



finder[®]
SWITCH TO THE FUTURE

55
SERIES

Relays for railway applications 7 A



Exterior light control



Air conditioning



Ancillary equipment



Doors opening / closing



Internal light management



Message panels infotainment



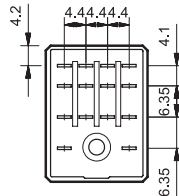
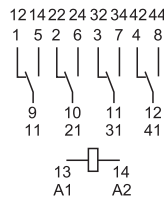
Plug-in mount, general purpose
4 Pole relays, 7 A

- Complies with EN 45545-2 +A1:2016 (protection against fire of materials), EN 61373 (resistance against random vibrations and shock, Category 1, Class B), EN 50155 (resistance to temperature and humidity, TX class)
- DC coils with extended range
- Cadmium Free contacts (standard version)
- 94 series sockets
- Coil EMC suppression modules
- Accessories (Sockets and Timer modules)

55.34T



- 4 pole, 7 A
- Plug-in 94 series sockets



* Short term (10 min) +85°C

For outline drawing see page 5

Contact specification

Contact configuration		4 CO (4PDT)
Rated current/Maximum peak current	A	7/15
Rated voltage/Maximum switching voltage	V AC	250/250
Rated load AC1	VA	1750
Rated load AC15 (230 V AC)	VA	350
Single phase motor rating (230 V AC)	kW	0.125
Breaking capacity DC1: 30/110/220 V	A	7/0.25/0.12
Minimum switching load	mW (V/mA)	300 (5/5)
Standard contact material		AgNi

Coil specification

Nominal voltage (U_N)	V AC (50/60 Hz)	—
	V DC	24 - 72 - 110
Rated power DC	W	1
Operating range	AC	—
	DC	$(0.70 \dots 1.25)U_N$
Holding voltage	DC	$0.5 U_N$
Must drop-out voltage	DC	$0.1 U_N$

Technical data

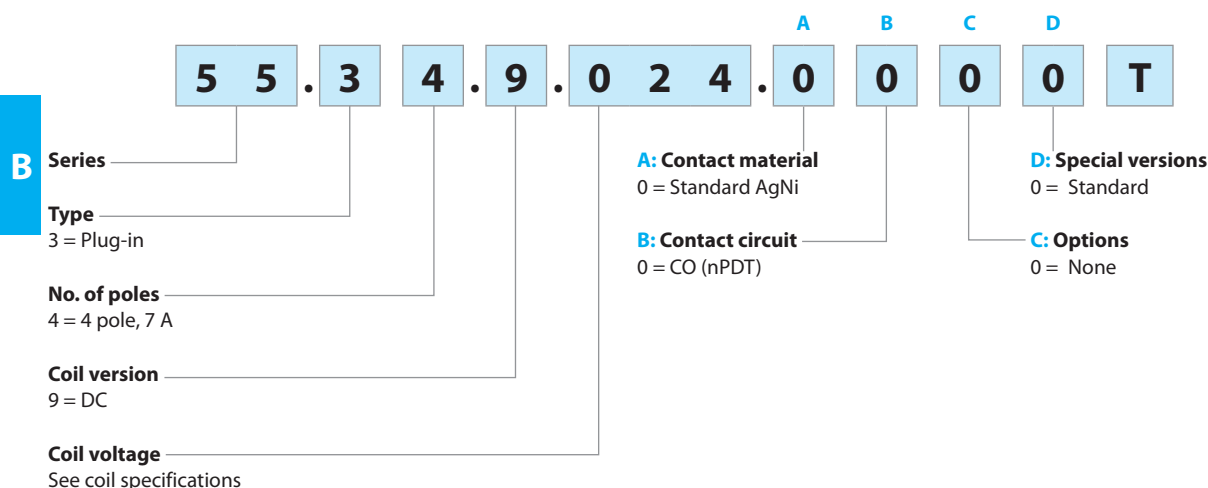
Mechanical life AC/DC	cycles	$50 \cdot 10^6$
Electrical life at rated load AC1	cycles	$150 \cdot 10^3$
Operate/release time	ms	11/3
Insulation between coil and contacts (1.2/50 μ s)	kV	4
Dielectric strength between open contacts	V AC	1000
Ambient temperature range	°C	-40...+70*
Environmental protection		RT I

Approvals (according to type)



Ordering information

Example: 55 series plug-in relay, 4 CO (4PDT), 24 V DC coil.

