

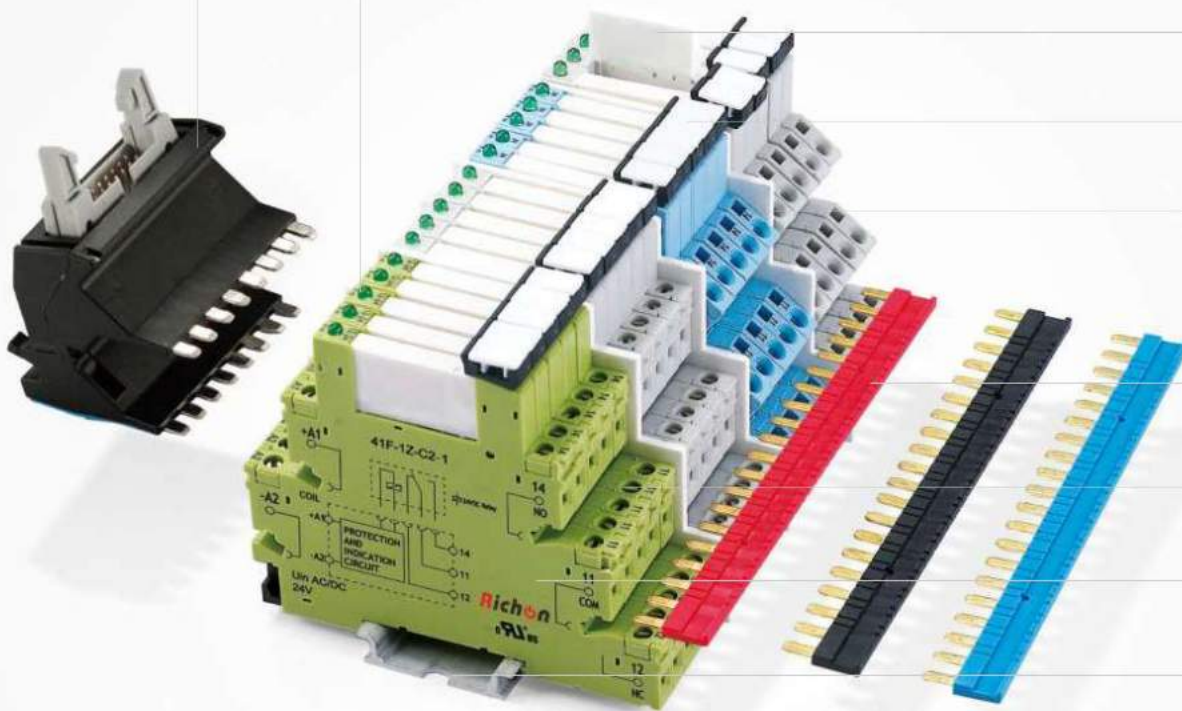


Fastron

Electronics

F41F

Subminiature Power Relay



Adapter
JH-AR

LED

Relay
F41F

Make
F41F-M

Separator
41F-S

Jumper
41F-J1
41F-J1R
41F-J1B

Screw Terminals

Relay Socket
F41F

DIN Rail

Other sockets are available



F41F-1Z-C2/1/2/3/4/5
F41F-1Z-C4/1/2/3/4/5
F41F-1Z-A

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F41F



- Slim size (width 5mm)
- Switching capacity 6A
- High breakdown voltage 4kV (between coil and contacts)
- Surge voltage up to 6kV (between coil and contacts)
- Meeting VDE0700/0631 reinforce insulation
- High sensitive: Approx. 170mW
- Sockets available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (28.0x5.0x15.0)mm



Technical Data

Contact Data

Contact arrangement	1H, 1Z
Contact resistance	30mΩ (1A 6VDC) ; 100mΩ (1A 6VDC)
Contact material	AgSnO ₂ , AgNi
Contact rating (Res. load)	6A 250VAC/30VDC
Max. switching voltage	400VAC/125VDC
Max. switching current	6A
Max. switching power	1500VA/180W
Mechanical endurance	1×10 ⁶
Electrical endurance	6×10 ⁶ (AgNi, 6A 250VAC/30VDC 85°C
	3×10 ⁶ (NO, AgNi, 6A 250VAC/30VDC 85°C
	1×10 ⁶ (NO, AgNi, 6A 250VAC/30VDC 85°C

