cable PC/AC010	**1SVR 440 692 R 0000**	1	
TK011	Spare plug for connection Base device with expansion devices	**1SVR 440 692 R 1000**	1	
Manual German		**2CDC 126 009 M 0101**	1	
English		**2CDC 126 009 M 0201**	1	
French		**2CDC 126 009 M 0301**	1	
Spain		**2CDC 126 009 M 0701**	1	
Italian		**2CDC 126 009 M 0901**	1	

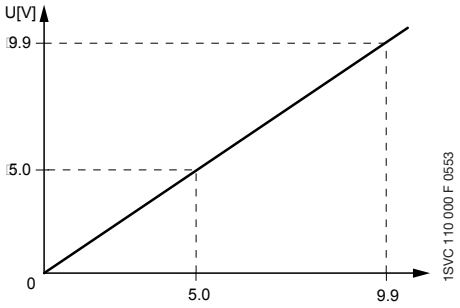
Product overview AC010

Type	115/230 V AC supply	24 V DC supply	12 V DC supply	Inputs	Outputs: R=relay, T=Transistor	Cont. current outputs	LC display, keyboard	Text on display	Weekly timer	Expandable with modules listed in the next columns	DO001-EX02R (local only)	DX001-EX18RAC	DX011-EX18RDC	DX021-EX20TDC
LM021-12RDC		x		8	4R	8 A	x		-	-				
LM022-C12RDC		x		8	4R	8 A	x		x	-				
LM023-C12RDC12V			x	8	4R	8 A	x		x	-				
LM024-CX12RDC		x		8	4R	8 A	-		x	-				
LM025-C12TDC		x		8	4T	0.5 A	x		x	-				
LM026-CX12TDC		x		8	4T	0.5 A	-		x	-				
LM041-CE18RDC		x		12	6R	8 A	x	x	x	x	x	x	x	x
LM042-CXE18RDC		x		12	6R	8 A	-		x	x	x	x	x	x
LM043-CE20TDC		x		12	8T	0.5 A	x	x	x	x	x	x	x	x
LM044-CXE20TDC		x		12	8T	0.5 A	-		x	x	x	x	x	x
LM001-12RAC	x			8	4R	8 A	x		-	-				
LM002-C12RAC	x			8	4R	8 A	x		x	-				
LM003-CX12RAC	x			8	4R	8 A	-		x	-				
LM011-CE18RAC	x			12	6R	8 A	x	x	x	x	x	x	x	x
LM012-CXE18RAC	x			12	6R	8 A	-		x	x	x	x	x	x

