01	70K09 RELE+ZOCALO+VARISTOR *70K09 RELE+ZOCCOLO+VARISTORE FINDER*	1		MEKT 0080150050	0.150	
MARCA *MARCA*	DESCRIPCIÓN *DESCRIZIONE*	CANT. *QUANT.*	CÓDIGO O NORMA *CÒDICE O NORMA*	MATERIAL O REFERENCIA *MATERIALE O REFERENZA*	PESO *PESO* (Kg)	DIMENSIONES *DIMENSIONES* (mm)

LOCOMOTIVA E401

Ed.	Descrizione	Date	Nome
A	MODIFICAR CAJETIN	2016-06-28	96015
B	AÑADIR DATASHEETS	2016-10-18	96015

ISO 2768-cK
DIN ISO 13920-BF

0.150	A4	BEASAIN	OT	Y

CAF Power & Automation

X:X			
	Disegnato	23/09/2015	10221
	Comprovato	23/09/2015	10221
	Verificato	23/09/2015	14422
	Date		Nome
	es/it		

CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES, S.A.
BEASAIN (GIPUZKOA)

70K09 RELE+ZOCALO+VARISTOR

70K09 RELE+ZOCCOLO+VARISTORE FINDER

B.20.64.120 | B | 1/5

IL RELE' FINDER E' COMPOSTO DA:

1. RELE' COD. 46.52.9.024.0000.T
2. ZOCCOLO COD. 97.52 SMA
3. MODULO LED+VARISTORE COD. 99.02.0.024.98

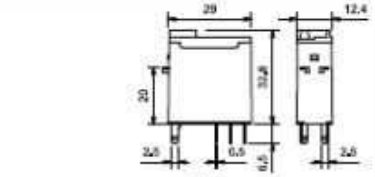
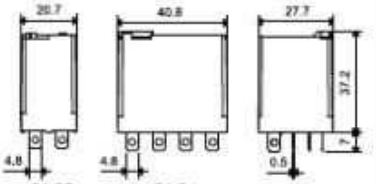
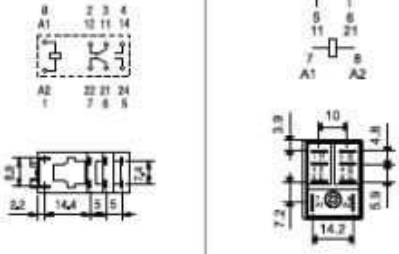
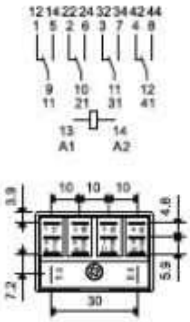
finder

46 and 56 Series - Relays for railway applications 8 - 12 A

Features

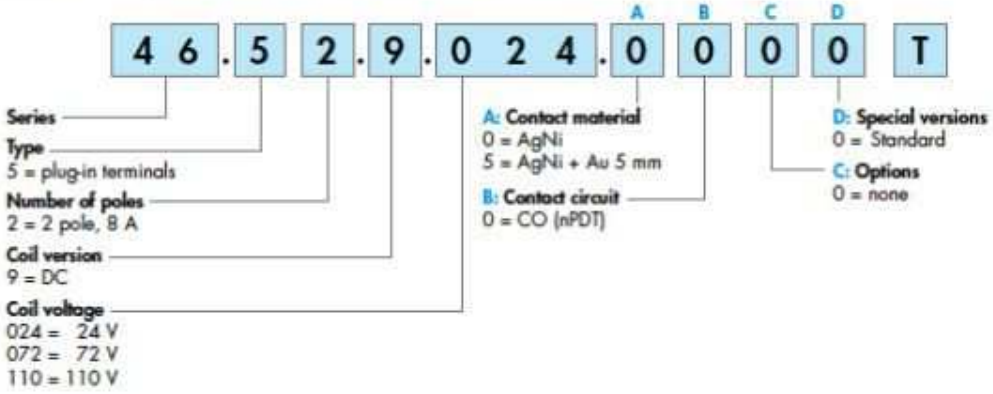
Plug-in power relays:
8 A, 2 pole
12 A, 2 and 4 pole