Characteristics

Insulation resistance		1000MΩ (at 500VDC)
Dielectric Strength	Between coil and contact	4000VAC 1Min
	Between open contacts	1000VAC 1Min
	Operate time	≤ 8ms max.
Shock resistance	Release time	≤ 4ms max.
	Functional	49m/s ²
	Destructive	980m/s ²
Vibration		10~55Hz 1mm
Humidity		5%~85% RH
Ambient temperature		-40°C~+85°C
Termination		PCB
Weight		Approx. 5g
Construction		Plastic sealed, Flux proofed

Coil Data

Coil power	5VDC~24VDC: Approx. 170mW
	48VDC, 60VDC: Approx. 210mW

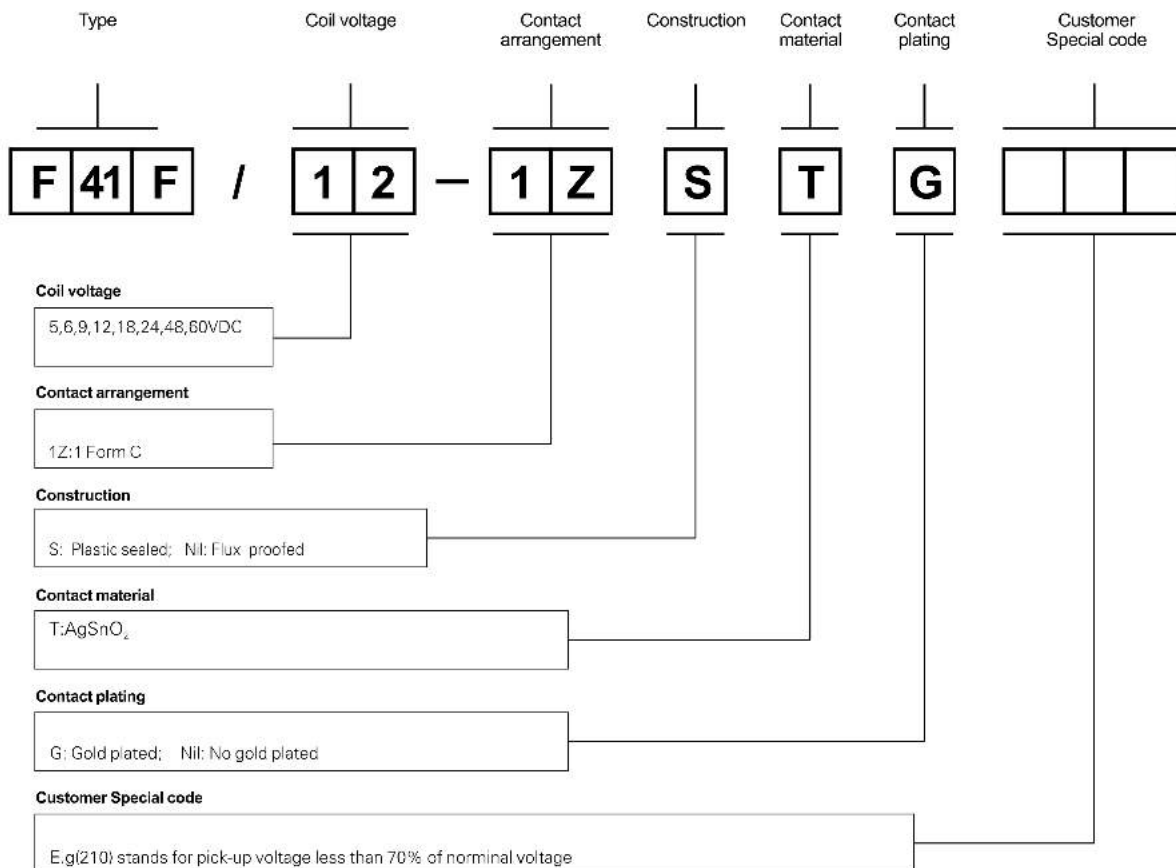
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Coil Data(23°C)