Logic module
AC010
Technical data for digital/analog inputs

Type	LM0..-.12.RDC 12V	LM0..-.12.DC	LM0..-.18/20.DC, DX0..-.DC	LM0..-.12RAC	LM0..-.18RAC, DX0..-AC
Digital inputs		**DC**		**115/230 V AC**	
Number	8	8	12	8	12
	2 inputs (I7, I8) can be used as analog inputs				
State indication	LCD, if available			LCD, if available	
Potential separation					
– against voltage supply	no			no	
– against each other	no			no	
– against the outputs	yes			yes	
Rated voltage				**Rated voltage L sinusoidal**	
Rated voltage	12 V DC	24 V DC	24 V DC		
– in 0 state	<4 V DC (I1 - I8)	<5 V DC (I1 - I8)	<5 V DC (I1- I12, R1-R12)	0-40 V AC	
– in 1 state	>8 V DC (I1 - I8)	>8 V DC (I7, I8) >15 V DC (I1 - I6)	>8 V DC (I7, I8) >15 V DC (I1 - I6, I9 - I12, R1 - R12)	79-264 V AC	
Rated frequency				50/60 HZ	
Input current					
– in 1 state	3.3 mA / 12 V DC (I1 - I6)	3.3 mA / 24 V DC (I1 - I6, R1 - R12)	3.3 mA / 24 V DC (I1 - I6, I9 - I12, R1 - R12)	6 x 0.5 mA / 230 V AC 50 Hz 6 x 0.25 mA / 115 V AC 60 Hz R1 - R12, I1 - I16 (AC010 also I9 - I12)	10(12) x 0.5 mA / 230 V AC 50 Hz 10(12) x 0.25 mA / 115 V AC 60 Hz
– I7, I8	1.1 mA / 12 V DC	2.2 mA / 24 V DC	2.2 mA / 24 V DC	2 x 6 mA / 230 V AC 50 Hz 2 x 4 mA / 115 V AC 60 Hz	
Switching delay from 0 to 1				**and from 1 to 0 for I1 - I6, I9 - I12**	
Debounce ON	20 ms			80 ms (50 Hz), $66^2/_3$ ms (60 Hz)	
Debounce OFF	typ. 0.3 ms (I1 - I6) typ. 0.35 ms (I7, I8)	typ. 0.25 ms (I1 - I12)		20 ms (50H z), $16^2/_3$ ms (60 Hz) (also R1 - R12)	
Switching delay from 1 to 0					
Debounce ON	20 ms				
Debounce OFF (for LM0..-.12.DC and LM0..-.18/20 DC also R1 - R12)	typ. 0.3 ms (I1 - I6) typ. 0.35 ms (I7, I8)	typ. 0.4 ms (I1 - I6) typ. 0.2 ms (I7, I8)	typ. 0.4 ms (I1 - I6, I9 - I12) typ. 0.2 ms (I7, I8)		
Switching delay 17, 18 from 1 to 0					
Debounce ON				160 ms (50 Hz), 150 ms (60 Hz)	80 ms (50 Hz), $66^2/_3$ ms (60 Hz)
Debounce OFF				100 ms (50/60 Hz)	20 ms (50 Hz), $16^2/_3$ ms (60 Hz)
Max. permitted line length (per input) line length (unshielded)	100 m				
I1 - I6, R1 - R12 (for AC010 also I9 - I12)				typ. 40 m	
17, 18				typ. 100 m	

Type	LM0..-.12.DC	LM0..-.18/20.DC, DX0..DC
Analog inputs		
Number	2	
Potenzialtrennung		
– against power supply	no	
– against digital inputs	no	
– against outputs	yes	
Input type	DC voltage	
Signal range	0 to 10 V DC	
Resolution, analog	0.1 V	
Resolution, digital	0.1 V	
Input impedance	11.2 kΩ	
Accuracy – two "AC010" units	± 3 % from actual value	
– within one unit	± 2 % from actual value (I7, I8), ± 0.12 V	
Conversion time analog/digital	Input delay ON: 20 ms Input delay OFF: Every cycle time	
Input current	<1 mA	
Line length (shielded)	30 m	



Logic module
AC010
Technical data for relay and transistor outputs

Relay outputs LM0..-12R., LM0..-.18R, DX0..-R.