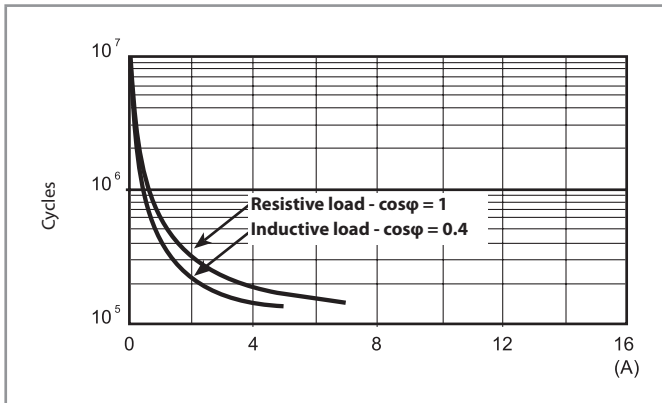


Technical data

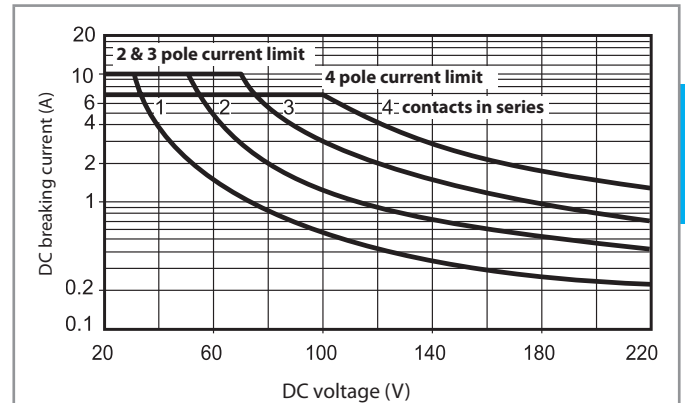
Insulation according to EN 61810-1	
Nominal voltage of supply system	V AC 230
Rated insulation voltage	V AC 250
Pollution degree	2
Insulation between coil and contact set	
Type of Insulation	Basic
Overvoltage category	III
Rated impulse voltage	kV (1.2/50 µs) 4
Dielectric strength	V AC 2000
Insulation between adjacent contacts	
Type of insulation	Basic
Overvoltage category	II
Rated impulse voltage	kV (1.2/50 µs) 2.5
Dielectric strength	V AC 2000
Insulation between open contacts	
Type of disconnection	Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 µs) 1000/1.5
Insulation between coil terminals	
Rated impulse voltage (surge) differential mode (according to EN 50121)	kV (1.2/50 µs) 4
Other data	
Bounce time: NO/NC	ms 1/3
Vibration resistance: NO/NC	According to EN 61373
Shock resistance	According to EN 61373
Power lost to the environment	without contact current W 1
	with rated current W 3
Recommended distance between relays mounted on PCB	mm ≥ 5

Contact specification

F 55 - Electrical life (AC) v contact current



H 55 - Maximum DC1 breaking capacity



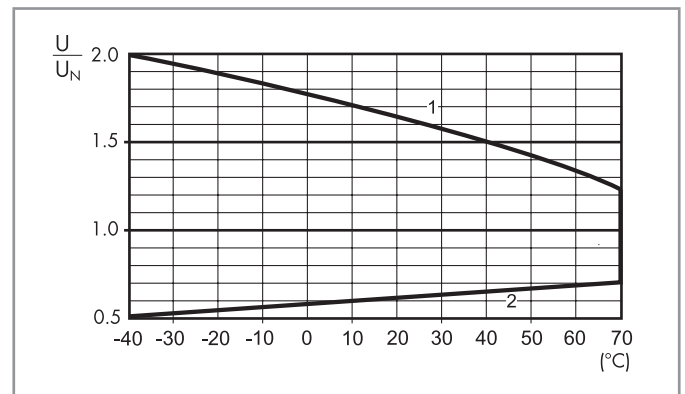
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
Note: the release time of the load will be increased.