(VDC) Rated voltage	(VDC) Pick-up voltage	(VDC) Drop-out voltage	(VDC) Max.Voltage	(Ω) Coil resistance
5	≤3.75	≥0.25	7.5	147×(1±10%)
6	≤4.50	≥0.30	9.0	212×(1±10%)
9	≤6.75	≥0.45	13.5	476×(1±10%)
12	≤9.00	≥0.60	18	848×(1±10%)
18	≤13.5	≥0.90	27	1906×(1±15%)
24	≤18.0	≥1.20	36	3390×(1±15%)
48(2)	≤36.0	≥2.40	72	10600×(1±15%)
60(3)	≤45.0	≥3.00	90	16600×(1±15%)

Ordering Information



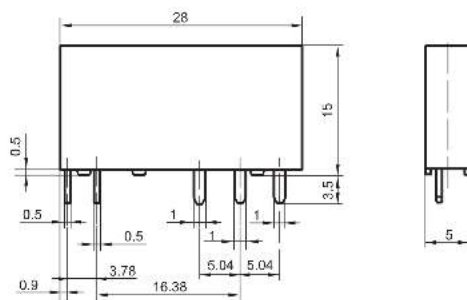
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Safety Approval ratings

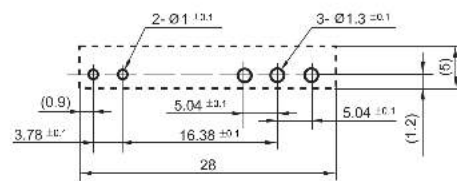
UL/CUL	YES
VDE	YES

Dimensions

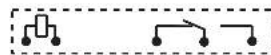
Outline Dimensions



PCB Layout(bottom view)



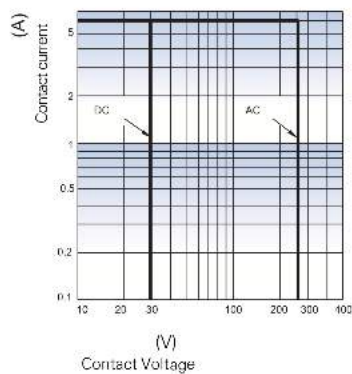
Wiring diagram(bottom view)



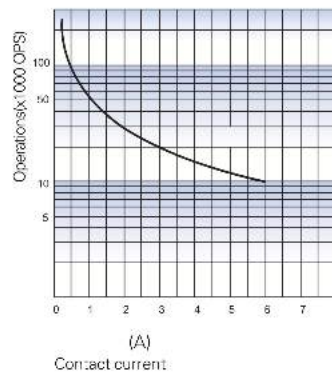
1Form C

Characteristic Curves

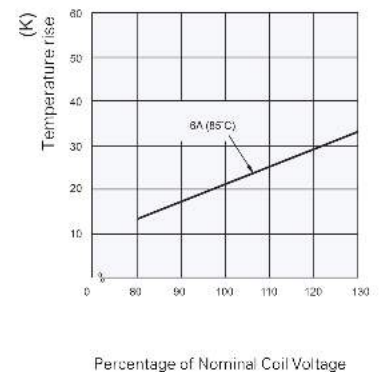
Maximum switching power



Endurance curve



Coil temperature rise



Test conditions:
NO, AgNi, Resistive load, 250VAC,
Flux proofed, Room temp., 1s on 9s off.