Type	LM0..-.12R.	LM0..-.18R., DX0..-..R.
Number	4	6
Output type	relay	
In groups of	1	
Parallel connection of outputs to increase switching capacity	not permitted	
Fusing of an output relay	Circuit breaker B16 or fuse 8 A (slow-acting)	
Electrical isolation against mains supply, inputs	yes 300 V AC (safe isolation) 600 V AC (basic isolation)	
Mechanical lifetime (operations)	$10x10^6$	
Relay current paths		
Conventional thermal current	8 A (10A UL)	
Recommended for load	> 500 mA, 12 V AC/DC	
Short-circuit proof cosφ = 1	16 A, B characteristic (B16) at 600 A	
Short-circuit proof cosφ = 0.5 to 0.7	16 A, B characteristic (B16) at 900 A	
Rated surge voltage resistance V_{imp} contact-coil	6 kV	
Rated insulation voltage V_i		
Rated operating voltage V_e	250 V AC	
Safe isolation acc. to EN 50178 between coil and contact	300 V AC	
Safe isolation acc. to EN 50178 between two contacts	300 V AC	
Switch-on capacity		
AC-15 250 V AC, 3 A (600 S/h)	300 000 operations	
DC-13 L/R ≤ 150 ms 24 V DC, 1 A (500 S/h)	200 000 operations	
Switch-off capacity		
AC-15 250 V AC, 3 A (600 S/h)	300 000 operations	
DC-13 L/R ≤ 150 ms 24 V DC, 1 A (500 S/h)	200 000 operations	
Incandescent lamp load	1000 W at 230/240 V AC / 25000 operations 500 W at 115/120 V AC / 25000 operations	
Fluorescent tube with electrical ballast	10 x 58 W at 230/240 V AC / 25000 operations	
Fluorescent tube, conventionally compensated	1 x 58 W at 230/240 V AC / 25000 operations	
Fluorescent tube, non-compensated	10 x 58 W at 230/240 V AC / 25000 operations	
Relay switching frequencies		
Mechanical operations	10×10^6	
– mechanical switching frequency	10 Hz	
– ohmic load / lamp load	2 Hz	
– inductive load	0.5 Hz	

UL/CSA		
	Cont. current at 240 V AC / 24 V DC	10/8 A
AC	Control Circuit Rating Codes (utilization category)	B300 Light Pilot Duty
	Maximum rated operating voltage	300 V AC
	Max. thermal constant current cos φ = 1 at B300	5 A
	Max. make/brake apparent power cosφ ≠1 at B300	3600/360 VA
DC	Control Circuit Rating Codes (utilization category)	R300 Light Pilot Duty
	Maximum rated operating voltage	300 V DC
	Max. thermal constant current at R300	1 A
	Max. make/brake apparent power at R300	28/28 VA

Transistor outputs LM0..-12T., LM0..-.18/20., DX0..

Type	LM0..-.12T.	LM0..-.18/20., DX0..
Number of outputs	4	8
Output type	solid-state	
Rated voltage V_e	24 V DC	
Permissible voltage range	20.4 to 28.8 V DC	
Residual ripple	≤ 5 %	
Supply current		
In "0" state, typ.	9 mA, max.16 mA	typ. 18 mA, max. 32 mA
In "1" state, typ.	12 mA, max. 22 mA	typ. 24 mA, max. 44 mA
Reverse polarity protection	Yes. Warning! In case of reverse polarity of the input voltage, danger of short circuit if voltage is applied to the outputs.	
Electrical isolation against the inputs and power supply	yes	
Rated current I_e in "1" state	max. 0.5 A DC	
Lamp load	5 W without R_v	
Residual current in "0" state per channel	< 0.1 mA	
Max. output voltage		
In "0" state with ext. load < 10 MΩ	2.5 V	
In "1" state, I_e = 0.5 A	$V = V_e$ - 1V	
Short-circuit protection	yes, thermally (evaluation by means of diagnosis input I16, I15; R15; R16)	
Short-circuit tripping current for R_a ≤10 mΩ	0.7 A ≤ I_e ≤ 2 A (depending on the number of active channels and their rating)	
Max. total short-circuit current	8 A	16 A
Peak short-circuit current	16 A	32 A
Thermal switch-off	yes	
Max. switching frequency at ohmic load RL < 100 kΩ in operations per hour	40,000 (depending on software and load)	
Parallel connection of outputs at resistive load; inductive load with external protection circuitry combination within one group	Group 1: Q1 to Q4	Group 1: Q1 to Q4, S1 to S4 Group 2: Q5 to Q8, S5 to S8
Max. number of outputs	4	
Maximum total current	2.0 A, Warning! Outputs must be controlled simultaneously and for the same duration.	
Indication of output states	LCD display (if available)	

Inductive load (without external protection circuit)