Coil specifications

DC coil data

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil consumption I at U_N mA
		U_{min} V	U_{max} V		
24	9.024	16.8	30	600	40
72	9.072	50.4	90	4000	15
110	9.110	77	137.5	12500	8.8

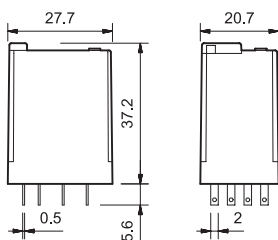
R 55 - DC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.

Outline drawing

Type 55.34T





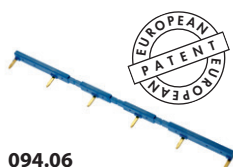
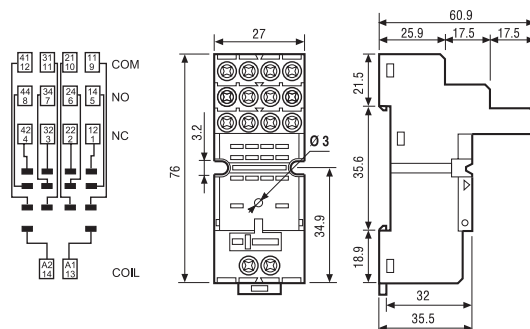
94.04.7

Approvals
(according to type):



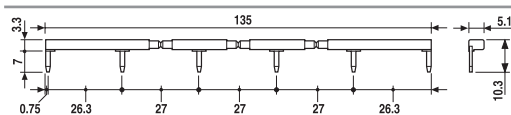
Screw terminal (Box clamp) socket panel or 35 mm (EN 60715) rail mount	94.04.7 SMA*	
For relay type	55.34T	
Accessories		
Metal retaining clip	094.71	
6-way jumper link	094.06	
Identification tag	094.00.4	
Modules (see table below)	99.02	
Timer modules (see table below)	86.30T	
Technical data		
Rated values	10 A - 250 V	
Dielectric strength	2 kV AC	
Protection category	IP 20	
Ambient temperature	°C	-40...+70
Screw torque	Nm	0.5
Wire strip length	mm	8
Max. wire size for 94.04.7 sockets	solid wire	stranded wire
	mm ²	1 x 6 / 2 x 2.5
	AWG	1 x 10 / 2 x 14

* Complies with **EN 45545-2 +A1:2016** (protection against fire of materials), **EN 61373** (resistance against random vibrations and shock, Category 1, Class B), **EN 50155** (resistance to temperature and humidity, TX class)



094.06

6-way jumper link for 94.04.7 socket	094.06
Rated values	10 A - 250 V



86.30



86 series timer modules	
(12...24)V AC/DC; Bi-function: AI, DI; (0.05 s...100 h)	86.30.0.024.0000T

Approvals (according to type):

AI: ON-delay
DI: Interval

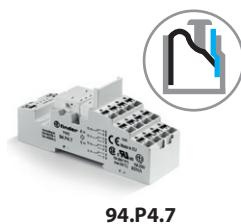
99.02



99.02 coil indication and EMC suppression modules for 94.04.7 socket		
Diode (+A1, standard polarity)	(6...220)V DC	99.02.3.000.00
LED + Diode (+A1, standard polarity)	(6...24)V DC	99.02.9.024.99
LED + Diode (+A1, standard polarity)	(28...72)V DC	99.02.9.060.99
LED + Diode (+A1, standard polarity)	(110...220)V DC	99.02.9.220.99
LED + Varistor	(6...24)V DC/AC	99.02.0.024.98
LED + Varistor	(28...72)V DC/AC	99.02.0.060.98
LED + Varistor	(110...240)V DC/AC	99.02.0.230.98

Approvals (according to type):

DC Modules with non-standard polarity (+A2) on request.