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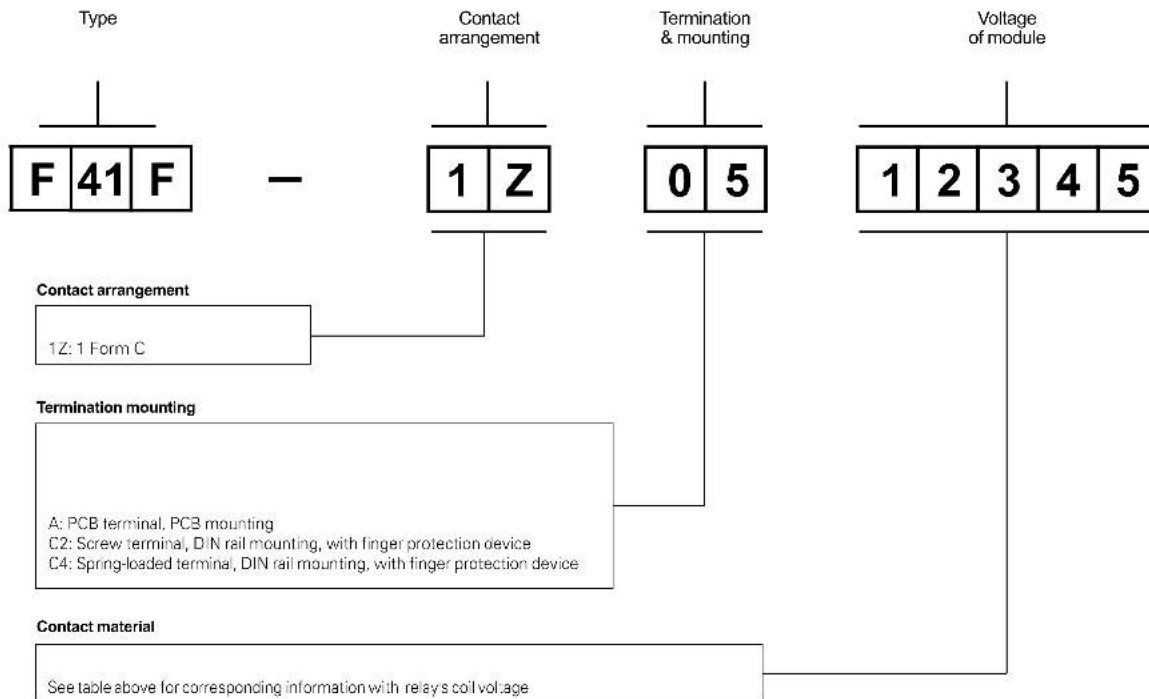
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subminiature power relay

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Ordering Information



Technical Data

Type	Rated voltage	Rated current	Temperature	Input voltage	Apply to relay the rated voltage	Input voltage polarity	Screw torque	Stripped wire length
F41F-1Z-C2-1	250VAC	6A	-40°C ~ 70°C	(12~24)V AC/DC	(12~24)V AC/DC	N/A	0.5N.m	7mm
F41F-1Z-C2-2	250VAC	6A	-40°C ~ 70°C	(48~60)V AC/DC	(48~60)V DC	N/A	0.5N.m	7mm
F41F-1Z-C2-3	250VAC	6A	-40°C ~ 55°C	(110~125)V AC/DC	60V DC	N/A	0.5N.m	7mm
F41F-1Z-C2-4	250VAC	6A	-40°C ~ 55°C	(220~240)V AC/DC	60V DC	N/A	0.5N.m	7mm
F41F-1Z-C2-5	250VAC	6A	-40°C ~ 70°C	(6~24)V DC	(6~24)V DC	Applicable	0.5N.m	7mm
F41F-1Z-C4-1	250VAC	6A	-40°C ~ 70°C	(12~24)V AC/DC	(12~24)V DC	N/A	-	7mm
F41F-1Z-C4-2	250VAC	6A	-40°C ~ 70°C	(48~60)V AC/DC	(48~60)V DC	N/A	-	7mm
F41F-1Z-C4-3	250VAC	6A	-40°C ~ 55°C	(110~125)V AC/DC	60V DC	N/A	-	7mm
F41F-1Z-C4-4	250VAC	6A	-40°C ~ 55°C	(220~240)V AC/DC	60V DC	N/A	-	7mm
F41F-1Z-C4-5	250VAC	6A	-40°C ~ 70°C	(6~24)V DC	(6~24)V DC	Applicable	-	7mm
F41F-1Z-A	250VAC	6A	-40°C ~ 70°C	(6~60)V DC	(6~60)V DC	Applicable	-	-

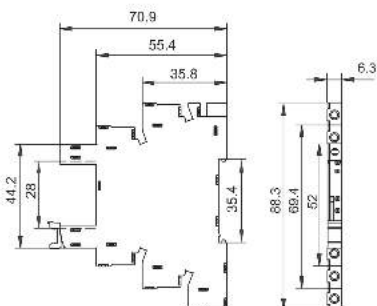
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Specification