General notes:
$T_{0.95}$ = time in msec., until 95 % of the stationary current is reached

$$T_{0.95} \approx 3 \times T_{0.65} = R\ 3 \times \frac{R}{L}$$

Utilization categories in groups of
Q1 to Q4
Q5 to Q8
S1 to S4
S5 to S8

$T_{0.95}$ = 1 ms	Simultaneity factor	g = 0.25
R = 48Ω	Rel. duty cycle	100 %
L = 16 mH	Max. switching frequency Max. duty cycle => Switching operations p. hour	f = 0.5 Hz on-time = 50 % 1500
DC13	Simultaneity factor	g = 0.25
$T_{0.95}$ = 72 ms	Rel. duty cycle	100 %
R = 48 Ω L = 1.15 H	Max. switching frequency Max. duty cycle => Switching operations p. hour	f = 0.5 Hz on-time = 50 % 1500
Other inductive loads:		
$T_{0.95}$ = 15 ms	Simultaneity factor	g = 0.25
R = 48 Ω	Rel. duty cycle	100 %
L = 0.24 H	Max. switching frequency Max. duty cycle => Switching operations p. hour	f = 0.5 Hz on-time = 50 % 1500
Inductive load with external RC circuit for each load		
	Simultaneity factor	g = 1
	Rel. duty cycle	100 %
	Max. switching frequency Max. duty cycle => Switching operations p. hour	depending on the type of protection circuitry

Logic module AC010
Technical data for power supply, cycle time determination

Power supply LM0..-12RAC, LM0..-.18/20RAC, DX0..-AC

Typ	LM0..-.12RAC	LM0..-.18/20RAC, DX0..-AC
Rated value (sinusoidal)	115/120/230/240 V AC	100/110/115/120/230/240 V AC
Operating range	+10/–15 % 90 up to 264 V AC	+10/–15 % 85 up to 264 V AC
Frequency, rated value, tolerance	50/60 Hz, ± 5 %	
Input current consumption		
at 115/120 V AC 60 Hz	typ. 40 mA	typ. 70 mA
at 230/240 V AC 50 Hz	typ. 20 mA	typ. 35 mA
Voltage dips	20 ms, IEC/EN 61 131-2	
Power dissipation		
at 115/120 V AC	typ. 5 VA	typ. 10 VA
at 230/240 V AC	typ. 5 VA	typ. 10 VA

Power supply LM0..-12DC 12V, LM0..-.18/20RDC, DX0..-AC

Typ	LM0..-.12 DC 12V	LM0..-.12 DC	LM0..-.18RDC LM0..-.20TDC, DX0..-DC
Rated value			
Nominal value	12 V DC, +30 %, –15 %	24 V DC, +20 %, –15 %	
Permitted range	10.2 up to 15.6 V DC	20.4 up to 28.8	20.4 up to 28.8
Residual ripple	± 5 %	5 %	5 %
Input current at 24 V DC (for LM023... 12 V DC)	typ. 140 mA	typ. 80 mA	typ. 140 mA
Voltage dips	10 ms, IEC/EN 61 131-2		
Power dissipation at 24 V DC (for LM023... 12 V DC)	typ. 2 W	typ. 2 W	typ. 3.5 W

Cycle time determination LM0..-12

	Number	Duration in µs	Sum
Basic clock	1	210	
Refresh	1	3500	
Contacts and bridged contact fields		20	
Coils		20	
Current paths from the first to the last, also blank paths in between		50	
Connector (only ⌜, ⌞, ⊦)		20	
Timing relays (see below)		–	
Counters (see below)		–	
Analog quantity processor (see below)		–	
Sum			

Cycle time determination LM0..-18/20

	Number	Duration in µs	Sum
Basic clock	1	520	
Refresh		5700	
Contacts and bridged contact fields		40	
Coils		20	
Current paths from the first to the last, also blank paths in between		70	
Connector (only ⌜, ⌞, ⊦)		40	
Timing relays (see below)		–	
Counters (see below)		–	
Analog quantity processor (see below)		–	
Sum			