- DC coils with extended range
- Complies with **UNI CEI 11170-3** (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)
- Cadmium Free contacts (standard version)
- Contact material options
- 97 and 96 series sockets
- Coil EMC suppression modules
- Accessories

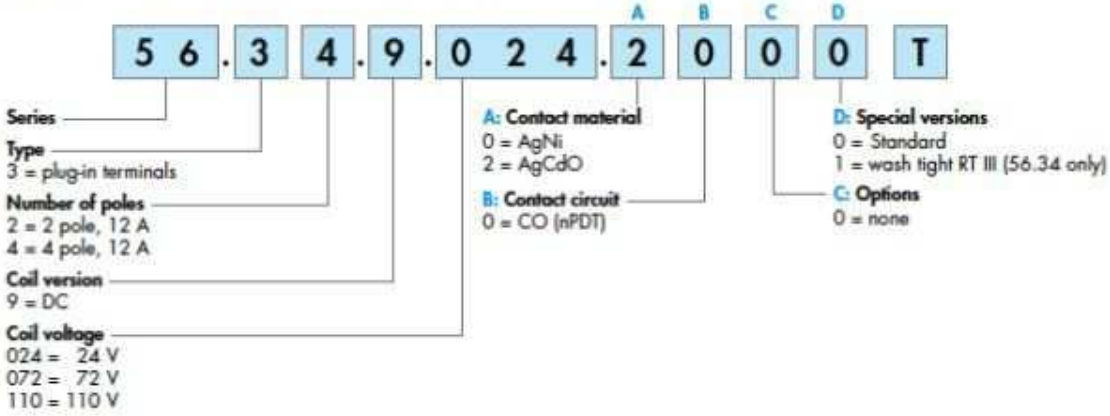
	46.52T	56.32T	56.34T
			
	• 2 Pole CO, 8A • Plug-in	• 2 Pole CO, 12 A • Plug-in/Faston 187	• 4 Pole CO, 12 A • Plug-in/Faston 187
	 46.52  56.32 56.34		
Contact specification			
Contact configuration	2 CO (DPDT)	2 CO (DPDT)	4 CO (4PDT)
Rated current/Maximum peak current A	8/15	12/20	12/20
Rated voltage/Maximum switching voltage V AC	250/400	250/400	250/400
Rated load AC1 VA	2,000	3,000	3,000
Rated load AC15 (230 V AC) VA	350	700	700
Single phase motor rating (230 V AC) kW	0.37	0.55	0.55
Breaking capacity DC1: 30/110/220 V A	6/0.5/0.15	12/0.5/0.25	12/0.5/0.25
Minimum switching load mW (V/mA)	300 (5/5)	500 (10/5)	500 (10/5)
Standard contact material	AgNi	AgNi	AgNi
Coil specification			
Nominal voltage (U_N) V AC (50/60 Hz)	–	–	–
V DC	24 - 72 - 110	24 - 72 - 110	24 - 72 - 110
Rated power W	0.5	1	1.3
Operating range @ 23 °C AC	–	–	–
DC	(0.70...1.6) U_N	(0.70...1.6) U_N	(0.70...1.6) U_N
Holding voltage	0.4 U_N	0.6 U_N	0.6 U_N
Must drop-out voltage	0.1 U_N	0.1 U_N	0.1 U_N
Technical data			
Mechanical life DC cycles	10 · 10^6	10 · 10^6	10 · 10^6
Electrical life at rated load AC1 cycles	100 · 10^3	100 · 10^3	100 · 10^3
Operate/release time ms	10/3	8/8	8/8
Insulation between coil and contacts (1.2/50 µs) kV	6 (8 mm)	4	4
Dielectric strength between open contacts V AC	1,000	1,000	1,000
Ambient temperature range °C	–40...+70	–40...+70	–40...+70
Environmental protection	RT II	RT I	RT I
Approvals (according to type)	CE	CE	CE

Ordering information

Example: 46 series plug-in relay, 2 poles, 24 V DC coil, AgNi contacts.



