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



FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

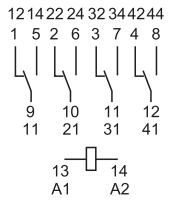
Plug-in mount, general purpose
4 Pole relays, 7 A

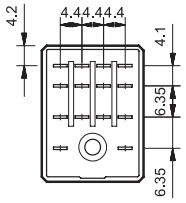
- Complies with EN 45545-2 +A1:2016 (protection against fire of materials), EN 61373 (resistance against random vibrations and shock, Category 1, Class B), EN 50155 (resistance to temperature and humidity, TX class)
- DC coils with extended range
- Cadmium Free contacts (standard version)
- 94 series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

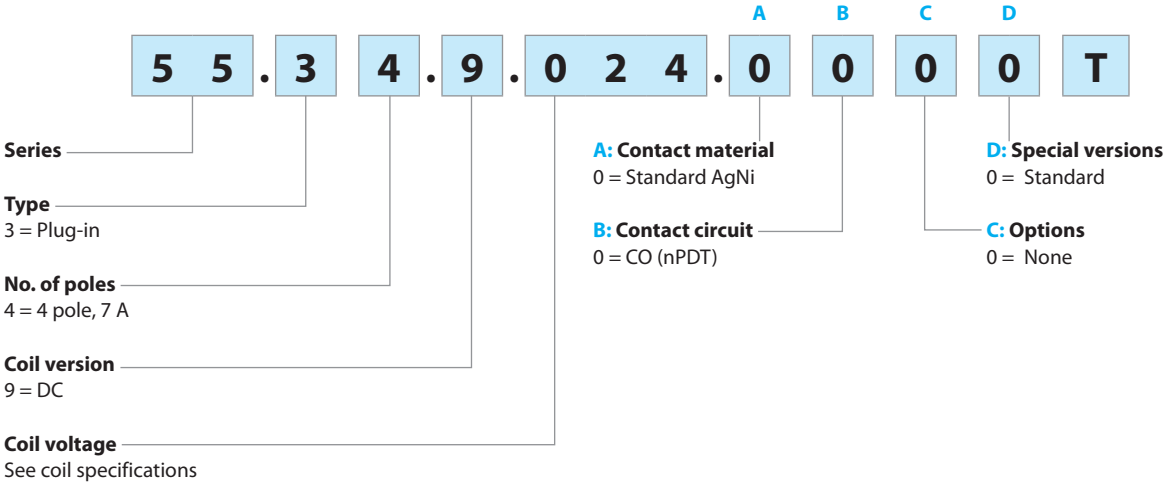
For outline drawing see page 5

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…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 µs)	kV	4
Dielectric strength between open contacts	V AC	1000
Ambient temperature range	°C	–40…+70*
Environmental protection		RT I
Approvals (according to type)		CE