List of duration values for the processing of function relays

Number	1	2	3	4	5	6	7	8
Timing relays in µs	20	40	80	120	160	200	240	280
Counters in µs	20	50	90	130	170	210	260	310
Analog value comparator in µs	80	100	120	140	160	180	220	260

Number	1	2	3	4	5	6	7	8
Timing relays in µs	40	120	160	220	300	370	440	540
Counters in µs	40	100	160	230	300	380	460	560
Analog value comparator in µs	120	180	220	260	300	360	420	500

Logic module
AC010
General technical data

Climatic ambient conditions (cold acc. to IEC 60 068-2-1, heat acc. to IEC 60 068-2-2)	
Operating ambient temperature horizontal/vertical installation	–25 to 55 °C, –13 to 131 °F
Moisture condensation	prevent moisture condensation through suitable measures
LCD display (100% readable)	0 to 55 °C, 32 to 131 °F
Storage/shipping temperature	–40 to +70 °C, –40 to 158 °F
Relative air humidity (IEC 60 068-2-30)	5 to 95 %, non-condensating
Air pressure (operation)	795 to 1080 hPa
Corrosion resistance IEC 60 068-2-42	 SO_2 10 cm^3/m^3 , 4 days
IEC 60 068-2-43	H_2S 1 cm^3/m^3 , 4 days
Mechanical ambient conditions	
Pollution degree	2
Degree of protection (EN 50 178, IEC 60 529, VBG4)	IP 20
Vibrations (IEC 60 068-2-6)	10 to 57 Hz (constant magnitude 0.15 mm)
	57 to 150 Hz (constant acceleration 2 g)
Shocks (IEC 60 068-2-27)	18 shocks (half-sinusoidal 15 g / 11 ms)
Dropping (IEC 60 068-2-31)	dropping height 50 mm
Free fall, packed (IEC 60 068-2-32)	1 m
Electromagnetic compatibility (EMC)	
Electrostatic discharge (ESD), (IEC/EN 61 000-4-2, severity class 3)	8 kV air discharge, 6 kV air discharge,
Electromagnetic fields (RFI), (IEC/EN 61 000-4-3)	10 V/m field strength
RFI suppression (EN 55 011, EN 55 022)	class B
Burst pulses (IEC/EN 61 000-4-4, severity class 3)	2 kV supply lines,
	2 kV signal lines
High-energy pulses (surge) "AC010"-AC (IEC/EN 61 000-4-5)	2 kV symmetrical supply line
High-energy pulses (surge) "AC010"-DC (IEC/EN 61 000-4-5, severity class 2)	0.5 kV symmetrical supply line
Inflow (IEC/EN 61 000-4-6)	10 V
Insulation strength	
Rating of the clearance/creepage distances	EN 50 178, UL 508, CSA C22.2, No 142
Insulation strength	EN 50 178
Tool and conductor cross-sections	
Solid wire	min. 0.2 mm^2 , max. 4 mm^2 /AWG: 22 -12
Stranded wire with wire end ferrule	min. 0.2 mm^2 , max. 2.5 mm^2 / AWG: 22 -12 factory wiring: up to AWG 30
Flat-bladed screwdriver width	3.5 x 0.8 mm, 0.14 x 0.03 "
Tightening torque	0.6 Nm
Buffering/precision of the real-time clock (only for "AC010"-C)	
Clock buffer	
– at 25 °C / 77 °F	typ. 64 h
– at 40 °C / 104 °F	typ. 24 h
Accuracy of the real-time clock	typ. ± 5 s/day, ~ ± 0,5 h/year
Repeat accuracy of timing relays	
Accuracy of timing relays	±1 % of the set value
Resolution	
"s" range	10 ms
"M:S" range	1 s
"H:M" range	1 min.
Remanence memory	
Remanence memory writing cycles	≥ 100 000
Current paths (basic devices)	
LM0..-.12..	41
LM0..-.18/20..	121

