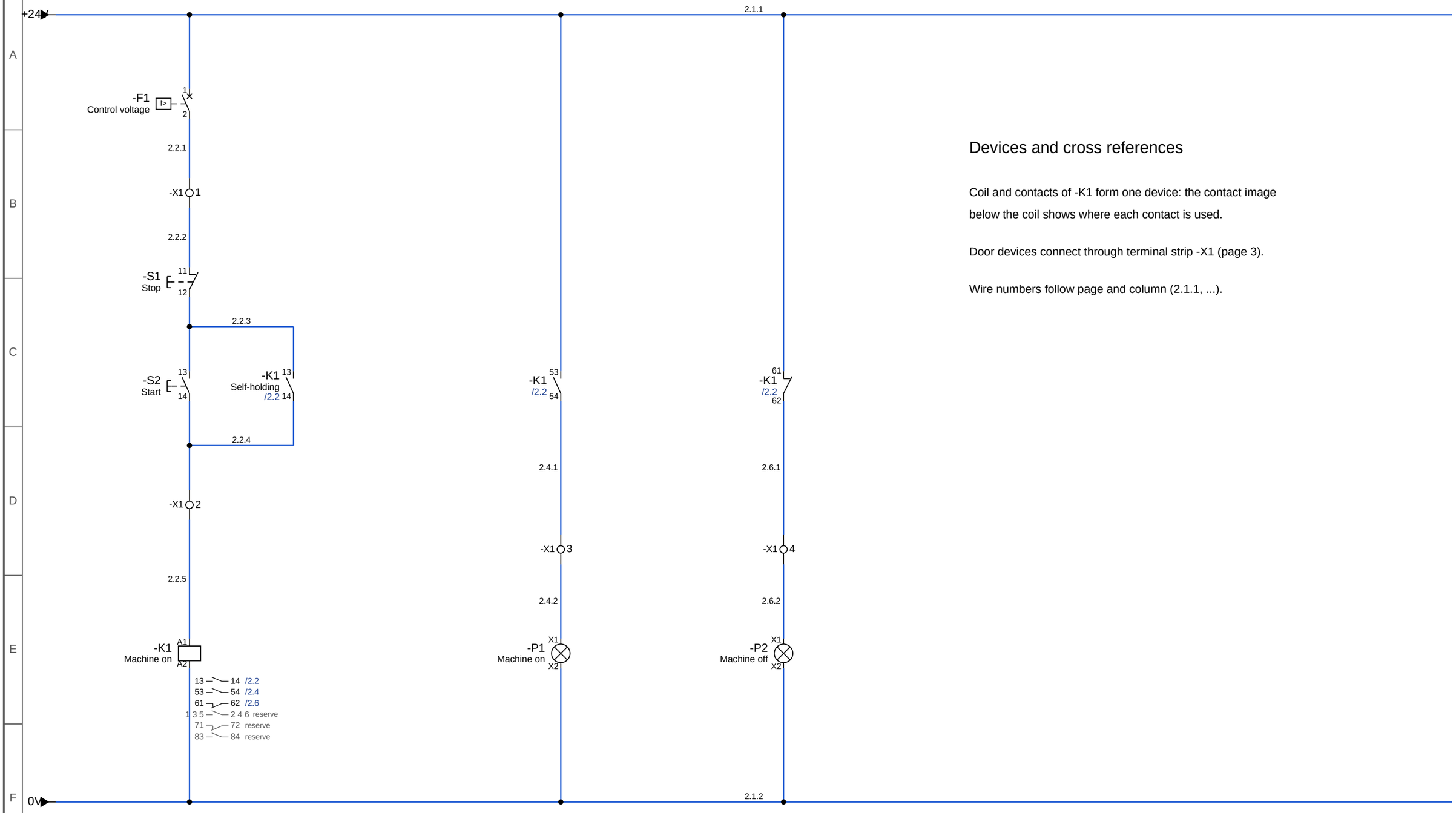
Self-holding relay

Start / stop circuit
with terminal strip

Company	OpenECraft
Created by	OpenECraft
Date	2026-10-27
Revision	A
Number of pages	6



Devices and cross references

Coil and contacts of -K1 form one device: the contact image below the coil shows where each contact is used.

Door devices connect through terminal strip -X1 (page 3).

Wire numbers follow page and column (2.1.1, ...).