B

Ordering information

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



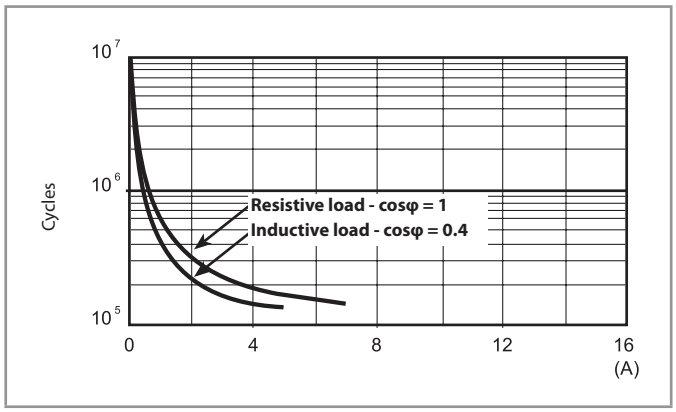
Technical data

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

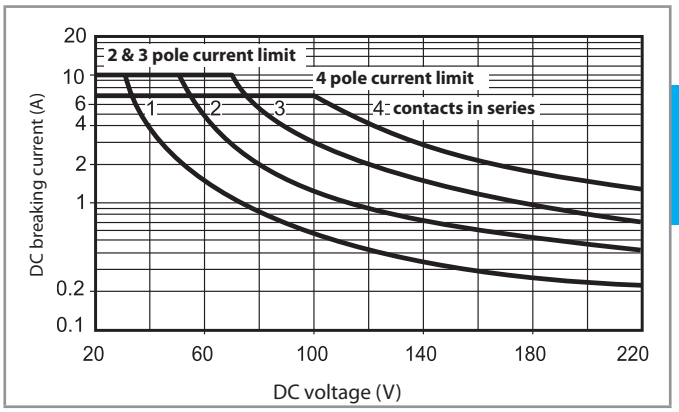
I-2019, www.findernet.com

Contact specification

F 55 - Electrical life (AC) v contact current



H 55 - Maximum DC1 breaking capacity



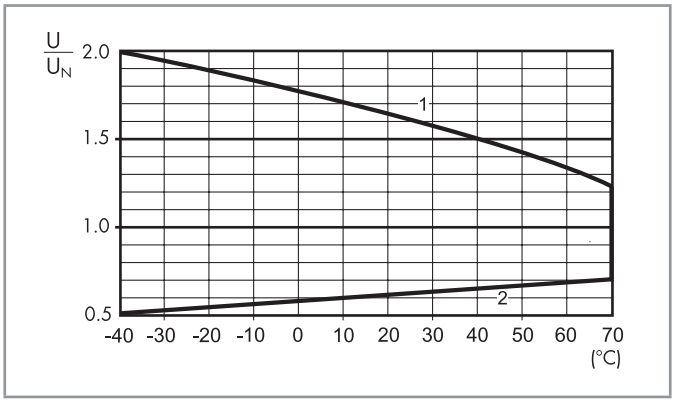
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 100 · 10³ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
  Note: the release time of the load will be increased.

Coil specifications

DC coil data

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N
V		V	V	Ω	mA
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

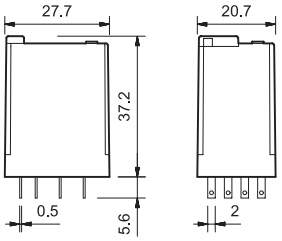
R 55 - DC coil operating range v ambient temperature



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

Outline drawing

Type 55.34T





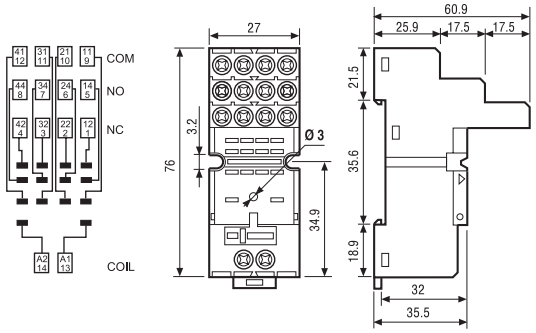
94.04.7

Approvals (according to type):

B

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
	mm²	1 x 6 / 2 x 2.5	1 x 4 / 2 x 2.5
	AWG	1 x 10 / 2 x 14	1 x 12 / 2 x 14

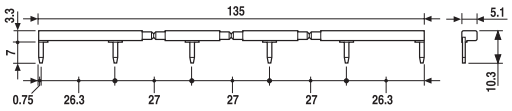
* Complies with **EN 45545-2 +A1:2016** (protection against fire of materials), **EN 61373** (resistance against random vibrations and shock, Category 1, Class B), **EN 50155** (resistance to temperature and humidity, TX class)





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

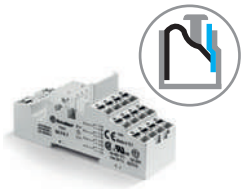


99.02

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.

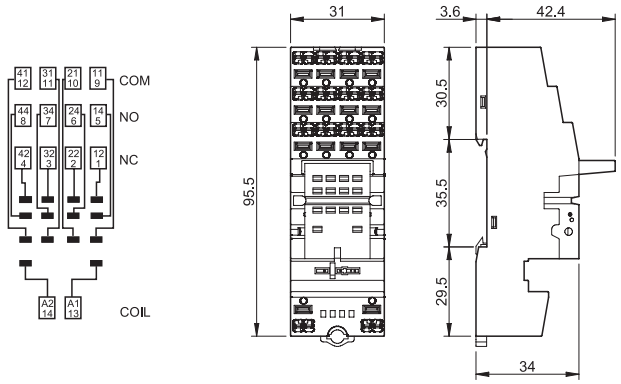


94.P4.7

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
	mm²	0.5	0.5
	AWG	21	21
Max. wire size for 94.P4.7 sockets		solid wire	stranded wire
	mm²	2 x 1.5 / 1 x 2.5	2 x 1.5 / 1 x 2.5
	AWG	2 x 18 / 1 x 14	2 x 18 / 1 x 14

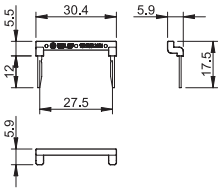
* Complies with **EN 45545-2 +A1:2016** (protection against fire of materials), **EN 61373** (resistance against random vibrations and shock, Category 1, Class B), **EN 50155** (resistance to temperature and humidity, TX class)





094.52.1

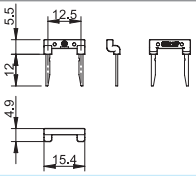
2-way jumper link for 94.P4.7 sockets	094.52.1
Rated values	10 A - 250 V





097.52

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





86.30

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.P4.7 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.