Logic module
AC010
General technical data, dimensional drawings

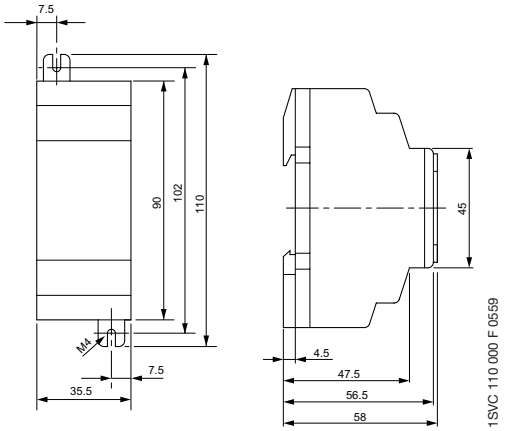
General data for logic modules AC010

	CI000	LM0..-.12.	LM0..-.18/20, DX0...
Dimensions W x H x D [mm] [inches]	 35.5 x 90 x 53 1.4 x 3.54 x 2.08	 71.5 x 90 x 53 2.81 x 3.54 x	 107.5 x 90 x 53 2.08 4.23 x 3.54 x 2.08
Spacing units (SU)	2 SU wide	4 SU wide	6 SU wide
Weight [g] [lb]	 70 0.154	 200 0.441	 300 0.661
Mounting	top-hat rail DIN 50 022, 35 mm or screw mounting with 3 device bases FD001 (accessories); for CI000 only two device bases are required.		

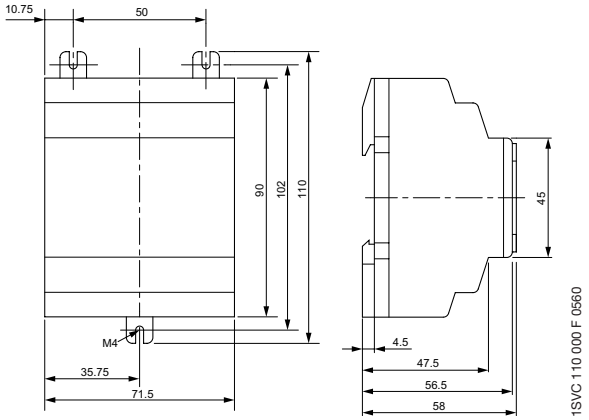
Dimensional drawings

Dimensions in mm

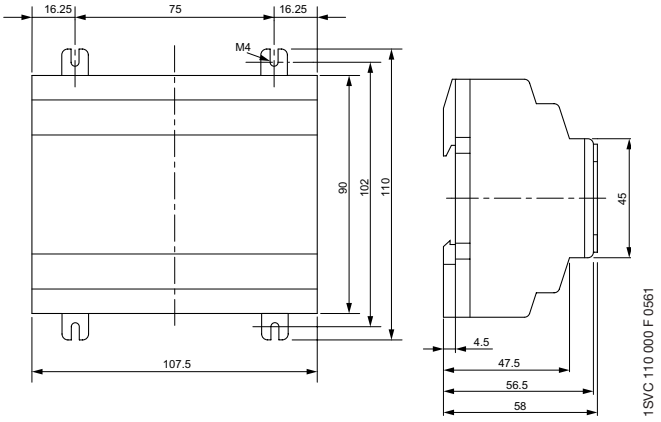
CI000



LM0..-.12...



LM0..-.18/20..., DX0...,



mm-inch conversion table

mm	inches	mm	inches
4.5	0.177	56.5	2.22
7.5	0.295	58	2.28
10.75	4.23	71.5	2.81
16.25	0.64	75	2.95
35.5	1.4	90	3.54
35.75	1.41	102	4.01
45	1.77	107.5	4.23
47.5	1.87	110	4.33
50	1.97		

Notes