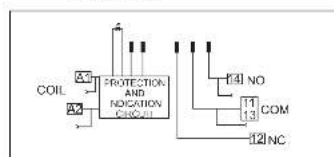
Type	F41F-1Z-C2/1/2/3/4/5	F41F-1Z-C4/1/2/3/4/5	F41F-1Z-A
Nominal current	6A		6A
Nominal voltage	250VAC		250VAC
Wire strip Length	7mm		-
Max wire size	1×2.5/1×1.5mm ²		-
Screw torque	0.5Nm	-	-
Suitable relay type	JH41F		-
Jumper	41F-J1 41F-J1R 41F-J1B		-
Separator	41F-S		-
Maker	41F-M 41F-M1		41F-M
Termination&mounting	Screw terminal, DIN rail mounting, with finger protection device	Spring-loaded terminal, DIN rail mounting, with finger protection device	Printing plate terminal, printing plate installation

Dimensions

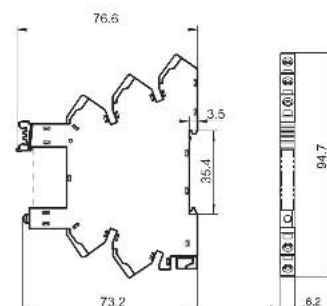
F41F-1Z-C2



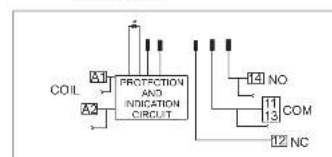
Wiring diagram



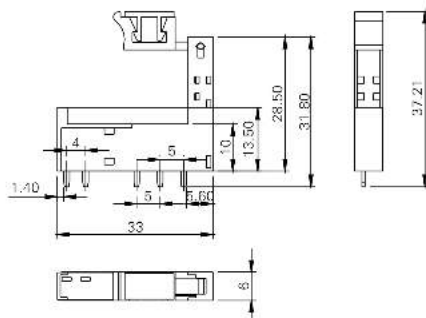
F41F-1Z-C4



Wiring diagram



F41F-1Z-A



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Accessory

Adapter

JH-AR



Technical data

Rated current (per signal path)	1A
Minimum required supply power	3W
Nominal voltage (U _N)	24V DC
Operating range	(0.8~1.1)U _N
Control logic	Positive switching (to A)
Power supply status indication	Green LED
Ambient temperature range	-40°C~+70°C

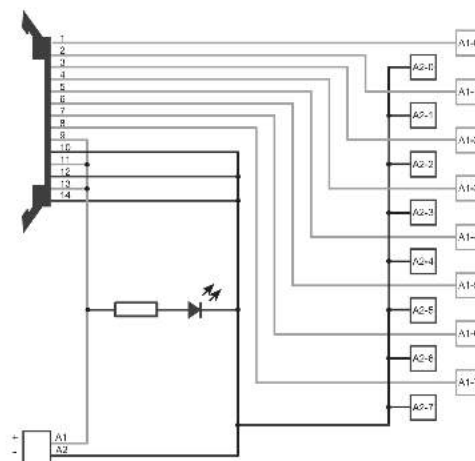
Terminals for 24V control logic

Type of connector	14 pole, according to IEC 60603-13
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Terminals for 24V Power supply

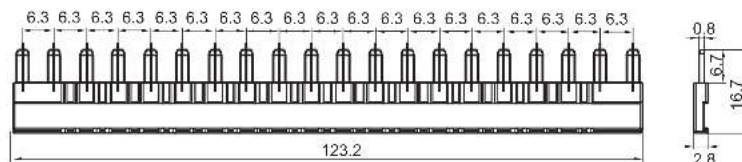
Wire strip length	9.5mm
Screw torque	0.5Nm
Max. wire size	solid wire
	1x4/2x1.5 mm ²
	1x12/2x16 AWG
	stranded wire
	1x2.5/2x1.5 mm ²
	1x14/2x16 AWG

Wiring diagram



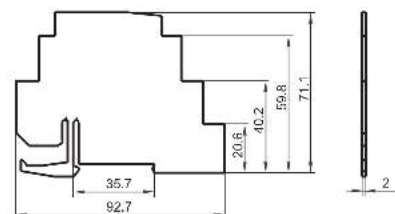
跨接片 Jumper

41F-J1 、41F-J1R 、41F-J1B



Separator

41F-S



Maker

41F-M

41F-M1

