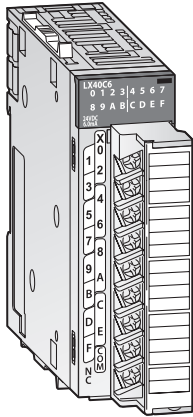


Digital input modules



Detection of digital input signals

Various input modules are available for converting digital process signals with different voltage levels into the levels required by the PLC.

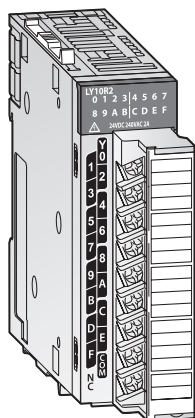
All models are capable of using both positive or negative common connections, so that separate modules are not necessary.

- Indication of input status via LED
- Positive/negative common
- Response time 1 to 70 ms
- Modules with 16, 32 or 64 input points available

Specifications		LX40C6	LX10	LX41C4	LX28	LX42C4	
Number of input points		16	16	32	8	64	
Rated input voltage	V DC	20.4–28.8	100–120 V AC, 50/60 Hz	20.4–28.8	100–240 V AC, 50/60 Hz	20.4–28.8	
Rated input current	mA	6.0	8.2 (100 V AC, 60 Hz) 6.8 (100 V AC, 50 Hz)	4.0	16.4 (200 V AC, 60 Hz) 13.7 (200 V AC, 50 Hz) 8.2 (100 V AC, 60 Hz) 6.8 (100 V AV, 50 Hz)	4.0	
Input derating (for rated voltage)		100 %	100 % (at 50 °C)	100 %	100 % (at 50 °C)	100 % (at 35 °C)	
ON	voltage	V	≥15	≥80	≥19	≥80	≥19
	current	mA	≥4	≥5	≥3	≥5	≥3
OFF	voltage	V	≤8	≤30	≤9	≤30	≤9
	current	mA	≤2	≤1.7	≤1.7	≤1.7	≤1.7
Response time	ms	≤1–70 ^①	OFF → ON: ≤15 ON → OFF: ≤20	≤1–70 ^①	OFF → ON: ≤10 ON → OFF: ≤20	≤1–70 ^①	
Inputs per group:		16	16	32	16	32	
I/O points		16	16	32	16	64	
Status display for the inputs		As operation indicator, all modules are equipped with a LED for each input.					
Connection terminal		18-point removable terminal block with screws	18-point removable terminal block with screws	40-pin connector	18-point removable terminal block with screws	40-pin connector x 2	
Internal power consumption (5 V DC)	mA	90	90	100	80	120	
Weight	kg	0.15	0.17	0.11	0.15	0.12	
Dimensions (WxHxD)	mm	28.5x90x117	28.5x90x117	28.5x90x95	28.5x90x117	28.5x90x95	
Order information	Art. no.	238085	255566	238086	255567	238087	

① Can be changed in the PLC parameters (Default: 10 ms)

Digital output modules



Switching of external processes and devices

The MELSEC L series output modules have different number of outputs and different switching elements for adaptation to many control tasks.

Modules are built with countermeasures in case of external load short-circuits to protect against over-current and overheating.

- Indication of output status via LED
- Sink and source type modules available
- Response time less than 0.5 ms for transistor output modules
- Modules with 16, 32 or 64 output points available

Specifications	LY10R2	LY20S6	LY40NT5P	LY41NT1P	LY42NT1P	LY40PT5P	LY41PT1P	LY42PT1P
Number of output points	16	16	16	32	64	16	32	64
Output type	Relay	Triac	Transistor (sink type)	Transistor (sink type)	Transistor (sink type)	Transistor (source type)	Transistor (source type)	Transistor (source type)
Outputs in groups of	16	16	16	32	32	16	32	32
Rated load voltage	24 V DC/240 V AC	100–240 V AC, 50/60 Hz	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
Max. switching load	A 2 (8 common)	0.6 (4.8 common)	0.5 (5 common)	0.1 (2 common)	0.1 (2 common)	0.5 (5 common)	0.1 (2 common)	0.1 (2 common)
Response time	OFF → ON	≤10	Total of 1 ms and 0.5 cycles or less	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
	ON → OFF	≤12	Total of 1 ms and 0.5 cycles or less (resistive load)	≤1	≤1	≤1	≤1	≤1
Load voltage range	<125 V DC/ <264 V AC	85–264 V AC	10.2–28.8 V DC	10.2–28.8 V DC	10.2–28.8 V DC	10.2–28.8 V DC	10.2–28.8 V DC	10.2–28.8 V DC
Protective functions	—	—	Overload protection function, overheat protection function					
I/O points	16	16	16	32	64	16	32	64
Status display for the outputs	As operation indicator, modules with 16 or 32 outputs are equipped with a LED for each output. Modules with 64 outputs have a switchable display with 32 LEDs.							
Connection terminal	18-point removable terminal block with screws	18-point removable terminal block with screws	18-point removable terminal block with screws	40-pin connector	40-pin connector x 2	40-pin connector	40-pin connector	40-pin connector x 2
External power supply of the module	—	—	10.2–28.8 V DC, 9 mA	10.2–28.8 V DC, 13 mA	10.2–28.8 V DC, 9 mA	10.2–28.8 V DC, 17 mA	10.2–28.8 V DC, 20 mA	10.2–28.8 V DC, 20 mA
Internal power consumption 5 V DC	mA 460	300	100	140	190	100	140	190
Weight	kg 0.21	0.22	0.15	0.11	0.12	0.15	0.11	0.12
Dimensions (WxHxD)	mm 28.5x90x117	28.5x90x117	28.5x90x95	28.5x90x95	28.5x90x95	28.5x90x95	28.5x90x95	28.5x90x95
Order information	Art. no. 238088	255568	242167	238089	238090	242168	242169	242170