Company OpenECraft	Date 2026-10-27	Revision A	Project / page description Self-holding relay Control circuit	Page 2	Sheet 2 / 6
	Creator OpenECraft	Software OpenECraft		Type Schematic	Project Self-holding relay

Terminal diagram

Strip	Terminal	Level	Jumper	External (top)	Internal (bottom)	Potential	Location	Function text
-X1	End bracket			GEN.EB-35				
-X1	1			-F1:2	-S1:11	N1	/2.2	
-X1	2			-K1:14, -S2:14	-K1:A1	N3	/2.2	
-X1	3			-K1:54	-P1:X1	N4	/2.4	
-X1	4			-K1:62	-P2:X1	N5	/2.6	
-X1	End plate			GEN.TB-END				
-X1	End bracket			GEN.EB-35				

Connection list

Wire no.	Potential	From	To	Page	Colour	Cross-section	Cable	Core	Wire type
2.1.1	+24V	-F1:1	-K1:53	/2.2	BU	0.75 mm²			
2.1.1	+24V	-K1:53	-K1:61	/2.4	BU	0.75 mm²			
2.1.2	0V	-K1:A2	-P1:X2	/2.2	BU	0.75 mm²			
2.1.2	0V	-P1:X2	-P2:X2	/2.4	BU	0.75 mm²			
2.2.1	N1	-F1:2	-X1:1	/2.2	BU	0.75 mm²			
2.2.2	N1	-X1:1	-S1:11	/2.2	BU	0.75 mm²			
2.2.3	N2	-S1:12	-S2:13	/2.2	BU	0.75 mm²			
2.2.3	N2	-S2:13	-K1:13	/2.2	BU	0.75 mm²			
2.2.4	N3	-S2:14	-X1:2	/2.2	BU	0.75 mm²			
2.2.4	N3	-X1:2	-K1:14	/2.2	BU	0.75 mm²			
2.2.5	N3	-X1:2	-K1:A1	/2.2	BU	0.75 mm²			
2.4.1	N4	-K1:54	-X1:3	/2.4	BU	0.75 mm²			
2.4.2	N4	-X1:3	-P1:X1	/2.4	BU	0.75 mm²			
2.6.1	N5	-K1:62	-X1:4	/2.6	BU	0.75 mm²			
2.6.2	N5	-X1:4	-P2:X1	/2.6	BU	0.75 mm²			

Device list

Device tag	Main function	Function text	Location	Aux. functions	Part number	Description
-F1	Circuit breaker 1-pole	Control voltage	/2.2	0	GEN.MCB-1P-C6	Miniature circuit breaker 1P C6
-K1	Relay / contactor coil	Machine on	/2.2	3	GEN.CT-9A-24DC, GEN.AUX-2NO2NC	Contactor 3P 9 A, coil 24 V DC, 1 NO aux
-P1	Indicator lamp	Machine on	/2.4	0	GEN.LMP-GN-24	Indicator lamp green, LED 24 V
-P2	Indicator lamp	Machine off	/2.6	0	GEN.LMP-RD-24	Indicator lamp red, LED 24 V
-S1	Push button NC	Stop	/2.2	0	GEN.PB-RD-1NC	Pushbutton red, 1 NC
-S2	Push button NO	Start	/2.2	0	GEN.PB-GN-1NO	Pushbutton green, 1 NO
-X1	Terminal ×4		/2.2	0	GEN.TB-2.5	Feed-through terminal 2.5 mm², grey

Bill of materials

Pos	Qty	Unit	Part number	Type number	Manufacturer	Description	Devices	Unit price	Total
1	1	pcs	GEN.AUX-2NO2NC	AUX-2NO2NC	Generic	Auxiliary contact block 2 NO + 2 NC, front mounting	-K1	14.60 EUR	14.60
2	1	pcs	GEN.CT-9A-24DC	CT-9A-24DC	Generic	Contactor 3P 9 A, coil 24 V DC, 1 NO aux	-K1	38.50 EUR	38.50
3	2	pcs	GEN.EB-35	EB-35	Generic	End bracket for TS 35 mounting rail	-X1	1.10 EUR	2.20
4	1	pcs	GEN.LMP-GN-24	LMP-GN-24	Generic	Indicator lamp green, LED 24 V	-P1	9.10 EUR	9.10
5	1	pcs	GEN.LMP-RD-24	LMP-RD-24	Generic	Indicator lamp red, LED 24 V	-P2	9.10 EUR	9.10
6	6	pcs	GEN.MARK-DEV	MARK-DEV	Generic	Device marker 15 x 5 mm, white, printable	marking	0.08 EUR	0.48
7	5	pcs	GEN.MARK-TB-5	MARK-TB-5	Generic	Terminal marker 5.2 mm, white, printable	marking	0.02 EUR	0.10
8	30	pcs	GEN.MARK-WIRE	MARK-WIRE	Generic	Wire marker sleeve for 0.5 – 2.5 mm², white, printable	marking	0.03 EUR	0.90
9	1	pcs	GEN.MCB-1P-C6	MCB-1P-C6	Generic	Miniature circuit breaker 1P C6	-F1	8.70 EUR	8.70
10	1	pcs	GEN.PB-GN-1NO	PB-GN-1NO	Generic	Pushbutton green, 1 NO	-S2	11.20 EUR	11.20
11	1	pcs	GEN.PB-RD-1NC	PB-RD-1NC	Generic	Pushbutton red, 1 NC	-S1	11.20 EUR	11.20
12	4	pcs	GEN.TB-2.5	TB-2.5	Generic	Feed-through terminal 2.5 mm², grey	-X1	0.95 EUR	3.80
13	1	pcs	GEN.TB-END	TB-END	Generic	End plate for terminal 2.5 mm²	-X1	0.30 EUR	0.30
						Sum			110.18