Example: 56 series plug-in relay, 4 poles, 24 V DC coil, AgCdO contacts.

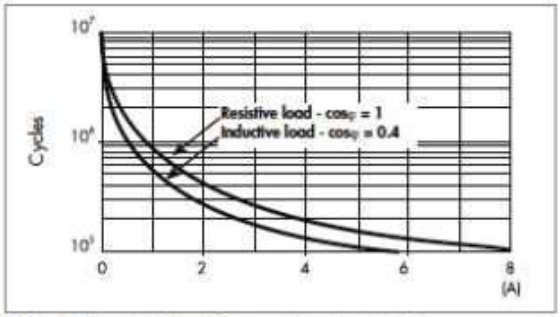


Technical data

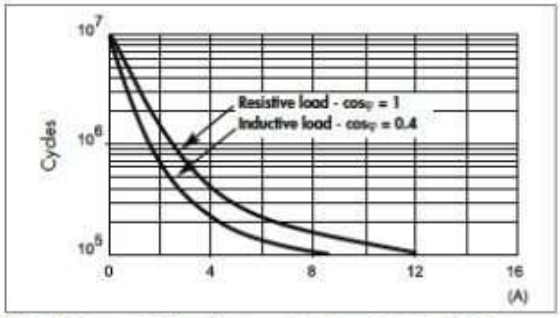
			46.52		56.32/34	
Insulation according to EN 61810-1						
Nominal voltage of supply system		V AC	230/400		230/400	
Rated insulation voltage		V AC	250	400	250	400
Pollution degree			3	2	3	2
Insulation between coil and contact set						
Type of insulation			Reinforced (8 mm)		Basic	
Overvoltage category			III		III	
Rated impulse voltage		kV (1.2/50 µs)	6		4	
Dielectric strength		V AC	4,000		2,500	
Insulation between adjacent contacts						
Type of insulation			Basic		Basic	
Overvoltage category			III		III	
Rated impulse voltage		kV (1.2/50 µs)	4		4	
Dielectric strength		V AC	2,000		2,500	
Insulation between open contacts						
Type of disconnection			Micro-disconnection		Micro-disconnection	
Dielectric strength		V AC/(1.2/50 µs)	1,000/1.5		1,000/1.5	
Conducted disturbance immunity						
Burst (5...50)ns, 5 kHz, on A1 - A2		EN 61000-4-4	level 4 (4 kV)		level 4 (4 kV)	
Surge (1.2/50 µs) on A1 - A2 (differential mode)		EN 61000-4-5	level 3 (2 kV)		level 4 (4 kV)	
Other data						
Bounce time: NO/NC		ms	1/4		1/3	
Power lost to the environment	without contact current	W	0.6		1 (56.32) / 1.3 (56.34)	
	with rated current	W	2		3.8 (56.32) / 6.9 (56.34)	

Contact specification

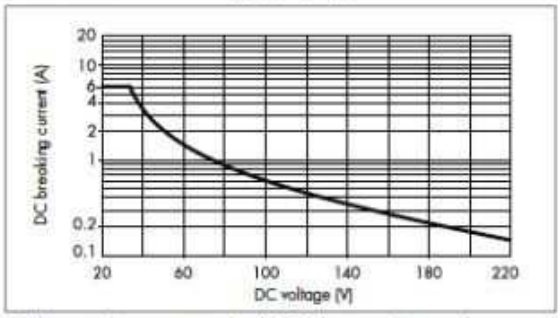
F 46 - Electrical life (AC) v contact current - Type 46.52