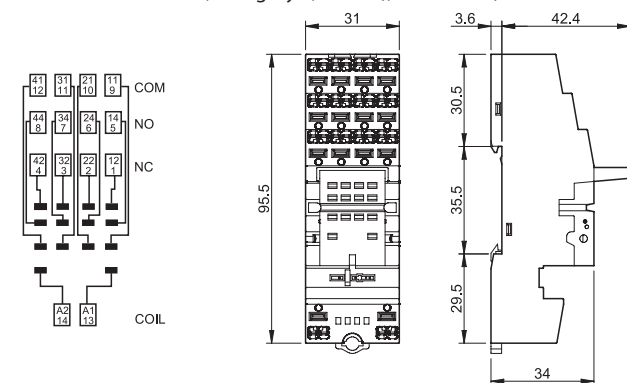
94.P4.7

Approvals
(according to type):



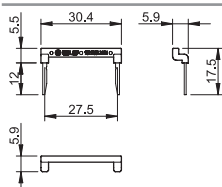
Push-in terminal socket 35 mm rail (EN 60715) mount		94.P4.7 SMA*	
For relay type		55.34T	
Accessories			
Metal retaining clip		094.71	
2-way jumper link		094.52.1	
2-way jumper link		097.52	
Modules (see table below)		99.02, 86.30T	
Technical data			
Rated values		10 A - 250 V	
Dielectric strength		2 kV AC	
Protection category		IP 20	
Ambient temperature		°C -40...+70	
Wire strip length		mm 10	
Min. wire size for 94.P4.7 sockets		solid wire	stranded wire
		mm ² 0.5	0.5
Max. wire size for 94.P4.7 sockets		mm ² 2 x 1.5 / 1 x 2.5	2 x 1.5 / 1 x 2.5
		AWG 21	21
		solid wire	stranded wire
		mm ² 2 x 18 / 1 x 14	2 x 18 / 1 x 14
		AWG 21	21

* Complies with **EN 45545-2 +A1:2016** (protection against fire of materials), **EN 61373** (resistance against random vibrations and shock, Category 1, Class B), **EN 50155** (resistance to temperature and humidity, TX class)



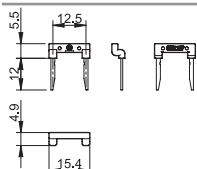
094.52.1

2-way jumper link for 94.P4.7 sockets	094.52.1
Rated values	10 A - 250 V



097.52

2-way jumper link for 94.P4.7 sockets	097.52
Rated values	10 A - 250 V



86 series timer modules	
(12...24)V AC/DC; Bi-function: AI, DI; (0.05 s...100 h)	86.30.0.024.0000T

Approvals (according to type):

AI: ON-delay
DI: Interval



86.30

99.02 coil indication and EMC suppression modules for 94.P4.7 socket		
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Diode (+A1, standard polarity)	(6...220)V DC	99.02.3.000.00
LED + Diode (+A1, standard polarity)	(6...24)V DC	99.02.9.024.99
LED + Diode (+A1, standard polarity)	(28...72)V DC	99.02.9.060.99
LED + Diode (+A1, standard polarity)	(110...220)V DC	99.02.9.220.99
LED + Varistor	(6...24)V DC/AC	99.02.0.024.98
LED + Varistor	(28...72)V DC/AC	99.02.0.060.98
LED + Varistor	(110...240)V DC/AC	99.02.0.230.98

Approvals (according to type):

DC Modules with non-standard polarity (+A2) on request.

99.02