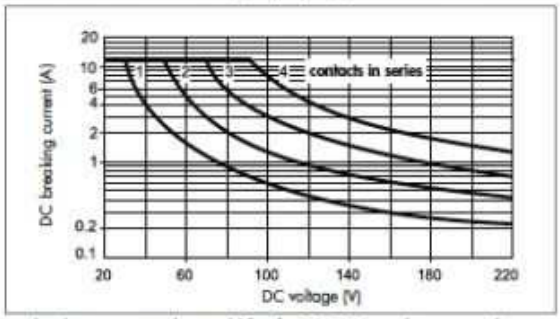
F 56 - Electrical life (AC) v contact current - Type 56.32 and 56.34



H 46 - Maximum DC1 breaking capacity - Type 46.52



H 56 - Maximum DC1 breaking capacity - Type 56.32 and 56.34



- 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 for the load will be increased.

Coil specifications

DC coil data, 2 CO - Type 46.52 @ 23 °C

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	38	1,200	20
72	9.072	50.4	115	3,400	7
110	9.110	77	176	23,500	4.7

Other types of coil version are available on request.

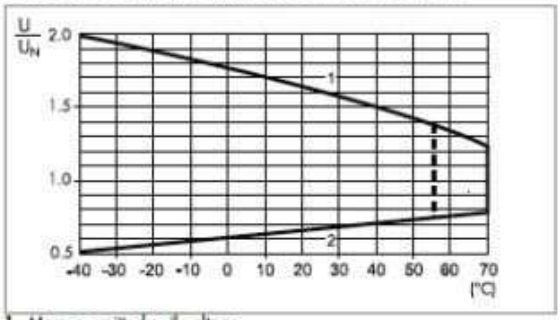
DC coil data, 2 CO - Type 56.32 @ 23 °C

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	38	600	40
72	9.072	50.4	115	5,100	14
110	9.110	77	176	12,500	8.8

DC coil data, 4 CO - Type 56.34 @ 23 °C

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	38	490	49
72	9.072	50.4	115	4,000	18
110	9.110	77	176	10,400	10.5

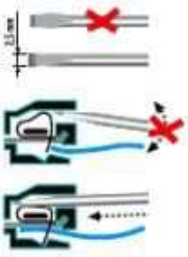
RT 46 / 56 - DC coil operating range v ambient temperature

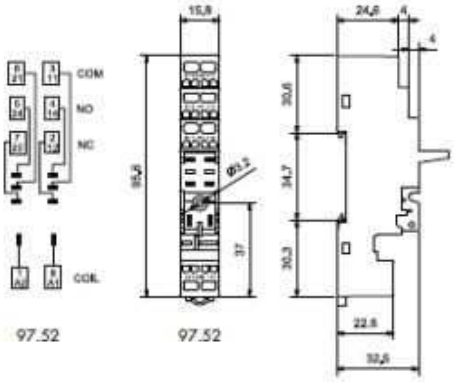


1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

Approvals (according to type):

Screwless terminal socket panel or 35 mm rail (EN 60715) mount		**97.52 SMA**	
For relay type		46.52	
Accessories			
Metal retaining clip (supplied with socket - packaging code SMA)		097.71	
Modules (see table below)		99.02	
Timer modules (see table below)		86.30	
Technical data			
Rated current		8 A - 250 V AC	
Dielectric strength		6 kV (1.2/50 µs) between coil and contacts	
Protection category		IP 20	
Ambient temperature	°C	–25...+70	
Wire strip length	mm	8	
Max. wire size for 97.52 socket		solid wire	stranded wire
	mm²	2x(0.2...1.5)	2x(0.2...1.5)
	AWG	2x(24...18)	2x(24...18)





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

Approvals (according to type):

99.02 coil indication and EMC suppression modules for 97.52 socket		
Diode (+A1, standard polarity)	(6...220)V DC	99.02.3.000.00
LED	(6...24)V DC/AC	99.02.0.024.59
LED + Diode (+A1, standard polarity)	(6...24)V DC	99.02.9.024.99
LED + Varistor	(6...24)V DC/AC	99.02.0.024.98
RC circuit	(6...24)V DC/AC	99.02.0.024.09

Approvals (according to type):

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